



ALL LGC PRODUCTS  
LINK DIRECTLY TO  
WEBSHOP

# Impurity testing beyond pharmacopeial methods

September 2017

detailed certificates of analysis • acknowledged by regulatory authorities worldwide • pharmaceutical impurities • custom synthesised impurities • pharmaceutical primary standards





## Did you know?

When your laboratory is testing on impurities, and working with analytical methods other than those from the pharmacopoeias, then other, non-pharmacopoeial reference standards can have major advantages, including:

- A detailed CoFA
- A consistent supply
- Potential cost savings
- Support with any technical issues relating to their usage

This catalogue contains a listing of pharmaceutical impurity reference standards from LGC, that can be used in these situations.

## What are pharmacopoeial/monograph standards – and when should they be used

A pharmacopoeial reference standard is a reference standard for active ingredients, excipients and impurity substances established under the aegis of and approved by the relevant Pharmacopoeia, such as USP, EP, BP and JP.

Pharmacopoeial reference standards should only be used for the purposes which are described in the relevant monograph, for which they can be considered primary reference standards. This is because they have been characterised and tested only for their official purpose – outside of those specific situations, the official status of these materials is not valid. They are not supplied with a detailed certificate of analysis thus significantly limiting their usability and value in applications outside of the relevant monograph. An example of this would be testing for impurities using non-compendial methods. United States Pharmacopoeia (USP) states the following in their general chapter <11>:

‘When approved as suitable for use ... in the USP, USP RS also assume official status and legal recognition in the US. **Assessment of the suitability for use in other applications rests with the user.**’

In fact, cases have been reported to us where users were challenged by the regulatory authorities to justify the off-compendial use of pharmacopoeial materials.

Our customers have contacted us seeking advice on how to avoid such regulatory challenges. We have produced this catalogue to support you.

## LGC impurity reference standards

LGC Standards has a catalogue of approximately 4,000 impurity reference standards, developed over 20 years with the experience gained when serving the pharmaceutical industry. They are valid impurity reference standards for the development and validation of analytical methods, routine quality control and stability testing.

The table below illustrates the differences between pharmacopoeial reference materials and LGC impurity standards.

|                                      | Identity confirmation |     |    | Purity analysis | Residuals analysis |                   |               | Assay        |                   | Intended use <sup>3</sup> |
|--------------------------------------|-----------------------|-----|----|-----------------|--------------------|-------------------|---------------|--------------|-------------------|---------------------------|
|                                      | IR                    | NMR | MS | HPLC            | Water              | Residual solvents | Sulphated ash | Mass balance | Orthogonal method |                           |
| Reference standards by LGC           |                       |     |    |                 |                    |                   |               |              |                   |                           |
| LGC impurity standard <sup>1</sup>   | ●                     | ●   | ●  | ●               | ●                  | ●                 | ●             | ●            | ●                 | Universal                 |
| Other materials                      |                       |     |    |                 |                    |                   |               |              |                   |                           |
| Pharmacopoeial standard <sup>2</sup> | ●                     | ●   | ●  | ●               | ●                  | ●                 | ●             | ●            | ●                 | Monograph                 |

● Always supplied

● Supplied depending on purpose and/or request

● Not supplied

<sup>1</sup> LGC impurity standards can be identified by the product code part "MM" in catalogues and on the webshop at [www.lgcstandards.com](http://www.lgcstandards.com).

<sup>2</sup> Pharmacopoeial standards are normally characterised for their intended purpose. This information is not typically available to users.

<sup>3</sup> **Universal:** For in-house quantitative and qualitative QC applications and for method validation. Also for monograph when compared to compendial RS.

**Monograph:** Pharmacopoeial reference standards are designed and to be used strictly for the purpose of the monograph. The risk of incorrect use lies with the user. Assay is provided if used quantitatively, and may be derived from mass balance and orthogonal method.

This catalogue links our products to the USP descriptions, allowing you to quickly find equivalents to the impurity standards from USP, when working with non-pharmacopoeial methods for which the USP materials are not suitable.

*Please note that in some cases salt forms or different salt forms of the compounds are provided. It is strongly recommended that prior to ordering the user checks to ensure that the LGC suggested alternative will be suitable for its intended use. Please also note that the suggestions for equivalents on the following pages only refer to cases where the standards would be used as impurity standards. The suggestions do not refer to the few cases where the standards could also be used as drug substance reference standards.*

- Detailed CofA with qualitative and quantitative characterization for method development, validation and ongoing use in stability testing and quality control
- Certainty of consistent supply, not dependant on monograph changes

For further information or to see if we can match other pharmacopoeial standards against our range of products, please contact your local LGC office or email [\*\*pharma.tech@lgcgroup.com\*\*](mailto:pharma.tech@lgcgroup.com).

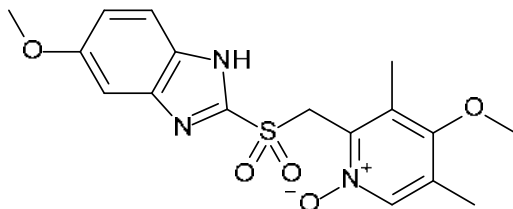




## Certificate of Analysis

### Reference Standard

4-Methoxy-2-[[[(5-methoxy-1H-benzimidazol-2-yl)sulphonyl]methyl]-3,5-dimethylpyridine 1-Oxide (Omeprazole Sulphone N-Oxide)



Molecular Formula:  $C_{17}H_{19}N_3O_5S$   
Molecular Weight: 377.42  
CAS Number: 158812-85-2

Catalogue Number: MM0095.16  
Lot Number: 119760  
Long-term Storage: 2 to 8 °C, dark  
Appearance: white solid  
Melting Point: 185 °C (dec.)  
Assay 'as is': 99.6 %

Date of shipment: **2017-June-30**

This certificate is valid for two years from the date of shipment provided the substance is stored under the recommended conditions unopened in the original container.

LGC Quality ISO 9001:2008  
DQS 102448 QM08

LGC GmbH, Im Biotechnologiepark, TGZ II, D-14943 Luckenwalde, Germany

6 Pages

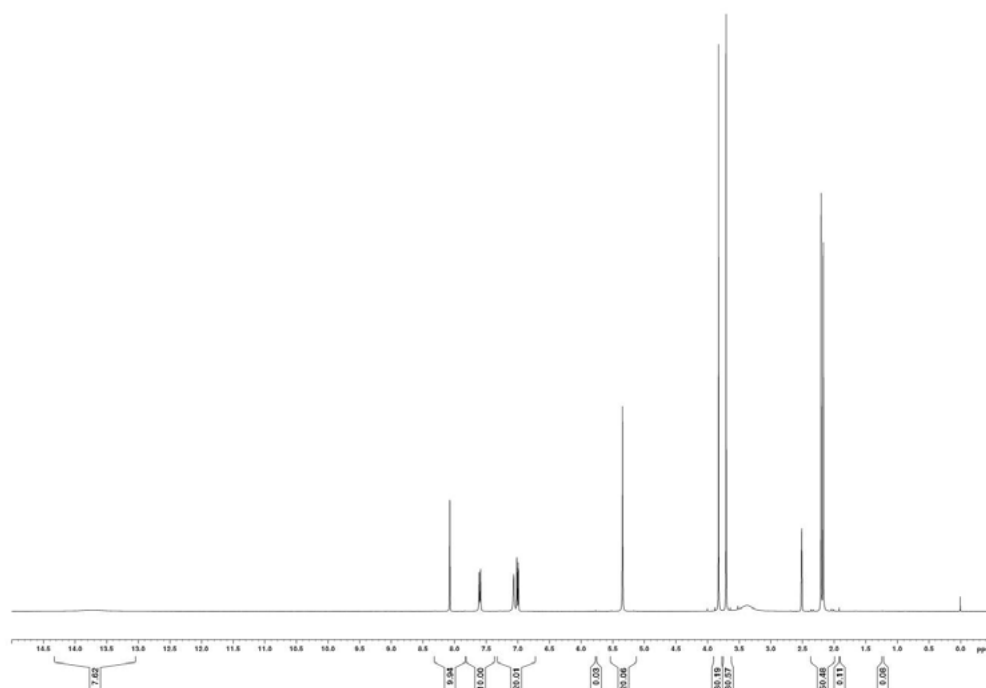


## I. Identity

The identity of the reference substance was established by following analyses.

### Ia. $^1\text{H}$ -NMR Spectrum

Conditions: 400 MHz, DMSO- $\text{d}_6$

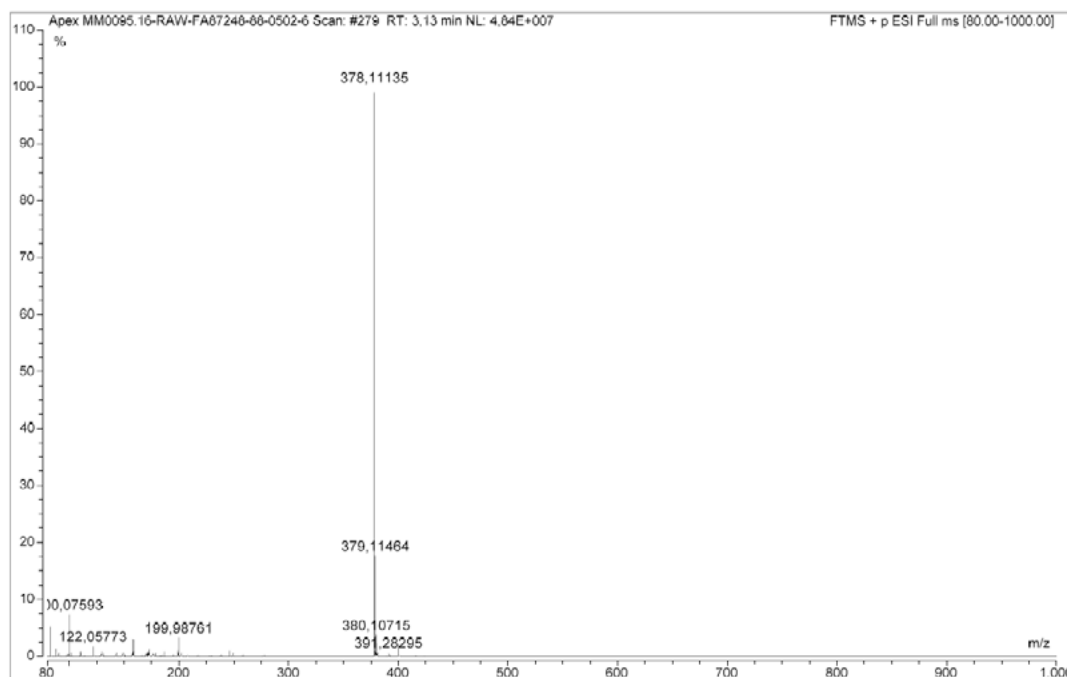


The structure is confirmed by the signals of the spectrum and their interpretation.



## Ib. Mass Spectrum

Method: 3.5 kV ESI+; capillary temperature: 269 °C



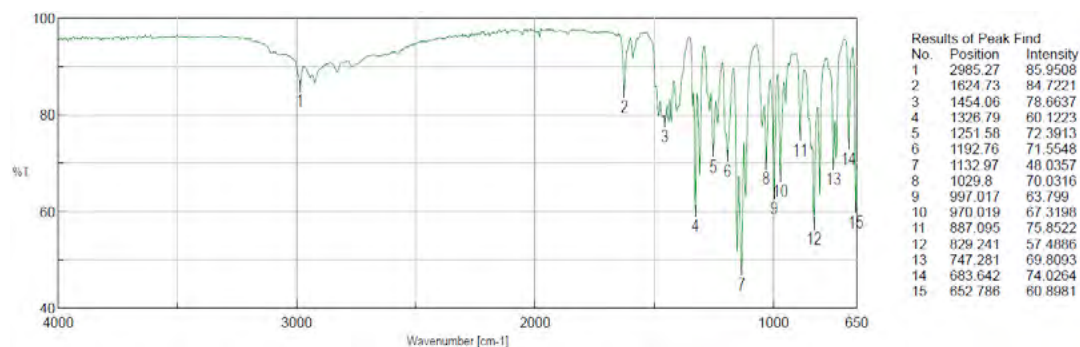
Theoretical value: 378.11182

The signal of the MS spectrum is consistent with the theoretical value and its interpretation is consistent with the structural formula.



## Ic. IR Spectrum

Method: Attenuated Total Reflection Fourier Transform Infrared (ATR-FTIR) Spectroscopy



The signals of the IR spectrum and their interpretation are consistent with the structural formula.

## II. Purity

### Ila. High Performance Liquid Chromatography (HPLC)

The purity of the reference substance was analysed by high performance liquid chromatography (HPLC).

#### HPLC Conditions:

##### Column:

Hypersil Gold C18  
5 µm, 150 x 4.6 mm

##### Conditions:

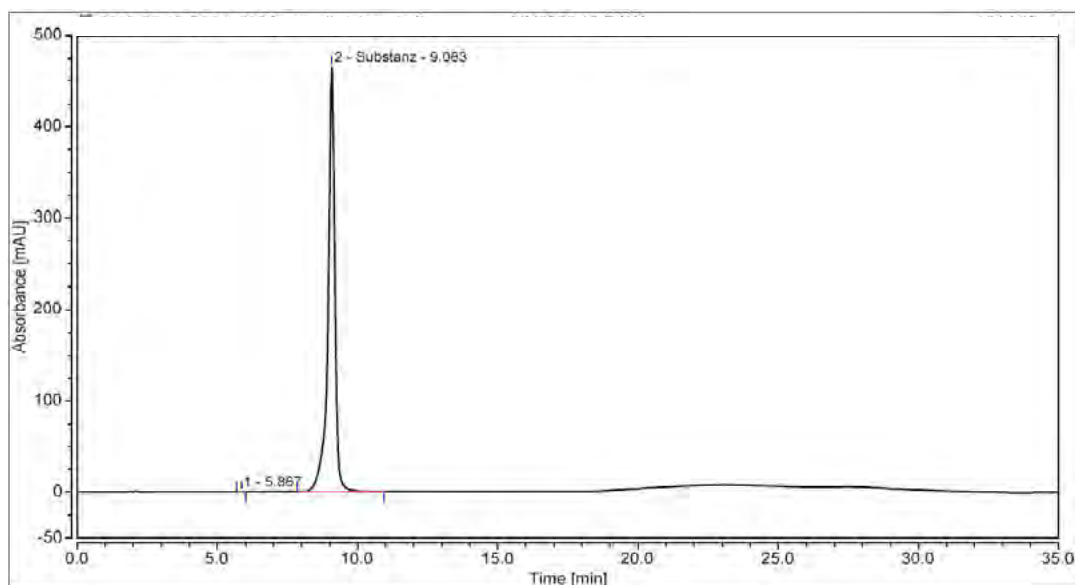
1.0 ml/min, 40 °C  
0-15 min Water/Acetonitrile 80/20  
15-20 min Water/Acetonitrile to 60/40  
20-25 min Water/Acetonitrile 60/40  
25-30 min Water/Acetonitrile to 80/20  
30-35 min Water/Acetonitrile 80/20 (v/v);  
0.1 % H<sub>3</sub>PO<sub>4</sub>

##### Detector:

DAD  
220 nm

##### Injector:

Auto  
5 µl; 0.0696 mg/ml in  
Water/Acetonitrile 50/50 (v/v)



## Area Percent Report - Sorted by Signal

| Pk #   | Retention Time | Area    | Area % |
|--------|----------------|---------|--------|
| 1      | 5.867          | 0.042   | 0.03   |
| 2      | 9.083          | 132.108 | 99.97  |
| Totals |                | 132.149 | 100.00 |

For the calculation the system peaks were ignored. The content of the analyte was determined as ratio of the peak area of the analyte and the cumulative areas of the purities, added up to 100 %.

## Results:

|                    |          |
|--------------------|----------|
| Average            | 99.97 %  |
| Number of results  | n=3      |
| Standard deviation | < 0.01 % |

## IIb. Water Content

Method: Karl Fischer titration

## Results:

|                    |        |
|--------------------|--------|
| Average            | 0.22 % |
| Number of results  | n=3    |
| Standard deviation | 0.01 % |



## IIc. Residual Solvents

Method: <sup>1</sup>H-NMR

Result: 0.06 % Acetic acid  
0.03 % Dichloromethane  
0.02 % *n*-Hexane

## III. Final Result

|                                   |         |
|-----------------------------------|---------|
| Chromatographic purity (HPLC)     | 99.97 % |
| Water content                     | 0.22 %  |
| Residual solvents                 | 0.11 %  |
| Assay (100 % method) <sup>1</sup> | 99.64 % |

The assay is assessed to be 99.6 % 'as is'

The assay 'as is' is equivalent to the assay based on the not anhydrous and not dried substance respectively.

Release Date:

Luckenwalde, 2016-12-13



Dr. Sabine Schröder  
Product Release

<sup>1</sup> The calculation of the 100 % method follows the formula:

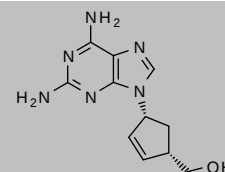
$$\text{Assay (\%)} = (100 \% - \text{volatile contents}) * \frac{\text{Purity (\%)}}{100 \%}$$

Volatile contents are considered as absolute contributions, purity is considered as relative contribution.

## LGC impurities according to USP declaration system

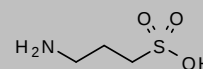
### Abacavir Related Compound A ([[(1S,4R)-4-(2,6-Diamino-9H-purin-9-yl)cyclopent-2-enyl]methanol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM3249.01</a> | 100mg              | 124752-25-6                                                       |
| USP      | 1000420                   | 20mg               | M.W. 246.2685<br>C <sub>11</sub> H <sub>14</sub> N <sub>6</sub> O |



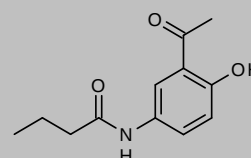
### Acamprosate Related Compound A (3-Aminopropane-1-sulfonic Acid; Homotaurine)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM3407.01</a> | 100mg              | 3687-18-1                                                         |
| USP      | 1000565                   | 15mg               | M.W. 139.1735<br>C <sub>3</sub> H <sub>9</sub> N O <sub>3</sub> S |



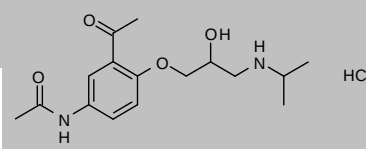
### Acebutolol Related Compound A (N-(3-Acetyl-4-hydroxyphenyl)butanamide)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0435.03</a> | 100mg              | 40188-45-2                                                        |
| USP      | 1000612                   | 20mg               | M.W. 221.2524<br>C <sub>12</sub> H <sub>15</sub> N O <sub>3</sub> |



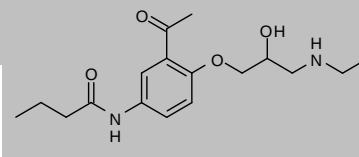
### Acebutolol Related Compound B (N-[3-Acetyl-4-[(2RS)-2-hydroxy-3-[(1-methylethyl)amino]propoxy]phenyl]acetamide Hydrochloride; Diacetolol Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0435.02</a> | 100mg              | 73899-76-0                                                                            |
| USP      | 1000623                   | 20mg, as free base | M.W. 344.8337<br>C <sub>16</sub> H <sub>24</sub> N <sub>2</sub> O <sub>4</sub> · Cl H |



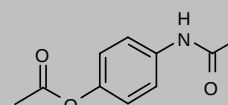
### Acebutolol Related Compound I (N-[3-Acetyl-4-[(2RS)-3-(ethylamino)-2-hydroxypropoxy]phenyl]butanamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0435.09</a> | 50mg               | 441019-91-6                                                                    |
| USP      | 1000699                   | 20mg               | M.W. 322.3993<br>C <sub>17</sub> H <sub>26</sub> N <sub>2</sub> O <sub>4</sub> |



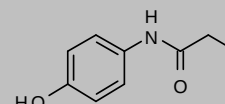
### Acetaminophen Related Compound A (4-(Acetylamino)phenyl Acetate; N,O-Diacetyl-4-aminophenol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0042.04</a> | 100mg              | 2623-33-8                                                         |
| USP      | 1003010                   | 15mg               | M.W. 193.1992<br>C <sub>10</sub> H <sub>11</sub> N O <sub>3</sub> |



### Acetaminophen Related Compound B (N-(4-Hydroxyphenyl)propanamide; N-Propionyl-4-aminophenol)

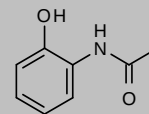
| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0042.05</a> | 100mg              | 1693-37-4                                                        |
| USP      | 1003027                   | 30mg               | M.W. 165.1891<br>C <sub>9</sub> H <sub>11</sub> N O <sub>2</sub> |



## LGC impurities according to USP declaration system

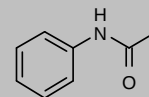
### Acetaminophen Related Compound C (N-(2-Hydroxyphenyl)acetamide; 2-Acetamidophenol)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0042.08</a> | 100mg              | 614-80-2                      |
| USP      | 1003031                   | 50mg               | M.W. 151.1626<br>$C_8H_9NO_2$ |



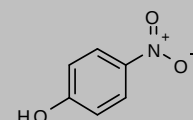
### Acetaminophen Related Compound D (N-Phenylacetamide; Acetanilide)

| Producer | Code                      | Quantity / Comment | CAS                         |
|----------|---------------------------|--------------------|-----------------------------|
| LGC      | <a href="#">MM0042.10</a> | 100mg              | 103-84-4                    |
| USP      | 1003042                   | 50mg               | M.W. 135.1632<br>$C_8H_9NO$ |



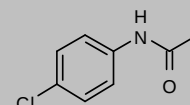
### Acetaminophen Related Compound F (4-Nitrophenol)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0042.03</a> | 100mg              | 100-02-7                      |
| USP      | 1003064                   | 50mg               | M.W. 139.1088<br>$C_6H_5NO_3$ |



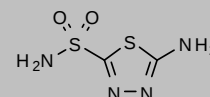
### Acetaminophen Related Compound J (N-(4-Chlorophenyl)acetamide; 4-Chloroacetanilide)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0042.02</a> | 100mg              | 539-03-7                      |
| USP      | 1003100                   | 50mg               | M.W. 169.6082<br>$C_8H_8ClNO$ |



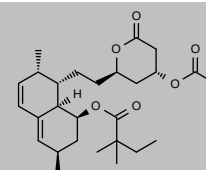
### Acetazolamide Related Compound D (5-Amino-1,3,4-thiadiazole-2-sulfonamide)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0648.02</a> | 100mg              | 14949-00-9                         |
| USP      | 1005048                   | 25mg               | M.W. 180.2088<br>$C_2H_4N_4O_2S_2$ |



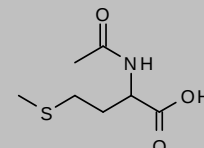
### Acetyl Simvastatin ((1S,3R,7S,8S,8aR)-8-[2-[(2R,4R)-4-(Acetyloxy)-6-oxotetrahydro-2H-pyran-2-yl]ethyl]-3,7-dimethyl-1,2,3,7,8,8a-hexahydronaphthalen-1-yl 2,2-Dimethylbutanoate; Simvastatin Acetate Ester)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0158.02</a> | 100mg              | 145576-25-6                        |
| USP      | 1010208                   | 30mg               | M.W. 460.6029<br>$C_{27}H_{40}O_6$ |



### N-Acetyl-D,L-Methionine ((2RS)-2-(Acetylamino)-4-(methylsulfanyl)butanoic Acid)

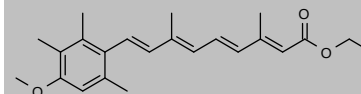
| Producer | Code                      | Quantity / Comment | CAS                              |
|----------|---------------------------|--------------------|----------------------------------|
| LGC      | <a href="#">MM0358.07</a> | 100mg              | 1115-47-5                        |
| USP      | 1009978                   | 100mg              | M.W. 191.248<br>$C_7H_{13}NO_3S$ |



## LGC impurities according to USP declaration system

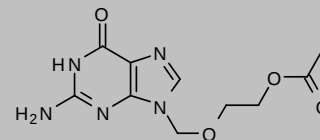
### Acitretin Related Compound B (Etretinate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM3076.00</a> | 100mg              | 54350-48-0                                                      |
| USP      | 1011029                   | 20mg               | M.W. 354.4825<br>C <sub>23</sub> H <sub>30</sub> O <sub>3</sub> |



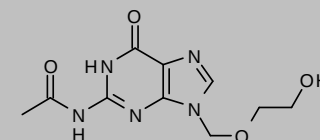
### Acyclovir Related Compound A (2-[(2-Amino-6-oxo-1,6-dihydro-9H-purin-9-yl)methoxy]ethyl Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0061.01</a> | 100mg              | 102728-64-3                                                                    |
| USP      | 1012076                   | 50mg               | M.W. 267.2413<br>C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O <sub>4</sub> |



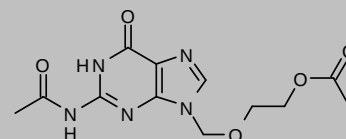
### Acyclovir Related Compound F (N-[9-[(2-Hydroxyethoxy)-methyl]-6-oxo-6,9-dihydro-1H-purin-2-yl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0061.06</a> | 100mg              | 110104-37-5                                                                    |
| USP      | 1012054                   | 50mg               | M.W. 267.2413<br>C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O <sub>4</sub> |



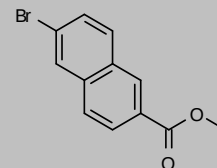
### Acyclovir Related Compound G (2-[[[(2-Acetylamino)-6-oxo-1,6-dihydro-9H-purin-9-yl]-methoxy]ethyl Acetate])

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0061.07</a> | 100mg              | 75128-73-3                                                                    |
| USP      | 1012087                   | 50mg               | M.W. 309.278<br>C <sub>12</sub> H <sub>15</sub> N <sub>5</sub> O <sub>5</sub> |



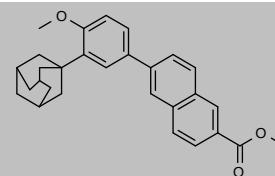
### Adapalene Related Compound A (Methyl 6-Bromo-2-naphthoate)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0681.05</a> | 100mg              | 33626-98-1                                                        |
| USP      | 1011710                   | 50mg               | M.W. 265.1027<br>C <sub>12</sub> H <sub>9</sub> Br O <sub>2</sub> |



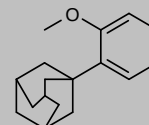
### Adapalene Related Compound B (Methyl 6-[3-(1-Adamantyl)-4-methoxyphenyl]-2-naphthoate; Adapalene Methyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0681.06</a> | 100mg              | 106685-41-0                                                     |
| USP      | 1011721                   | 50mg               | M.W. 426.5467<br>C <sub>29</sub> H <sub>30</sub> O <sub>3</sub> |



### Adapalene Related Compound C (1-(2-Methoxyphenyl)tricyclo[3.3.1.1<sup>3,7</sup>]decane)

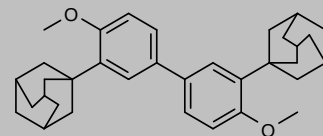
| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0681.01</a> | 50mg               | 43109-77-9                                        |
| USP      | 1011732                   | 25mg               | M.W. 242.356<br>C <sub>17</sub> H <sub>22</sub> O |



## LGC impurities according to USP declaration system

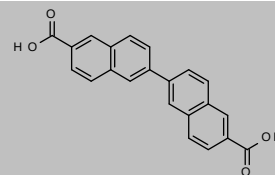
### Adapalene Related Compound D (1,1'-[4,4'Bis(methoxy)biphenyl-3,3'-diyl]bis(tricyclo[3.3.1.1<sup>3,7</sup>]decane))

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0681.02</a> | 50mg               | 932033-57-3                                                     |
| USP      | 1011743                   | 25mg               | M.W. 482.6961<br>C <sub>34</sub> H <sub>42</sub> O <sub>2</sub> |



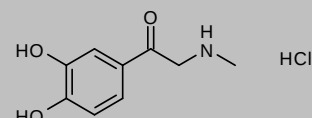
### Adapalene Related Compound E (2,2'-Binaphthalene-6,6'-dicarboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0681.03</a> | 50mg               | 932033-58-4                                                     |
| USP      | 1011754                   | 25mg               | M.W. 342.3442<br>C <sub>22</sub> H <sub>14</sub> O <sub>4</sub> |



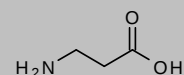
### Adrenalone Hydrochloride (1-(3,4-Dihydroxyphenyl)-2-(methylamino)ethanone Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                     |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------|
| LGC      | <a href="#">MM0614.13</a> | 100mg              | 62-13-5                                                                 |
| USP      | 1011878                   | 25mg               | M.W. 217.6495<br>C <sub>9</sub> H <sub>11</sub> N O <sub>3</sub> · Cl H |



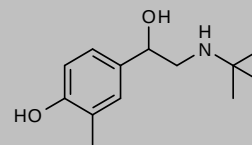
### Beta Alanine (3-Aminopropanoic Acid; β-Alanine)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM1463.01</a> | 100mg              | 107-95-9                                                       |
| USP      | 1012495                   | 100mg              | M.W. 89.0932<br>C <sub>3</sub> H <sub>7</sub> N O <sub>2</sub> |



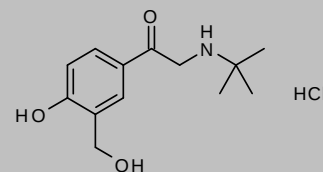
### Albuterol Related Compound A ((1RS)-2-[(1,1-Dimethylethyl)amino]-1-(4-hydroxy-3-methylphenyl)ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0381.03</a> | 50mg               | 18910-68-4                                                        |
| USP      | 1012644                   | 25mg               | M.W. 223.3113<br>C <sub>13</sub> H <sub>21</sub> N O <sub>2</sub> |



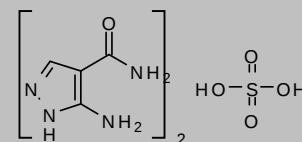
### Albuterol Related Compound B (2-[(1,1-Dimethylethyl)amino]-1-[4-hydroxy-3-(hydroxymethyl)phenyl]ethanone Hydrochloride; Salbutamone Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0381.10</a> | 50mg               | 41489-89-8                                                               |
| USP      | 1012655                   | 10mg, as free base | M.W. 273.7558<br>C <sub>13</sub> H <sub>19</sub> N O <sub>3</sub> · Cl H |



### Allopurinol Related Compound A (5-Amino-1H-pyrazole-4-carboxamide Hemisulphate)

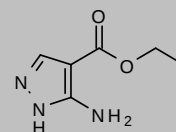
| Producer | Code                      | Quantity / Comment | CAS                                                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0034.01</a> | 100mg              | 27511-79-1                                                                                          |
| USP      | 1013024                   | 25mg               | M.W. 350.3118<br>2 C <sub>4</sub> H <sub>6</sub> N <sub>4</sub> O · H <sub>2</sub> O <sub>4</sub> S |



## LGC impurities according to USP declaration system

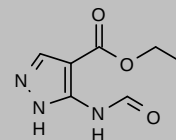
### Allopurinol Related Compound D (Ethyl 5-Amino-1H-pyrazole-4-carboxylate)

|          |                           |                    |                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 6994-25-8                                               |
| LGC      | <a href="#">MM0034.05</a> | 100mg              | M.W. 155.1546                                               |
| USP      | 1013046                   | 35mg               | C <sub>6</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> |



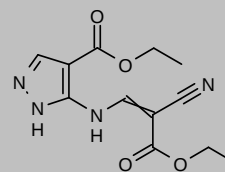
### Allopurinol Related Compound E (Ethyl 5-(Formylamino)-1H-pyrazole-4-carboxylate)

|          |                           |                    |                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 31055-19-3                                              |
| LGC      | <a href="#">MM0034.06</a> | 100mg              | M.W. 183.1647                                               |
| USP      | 1013068                   | 25mg               | C <sub>7</sub> H <sub>9</sub> N <sub>3</sub> O <sub>3</sub> |



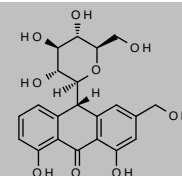
### Allopurinol Related Compound F (Ethyl (E/Z)-3-(2-Carboxy-2-cyanoethenyl)amino-1H-pyrazole-4-carboxylate)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 321571-07-7                                               |
| LGC      | <a href="#">MM0034.10</a> | 100mg              | M.W. 278.264                                                  |
| USP      | 1013079                   | 25mg               | C <sub>12</sub> H <sub>14</sub> N <sub>4</sub> O <sub>4</sub> |



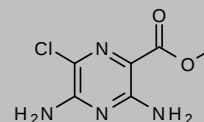
### Aloin

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1415-73-2                                  |
| LGC      | <a href="#">MM1318.01</a> | 100mg              | M.W. 418.394                                   |
| USP      | 1013727                   | 25mg               | C <sub>21</sub> H <sub>22</sub> O <sub>9</sub> |



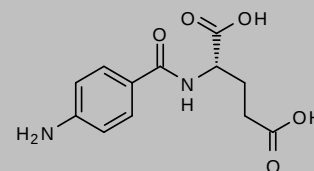
### Amiloride Related Compound A (Methyl 3,5-Diamino-6-chloropyrazine-2-carboxylate)

|          |                           |                    |                                                                |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1458-01-1                                                  |
| LGC      | <a href="#">MM0560.01</a> | 100mg              | M.W. 202.5984                                                  |
| USP      | 1019712                   | 30mg               | C <sub>6</sub> H <sub>7</sub> Cl N <sub>4</sub> O <sub>2</sub> |



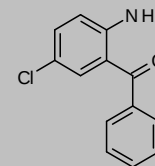
### N-(4-Aminobenzoyl)-L-glutamic Acid; (2S)-2-[(4-Aminobenzoyl)amino]pentanedioic Acid

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 4271-30-1                                                 |
| LGC      | <a href="#">MM0621.01</a> | 100mg              | M.W. 266.25                                                   |
| USP      | 1019870                   | 50mg               | C <sub>12</sub> H <sub>14</sub> N <sub>2</sub> O <sub>5</sub> |



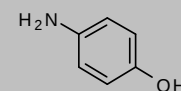
### 2-Amino-5-chlorobenzophenone (2-Amino-5-chlorophenyl)phenylmethanone)

|          |                           |                    |                                        |
|----------|---------------------------|--------------------|----------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 719-59-5                           |
| LGC      | <a href="#">MM0028.03</a> | 100mg              | M.W. 231.6776                          |
| USP      | 1022808                   | 25mg               | C <sub>13</sub> H <sub>10</sub> Cl N O |



### 4-Aminophenol

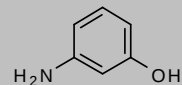
|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 123-30-8                      |
| LGC      | <a href="#">MM0042.01</a> | 100mg              | M.W. 109.1259                     |
| USP      | 1021204                   | 100mg              | C <sub>6</sub> H <sub>7</sub> N O |



## LGC impurities according to USP declaration system

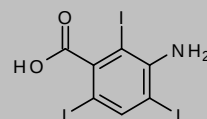
### m-Aminophenol (3-Aminophenol)

|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 591-27-5                      |
| LGC      | <a href="#">MM0042.07</a> | 100mg              | M.W. 109.1259                     |
| USP      | 1026004                   | 300mg              | C <sub>6</sub> H <sub>7</sub> N O |



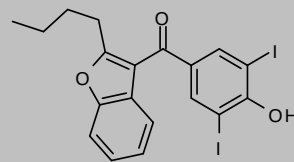
### 3-Amino-2,4,6-triiodobenzoic Acid

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 3119-15-1                                                 |
| LGC      | <a href="#">MM3337.01</a> | 100mg              | M.W. 514.8256                                                 |
| USP      | 1026605                   | 50mg               | C <sub>7</sub> H <sub>4</sub> I <sub>3</sub> N O <sub>2</sub> |



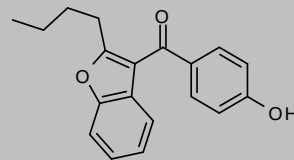
### Amiodarone Related Compound D ((2-Butylbenzofuran-3-yl)(4-hydroxy-3,5-diiodophenyl) methanone)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1951-26-4                                                 |
| LGC      | <a href="#">MM0697.05</a> | 100mg              | M.W. 546.1375                                                 |
| USP      | 1027346                   | 20mg               | C <sub>19</sub> H <sub>16</sub> I <sub>2</sub> O <sub>3</sub> |



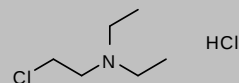
### Amiodarone Related Compound E ((2-Butylbenzofuran-3-yl)(4-hydroxyphenyl) methanone)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 52490-15-0                                 |
| LGC      | <a href="#">MM0697.06</a> | 100mg              | M.W. 294.3444                                  |
| USP      | 1027357                   | 25mg               | C <sub>19</sub> H <sub>18</sub> O <sub>3</sub> |



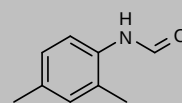
### Amiodarone Related Compound H (2-Chloro-N,N-diethylethanamine Hydrochloride; 2-Chlorotriethylamine Hydrochloride; (2-Chloroethyl)diethylamine Hydrochloride)

|          |                           |                    |                                            |
|----------|---------------------------|--------------------|--------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 869-24-9                               |
| LGC      | <a href="#">MM0697.09</a> | 100mg              | M.W. 172.096                               |
| USP      | 1027380                   | 20mg               | C <sub>6</sub> H <sub>14</sub> Cl N . Cl H |



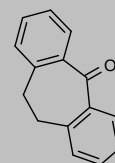
### Amitraz Related Compound A (Form-2',4'-xylidide)

|          |                           |                    |                                    |
|----------|---------------------------|--------------------|------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 60397-77-5                     |
| LGC      | <a href="#">MM1018.02</a> | 100mg              | M.W. 149.1897                      |
| USP      | 1028019                   | 40mg               | C <sub>9</sub> H <sub>11</sub> N O |



### Amitriptyline Related Compound A (10,11-Dihydro-5H-dibenzo[a,d][7]annulen-5-one; Dibenzosuberone)

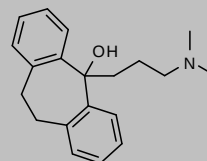
|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1210-35-1                     |
| LGC      | <a href="#">MM0062.01</a> | 100mg              | M.W. 208.2552                     |
| USP      | 1029013                   | 25mg               | C <sub>15</sub> H <sub>12</sub> O |



## LGC impurities according to USP declaration system

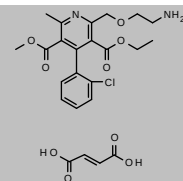
### Amitriptyline Related Compound B (5-[3-(Dimethylamino)propyl]-10,11-dihydro-5H-dibenzo[a,d][7]annulen-5-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0062.03</a> | 100mg              | 1159-03-1                                            |
| USP      | 1029024                   | 25mg               | M.W. 295.4186<br>C <sub>20</sub> H <sub>25</sub> N O |



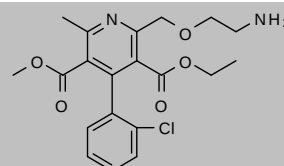
### Amlodipine Related Compound A (3-Ethyl 5-Methyl 2-[(2-Aminoethoxy)methyl]-4-(2-chlorophenyl)-6-methylpyridine-3,5-dicarboxylate Fumarate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0383.12</a> | 100mg              | n/a                                                                                                                              |
| USP      | 1029512                   | 25mg               | M.W. 522.9322<br>C <sub>20</sub> H <sub>23</sub> Cl N <sub>2</sub> O <sub>5</sub> · C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



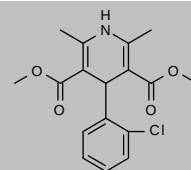
### Amlodipine Related Compound A (3-Ethyl 5-Methyl 2-[(2-Aminoethoxy)methyl]-4-(2-chlorophenyl)-6-methylpyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0383.04</a> | 100mg              | 113994-41-5                                                                     |
| USP      | 1029512                   | 25mg, as fumarate  | M.W. 406.86<br>C <sub>20</sub> H <sub>23</sub> Cl N <sub>2</sub> O <sub>5</sub> |



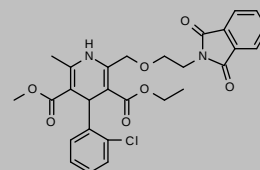
### Amlodipine Related Compound C (Dimethyl 4-(2-Chlorophenyl)-2,6-dimethyl-1,4-dihydropyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                  |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| LGC      | <a href="#">MM0383.07</a> | 100mg              | 43067-01-2                                                           |
| USP      | 1029534                   | 25mg               | M.W. 335.7821<br>C <sub>17</sub> H <sub>18</sub> Cl N O <sub>4</sub> |



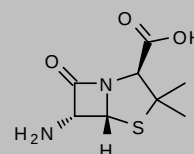
### Amlodipine Related Compound D (3-Ethyl 5-Methyl (4RS)-4-(2-Chlorophenyl)-2-[[2-(1,3-dioxo-1,3-dihydro-2H-isoindol-2-yl)ethoxy]methyl]-6-methyl-1,4-dihydropyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0383.01</a> | 100mg              | 88150-62-3                                                                        |
| USP      | 1029545                   | 25mg               | M.W. 538.9762<br>C <sub>28</sub> H <sub>27</sub> Cl N <sub>2</sub> O <sub>7</sub> |



### Amoxicillin Related Compound A ((2S,5R,6R)-6-Amino-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid; 6-Aminopenicillanic Acid)

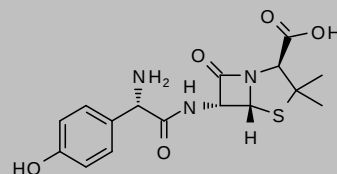
| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0026.04</a> | 100mg              | 551-16-6                                                                        |
| USP      | 1031514                   | 15mg               | M.W. 216.2575<br>C <sub>8</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub> S |



## LGC impurities according to USP declaration system

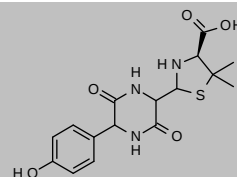
Amoxicillin Related Compound B ((2S,5R,6R)-6-(((2S)-2-Amino-2-(4-hydroxyphenyl)acetyl)amino)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid; L-Amoxicillin)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.02</a> | 100mg              | 26889-93-0                                                                       |
| USP      | 1031525                   | 15mg               | M.W. 365.4042<br>C <sub>16</sub> H <sub>19</sub> N <sub>3</sub> O <sub>5</sub> S |



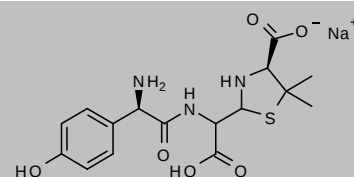
Amoxicillin Related Compound C ((4S)-2-[5-(4-Hydroxyphenyl)-3,6-dioxopiperazin-2-yl]-5,5-dimethylthiazolidine-4-carboxylic Acid; Amoxicillin Diketopiperazines)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.03</a> | 100mg              | 94659-47-9                                                                       |
| USP      | 1031536                   | 15mg               | M.W. 365.4042<br>C <sub>16</sub> H <sub>19</sub> N <sub>3</sub> O <sub>5</sub> S |



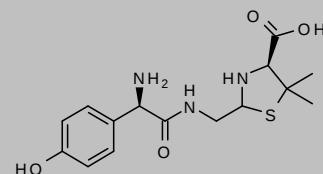
Amoxicillin Related Compound D ((4S)-2-[[[(2R)-2-Amino-2-(4-hydroxyphenyl)acetyl]amino]carboxymethyl]-5,5-dimethylthiazolidine-4-carboxylic Acid Sodium Salt; Penicilloic Acids of Amoxicillin Sodium Salt)

| Producer | Code                      | Quantity / Comment | CAS                                                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.04</a> | 100mg              | 68728-47-2                                                                            |
| USP      | 1031547                   | 50mg               | M.W. 405.4013<br>C <sub>16</sub> H <sub>20</sub> N <sub>3</sub> O <sub>6</sub> S . Na |



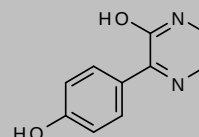
Amoxicillin Related Compound E ((2RS,4S)-2-[[[(2R)-2-Amino-2-(4-hydroxyphenyl)acetyl]amino]methyl]-5,5-dimethylthiazolidine-4-carboxylic Acid; Penilloic Acids of Amoxicillin)

| Producer | Code                      | Quantity / Comment                | CAS                                                                              |
|----------|---------------------------|-----------------------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.05</a> | 50mg                              | 178738-48-2 and 178738-49-3                                                      |
| USP      | 1031558                   | 15mg, mixture of rel. comp. D + E | M.W. 339.4099<br>C <sub>15</sub> H <sub>21</sub> N <sub>3</sub> O <sub>4</sub> S |



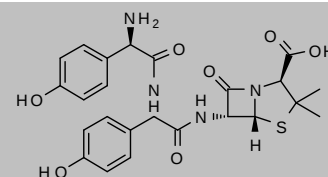
Amoxicillin Related Compound F (3-(4-Hydroxyphenyl)-pyrazin-2-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.06</a> | 100mg              | 126247-63-0                                                                   |
| USP      | 1031569                   | 15mg               | M.W. 188.1827<br>C <sub>10</sub> H <sub>8</sub> N <sub>2</sub> O <sub>2</sub> |



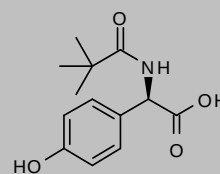
Amoxicillin Related Compound G ((2S,5R,6R)-6-(((2R)-2-(((2R)-2-Amino-2-(4-hydroxyphenyl)acetyl)amino)-2-(4-hydroxyphenyl)acetyl)amino)-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.07</a> | 100mg              | 188112-75-6                                                                      |
| USP      | 1031570                   | 15mg               | M.W. 514.5508<br>C <sub>24</sub> H <sub>26</sub> N <sub>4</sub> O <sub>7</sub> S |



Amoxicillin Related Compound H ((2R)-2-[(2,2-Dimethylpropanoyl)amino]-2-(4-hydroxyphenyl)acetic Acid)

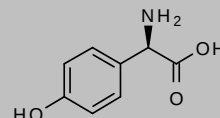
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0232.08</a> | 100mg              | 205826-86-4                                                       |
| USP      | 1031616                   | 15mg               | M.W. 251.2784<br>C <sub>13</sub> H <sub>17</sub> N O <sub>4</sub> |



## LGC impurities according to USP declaration system

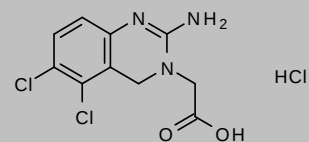
### Amoxicillin Related Compound I ((2R)-2-Amino-2-(4-hydroxyphenyl)acetic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0232.09</a> | 100mg              | 22818-40-2                                                     |
| USP      | 1031591                   | 25mg               | M.W. 167.162<br>C <sub>8</sub> H <sub>9</sub> N O <sub>3</sub> |



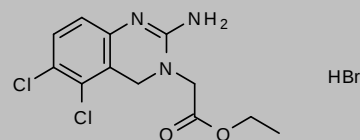
### Anagrelide Related Compound B ((2-Amino-5,6-dichloroquinazolin-3(4H)-yl)acetic Acid Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3250.04</a> | 100mg              | n/a                                                                                                  |
| USP      | 1034750                   | 25mg               | M.W. 310.5643<br>C <sub>10</sub> H <sub>9</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub> · Cl H |



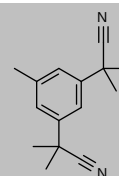
### Anagrelide Related Compound C (Ethyl 2-(5,6-Dichloro-2-imino-1,2-dihydroquinazolin-3(4H)-yl)acetate Hydrobromide)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                   |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3250.03</a> | 100mg              | 70381-75-8                                                                                            |
| USP      | 1034771                   | 25mg               | M.W. 383.0685<br>C <sub>12</sub> H <sub>13</sub> Cl <sub>2</sub> N <sub>3</sub> O <sub>2</sub> · Br H |



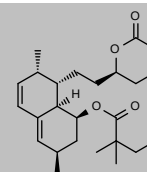
### Anastrozole Related Compound A (2,2'-(5-Methylbenzene-1,3-diyl)bis(2-methylpropanenitrile))

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1250.03</a> | 100mg              | 120511-72-0                                                     |
| USP      | 1034818                   | 20mg               | M.W. 226.3168<br>C <sub>15</sub> H <sub>18</sub> N <sub>2</sub> |



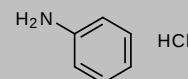
### Anhydro Simvastatin ((1S,3R,7S,8S,8aR)-3,7-Dimethyl-8-[2-[(2R)-6-oxo-3,6-dihydro-2H-pyran-2-yl]ethyl]-1,2,3,7,8,8a-hexahydronaphthalen-1-yl 2,2-Dimethylbutanoate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0158.03</a> | 100mg              | 210980-68-0                                                     |
| USP      | 1035402                   | 30mg               | M.W. 400.5509<br>C <sub>25</sub> H <sub>36</sub> O <sub>4</sub> |



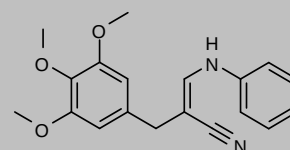
### Aniline Hydrochloride

| Producer | Code                      | Quantity / Comment  | CAS                                                     |
|----------|---------------------------|---------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0093.17</a> | 100mg               | 142-04-1                                                |
| USP      | 1036110                   | 250mg, as free base | M.W. 129.5874<br>C <sub>6</sub> H <sub>7</sub> N · Cl H |



### 3-Anilino-2-(3,4,5-trimethoxybenzyl) acrylonitrile (3-(Phenylamino)-2-(3,4,5-trimethoxybenzyl)prop-2-enenitrile (E/Z-mixture))

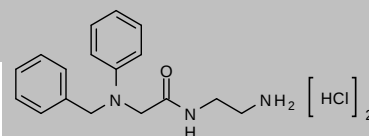
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0093.12</a> | 100mg              | 30078-48-9                                                                     |
| USP      | 1036507                   | 25mg               | M.W. 324.3737<br>C <sub>19</sub> H <sub>20</sub> N <sub>2</sub> O <sub>3</sub> |



## LGC impurities according to USP declaration system

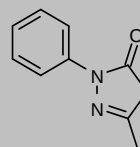
### Antazoline Related Compound A (N-(2-Aminoethyl)-2-(benzylphenylamino)acetamide Dihydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                   |
|----------|---------------------------|--------------------|-----------------------------------------------------------|
| LGC      | <a href="#">MM0171.01</a> | 100mg              | M.W. 356.29                                               |
| USP      | 1038025                   | 15mg, as free base | C <sub>17</sub> H <sub>21</sub> N <sub>3</sub> O . 2 Cl H |



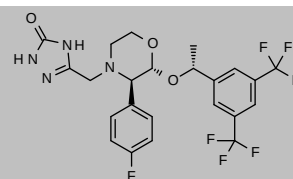
### Antipyrine Related Compound A (5-Methyl-2-phenyl-2,4-dihydro-3H-pyrazol-3-one; Edaravone)

| Producer | Code                      | Quantity / Comment | CAS 89-25-8                                      |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0036.01</a> | 100mg              | M.W. 174.1992                                    |
| USP      | 1040016                   | 25mg               | C <sub>10</sub> H <sub>10</sub> N <sub>2</sub> O |



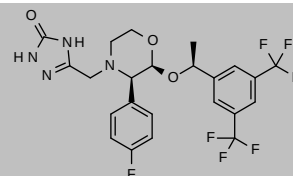
### Aprepitant Related Compound A (3-[[[(2R,3R)-2-[(R)-1-[3,5-Bis(trifluoromethyl)phenyl]ethoxy]-3-(4-fluorophenyl)morpholino]methyl]-1H-1,2,4-triazol-5(4H)-one; (R,R,R)-Aprepitant)

| Producer | Code                      | Quantity / Comment | CAS 1148113-53-4                                                             |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3251.01</a> | 100mg              | M.W. 534.4267                                                                |
| USP      | 1041915                   | 10mg               | C <sub>23</sub> H <sub>21</sub> F <sub>7</sub> N <sub>4</sub> O <sub>3</sub> |



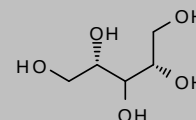
### Aprepitant Related Compound B (3-[[[(2S,3R)-2-[(S)-1-[3,5-Bis(trifluoromethyl)phenyl]ethoxy]-3-(4-fluorophenyl)morpholino]methyl]-1H-1,2,4-triazol-5(4H)-one; (S,R,S)-Aprepitant)

| Producer | Code                      | Quantity / Comment | CAS 172822-29-6                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3251.02</a> | 100mg              | M.W. 534.4267                                                                |
| USP      | 1041926                   | 10mg               | C <sub>23</sub> H <sub>21</sub> F <sub>7</sub> N <sub>4</sub> O <sub>3</sub> |



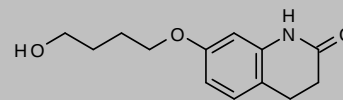
### L-Arabinitol

| Producer | Code                      | Quantity / Comment | CAS 7643-75-6                                 |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM1451.01</a> | 100mg              | M.W. 152.1458                                 |
| USP      | 1042102                   | 250mg              | C <sub>5</sub> H <sub>12</sub> O <sub>5</sub> |



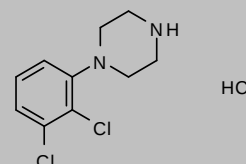
### Aripiprazole Related Compound B (7-(4-Hydroxybutoxy)-3,4-dihydroquinolin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS 889443-20-3                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0961.01</a> | 100mg              | M.W. 235.279                                     |
| USP      | 1042645                   | 25mg               | C <sub>13</sub> H <sub>17</sub> N O <sub>3</sub> |



### Aripiprazole Related Compound C (1-(2,3-Dichlorophenyl)piperazine Hydrochloride)

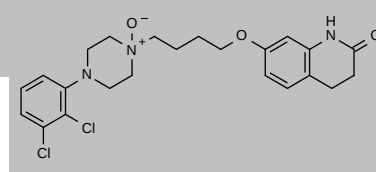
| Producer | Code                      | Quantity / Comment | CAS 119532-26-2                                                       |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM0961.02</a> | 100mg              | M.W. 267.5826                                                         |
| USP      | 1042656                   | 25mg               | C <sub>10</sub> H <sub>12</sub> Cl <sub>2</sub> N <sub>2</sub> . Cl H |



## LGC impurities according to USP declaration system

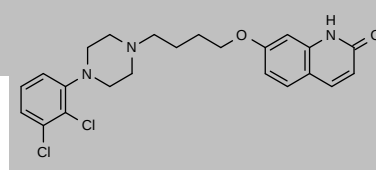
### Aripiprazole Related Compound F (7-[4-[4-(2,3-Dichlorophenyl)-1-oxidopiperazin-1-yl]butoxy]-3,4-dihydroquinolin-2(1H)-one; Aripiprazole N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                       |
|----------|---------------------------|--------------------|-------------------------------------------|
| LGC      | <a href="#">MM0961.03</a> | 100mg              | 573691-09-5                               |
| USP      | 1042689                   | 25mg               | M.W. 464.3848<br>$C_{23}H_{27}Cl_2N_3O_3$ |



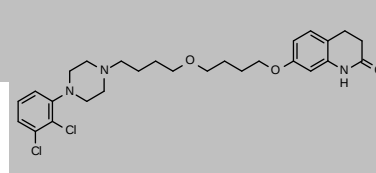
### Aripiprazole Related Compound G (7-[4-[4-(2,3-Dichlorophenyl)piperazin-1-yl]butoxy]quinolin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                       |
|----------|---------------------------|--------------------|-------------------------------------------|
| LGC      | <a href="#">MM0961.04</a> | 100mg              | 129722-25-4                               |
| USP      | 1042690                   | 25mg               | M.W. 446.3695<br>$C_{23}H_{25}Cl_2N_3O_2$ |



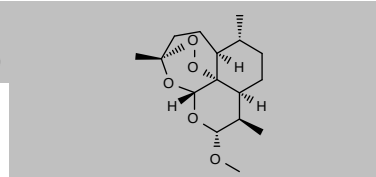
### Aripiprazole Related Compound H (7-(4-[4-(2,3-Dichlorophenyl)piperazin-1-yl]butoxy)butoxy)-3,4-dihydroquinolin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                       |
|----------|---------------------------|--------------------|-------------------------------------------|
| LGC      | <a href="#">MM0961.05</a> | 100mg              | n/a                                       |
| USP      | 1042714                   | 25mg               | M.W. 520.4911<br>$C_{27}H_{35}Cl_2N_3O_3$ |



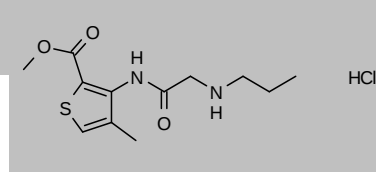
### Artemether Related Compound B (α-Artemether; (3R,5aS,6R,8aS,9R,10R,12R,12aR)-Decahydro-10-methoxy-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM3252.02</a> | 100mg              | 71939-51-0                         |
| USP      | 1042805                   | 15mg               | M.W. 298.3746<br>$C_{16}H_{26}O_5$ |



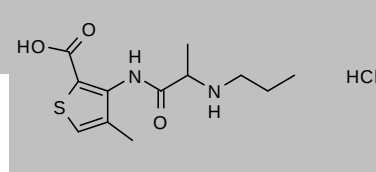
### Articaine Related Compound A (Methyl 3-[[2-(Propylamino)acetyl]amino]-4-methylthiophene-2-carboxylate Hydrochloride; Acetamidoarticaine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0369.01</a> | 100mg              | n/a                                              |
| USP      | 1042929                   | 40mg, as free base | M.W. 306.8089<br>$C_{12}H_{18}N_2O_3S \cdot ClH$ |



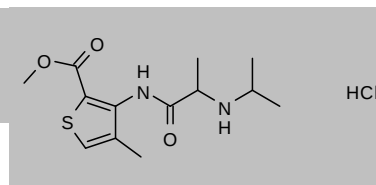
### Articaine Related Compound B (4-Methyl-3-[[2-(2RS)-2-(propylamino)propanoyl]amino]thiophene-2-carboxylic Acid Hydrochloride; Articaine Acid Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0369.02</a> | 50mg               | n/a                                              |
| USP      | 1042930                   | 25mg, as free base | M.W. 306.8089<br>$C_{12}H_{18}N_2O_3S \cdot ClH$ |



### Articaine Related Compound E (Methyl 4-Methyl-3-[[2-(2RS)-2-[(1-methylethyl)amino]propanoyl]amino]thiophene-2-carboxylate Hydrochloride; Isopropylarticaine Hydrochloride)

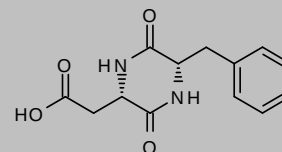
| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0369.05</a> | 100mg              | n/a                                              |
| USP      | 1042962                   | 40mg, as free base | M.W. 320.8354<br>$C_{13}H_{20}N_2O_3S \cdot ClH$ |



## LGC impurities according to USP declaration system

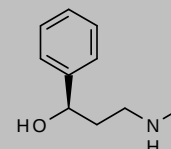
### Aspartame Related Compound A (2-(5-Benzyl-3,6-dioxopiperazin-2-yl)acetic Acid; Diketopiperazine)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5262-10-2                                                 |
| LGC      | <a href="#">MM0314.01</a> | 100mg              | M.W. 262.2613                                                 |
| USP      | 1043728                   | 25mg               | C <sub>13</sub> H <sub>14</sub> N <sub>2</sub> O <sub>4</sub> |



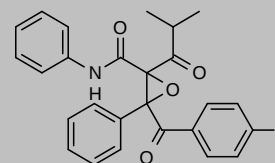
### Atomoxetine Related Compound A ((1R)-3-(Methylamino)-1-phenylpropan-1-ol)

|          |                           |                    |                                     |
|----------|---------------------------|--------------------|-------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 115290-81-8                     |
| LGC      | <a href="#">MM1304.06</a> | 100mg              | M.W. 165.2322                       |
| USP      | 1044470                   | 10mg               | C <sub>10</sub> H <sub>15</sub> N O |



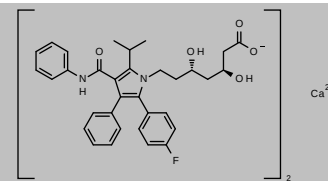
### Atorvastatin Related Compound D (3-[(4-Fluorophenyl)carbonyl]-2-(2-methylpropanoyl)-N,3-diphenyloxirane-2-carboxamide)

|          |                           |                    |                                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 148146-51-4                                    |
| LGC      | <a href="#">MM0400.11</a> | 100mg              | M.W. 431.4556                                      |
| USP      | 1044550                   | 10mg               | C <sub>26</sub> H <sub>22</sub> F N O <sub>4</sub> |



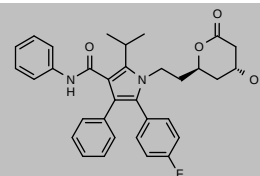
### Atorvastatin Related Compound E ((3S,5S)-7-[2-(4-Fluorophenyl)-5-(1-methylethyl)-3-phenyl-4-(phenylcarbamoyl)-1H-pyrrol-1-yl]-3,5-dihydroxyheptanoic Acid Calcium Salt; ent-Atorvastatin Calcium Salt)

|          |                           |                    |                                                                        |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1105067-88-6                                                       |
| LGC      | <a href="#">MM0400.28</a> | 100mg              | M.W. 1155.3417                                                         |
| USP      | 1044571                   | 10mg               | 2 C <sub>33</sub> H <sub>34</sub> F N <sub>2</sub> O <sub>5</sub> · Ca |



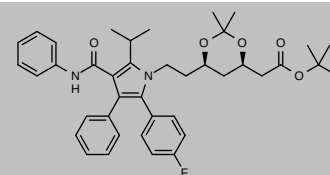
### Atorvastatin Related Compound H ((4R,6R)-6-[2-[2-(4-Fluorophenyl)-5-(1-methylethyl)-3-phenyl-4-(phenylcarbamoyl)-1H-pyrrol-1-yl]ethyl]-4-hydroxytetrahydro-2H-pyran-2-one; Atorvastatin Lactone)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 125995-03-1                                                 |
| LGC      | <a href="#">MM0400.01</a> | 100mg              | M.W. 540.6245                                                   |
| USP      | 1044582                   | 20mg               | C <sub>33</sub> H <sub>33</sub> F N <sub>2</sub> O <sub>4</sub> |



### Atorvastatin Related Compound I (1,1-Dimethylethyl (4R-cis)-6-[2-[2-(4-Fluorophenyl)-5-(1-methylethyl)-3-phenyl-4-[(phenylamino)carbonyl]-1-H-pyrrol-1-yl]ethyl]-2,2-di-methyl-1,3-dioxane-4-acetate)

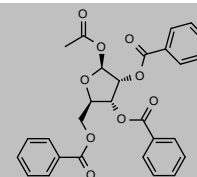
|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 125971-95-1                                                 |
| LGC      | <a href="#">MM0400.04</a> | 100mg              | M.W. 654.81                                                     |
| USP      | 1044593                   | 20mg               | C <sub>40</sub> H <sub>47</sub> F N <sub>2</sub> O <sub>5</sub> |



## LGC impurities according to USP declaration system

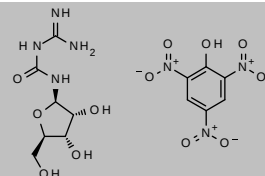
### Azacitidine Related Compound B (1-O-Acetyl-2,3,5-tri-O-benzoyl-β-D-ribofuranose)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 6974-32-9                                  |
| LGC      | <a href="#">MM1259.03</a> | 100mg              | M.W. 504.4848                                  |
| USP      | 1045541                   | 15mg               | C <sub>28</sub> H <sub>24</sub> O <sub>9</sub> |



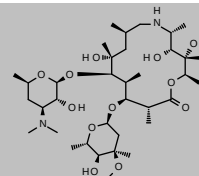
### Azacitidine Related Compound C (1-β-D-Ribofuranosyl-3-guanyurea Picrate)

|          |                           |                    |                                                                                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 4336-46-3                                                                                                              |
| LGC      | <a href="#">MM1259.04</a> | 50mg               | M.W. 463.3138                                                                                                              |
| USP      | 1045574                   | 15mg               | C <sub>7</sub> H <sub>14</sub> N <sub>4</sub> O <sub>5</sub> · C <sub>6</sub> H <sub>3</sub> N <sub>3</sub> O <sub>7</sub> |



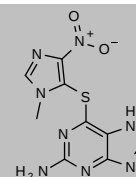
### Azaerythromycin A (6-Demethylazithromycin)

|          |                           |                    |                                                                |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 76801-85-9                                                 |
| LGC      | <a href="#">MM1075.01</a> | 100mg              | M.W. 734.9579                                                  |
| USP      | 1045600                   | 100mg              | C <sub>37</sub> H <sub>70</sub> N <sub>2</sub> O <sub>12</sub> |



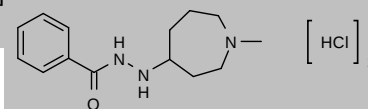
### Azathioprine Related Compound G (Thiamiprine)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5581-52-2                                                 |
| LGC      | <a href="#">MM1292.00</a> | 100mg              | M.W. 292.2772                                                 |
| USP      | 1045938                   | 15mg               | C <sub>9</sub> H <sub>8</sub> N <sub>8</sub> O <sub>2</sub> S |



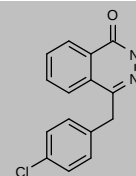
### Azelastine Related Compound B (1-Benzoyl-2-[(4RS)-1-methylhexahydro-1H-azepin-4-yl]diazane Dihydrochloride)

|          |                           |                            |                                                           |
|----------|---------------------------|----------------------------|-----------------------------------------------------------|
| Producer | Code                      | Quantity / Comment         | CAS n/a                                                   |
| LGC      | <a href="#">MM0362.07</a> | 100mg                      | M.W. 320.2579                                             |
| USP      | 1046170                   | 20mg, as monohydrochloride | C <sub>14</sub> H <sub>21</sub> N <sub>3</sub> O · 2 Cl H |



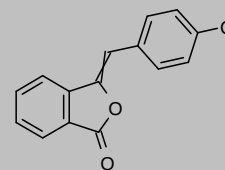
### Azelastine Related Compound D (4-(4-Chlorobenzyl)phthalazin-1(2H)-one)

|          |                           |                    |                                                     |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 53242-88-9                                      |
| LGC      | <a href="#">MM0362.01</a> | 100mg              | M.W. 270.7136                                       |
| USP      | 1046191                   | 20mg               | C <sub>15</sub> H <sub>11</sub> Cl N <sub>2</sub> O |



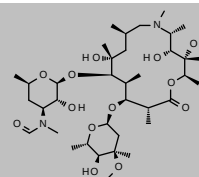
### Azelastine Related Compound E (3-(4-Chlorobenzylidene)isobenzofuran-1(3H)-one)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 20526-97-0                                   |
| LGC      | <a href="#">MM0362.08</a> | 100mg              | M.W. 256.6838                                    |
| USP      | 1046202                   | 20mg               | C <sub>15</sub> H <sub>9</sub> Cl O <sub>2</sub> |



### Azithromycin Related Compound F (3'-N-Demethyl-3'-N-formylazithromycin)

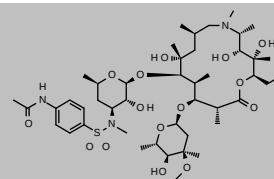
|          |                           |                    |                                                                |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 612069-28-0                                                |
| LGC      | <a href="#">MM1075.03</a> | 100mg              | M.W. 762.968                                                   |
| USP      | 1046045                   | 25mg               | C <sub>38</sub> H <sub>70</sub> N <sub>2</sub> O <sub>13</sub> |



## LGC impurities according to USP declaration system

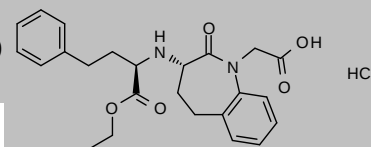
### Azithromycin Related Compound H (3'-N-[[4-(Acetylamino)phenyl]sulfonyl]-3'-N-demethylazithromycin)

|          |                           |                    |                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 612069-30-4                                                  |
| LGC      | <a href="#">MM1075.11</a> | 50mg               | M.W. 932.169                                                     |
| USP      | 1046023                   | 15mg               | C <sub>45</sub> H <sub>77</sub> N <sub>3</sub> O <sub>15</sub> S |



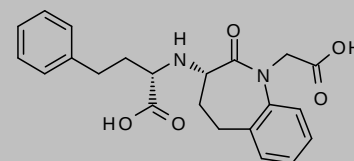
### Benazepril Related Compound B ([[(3S)-3-[[[(1R)-1-(Ethoxycarbonyl)-3-phenylpropyl]amino]-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]acetic Acid Hydrochloride; (1R,3S)-Benazepril Hydrochloride)

|          |                           |                    |                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 86541-77-7                                                       |
| LGC      | <a href="#">MM1229.08</a> | 100mg              | M.W. 460.9505                                                        |
| USP      | 1048630                   | 15mg               | C <sub>24</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub> · Cl H |



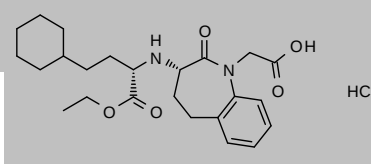
### Benazepril Related Compound C ((2S)-2-[[[(3S)-1-(Carboxymethyl)-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-3-yl]amino]-4-phenylbutanoic Acid; Benazeprilat)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 86541-78-8                                                |
| LGC      | <a href="#">MM0274.01</a> | 100mg              | M.W. 396.4364                                                 |
| USP      | 1048641                   | 50mg               | C <sub>22</sub> H <sub>24</sub> N <sub>2</sub> O <sub>5</sub> |



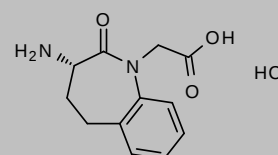
### Benazepril Related Compound D ([[(3S)-3-[[[(1S)-3-Cyclohexyl-1-(ethoxycarbonyl)propyl]amino]-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]acetic Acid Hydrochloride)

|          |                           |                    |                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                                              |
| LGC      | <a href="#">MM1229.06</a> | 100mg              | M.W. 466.9981                                                        |
| USP      | 1048652                   | 15mg               | C <sub>24</sub> H <sub>34</sub> N <sub>2</sub> O <sub>5</sub> · Cl H |



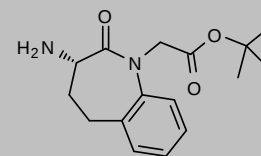
### Benazepril Related Compound E ([[(3S)-3-Amino-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]acetic Acid Hydrochloride)

|          |                           |                    |                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                                              |
| LGC      | <a href="#">MM1229.07</a> | 100mg              | M.W. 270.7121                                                        |
| USP      | 1048663                   | 25mg               | C <sub>12</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub> · Cl H |



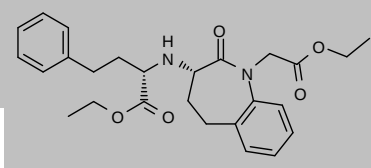
### Benazepril Related Compound F (1,1-Dimethylethyl [(3S)-3-Amino-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-1-yl]acetate)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 109010-60-8                                               |
| LGC      | <a href="#">MM1229.03</a> | 100mg              | M.W. 290.3575                                                 |
| USP      | 1048674                   | 15mg               | C <sub>16</sub> H <sub>22</sub> N <sub>2</sub> O <sub>3</sub> |



### Benazepril Related Compound G (Ethyl (2S)-2-[[[(3S)-1-(2-Ethoxy-2-oxoethyl)-2-oxo-2,3,4,5-tetrahydro-1H-1-benzazepin-3-yl]amino]-4-phenylbutanoate; Benazepril Ethyl Ester)

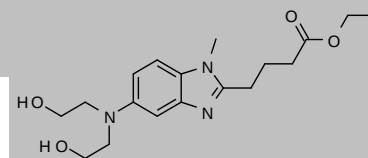
|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 103129-58-4                                               |
| LGC      | <a href="#">MM1229.02</a> | 100mg              | M.W. 452.5427                                                 |
| USP      | 1048685                   | 15mg               | C <sub>26</sub> H <sub>32</sub> N <sub>2</sub> O <sub>5</sub> |



## LGC impurities according to USP declaration system

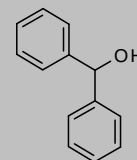
### Bendamustine Related Compound C (5-[Bis(2-hydroxyethyl)amino]-1-methyl-1H-benzimidazole-2-butanoic Acid Ethyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0154.02</a> | 100mg              | 3543-74-6                             |
| USP      | 1065254                   | 20mg               | M.W. 349.4247<br>$C_{18}H_{27}N_3O_4$ |



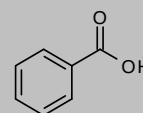
### Benzhydrol (Diphenylmethanol)

| Producer | Code                      | Quantity / Comment | CAS                              |
|----------|---------------------------|--------------------|----------------------------------|
| LGC      | <a href="#">MM0490.02</a> | 100mg              | 91-01-0                          |
| USP      | 1051602                   | 50mg               | M.W. 184.2338<br>$C_{13}H_{12}O$ |



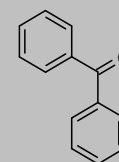
### Benzoic Acid

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM0278.01</a> | 100mg              | 65-85-0                      |
| USP      | 1055002                   | 300mg              | M.W. 122.1213<br>$C_7H_6O_2$ |



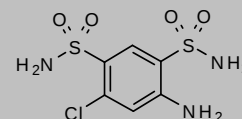
### Benzophenone (Diphenylmethanone)

| Producer | Code                      | Quantity / Comment | CAS                              |
|----------|---------------------------|--------------------|----------------------------------|
| LGC      | <a href="#">MM0630.01</a> | 100mg              | 119-61-9                         |
| USP      | 1056130                   | 25mg               | M.W. 182.2179<br>$C_{13}H_{10}O$ |



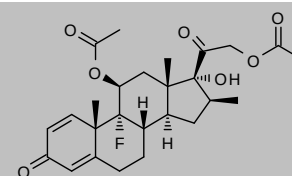
### Benzothiadiazine Related Compound A (4-Amino-6-chlorobenzene-1,3-disulphonamide; Sulfamide)

| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0011.01</a> | 100mg              | 121-30-2                             |
| USP      | 1057507                   | 100mg              | M.W. 285.7284<br>$C_6H_8ClN_3O_4S_2$ |



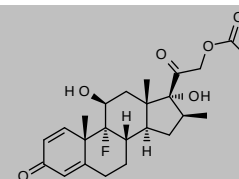
### Betamethasone Acetate Related Compound C (Betamethasone 11,21-Diacetate)

| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0201.03</a> | 100mg              | 330157-05-6                          |
| USP      | 1067034                   | 20mg               | M.W. 476.5344<br>$C_{26}H_{33}F O_7$ |



### Betamethasone Valerate Related Compound A (9-Fluoro-11β,17-dihydroxy-16β-methyl-3,20-dioxopregna-1,4-dien-21-yl Pentanoate; Betamethasone 21-Valerate)

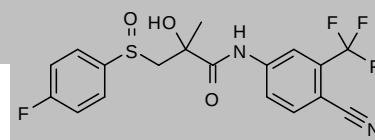
| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0203.01</a> | 100mg              | 2240-28-0                            |
| USP      | 1069018                   | 50mg               | M.W. 476.5775<br>$C_{27}H_{37}F O_6$ |



## LGC impurities according to USP declaration system

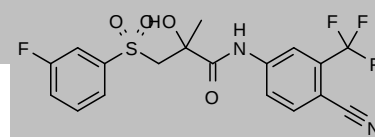
### Bicalutamide Related Compound A (N-[4-Cyano-3-(trifluoromethyl)phenyl]-3-[(4-fluorophenyl)sulfinyl]-2-hydroxy-2-methylpropanamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                                            |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0894.01</a> | 50mg               | n/a                                                                                            |
| USP      | 1071213                   | 25mg               | M.W. 414.374<br>C <sub>18</sub> H <sub>14</sub> F <sub>4</sub> N <sub>2</sub> O <sub>3</sub> S |



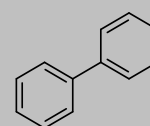
### Bicalutamide Related Compound B ((RS)-N-[4-Cyano-3-(trifluoromethyl)phenyl]-3-(3-fluorophenylsulfonyl)-2-hydroxy-2-methylpropanamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0894.08</a> | 100mg              | 1166228-30-3                                                                                    |
| USP      | 1071224                   | 10mg               | M.W. 430.3734<br>C <sub>18</sub> H <sub>14</sub> F <sub>4</sub> N <sub>2</sub> O <sub>4</sub> S |



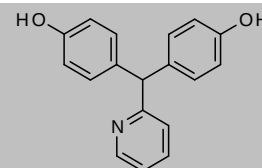
### Biphenyl

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0918.03</a> | 100mg              | 92-52-4                                          |
| USP      | 1073423                   | 500mg              | M.W. 154.2078<br>C <sub>12</sub> H <sub>10</sub> |



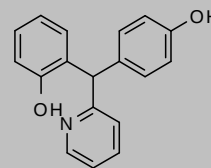
### Bisacodyl Related Compound A (4,4'-(Pyridin-2-ylmethylene)diphenol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0031.01</a> | 100mg              | 603-41-8                                                          |
| USP      | 1074030                   | 20mg               | M.W. 277.3172<br>C <sub>18</sub> H <sub>15</sub> N O <sub>2</sub> |



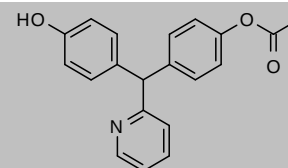
### Bisacodyl Related Compound B (2-[(RS)-(4-Hydroxyphenyl)(pyridin-2-yl)methyl]phenol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0031.04</a> | 50mg               | 16985-05-0                                                        |
| USP      | 1074042                   | 20mg               | M.W. 277.3172<br>C <sub>18</sub> H <sub>15</sub> N O <sub>2</sub> |



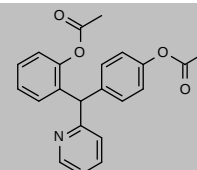
### Bisacodyl Related Compound C (4-[(RS)-(4-Hydroxyphenyl)-(pyridin-2-yl)methyl]phenyl Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0031.02</a> | 100mg              | 72901-16-7                                                        |
| USP      | 1074051                   | 20mg               | M.W. 319.3539<br>C <sub>20</sub> H <sub>17</sub> N O <sub>3</sub> |



### Bisacodyl Related Compound E (2-[(RS)-[4-(Acetyloxy)phenyl]-(pyridin-2-yl)methyl]phenyl Acetate)

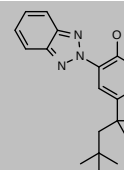
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0031.03</a> | 50mg               | 111664-35-8                                                       |
| USP      | 1074073                   | 20mg               | M.W. 361.3906<br>C <sub>22</sub> H <sub>19</sub> N O <sub>4</sub> |



## LGC impurities according to USP declaration system

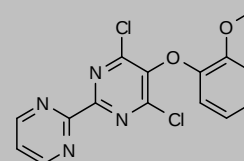
### Bisotrizole Related Compound A (2-(2H-Benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM3255.01</a> | 100mg              | 3147-75-9                          |
| USP      | 1075688                   | 25mg               | M.W. 323.432<br>$C_{20}H_{25}N_3O$ |



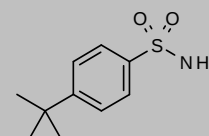
### Bosentan Related Compound D (4,6-Dichloro-5-(2-methoxyphenoxy)-2,2'-bipyrimidine)

| Producer | Code                      | Quantity / Comment | CAS                                       |
|----------|---------------------------|--------------------|-------------------------------------------|
| LGC      | <a href="#">MM3369.03</a> | 100mg              | 150728-13-5                               |
| USP      | 1076159                   | 15mg               | M.W. 349.1715<br>$C_{15}H_{10}Cl_2N_4O_2$ |



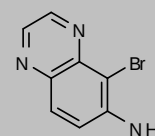
### Bosentan Related Compound E (4-(tert-Butyl)benzenesulfonamide)

| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM3369.02</a> | 100mg              | 6292-59-7                            |
| USP      | 1076160                   | 15mg               | M.W. 213.2966<br>$C_{10}H_{15}NO_2S$ |



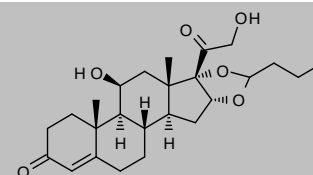
### Brimonidine Related Compound A (5-Bromoquinoxalin-6-amine)

| Producer | Code                      | Quantity / Comment | CAS                            |
|----------|---------------------------|--------------------|--------------------------------|
| LGC      | <a href="#">MM1324.02</a> | 100mg              | 50358-63-9                     |
| USP      | 1076419                   | 50mg               | M.W. 224.0573<br>$C_8H_6BrN_3$ |



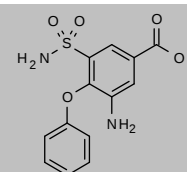
### Budesonide Related Compound G (16α,17-[(1RS)-Butylidenebis(oxy)]-11β,21-dihydroxypregn-4-ene-3,20-dione; 1,2-Dihydrobudesonide)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0204.07</a> | 50mg               | 137174-25-5                        |
| USP      | 1078267                   | 25mg               | M.W. 432.5497<br>$C_{25}H_{36}O_6$ |



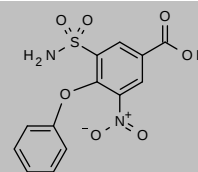
### Bumetanide Related Compound A (3-Amino-4-phenoxy-5-sulfamoylbenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM1290.02</a> | 100mg              | 28328-54-3                             |
| USP      | 1078325                   | 10mg               | M.W. 308.3098<br>$C_{13}H_{12}N_2O_5S$ |



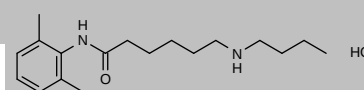
### Bumetanide Related Compound B (3-Nitro-4-phenoxy-5-sulfamoylbenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM1290.01</a> | 100mg              | 28328-53-2                             |
| USP      | 1078336                   | 25mg               | M.W. 338.2927<br>$C_{13}H_{10}N_2O_7S$ |



### Bupivacaine Related Compound A (6-(Butylamino)-N-(2,6-dimethylphenyl)hexanamide Hydrochloride)

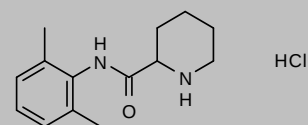
| Producer | Code                      | Quantity / Comment | CAS                                           |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM0613.05</a> | 50mg               | n/a                                           |
| USP      | 1078518                   | 50mg, as free base | M.W. 326.9045<br>$C_{18}H_{30}N_2O \cdot ClH$ |



## LGC impurities according to USP declaration system

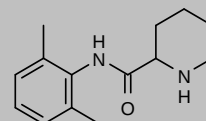
### Bupivacaine Related Compound B ((RS)-N-(2,6-Dimethylphenyl)piperidine-2-carboxamide Hydrochloride)

|          |                           |                    |                                                         |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 65797-42-4                                          |
| LGC      | <a href="#">MM0368.02</a> | 50mg               | M.W. 268.7823                                           |
| USP      | 1078529                   | 50mg, as free base | C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O . Cl H |



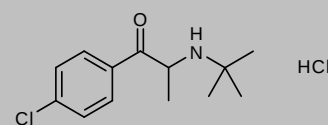
### Bupivacaine Related Compound B ((RS)-N-(2,6-Dimethylphenyl)piperidine-2-carboxamide)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 15883-20-2                                   |
| LGC      | <a href="#">MM0368.08</a> | 100mg              | M.W. 232.3214                                    |
| USP      | 1078529                   | 50mg               | C <sub>14</sub> H <sub>20</sub> N <sub>2</sub> O |



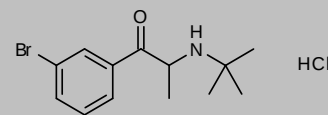
### Bupropion Hydrochloride Related Compound A (2-(tert-Butylamino)-4'-chloropropiophenone Hydrochloride)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1049718-72-0                              |
| LGC      | <a href="#">MM0745.02</a> | 100mg              | M.W. 276.2021                                 |
| USP      | 1078744                   | 15mg               | C <sub>13</sub> H <sub>18</sub> Cl N O . Cl H |



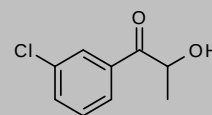
### Bupropion Hydrochloride Related Compound B (2-(tert-Butylamino)-3'-bromopropiophenone Hydrochloride)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1049718-43-5                              |
| LGC      | <a href="#">MM0745.03</a> | 100mg              | M.W. 320.6531                                 |
| USP      | 1078755                   | 10mg               | C <sub>13</sub> H <sub>18</sub> Br N O . Cl H |



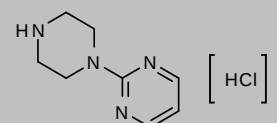
### Bupropion Hydrochloride Related Compound C (1-(3-Chlorophenyl)-2-hydroxy-1-propanone)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 152943-33-4                                 |
| LGC      | <a href="#">MM0745.04</a> | 100mg              | M.W. 184.6196                                   |
| USP      | 1078766                   | 40mg               | C <sub>9</sub> H <sub>9</sub> Cl O <sub>2</sub> |



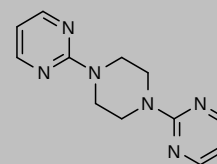
### Buspirone Related Compound A (2-(Piperazin-1-yl)pyrimidine Dihydrochloride)

|          |                           |                         |                                                        |
|----------|---------------------------|-------------------------|--------------------------------------------------------|
| Producer | Code                      | Quantity / Comment      | CAS 94021-22-4                                         |
| LGC      | <a href="#">MM0464.02</a> | 100mg                   | M.W. 237.1296                                          |
| USP      | 1078573                   | 75 mg x 2, as free base | C <sub>8</sub> H <sub>12</sub> N <sub>4</sub> . 2 Cl H |



### Buspirone Related Compound G (2,2'-(Piperazine-1,4-diyl)dipyrimidine)

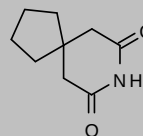
|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 84746-24-7                                 |
| LGC      | <a href="#">MM0464.12</a> | 50mg               | M.W. 242.2798                                  |
| USP      | 1078813                   | 50mg               | C <sub>12</sub> H <sub>14</sub> N <sub>6</sub> |



## LGC impurities according to USP declaration system

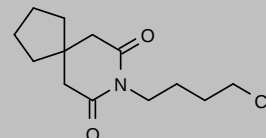
### Buspirone Related Compound K (8-Azaspiro[4,5]decane-7,9-dione)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1075-89-4                                   |
| LGC      | <a href="#">MM0464.08</a> | 100mg              | M.W. 167.205                                    |
| USP      | 1078642                   | 50mg               | C <sub>9</sub> H <sub>13</sub> N O <sub>2</sub> |



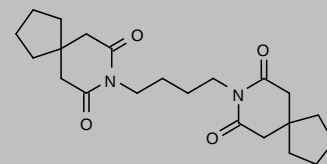
### Buspirone Related Compound L (8-(4-Chlorobutyl)-8-azaspiro[4.5]-decane-7,9-dione)

|          |                           |                    |                                                     |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 21098-11-3                                      |
| LGC      | <a href="#">MM0464.09</a> | 50mg               | M.W. 257.7564                                       |
| USP      | 1078824                   | 75 mg x 2          | C <sub>13</sub> H <sub>20</sub> Cl N O <sub>2</sub> |



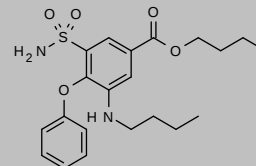
### Buspirone Related Compound N (8,8'-(Butane-1,4-diyl)bis(8-azaspiro[4.5]decane-7,9-dione))

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 257877-44-4                                               |
| LGC      | <a href="#">MM0464.10</a> | 50mg               | M.W. 388.5005                                                 |
| USP      | 1078835                   | 50mg               | C <sub>22</sub> H <sub>32</sub> N <sub>2</sub> O <sub>4</sub> |



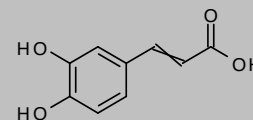
### Butyl 3-(Butylamino)-4-phenoxy-5-sulfamoylbenzoate

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 32643-00-8                                                  |
| LGC      | <a href="#">MM1290.03</a> | 100mg              | M.W. 420.5224                                                   |
| USP      | 1082901                   | 25mg               | C <sub>21</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub> S |



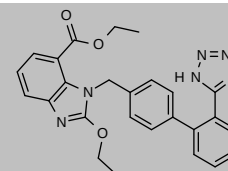
### Caffeic Acid (3,4-Dihydroxycinnamic Acid)

|          |                           |                    |                                              |
|----------|---------------------------|--------------------|----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 331-39-5                                 |
| LGC      | <a href="#">MM0048.01</a> | 100mg              | M.W. 180.1574                                |
| USP      | 1084995                   | 100mg              | C <sub>9</sub> H <sub>8</sub> O <sub>4</sub> |



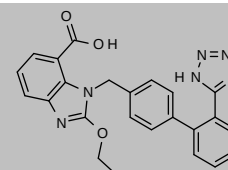
### Candesartan Cilixetil Related Compound A (Ethyl 2-Ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-benzimidazole-7-carboxylate)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 139481-58-6                                               |
| LGC      | <a href="#">MM0776.01</a> | 100mg              | M.W. 468.5072                                                 |
| USP      | 1087814                   | 10mg               | C <sub>26</sub> H <sub>24</sub> N <sub>6</sub> O <sub>3</sub> |



### Candesartan Cilixetil Related Compound G (2-Ethoxy-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-benzimidazole-7-carboxylic Acid; Candesartan)

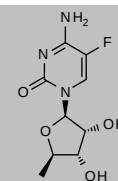
|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 139481-59-7                                               |
| LGC      | <a href="#">MM0776.09</a> | 100mg              | M.W. 440.454                                                  |
| USP      | 1087870                   | 10mg               | C <sub>24</sub> H <sub>20</sub> N <sub>6</sub> O <sub>3</sub> |



## LGC impurities according to USP declaration system

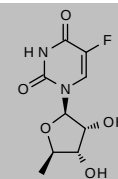
### Capecitabine Related Compound A (4-Amino-1-(5-deoxy-β-D-ribofuranosyl)-5-fluoropyrimidin-2(1H)-one; 5'-Deoxy-5-fluorocytidine)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0992.05</a> | 100mg              | 66335-38-4                                                                      |
| USP      | 1090717                   | 15mg               | M.W. 245.2077<br>C <sub>9</sub> H <sub>12</sub> F N <sub>3</sub> O <sub>4</sub> |



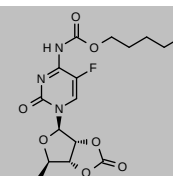
### Capecitabine Related Compound B (1-(5-Deoxy-β-D-ribofuranosyl)-5-fluoropyrimidine-2,4 (1H,3H)-dione; 5'-Deoxy-5-fluorouridine)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0992.06</a> | 100mg              | 3094-09-5                                                                       |
| USP      | 1090728                   | 20mg               | M.W. 246.1924<br>C <sub>9</sub> H <sub>11</sub> F N <sub>2</sub> O <sub>5</sub> |



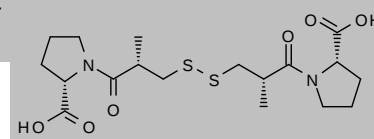
### Capecitabine Related Compound C (2',3'-O-Carbonyl-5'-deoxy-5-fluoro-N<sup>4</sup>-(pentyloxycarbonyl)cytidine)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0992.02</a> | 100mg              | 921769-65-5                                                                      |
| USP      | 1090739                   | 10mg               | M.W. 385.3443<br>C <sub>16</sub> H <sub>20</sub> F N <sub>3</sub> O <sub>7</sub> |



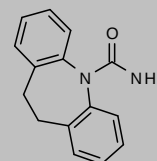
### Captopril Disulfide (1,1'-[Disulfanediy]bis-[(2S)-2-methyl-1-oxopropane-3,1-diy]]-bis[(2S)-pyrrolidine-2-carboxylic] Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                                           |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0067.01</a> | 100mg              | 64806-05-9                                                                                    |
| USP      | 1091221                   | 100mg              | M.W. 432.5547<br>C <sub>18</sub> H <sub>28</sub> N <sub>2</sub> O <sub>6</sub> S <sub>2</sub> |



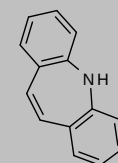
### Carbamazepine Related Compound A (10,11-Dihydro-5H-dibenzo[b,f]azepine-5-carboxamide; 10,11-Dihydro-carbamazepine)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0076.04</a> | 100mg              | 3564-73-6                                                         |
| USP      | 1093012                   | 30mg               | M.W. 238.2845<br>C <sub>15</sub> H <sub>14</sub> N <sub>2</sub> O |



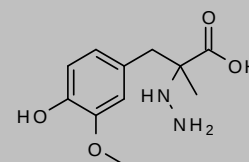
### Carbamazepine Related Compound B (5H-Dibenzo[b,f]azepine; Iminostilbene)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM0076.08</a> | 100mg              | 256-96-2                                           |
| USP      | 1093023                   | 50mg               | M.W. 193.2438<br>C <sub>14</sub> H <sub>11</sub> N |



### Carbidopa Related Compound A ((RS)-2-Hydrazino-3-(4-hydroxy-3-methoxyphenyl)-2-methylpropanoic Acid; (RS)-3-O-Methylcarbidopa)

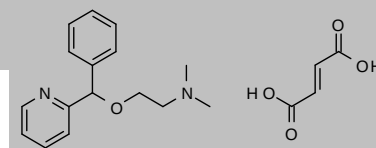
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1501.09</a> | 100mg              | 85933-19-3                                                                     |
| USP      | 1095517                   | 25mg               | M.W. 240.2557<br>C <sub>11</sub> H <sub>16</sub> N <sub>2</sub> O <sub>4</sub> |



## LGC impurities according to USP declaration system

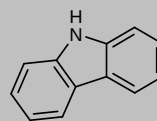
### Carbinoxamine Related Compound C (N,N-Dimethyl-2-[(RS)-1-phenyl(pyridin-2-yl)methoxy]ethanamine Hydrogen Fumarate)

| Producer | Code                      | Quantity / Comment | CAS n/a                            |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0101.03</a> | 50mg               | M.W. 372.415                       |
| USP      | 1096032                   | 25mg, as oxalate   | $C_{16}H_{20}N_2O \cdot C_4H_4O_4$ |



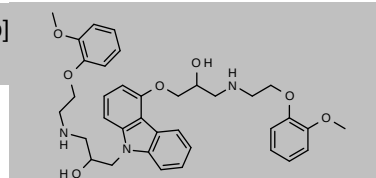
### Carprofen Related Compound A (Carbazole)

| Producer | Code                      | Quantity / Comment | CAS 86-74-8   |
|----------|---------------------------|--------------------|---------------|
| LGC      | <a href="#">MM1484.01</a> | 100mg              | M.W. 167.2066 |
| USP      | 1096702                   | 50mg               | $C_{12}H_9N$  |



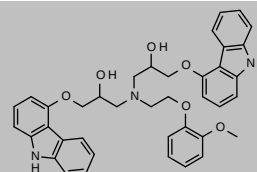
### Carvedilol Related Compound A (1-[[9-[2-Hydroxy-3-[[2-(2-methoxy-phenoxy)ethyl]amino]propyl]-9H-carbazol-4-yl]oxy]-3-[[2-(2-methoxyphenoxy)ethyl]amino]-propan-2-ol)

| Producer | Code                      | Quantity / Comment | CAS 1198090-73-1     |
|----------|---------------------------|--------------------|----------------------|
| LGC      | <a href="#">MM0291.01</a> | 50mg               | M.W. 629.7425        |
| USP      | 1096633                   | 15mg               | $C_{36}H_{43}N_3O_7$ |



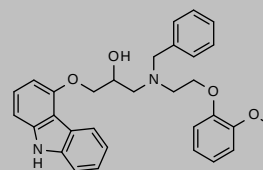
### Carvedilol Related Compound B (1,1'-[[2-(2-Methoxyphenoxy)ethyl]nitrilo]bis[3-(9H-carbazol-4-yloxy)propan-2-ol])

| Producer | Code                      | Quantity / Comment | CAS 918903-20-5      |
|----------|---------------------------|--------------------|----------------------|
| LGC      | <a href="#">MM0291.02</a> | 100mg              | M.W. 645.7435        |
| USP      | 1096644                   | 15mg               | $C_{39}H_{39}N_3O_6$ |



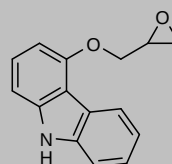
### Carvedilol Related Compound C ((2RS)-1-[Benzyl[2-(2-methoxyphenoxy)ethyl]amino]-3-(9H-carbazol-4-yloxy)propan-2-ol)

| Producer | Code                      | Quantity / Comment | CAS 72955-94-3       |
|----------|---------------------------|--------------------|----------------------|
| LGC      | <a href="#">MM0291.03</a> | 100mg              | M.W. 496.5968        |
| USP      | 1096655                   | 20mg               | $C_{31}H_{32}N_2O_4$ |



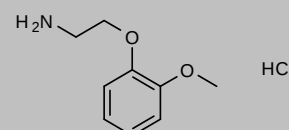
### Carvedilol Related Compound D (4-(2,3-Epoxypropoxy)carbazole)

| Producer | Code                      | Quantity / Comment | CAS 51997-51-4     |
|----------|---------------------------|--------------------|--------------------|
| LGC      | <a href="#">MM0291.10</a> | 100mg              | M.W. 239.2692      |
| USP      | 1096666                   | 15mg               | $C_{15}H_{13}NO_2$ |



### Carvedilol Related Compound E (2-(2-Methoxyphenoxy)ethylamine Hydrochloride)

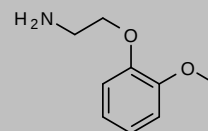
| Producer | Code                      | Quantity / Comment | CAS 64464-07-9            |
|----------|---------------------------|--------------------|---------------------------|
| LGC      | <a href="#">MM0291.11</a> | 100mg              | M.W. 203.666              |
| USP      | 1096677                   | 15mg, as free base | $C_9H_{13}NO_2 \cdot ClH$ |



## LGC impurities according to USP declaration system

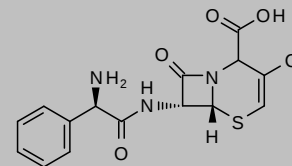
### Carvedilol Related Compound E (2-(2-Methoxyphenoxy)ethylamine)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1836-62-0                                   |
| LGC      | <a href="#">MM0291.09</a> | 100mg              | M.W. 167.205                                    |
| USP      | 1096677                   | 15mg               | C <sub>9</sub> H <sub>13</sub> N O <sub>2</sub> |



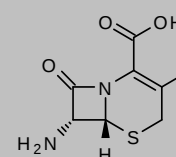
### Cefaclor Delta-3 Isomer ((2R,6R,7R)- and (2S,6R,7R)-7-[[[(2R)-2-Amino-2-phenylacetyl]amino]-3-chloro-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-3-ene-2-carboxylic Acid; delta-3-Cefaclor)

|          |                           |                    |                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 152575-13-8                                                    |
| LGC      | <a href="#">MM0326.03</a> | 100mg              | M.W. 367.8074                                                      |
| USP      | 1096917                   | 15mg               | C <sub>15</sub> H <sub>14</sub> Cl N <sub>3</sub> O <sub>4</sub> S |



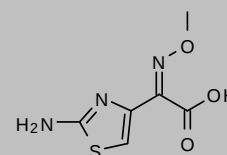
### Cefadroxil Related Compound B (7-Aminodesacetoxyccephalosporanic Acid)

|          |                           |                    |                                                                |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 22252-43-3                                                 |
| LGC      | <a href="#">MM0811.01</a> | 100mg              | M.W. 214.2416                                                  |
| USP      | 1097126                   | 25mg               | C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> O <sub>3</sub> S |



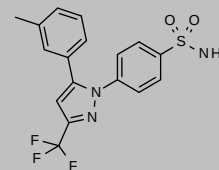
### Cefepime Related Compound D ((2Z)-(2-Aminothiazol-4-yl)(methoxyimino)acetic Acid)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 65872-41-5                                                |
| LGC      | <a href="#">MM1475.01</a> | 100mg              | M.W. 201.2031                                                 |
| USP      | 1097680                   | 20mg               | C <sub>6</sub> H <sub>7</sub> N <sub>3</sub> O <sub>3</sub> S |



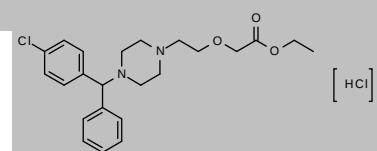
### Celecoxib Related Compound A (4-[5-(3-Methylphenyl)-3-(trifluoromethyl)-1H-pyrazol-1-yl]benzenesulfonamide)

|          |                           |                    |                                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 170570-01-1                                                                |
| LGC      | <a href="#">MM0344.06</a> | 50mg               | M.W. 381.3722                                                                  |
| USP      | 1098515                   | 10mg               | C <sub>17</sub> H <sub>14</sub> F <sub>3</sub> N <sub>3</sub> O <sub>2</sub> S |



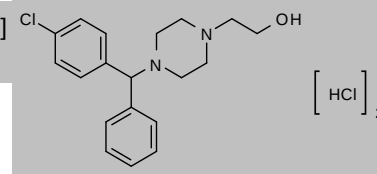
### Cetirizine Related Compound A (Ethyl Ester of Cetirizine Dihydrochloride)

|          |                           |                    |                                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                                                   |
| LGC      | <a href="#">MM0380.15</a> | 100mg              | M.W. 489.8628                                                             |
| USP      | 1102930                   | 20mg               | C <sub>23</sub> H <sub>29</sub> Cl N <sub>2</sub> O <sub>3</sub> · 2 Cl H |



### Cetirizine Related Compound G (2-[4-[(RS)-(4-Chlorophenyl)phenylmethyl]piperazin-1-yl]ethanol Dihydrochloride)

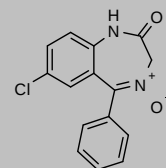
|          |                           |                    |                                                              |
|----------|---------------------------|--------------------|--------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 164726-80-1                                              |
| LGC      | <a href="#">MM0380.11</a> | 100mg              | M.W. 403.7736                                                |
| USP      | 1102963                   | 50mg               | C <sub>19</sub> H <sub>23</sub> Cl N <sub>2</sub> O · 2 Cl H |



## LGC impurities according to USP declaration system

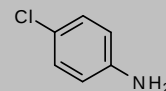
### Chlordiazepoxide Related Compound A (7-Chloro-5-phenyl-1,3-dihydro-2H-1,4-benzodiazepin-2-one 4-Oxide; Demoxepam)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0028.02</a> | 100mg              | 963-39-3                                                                         |
| USP      | 1110020                   | 25mg               | M.W. 286.713<br>C <sub>15</sub> H <sub>11</sub> Cl N <sub>2</sub> O <sub>2</sub> |



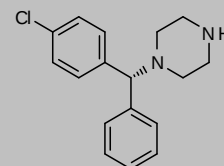
### p-Chloroaniline (4-Chloroaniline)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM0162.05</a> | 100mg              | 106-47-8                                            |
| USP      | 1111908                   | 200mg              | M.W. 127.5715<br>C <sub>6</sub> H <sub>6</sub> Cl N |



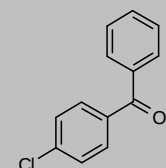
### Chlorobenzhydriyl Piperazine ((R)-1-[(4-Chlorophenyl)phenylmethyl]piperazine)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM1035.01</a> | 100mg              | 300543-56-0                                                        |
| USP      | 1112311                   | 75mg               | M.W. 286.7992<br>C <sub>17</sub> H <sub>19</sub> Cl N <sub>2</sub> |



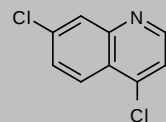
### 4-Chlorobenzophenone

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM0380.10</a> | 100mg              | 134-85-0                                            |
| USP      | 1112467                   | 30mg               | M.W. 216.663<br>C <sub>13</sub> H <sub>9</sub> Cl O |



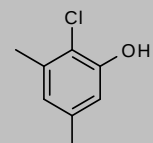
### Chloroquine Related Compound A (4,7-Dichloroquinoline)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0617.03</a> | 100mg              | 86-98-6                                                          |
| USP      | 1118328                   | 25mg               | M.W. 198.0487<br>C <sub>9</sub> H <sub>5</sub> Cl <sub>2</sub> N |



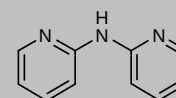
### Chloroxylenol Related Compound A (2-Chloro-3,5-dimethylphenol)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM1997.01</a> | 100mg              | 5538-41-0                                           |
| USP      | 1122722                   | 25mg               | M.W. 156.6095<br>C <sub>8</sub> H <sub>9</sub> Cl O |



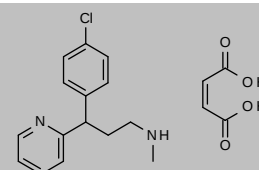
### Chlorpheniramine Related Compound B (N-(Pyridin-2-yl)pyridin-2-amine; 2,2'-Dipyridylamine)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0090.04</a> | 100mg              | 1202-34-2                                                      |
| USP      | 1123135                   | 25mg               | M.W. 171.1986<br>C <sub>10</sub> H <sub>9</sub> N <sub>3</sub> |



### Chlorpheniramine Related Compound C ((3RS)-3-(4-Chloro-phenyl)-N-methyl-3-(pyridin-2-yl)propan-1-amine Maleate)

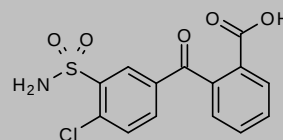
| Producer | Code                      | Quantity / Comment | CAS                                                                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0090.13</a> | 100mg              | 22630-25-7                                                                                                       |
| USP      | 1123146                   | 10mg               | M.W. 376.834<br>C <sub>15</sub> H <sub>17</sub> Cl N <sub>2</sub> · C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



## LGC impurities according to USP declaration system

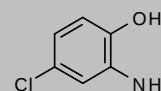
### Chlorthalidone Related Compound A (2-(4-Chloro-3-sulfamoylbenzoyl)benzoic Acid)

|          |                           |                    |                                                       |
|----------|---------------------------|--------------------|-------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5270-74-6                                         |
| LGC      | <a href="#">MM0297.02</a> | 100mg              | M.W. 339.7509                                         |
| USP      | 1119309                   | 10mg               | C <sub>14</sub> H <sub>10</sub> Cl N O <sub>5</sub> S |



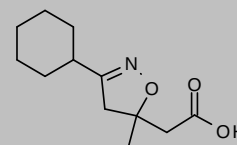
### Chlorzoxazone Related Compound A (2-Amino-4-chlorophenol)

|          |                           |                    |                                      |
|----------|---------------------------|--------------------|--------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 95-85-2                          |
| LGC      | <a href="#">MM0908.01</a> | 100mg              | M.W. 143.5709                        |
| USP      | 1130527                   | 50mg               | C <sub>6</sub> H <sub>6</sub> Cl N O |



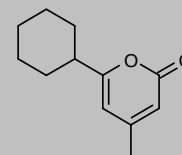
### Ciclopirox Related Compound A ((5RS)-3-Cyclohexyl-5-methyl-4,5-dihydro-1,2-oxazol-5-yl)acetic Acid)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                          |
| LGC      | <a href="#">MM0418.01</a> | 100mg              | M.W. 225.2842                                    |
| USP      | 1134029                   | 25mg               | C <sub>12</sub> H <sub>19</sub> N O <sub>3</sub> |



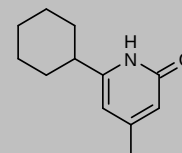
### Ciclopirox Related Compound B (6-Cyclohexyl-4-methyl-2H-pyran-2-one)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 14818-35-0                                 |
| LGC      | <a href="#">MM0418.02</a> | 100mg              | M.W. 192.2542                                  |
| USP      | 1134040                   | 25mg               | C <sub>12</sub> H <sub>16</sub> O <sub>2</sub> |



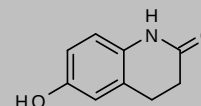
### Ciclopirox Related Compound C (6-Cyclohexyl-4-methylpyridin-2(1H)-one)

|          |                           |                    |                                     |
|----------|---------------------------|--------------------|-------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 67587-24-0                      |
| LGC      | <a href="#">MM0418.03</a> | 50mg               | M.W. 191.2695                       |
| USP      | 1134084                   | 10mg               | C <sub>12</sub> H <sub>17</sub> N O |



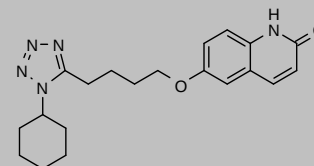
### Cilostazol Related Compound A (6-Hydroxy-3,4-dihydro-1H-quinolin-2-one)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 54197-66-9                                 |
| LGC      | <a href="#">MM0796.02</a> | 100mg              | M.W. 163.1733                                  |
| USP      | 1134164                   | 50mg               | C <sub>9</sub> H <sub>9</sub> N O <sub>2</sub> |



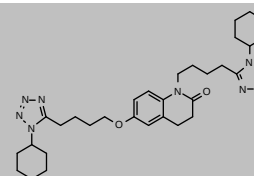
### Cilostazol Related Compound B (3,4-Dehydrocilostazol; 6-[4-(1-Cyclohexyl-1H-tetrazol-5-yl)-butoxy]-1H-quinolin-2-one)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 73963-62-9                                                |
| LGC      | <a href="#">MM0796.01</a> | 100mg              | M.W. 367.4448                                                 |
| USP      | 1134175                   | 50mg               | C <sub>20</sub> H <sub>25</sub> N <sub>5</sub> O <sub>2</sub> |



### Cilostazol Related Compound C (1-(4-(5-Cyclohexyl-1H-tetrazol-1-yl)butyl)-6-(4-(1-cyclohexyl-1H-tetrazol-5-yl)butoxy)-3,4-dihydroquinolin-2(1H)-one)

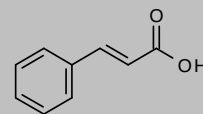
|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 865792-18-3                                               |
| LGC      | <a href="#">MM0796.03</a> | 100mg              | M.W. 575.7481                                                 |
| USP      | 1134186                   | 50mg               | C <sub>31</sub> H <sub>45</sub> N <sub>9</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

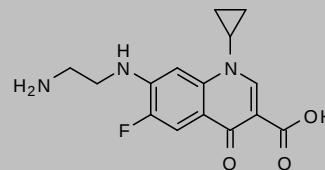
### Cinnamic Acid (trans-Cinnamic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM0900.05</a> | 100mg              | 140-10-3                                                      |
| USP      | 1133933                   | 100mg              | M.W. 148.1586<br>C <sub>9</sub> H <sub>8</sub> O <sub>2</sub> |



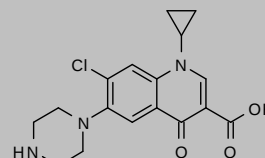
### Ciprofloxacin Ethylenediamine Analog (7-(2-Aminoethylamino)-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment     | CAS                                                                              |
|----------|---------------------------|------------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0018.04</a> | 50mg                   | 103222-12-4                                                                      |
| USP      | 1134324                   | 25mg, as hydrochloride | M.W. 305.3042<br>C <sub>15</sub> H <sub>16</sub> F N <sub>3</sub> O <sub>3</sub> |



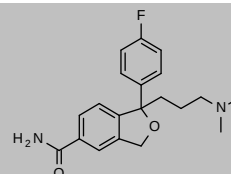
### Ciprofloxacin Related Compound A (7-Chloro-1-cyclopropyl-4-oxo-6-(piperazin-1-yl)-1,4-dihydroquinoline-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment     | CAS                                                                               |
|----------|---------------------------|------------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0018.02</a> | 50mg                   | 133210-96-5                                                                       |
| USP      | 1134346                   | 25mg, as hydrochloride | M.W. 347.7961<br>C <sub>17</sub> H <sub>18</sub> Cl N <sub>3</sub> O <sub>3</sub> |



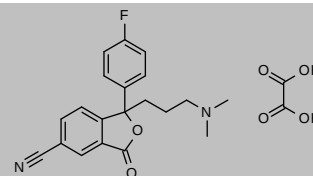
### Citalopram Related Compound A ((1RS)-1-[3-(Dimethylamino)propyl]-1-(4-fluorophenyl)-1,3-dihydroisobenzofuran-5-carboxamide; Citalopram-Amide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0242.14</a> | 100mg              | 64372-56-1                                                                       |
| USP      | 1134244                   | 25mg               | M.W. 342.4072<br>C <sub>20</sub> H <sub>23</sub> F N <sub>2</sub> O <sub>2</sub> |



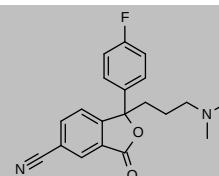
### Citalopram Related Compound C ((3RS)-6-Cyano-3-[3-(dimethylamino)propyl]-3-(4-fluorophenyl)isobenzofuran-1(3H)-one Oxalate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0242.20</a> | 100mg              | n/a                                                                                                                             |
| USP      | 1134266                   | 25mg               | M.W. 428.4103<br>C <sub>20</sub> H <sub>19</sub> F N <sub>2</sub> O <sub>2</sub> · C <sub>2</sub> H <sub>2</sub> O <sub>4</sub> |



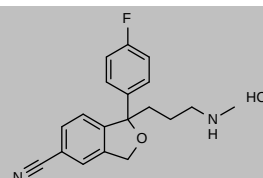
### Citalopram Related Compound C ((3RS)-6-Cyano-3-[3-(dimethylamino)propyl]-3-(4-fluorophenyl)isobenzofuran-1(3H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0242.17</a> | 100mg              | 372941-54-3                                                                      |
| USP      | 1134266                   | 25mg, as oxalate   | M.W. 338.3755<br>C <sub>20</sub> H <sub>19</sub> F N <sub>2</sub> O <sub>2</sub> |



### Citalopram Related Compound D ((1RS)-1-(4-Fluorophenyl)-1-[3-(methylamino)propyl]-1,3-dihydroisobenzofuran-5-carbonitrile Hydrochloride; Desmethylocitalopram Hydrochloride)

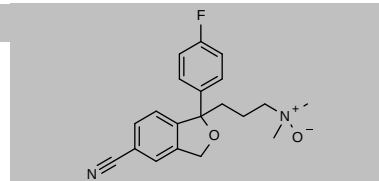
| Producer | Code                      | Quantity / Comment | CAS                                                                        |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------|
| LGC      | <a href="#">MM0242.09</a> | 100mg              | 97743-99-2                                                                 |
| USP      | 1134277                   | 15mg               | M.W. 346.8263<br>C <sub>19</sub> H <sub>19</sub> F N <sub>2</sub> O · Cl H |



# LGC impurities according to USP declaration system

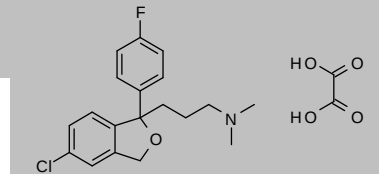
## Citalopram Related Compound E (Citalopram N-Oxide)

| Producer | Code                      | Quantity / Comment     | CAS                                    |
|----------|---------------------------|------------------------|----------------------------------------|
| LGC      | <a href="#">MM0242.10</a> | 100mg                  | 63284-72-0                             |
| USP      | 1134288                   | 25mg, as hydrochloride | M.W. 340.3913<br>$C_{20}H_{21}FN_2O_2$ |



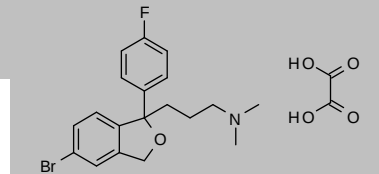
## Citalopram Related Compound G (3-[(1R)-5-Chloro-1-(4-fluorophenyl)-1,3-dihydroisobenzofuran-1-yl]-N,N-dimethylpropan-1-amine Oxalate)

| Producer | Code                      | Quantity / Comment    | CAS                                                    |
|----------|---------------------------|-----------------------|--------------------------------------------------------|
| LGC      | <a href="#">MM0242.12</a> | 50mg                  | n/a                                                    |
| USP      | 1134197                   | 25mg, as hydrobromide | M.W. 423.8624<br>$C_{19}H_{21}ClFN_2O \cdot C_2H_2O_4$ |



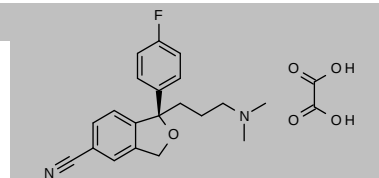
## Citalopram Related Compound H (3-[(1R)-5-Bromo-1-(4-fluorophenyl)-1,3-dihydroisobenzofuran-1-yl]-N,N-dimethylpropan-1-amine Hydrogen Oxalate)

| Producer | Code                      | Quantity / Comment    | CAS                                                    |
|----------|---------------------------|-----------------------|--------------------------------------------------------|
| LGC      | <a href="#">MM0242.13</a> | 50mg                  | 64372-43-6                                             |
| USP      | 1134222                   | 25mg, as hydrobromide | M.W. 468.3134<br>$C_{19}H_{21}BrFN_2O \cdot C_2H_2O_4$ |



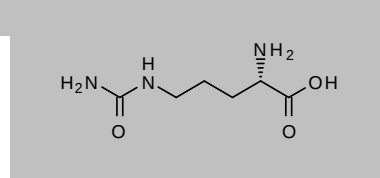
## R-Citalopram Oxalate

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM1162.03</a> | 100mg              | 219861-53-7                                          |
| USP      | 1134142                   | 10mg               | M.W. 414.4268<br>$C_{20}H_{21}FN_2O \cdot C_2H_2O_4$ |



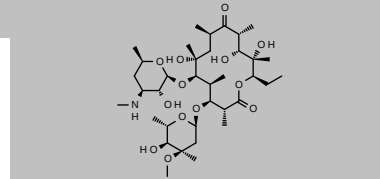
## L-Citrulline ((2S)-2-Amino-5-(carbamoylamino)pentanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0568.01</a> | 100mg              | 372-75-8                           |
| USP      | 1133842                   | 200mg              | M.W. 175.1857<br>$C_6H_{13}N_3O_3$ |



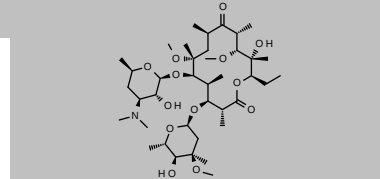
## Clarithromycin Impurity R (N-Demethylerythromycin A)

| Producer | Code                      | Quantity / Comment | CAS                                      |
|----------|---------------------------|--------------------|------------------------------------------|
| LGC      | <a href="#">MM0132.13</a> | 100mg              | 992-62-1                                 |
| USP      | 1134642                   | 10mg               | M.W. 719.9002<br>$C_{36}H_{65}N_3O_{13}$ |



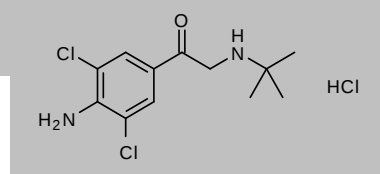
## Clarithromycin Related Compound A (6,11-Di-O-methylerythromycin A)

| Producer | Code                      | Quantity / Comment | CAS                                      |
|----------|---------------------------|--------------------|------------------------------------------|
| LGC      | <a href="#">MM0057.05</a> | 100mg              | 81103-14-2                               |
| USP      | 1134380                   | 50mg               | M.W. 761.9799<br>$C_{39}H_{71}N_3O_{13}$ |



## Clenbuterol Related Compound B (1-(4-Amino-3,5-dichlorophenyl)-2-[(1,1-dimethylethyl)amino]ethanone Hydrochloride)

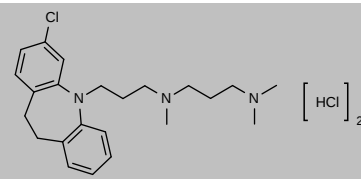
| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM1299.07</a> | 100mg              | 37148-49-5                                        |
| USP      | 1134696                   | 10mg               | M.W. 311.6352<br>$C_{12}H_{16}Cl_2N_2O \cdot ClH$ |



## LGC impurities according to USP declaration system

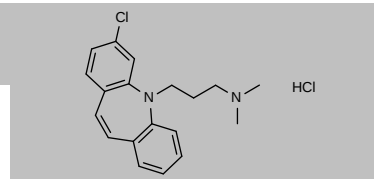
### Clomipramine Related Compound A (N-[3-(3-Chloro-10,11-dihydro-5H-dibenzo[b,f]azepin-5-yl)propyl]-N,N',N'-trimethylpropane-1,3-diamine Dihydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------|
| LGC      | <a href="#">MM0545.01</a> | 50mg               | M.W. 458.8952                                              |
| USP      | 1140258                   | 25mg               | C <sub>23</sub> H <sub>32</sub> Cl N <sub>3</sub> · 2 Cl H |



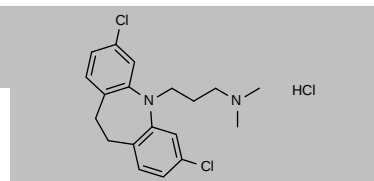
### Clomipramine Related Compound C (3-(3-Chloro-5H-dibenzo[b,f]azepin-5-yl)-N,N-dimethylpropan-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                  |
|----------|---------------------------|--------------------|----------------------------------------------------------|
| LGC      | <a href="#">MM0545.03</a> | 10mg               | M.W. 349.2974                                            |
| USP      | 1140269                   | 15mg, as hydrate   | C <sub>19</sub> H <sub>21</sub> Cl N <sub>2</sub> · Cl H |



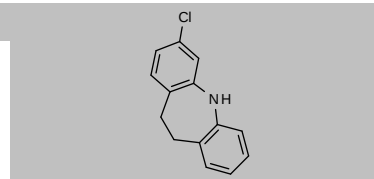
### Clomipramine Related Compound D (3-(3,7-Dichloro-10,11-dihydro-5H-dibenzo[b,f]azepin-5-yl)-N,N-dimethylpropan-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS 115189-28-1                                                       |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM0545.04</a> | 10mg               | M.W. 385.7583                                                         |
| USP      | 1140270                   | 15mg               | C <sub>19</sub> H <sub>22</sub> Cl <sub>2</sub> N <sub>2</sub> · Cl H |



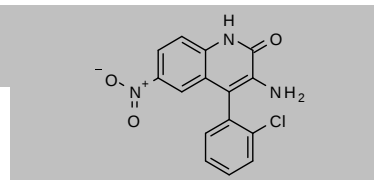
### Clomipramine Related Compound F (3-Chloro-10,11-dihydro-5H-dibenzo[b,f]azepine)

| Producer | Code                      | Quantity / Comment | CAS 32943-25-2                       |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0545.06</a> | 100mg              | M.W. 229.7048                        |
| USP      | 1140292                   | 15mg               | C <sub>14</sub> H <sub>12</sub> Cl N |



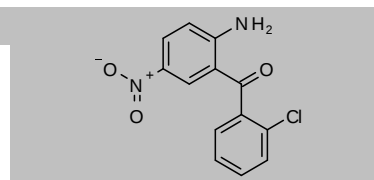
### Clonazepam Related Compound A (3-Amino-4-(2-chlorophenyl)-6-nitroquinolin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS 55198-89-5                                                   |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0945.02</a> | 50mg               | M.W. 315.7112                                                    |
| USP      | 1140327                   | 25mg               | C <sub>15</sub> H <sub>10</sub> Cl N <sub>3</sub> O <sub>3</sub> |



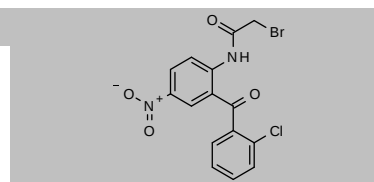
### Clonazepam Related Compound B ((2-Amino-5-nitrophenyl)(2-chlorophenyl)methanone)

| Producer | Code                      | Quantity / Comment | CAS 2011-66-7                                                   |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0945.01</a> | 100mg              | M.W. 276.6752                                                   |
| USP      | 1140338                   | 25mg               | C <sub>13</sub> H <sub>9</sub> Cl N <sub>2</sub> O <sub>3</sub> |



### Clonazepam Related Compound C (2-Bromo-2'-(2-chlorobenzoyl)-4'-nitroacetanilide)

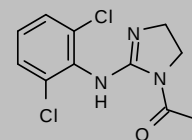
| Producer | Code                      | Quantity / Comment | CAS 52130-87-7                                                      |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0945.05</a> | 50mg               | M.W. 397.6079                                                       |
| USP      | 1140349                   | 25mg               | C <sub>15</sub> H <sub>10</sub> Br Cl N <sub>2</sub> O <sub>4</sub> |



## LGC impurities according to USP declaration system

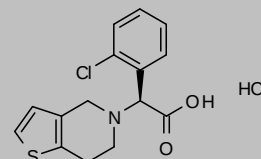
### Clonidine Related Compound A (1-Acetyl-2-[(2,6-dichlorophenyl)amino]-4,5-dihydro-1H-imidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0983.03</a> | 50mg               | 54707-71-0                                                                        |
| USP      | 1140418                   | 25mg               | M.W. 272.1305<br>C <sub>11</sub> H <sub>11</sub> Cl <sub>2</sub> N <sub>3</sub> O |



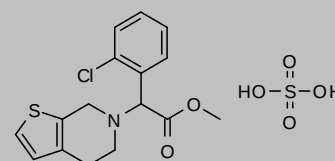
### Clopidogrel Related Compound A ((2S)-(2-Chlorophenyl)[6,7-dihydrothieno[3,2-c]pyridin-5(4H)-yl]acetic Acid Hydrochloride; Clopidogrel Acid Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0455.04</a> | 100mg              | 144750-42-5                                                                   |
| USP      | 1140586                   | 20mg               | M.W. 344.2561<br>C <sub>15</sub> H <sub>14</sub> Cl N O <sub>2</sub> S . Cl H |



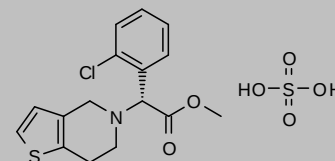
### Clopidogrel Related Compound B (Methyl (2RS)-(2-Chlorophenyl)[4,7-dihydrothieno[2,3-c]pyridin-6(5H)-yl]acetate Hydrogen Sulfate)

| Producer | Code                      | Quantity / Comment     | CAS                                                                                                      |
|----------|---------------------------|------------------------|----------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0455.13</a> | 100mg                  | n/a                                                                                                      |
| USP      | 1140597                   | 20mg, as hydrochloride | M.W. 419.9002<br>C <sub>16</sub> H <sub>16</sub> Cl N O <sub>2</sub> S . H <sub>2</sub> O <sub>4</sub> S |



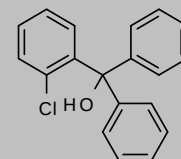
### Clopidogrel Related Compound C (Methyl (2R)-(2-Chlorophenyl)[6,7-dihydrothieno[3,2-c]pyridin-5(4H)-yl]acetate Hydrogen Sulfate; (R)-Clopidogrel Hydrogen Sulfate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0455.12</a> | 100mg              | 120202-71-3                                                                                              |
| USP      | 1140600                   | 20mg               | M.W. 419.9002<br>C <sub>16</sub> H <sub>16</sub> Cl N O <sub>2</sub> S . H <sub>2</sub> O <sub>4</sub> S |



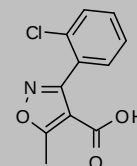
### Clotrimazole Related Compound A ((2-Chlorophenyl)diphenylmethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                   |
|----------|---------------------------|--------------------|-------------------------------------------------------|
| LGC      | <a href="#">MM0015.01</a> | 100mg              | 66774-02-5                                            |
| USP      | 1141024                   | 25mg               | M.W. 294.7748<br>C <sub>19</sub> H <sub>15</sub> Cl O |



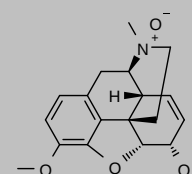
### Cloxacillin Related Compound D (3-(2-Chlorophenyl)-5-methylisoxazole-4-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0682.04</a> | 100mg              | 23598-72-3                                                          |
| USP      | 1144951                   | 15mg               | M.W. 237.6391<br>C <sub>11</sub> H <sub>8</sub> Cl N O <sub>3</sub> |



### Codeine N-Oxide

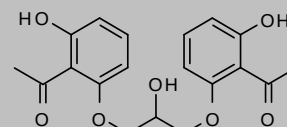
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0004.01</a> | 250mg              | 3688-65-1                                                         |
| USP      | 1143802                   | 30mg               | M.W. 315.3636<br>C <sub>18</sub> H <sub>21</sub> N O <sub>4</sub> |



## LGC impurities according to USP declaration system

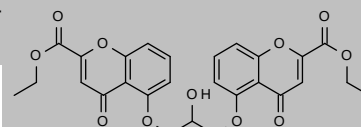
### Cromolyn Related Compound A (1,3-Bis(2-acetyl-3-hydroxyphenoxy)-2-propanol)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 16150-44-0                                 |
| LGC      | <a href="#">MM0039.02</a> | 100mg              | M.W. 360.3579                                  |
| USP      | 1150513                   | 25mg               | C <sub>19</sub> H <sub>20</sub> O <sub>7</sub> |



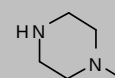
### Cromolyn Related Compound B (Diethyl 5,5'-[(2-hydroxypropane-1,3-diyl)dioxy]bis(4-oxo-4H-1-benzopyran-2-carboxylate); Ethyl Cromoglicate)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 16150-45-1                                  |
| LGC      | <a href="#">MM0039.04</a> | 100mg              | M.W. 524.4729                                   |
| USP      | 1150524                   | 25mg               | C <sub>27</sub> H <sub>24</sub> O <sub>11</sub> |



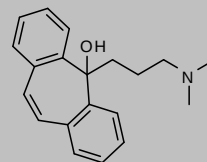
### Cyclizine Related Compound A (1-Methylpiperazine)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 109-01-3                                  |
| LGC      | <a href="#">MM1265.01</a> | 100mg              | M.W. 100.1622                                 |
| USP      | 1154015                   | 50mg               | C <sub>5</sub> H <sub>12</sub> N <sub>2</sub> |



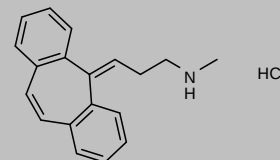
### Cyclobenzaprine Related Compound A (5-[3-(Dimethylamino)propyl]-5H-dibenzo[a,d]cyclohepten-5-ol)

|          |                           |                    |                                     |
|----------|---------------------------|--------------------|-------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 18029-54-4                      |
| LGC      | <a href="#">MM1248.01</a> | 50mg               | M.W. 293.4027                       |
| USP      | 1154514                   | 10mg               | C <sub>20</sub> H <sub>23</sub> N O |



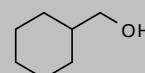
### Cyclobenzaprine Related Compound B (3-(5H-Dibenzo-[a,d][7]annulen-5-ylidene)-N-methylpropan-1-amine Hydrochloride; Norcyclobenzaprine Hydrochloride)

|          |                           |                    |                                          |
|----------|---------------------------|--------------------|------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 438-59-5                             |
| LGC      | <a href="#">MM0079.01</a> | 50mg               | M.W. 297.8218                            |
| USP      | 1154525                   | 10mg               | C <sub>19</sub> H <sub>19</sub> N . Cl H |



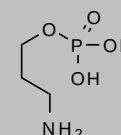
### Cyclohexylmethanol

|          |                           |                        |                                  |
|----------|---------------------------|------------------------|----------------------------------|
| Producer | Code                      | Quantity / Comment     | CAS 100-49-2                     |
| LGC      | <a href="#">MM0795.02</a> | 100mg                  | M.W. 114.1855                    |
| USP      | 1154605                   | 1 mL/ampule; 2 ampules | C <sub>7</sub> H <sub>14</sub> O |



### Cyclophosphamide Related Compound C (3-Aminopropyl Dihydrogen Phosphate)

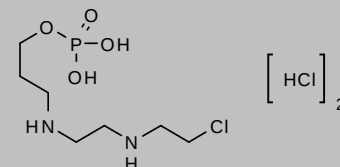
|          |                           |                    |                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1071-28-9                                     |
| LGC      | <a href="#">MM0822.03</a> | 100mg              | M.W. 155.0896                                     |
| USP      | 1157035                   | 25mg               | C <sub>3</sub> H <sub>10</sub> N O <sub>4</sub> P |



## LGC impurities according to USP declaration system

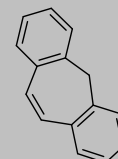
### Cyclophosphamide Related Compound D (3-[2-(2-Chloroethylamino)ethylamino]propyl Dihydrogen Phosphate Dihydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0822.04</a> | 100mg              | 158401-51-5                                      |
| USP      | 1157046                   | 25mg               | M.W. 333.5775<br>$C_7H_{18}ClN_2O_4P \cdot 2ClH$ |



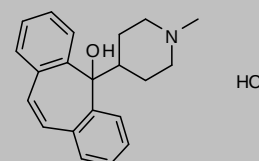
### Cyproheptadine Related Compound A (5H-Dibenzo[a,d][7]annulene; Dibenzocycloheptene)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0609.01</a> | 50mg               | 256-81-5                        |
| USP      | 1161010                   | 40mg               | M.W. 192.2558<br>$C_{15}H_{12}$ |



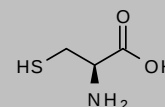
### Cyproheptadine Related Compound C (5-(1-Methylpiperidin-4-yl)-5H-dibenzo[a,d][7]annulene-5-ol Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                         |
|----------|---------------------------|--------------------|---------------------------------------------|
| LGC      | <a href="#">MM0609.07</a> | 50mg               | 4046-24-6                                   |
| USP      | 1161032                   | 25mg, as free base | M.W. 341.8744<br>$C_{21}H_{23}NO \cdot ClH$ |



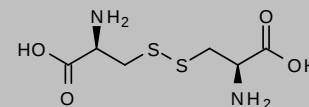
### L-Cysteine

| Producer | Code                      | Quantity / Comment              | CAS                            |
|----------|---------------------------|---------------------------------|--------------------------------|
| LGC      | <a href="#">MM0024.02</a> | 100mg                           | 52-90-4                        |
| USP      | 1161509                   | 600mg, as hydrochloride hydrate | M.W. 121.1582<br>$C_3H_7NO_2S$ |



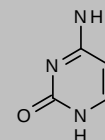
### Cystine (L-Cystine)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0024.03</a> | 100mg              | 56-89-3                               |
| USP      | 1161586                   | 200mg              | M.W. 240.3005<br>$C_6H_{12}N_2O_4S_2$ |



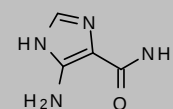
### Cytosine (4-Aminopyrimidin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM0749.05</a> | 100mg              | 71-30-7                      |
| USP      | 1162148                   | 100mg              | M.W. 111.102<br>$C_4H_5N_3O$ |



### Dacarbazine Related Compound A (5-Amino-1H-imidazole-4-carboxamide)

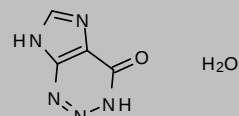
| Producer | Code                      | Quantity / Comment     | CAS                           |
|----------|---------------------------|------------------------|-------------------------------|
| LGC      | <a href="#">MM1289.02</a> | 100mg                  | 360-97-4                      |
| USP      | 1162320                   | 50mg, as hydrochloride | M.W. 126.1166<br>$C_4H_6N_4O$ |



## LGC impurities according to USP declaration system

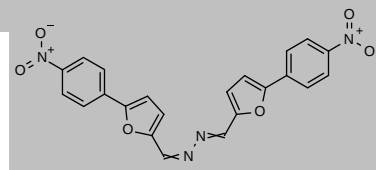
### Dacarbazine Related Compound B (3,7-Dihydro-4H-imidazo[4,5-d]-1,2,3-triazin-4-one Monohydrate; 2-Azahypoxanthine Monohydrate)

| Producer | Code                      | Quantity / Comment | CAS                                      |
|----------|---------------------------|--------------------|------------------------------------------|
| LGC      | <a href="#">MM1289.05</a> | 100mg              | 7151-03-3                                |
| USP      | 1162330                   | 50mg               | M.W. 155.1148<br>$C_4H_3N_5O \cdot H_2O$ |



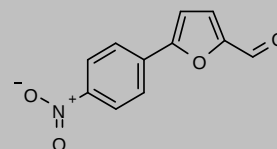
### Dantrolene Related Compound A (5-(4-Nitrophenyl)-2-furaldehyde Azine)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0905.03</a> | 100mg              | 301359-05-7                           |
| USP      | 1163162                   | 50mg               | M.W. 430.3698<br>$C_{22}H_{14}N_4O_6$ |



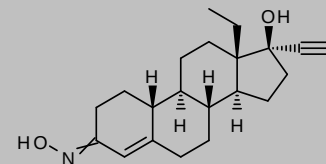
### Dantrolene Related Compound C (5-(4-Nitrophenyl)furan-2-carbaldehyde)

| Producer | Code                      | Quantity / Comment | CAS                              |
|----------|---------------------------|--------------------|----------------------------------|
| LGC      | <a href="#">MM0905.01</a> | 100mg              | 7147-77-5                        |
| USP      | 1163184                   | 50mg               | M.W. 217.1776<br>$C_{11}H_7NO_4$ |



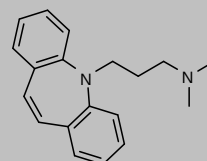
### 17-Deacetylnorgestimate (Norelgestromin)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0978.01</a> | 100mg              | 53016-31-2                          |
| USP      | 1471958                   | 25mg               | M.W. 327.4605<br>$C_{21}H_{29}NO_2$ |



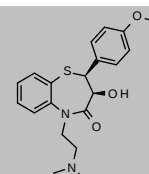
### Depramine (3-(5H-Dibenzo[b,f]azepin-5-yl)-N,N-dimethylpropan-1-amine; 10,11-Dehydroimipramine)

| Producer | Code                      | Quantity / Comment     | CAS                                |
|----------|---------------------------|------------------------|------------------------------------|
| LGC      | <a href="#">MM0077.05</a> | 100mg                  | 303-54-8                           |
| USP      | 1171397                   | 20mg, as hydrochloride | M.W. 278.3914<br>$C_{19}H_{22}N_2$ |



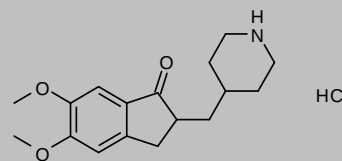
### Desacetyl Diltiazem Hydrochloride ((2S,3S)-5-[2-(Dimethylamino)-ethyl]-3-hydroxy-2-(4-methoxyphenyl)-2,3-dihydro-1,5-benzothiazepin-4(5H)-one)

| Producer | Code                      | Quantity / Comment     | CAS                                    |
|----------|---------------------------|------------------------|----------------------------------------|
| LGC      | <a href="#">MM0068.05</a> | 100mg                  | 42399-40-6                             |
| USP      | 1171706                   | 50mg, as hydrochloride | M.W. 372.4812<br>$C_{20}H_{24}N_2O_3S$ |



### Desbenzyl Donepezil Hydrochloride (2,3-Dihydro-5,6-dimethoxy-2-[(4-piperidiny)methyl]indan-1-one Hydrochloride)

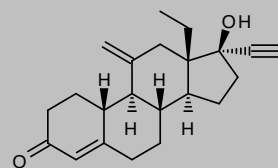
| Producer | Code                      | Quantity / Comment | CAS                                           |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM0677.02</a> | 100mg              | 120013-39-0                                   |
| USP      | 1171819                   | 20mg               | M.W. 325.8304<br>$C_{17}H_{23}NO_3 \cdot ClH$ |



## LGC impurities according to USP declaration system

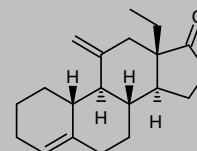
### Desogestrel Related Compound C (13-Ethyl-17-hydroxy-11-methylidene-18,19-dinor-17 $\alpha$ -pregn-4-en-20-yn-3-one; 3-Ketodesogestrel)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM1024.03</a> | 50mg               | 54048-10-1                         |
| USP      | 1173268                   | 25mg               | M.W. 324.4565<br>$C_{22}H_{28}O_2$ |



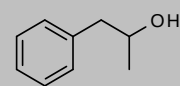
### Desogestrel Related Compound D (13-Ethyl-11-methylidenegon-4-en-17-one)

| Producer | Code                      | Quantity / Comment | CAS                              |
|----------|---------------------------|--------------------|----------------------------------|
| LGC      | <a href="#">MM1024.05</a> | 100mg              | 54024-21-4                       |
| USP      | 1173279                   | 25mg               | M.W. 284.4357<br>$C_{20}H_{28}O$ |



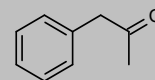
### Dextroamphetamine Related Compound A (1-Phenyl-2-propanol)

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM0741.03</a> | 100mg              | 698-87-3                     |
| USP      | 1180015                   | 25mg               | M.W. 136.191<br>$C_9H_{12}O$ |



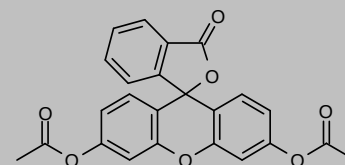
### Dextroamphetamine Related Compound B (Phenylacetone)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0741.04</a> | 100mg              | 103-79-7                      |
| USP      | 1180026                   | 25mg               | M.W. 134.1751<br>$C_9H_{10}O$ |



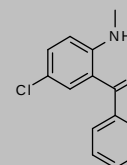
### Diacetylfluorescein

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM1533.01</a> | 100mg              | 596-09-8                           |
| USP      | 1182000                   | 200mg              | M.W. 416.3796<br>$C_{24}H_{16}O_7$ |



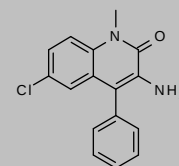
### Diazepam Related Compound A ([5-Chloro-2-(methylamino)phenyl]-phenylmethanone; 5-Chloro-2-(methylamino)benzophenone)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0023.01</a> | 100mg              | 1022-13-5                           |
| USP      | 1185020                   | 25mg               | M.W. 245.7042<br>$C_{14}H_{12}ClNO$ |



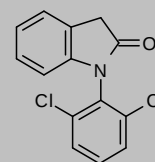
### Diazepam Related Compound B (3-Amino-6-chloro-1-methyl-4-phenylquinolin-2(1H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0023.03</a> | 100mg              | 5220-02-0                             |
| USP      | 1023403                   | 25mg               | M.W. 284.7402<br>$C_{16}H_{13}ClN_2O$ |



### Diclofenac Related Compound A (1-(2,6-Dichlorophenyl)-1,3-dihydro-2H-indol-2-one)

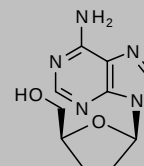
| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0006.01</a> | 100mg              | 15362-40-0                         |
| USP      | 1188811                   | 25mg               | M.W. 278.1334<br>$C_{14}H_9Cl_2NO$ |



## LGC impurities according to USP declaration system

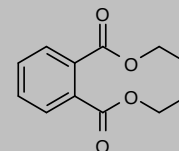
### Didanosine Related Compound B (9-(2,3-Dideoxy-β-D-glycero-pentofuranosyl)-9H-purin-6-amine; 2',3'-Dideoxyadenosine)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1047.02</a> | 100mg              | 4097-22-7                                                                      |
| USP      | 1191237                   | 25mg               | M.W. 235.2425<br>C <sub>10</sub> H <sub>13</sub> N <sub>5</sub> O <sub>2</sub> |



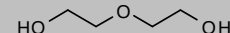
### Diethyl Phthalate

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0006.28</a> | 100mg              | 84-66-2                                                         |
| USP      | 1193505                   | 200mg              | M.W. 222.2372<br>C <sub>12</sub> H <sub>14</sub> O <sub>4</sub> |



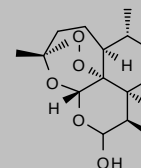
### Diethylene Glycol (2,2'-Oxydiethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0105.06</a> | 100mg              | 111-46-6                                                       |
| USP      | 1193265                   | 5 x 0.2 mL         | M.W. 106.1204<br>C <sub>4</sub> H <sub>10</sub> O <sub>3</sub> |



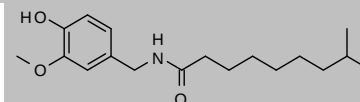
### (10RS)-Dihydroartemisinin ((3R,5aS,6R,8aS,9R,12R,12aR)-Decahydro-10-hydroxy-3,6,9-trimethyl-3,12-epoxy-12H-pyrano[4,3-j]-1,2-benzodioxepin)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM3252.03</a> | 100mg              | 131175-87-6                                                     |
| USP      | 1200520                   | 200mg              | M.W. 284.3481<br>C <sub>15</sub> H <sub>24</sub> O <sub>5</sub> |



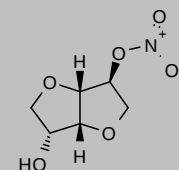
### Dihydrocapsaicin

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0016.01</a> | 50mg               | 19408-84-5                                                        |
| USP      | 1200600                   | 25mg               | M.W. 307.4278<br>C <sub>18</sub> H <sub>29</sub> N O <sub>3</sub> |



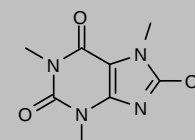
### Diluted Isosorbide Mononitrate Related Compound A (Isosorbide 2-Nitrate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0126.05</a> | 100mg              | 16106-20-0                                                      |
| USP      | 1353113                   | 150mg              | M.W. 191.1388<br>C <sub>6</sub> H <sub>9</sub> N O <sub>6</sub> |



### Dimenhydrinate Related Compound E (8-Chloro-1,3,7-trimethyl-3,7-dihydro-1H-purine-2,6-dione; 8-Chlorocaffeine)

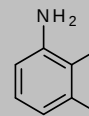
| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0599.08</a> | 50mg               | 4921-49-7                                                                       |
| USP      | 1206017                   | 15mg               | M.W. 228.6357<br>C <sub>8</sub> H <sub>9</sub> Cl N <sub>4</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

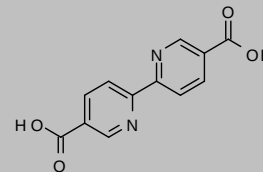
### 2,3-Dimethylaniline

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0327.01</a> | 100mg              | 87-59-2                                           |
| USP      | 1211254                   | 50mg               | M.W. 121.1796<br>C <sub>8</sub> H <sub>11</sub> N |



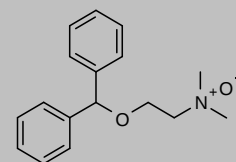
### 6,6'-Dinicotinic Acid (2,2'-Bipyridine-5,5'-dicarboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0553.06</a> | 100mg              | 1802-30-8                                                                     |
| USP      | 1211287                   | 50mg               | M.W. 244.2029<br>C <sub>12</sub> H <sub>8</sub> N <sub>2</sub> O <sub>4</sub> |



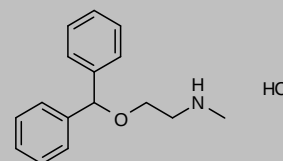
### Diphenhydramine N-Oxide

| Producer | Code                      | Quantity / Comment     | CAS                                                               |
|----------|---------------------------|------------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0490.01</a> | 100mg                  | 3922-74-5                                                         |
| USP      | 1218050                   | 25mg, as hydrochloride | M.W. 271.3541<br>C <sub>17</sub> H <sub>21</sub> N O <sub>2</sub> |



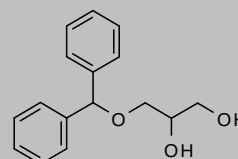
### Diphenhydramine Related Compound A (2-(Diphenylmethoxy)-N-methylethanamine Hydrochloride; Nordiphenhydramine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                         |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| LGC      | <a href="#">MM0490.03</a> | 100mg              | 53499-40-4                                                  |
| USP      | 1218016                   | 25mg               | M.W. 277.7891<br>C <sub>16</sub> H <sub>19</sub> N O . Cl H |



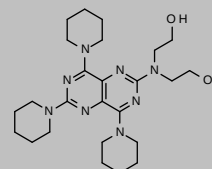
### Diphenhydramine Related Compound B (3-(Benzhydryloxy)propane-1,2-diol)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0490.09</a> | 100mg              | 19574-66-4                                                      |
| USP      | 1218027                   | 20mg               | M.W. 258.3123<br>C <sub>16</sub> H <sub>18</sub> O <sub>3</sub> |



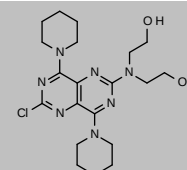
### Dipyridamole Related Compound A (2,2'-[[4,6,8-Tri(piperidin-1-yl)-pyrimido[5,4-d]pyrimidin-2-yl]nitrilo]diethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0462.01</a> | 100mg              | 16982-40-4                                                                     |
| USP      | 1220517                   | 25mg               | M.W. 484.6375<br>C <sub>25</sub> H <sub>40</sub> N <sub>8</sub> O <sub>2</sub> |



### Dipyridamole Related Compound C (2,2'-[[6-Chloro-4,8-di(piperidin-1-yl)pyrimido[5,4-d]pyrimidin-2-yl]nitrilo]diethanol)

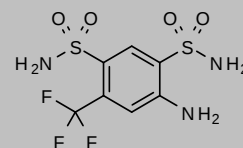
| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0462.03</a> | 100mg              | 54093-92-4                                                                        |
| USP      | 1220539                   | 25mg               | M.W. 435.9509<br>C <sub>20</sub> H <sub>30</sub> Cl N <sub>7</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

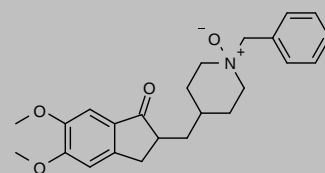
### 2,4-Disulfamyl-5-Trifluoromethylaniline (4-Amino-6-(trifluoromethyl)benzene-1,3-disulphonamide)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0674.01</a> | 100mg              | 654-62-6                              |
| USP      | 1223005                   | 50mg               | M.W. 319.2813<br>$C_7H_8F_3N_3O_4S_2$ |



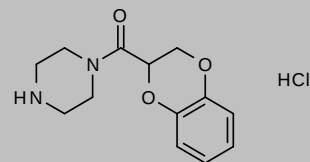
### Donepezil-N-Oxide

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0677.14</a> | 50mg               | 120013-84-5                         |
| USP      | 1224970                   | 20mg               | M.W. 395.4914<br>$C_{24}H_{29}NO_4$ |



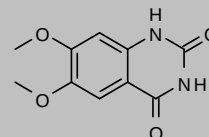
### Doxazosin Related Compound A (1-[(2RS)-2,3-Dihydro-1,4-benzodioxin-2-ylcarbonyl]piperazine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0386.05</a> | 100mg              | 70918-74-0                                        |
| USP      | 1225420                   | 20mg               | M.W. 284.7387<br>$C_{13}H_{16}N_2O_3 \cdot Cl\ H$ |



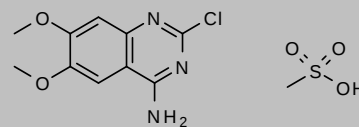
### Doxazosin Related Compound B (6,7-Dimethoxyquinazoline-2,4(1H,3H)-dione)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0085.07</a> | 100mg              | 28888-44-0                            |
| USP      | 1225441                   | 20mg               | M.W. 222.1974<br>$C_{10}H_{10}N_2O_4$ |



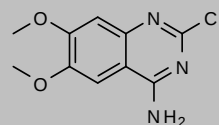
### Doxazosin Related Compound C (2-Chloro-6,7-dimethoxyquinazolin-4-amine Mesilate)

| Producer | Code                      | Quantity / Comment | CAS                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0386.12</a> | 100mg              | n/a                                                     |
| USP      | 1225452                   | 20mg, as free base | M.W. 335.764<br>$C_{10}H_{10}ClN_3O_2 \cdot C_4H_4O_3S$ |



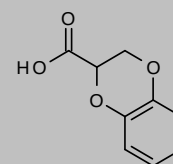
### Doxazosin Related Compound C (2-Chloro-6,7-dimethoxyquinazolin-4-amine)

| Producer | Code                      | Quantity / Comment | CAS                                     |
|----------|---------------------------|--------------------|-----------------------------------------|
| LGC      | <a href="#">MM0386.01</a> | 100mg              | 23680-84-4                              |
| USP      | 1225452                   | 20mg               | M.W. 239.6583<br>$C_{10}H_{10}ClN_3O_2$ |



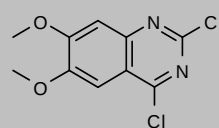
### Doxazosin Related Compound D ((2RS)-2,3-Dihydro-1,4-benzodioxine-2-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM0386.04</a> | 100mg              | 3663-80-7                    |
| USP      | 1225463                   | 20mg               | M.W. 180.1574<br>$C_9H_8O_4$ |



### Doxazosin Related Compound E (2,4-Dichloro-6,7-dimethoxyquinazoline)

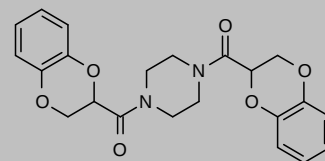
| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM0085.06</a> | 100mg              | 27631-29-4                             |
| USP      | 1225474                   | 20mg               | M.W. 259.0887<br>$C_{10}H_8Cl_2N_2O_2$ |



## LGC impurities according to USP declaration system

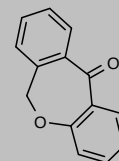
### Doxazosin Related Compound F (1,4-Bis(2,3-dihydro-1,4-benzodioxin-2-ylcarbonyl)piperazine)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0386.06</a> | 100mg              | 617677-53-9                           |
| USP      | 1225485                   | 15mg               | M.W. 410.4199<br>$C_{22}H_{22}N_2O_6$ |



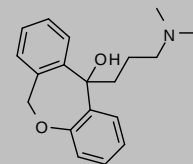
### Doxepin Related Compound A (Dibenzo[b,e]oxepin-11(6H)-one; Doxepinone)

| Producer | Code                      | Quantity / Comment | CAS                               |
|----------|---------------------------|--------------------|-----------------------------------|
| LGC      | <a href="#">MM0032.03</a> | 100mg              | 4504-87-4                         |
| USP      | 1225511                   | 50mg               | M.W. 210.228<br>$C_{14}H_{10}O_2$ |



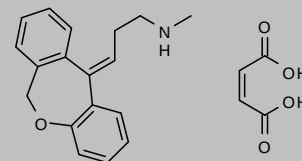
### Doxepin Related Compound B ((11RS)-11-[3-(Dimethylamino)-propyl]-6,11-dihydrodibenzo[b,e]oxepin-11-ol; Doxepinol)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0032.04</a> | 50mg               | 4504-88-5                           |
| USP      | 1225522                   | 50mg               | M.W. 297.3914<br>$C_{19}H_{23}NO_2$ |



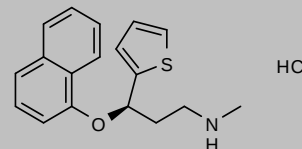
### Doxepin Related Compound C ((E)-3-(Dibenzo[b,e]oxepin-11(6H)-ylidene)-N-methylpropan-1-amine Maleate; Desmethyldoxepin Maleate)

| Producer | Code                      | Quantity / Comment     | CAS                                               |
|----------|---------------------------|------------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0032.10</a> | 50mg                   | n/a                                               |
| USP      | 1225533                   | 25mg, as hydrochloride | M.W. 381.4217<br>$C_{18}H_{19}NO \cdot C_4H_4O_4$ |



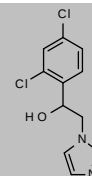
### Duloxetine Related Compound A ((3R)-N-Methyl-3-(naphthalen-1-yloxy)-3-(thiophen-2-yl)propan-1-amine Hydrochloride; (R)-Duloxetine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                          |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM1122.11</a> | 100mg              | 910138-96-4                                  |
| USP      | 1229828                   | 10mg               | M.W. 333.8755<br>$C_{18}H_{19}NOS \cdot ClH$ |



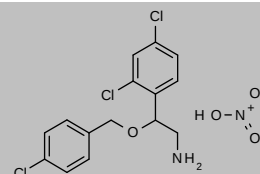
### Econazole Related Compound A ((1RS)-1-(2,4-Dichlorophenyl)-2-(1H-imidazol-1-yl)ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                     |
|----------|---------------------------|--------------------|-----------------------------------------|
| LGC      | <a href="#">MM0281.01</a> | 100mg              | 24155-42-8                              |
| USP      | 1231830                   | 15mg               | M.W. 257.1159<br>$C_{11}H_{10}Cl_2N_2O$ |



### Econazole Related Compound B ((2RS)-2-[(4-Chlorobenzyl)oxy]-2-(2,4-dichlorophenyl)ethanamine Nitrate)

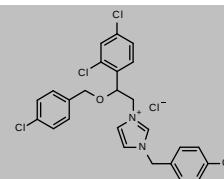
| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0524.02</a> | 100mg              | n/a                                               |
| USP      | 1231841                   | 15mg               | M.W. 393.6496<br>$C_{15}H_{14}Cl_3NO \cdot HNO_3$ |



## LGC impurities according to USP declaration system

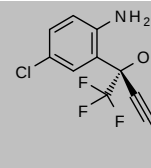
### Econazole Related Compound C (1-(4-Chlorobenzyl)-3-[(2RS)-2-[(4-chlorobenzyl)oxy]-2-(2,4-dichlorophenyl)ethyl]imidazolium Chloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM0524.03</a> | 100mg              | M.W. 542.712                                                          |
| USP      | 1231852                   | 15mg               | C <sub>25</sub> H <sub>21</sub> Cl <sub>4</sub> N <sub>2</sub> O · Cl |



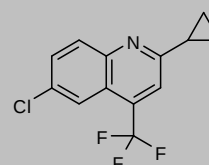
### Efavirenz Related Compound A ((S)-2-(2-Amino-5-chlorophenyl)-4-cyclopropyl-1,1,1-trifluorobut-3-yn-2-ol)

| Producer | Code                      | Quantity / Comment | CAS 209414-27-7                                       |
|----------|---------------------------|--------------------|-------------------------------------------------------|
| LGC      | <a href="#">MM0919.03</a> | 100mg              | M.W. 289.6807                                         |
| USP      | 1234125                   | 20mg               | C <sub>13</sub> H <sub>11</sub> Cl F <sub>3</sub> N O |



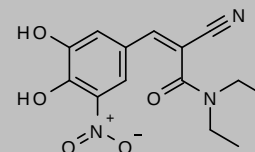
### Efavirenz Related Compound C (6-Chloro-2-cyclopropyl-4-(trifluoromethyl)quinoline)

| Producer | Code                      | Quantity / Comment | CAS 391860-73-4                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM0919.05</a> | 100mg              | M.W. 271.6655                                      |
| USP      | 1234136                   | 20mg               | C <sub>13</sub> H <sub>9</sub> Cl F <sub>3</sub> N |



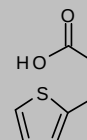
### Entacapone Related Compound A ((2Z)-2-Cyano-3-(3,4-dihydroxy-5-nitrophenyl)-N,N-diethylprop-2-enamide)

| Producer | Code                      | Quantity / Comment | CAS 145195-63-7                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM1221.02</a> | 50mg               | M.W. 305.286                                                  |
| USP      | 1235944                   | 25mg               | C <sub>14</sub> H <sub>15</sub> N <sub>3</sub> O <sub>5</sub> |



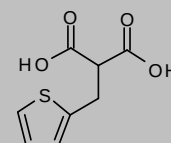
### Eprosartan Related Compound B (3-(Thiophen-2-yl)propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS 5928-51-8                                  |
|----------|---------------------------|--------------------|------------------------------------------------|
| LGC      | <a href="#">MM1577.02</a> | 100mg              | M.W. 156.2022                                  |
| USP      | 1238239                   | 15mg               | C <sub>7</sub> H <sub>8</sub> O <sub>2</sub> S |



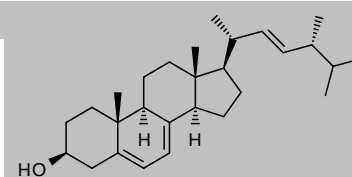
### Eprosartan Related Compound C (2-(Thiophen-2-ylmethyl)malonic Acid)

| Producer | Code                      | Quantity / Comment | CAS 4475-24-5                                  |
|----------|---------------------------|--------------------|------------------------------------------------|
| LGC      | <a href="#">MM1577.01</a> | 50mg               | M.W. 200.2117                                  |
| USP      | 1238240                   | 25mg               | C <sub>8</sub> H <sub>8</sub> O <sub>4</sub> S |



### Ergosterol

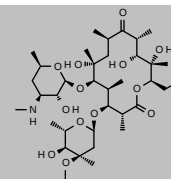
| Producer | Code                      | Quantity / Comment | CAS 57-87-4                       |
|----------|---------------------------|--------------------|-----------------------------------|
| LGC      | <a href="#">MM1511.01</a> | 100mg              | M.W. 396.6484                     |
| USP      | 1241007                   | 50mg               | C <sub>28</sub> H <sub>44</sub> O |



# LGC impurities according to USP declaration system

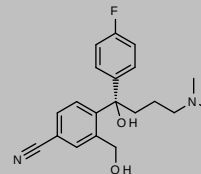
## Erythromycin Related Compound N (N-Demethylerythromycin A)

|          |                           |                    |                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 992-62-1                                      |
| LGC      | <a href="#">MM0132.13</a> | 100mg              | M.W. 719.9002                                     |
| USP      | 1242032                   | 50mg               | C <sub>36</sub> H <sub>65</sub> N O <sub>13</sub> |



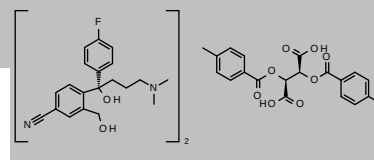
## Escitalopram Related Compound A ((S)-Citadiol)

|          |                           |                            |                                                                 |
|----------|---------------------------|----------------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment         | CAS 488787-59-3                                                 |
| LGC      | <a href="#">MM1162.06</a> | 50mg                       | M.W. 342.4072                                                   |
| USP      | 1249417                   | 10mg, as ditoluoyltartrate | C <sub>20</sub> H <sub>23</sub> F N <sub>2</sub> O <sub>2</sub> |



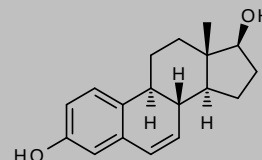
## Escitalopram Related Compound A (4-[(1S)-4-(Dimethylamino)-1-(4-fluorophenyl)-1-hydroxybutyl]-3-(hydroxymethyl)benzonitrile Hemi-(+)-di-p-toluoyltartrate)

|          |                           |                    |                                                                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 128173-53-5                                                                                                    |
| LGC      | <a href="#">MM1162.04</a> | 100mg              | M.W. 1071.1666                                                                                                     |
| USP      | 1249417                   | 10mg               | 2 C <sub>20</sub> H <sub>23</sub> F N <sub>2</sub> O <sub>2</sub> · C <sub>20</sub> H <sub>18</sub> O <sub>8</sub> |



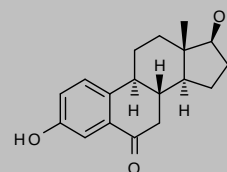
## Estradiol Related Compound B (Estra-1,3,5(10),6-tetraene-3,17β-diol; 6,7-Didehydroestradiol)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 7291-41-0                                  |
| LGC      | <a href="#">MM0300.09</a> | 100mg              | M.W. 270.3661                                  |
| USP      | 1250020                   | 10mg               | C <sub>18</sub> H <sub>22</sub> O <sub>2</sub> |



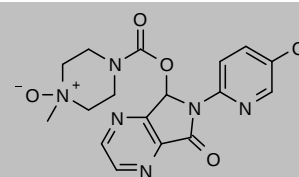
## Estradiol Related Compound C (6-Ketoestradiol)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 571-92-6                                   |
| LGC      | <a href="#">MM0300.08</a> | 100mg              | M.W. 286.3655                                  |
| USP      | 1250041                   | 15mg               | C <sub>18</sub> H <sub>22</sub> O <sub>3</sub> |



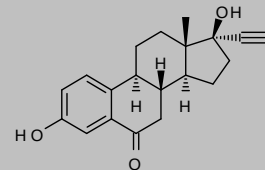
## Eszopiclone Related Compound A ((5RS)-6-(5-Chloropyridin-2-yl)-7-oxo-6,7-dihydro-5H-pyrrolo[3,4-b]pyrazin-5-yl 4-Methylpiperazine-1-carboxylate 4-Oxide; Zopiclone Oxide)

|          |                           |                    |                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 43200-96-0                                                   |
| LGC      | <a href="#">MM0149.01</a> | 100mg              | M.W. 404.8077                                                    |
| USP      | 1255861                   | 10mg               | C <sub>17</sub> H <sub>17</sub> Cl N <sub>6</sub> O <sub>4</sub> |



## Ethinyl Estradiol Related Compound A (3,17-Dihydroxy-19-nor-17α-pregna-1,3,5(10)-trien-20-yn-6-one; 6-Oxoethinylestradiol; 6-Ketoethinylestradiol)

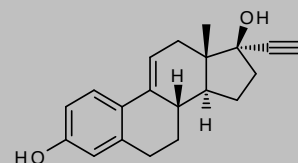
|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 38002-18-5                                 |
| LGC      | <a href="#">MM0123.05</a> | 100mg              | M.W. 310.3869                                  |
| USP      | 1260012                   | 20mg               | C <sub>20</sub> H <sub>22</sub> O <sub>3</sub> |



## LGC impurities according to USP declaration system

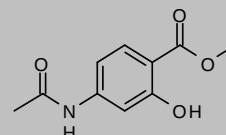
### Ethinyl Estradiol Related Compound B (19-Nor-17 $\alpha$ -pregna-1,3,5(10),9(11)-tetraen-20-yne-3,17-diol; 9,11-Didehydroethinylestradiol)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0123.02</a> | 50mg               | 1231-96-5                                                       |
| USP      | 1260023                   | 20mg               | M.W. 294.3875<br>C <sub>20</sub> H <sub>22</sub> O <sub>2</sub> |



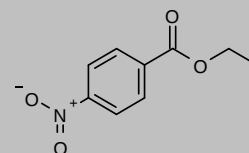
### Ethopabate Related Compound A (Methyl 4-(Acetylamino)-2-hydroxybenzoate)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0073.10</a> | 100mg              | 4093-28-1                                                         |
| USP      | 1262823                   | 25mg               | M.W. 209.1986<br>C <sub>10</sub> H <sub>11</sub> N O <sub>4</sub> |



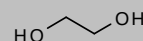
### Ethyl 4-nitrobenzoate

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0094.04</a> | 100mg              | 99-77-4                                                         |
| USP      | 1265300                   | 40mg               | M.W. 195.1721<br>C <sub>9</sub> H <sub>9</sub> N O <sub>4</sub> |



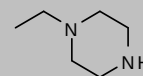
### Ethylene Glycol (Ethane-1,2-diol)

| Producer | Code                      | Quantity / Comment | CAS                                                          |
|----------|---------------------------|--------------------|--------------------------------------------------------------|
| LGC      | <a href="#">MM0112.02</a> | 100mg              | 107-21-1                                                     |
| USP      | 1265515                   | 0.5ml              | M.W. 62.0678<br>C <sub>2</sub> H <sub>6</sub> O <sub>2</sub> |



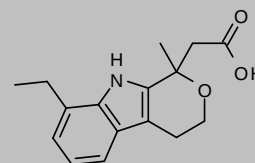
### N-Ethylpiperazine

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0395.06</a> | 100mg              | 5308-25-8                                                      |
| USP      | 1266802                   | 0.5ml              | M.W. 114.1888<br>C <sub>6</sub> H <sub>14</sub> N <sub>2</sub> |



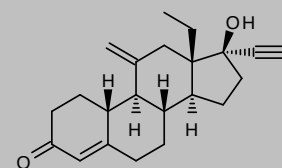
### Etodolac Related Compound A (2-[(1RS)-8-Ethyl-1-methyl-1,3,4,9-tetrahydropyrano[3,4-b]indol-1-yl]acetic Acid; 1-Methyl Etodolac)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0911.03</a> | 100mg              | 109518-47-0                                                      |
| USP      | 1268728                   | 25mg               | M.W. 273.327<br>C <sub>16</sub> H <sub>19</sub> N O <sub>3</sub> |



### Etonogestrel (13-Ethyl-17-hydroxy-11-methylidene-18,19-dinor-17 $\alpha$ -pregn-4-en-20-yn-3-one; 3-Ketodesogestrel)

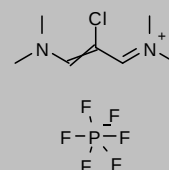
| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1024.03</a> | 50mg               | 54048-10-1                                                      |
| USP      | 1268783                   | 100mg              | M.W. 324.4565<br>C <sub>22</sub> H <sub>28</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

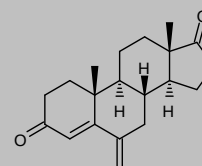
### Etoricoxib Related Compound C (2-Chloro-1,3-bis(dimethylamino)trimethinium Hexafluorophosphate)

|          |                           |                    |                                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 249561-98-6                                                     |
| LGC      | <a href="#">MM0965.03</a> | 100mg              | M.W. 306.6166                                                       |
| USP      | 1268896                   | 50mg               | C <sub>7</sub> H <sub>14</sub> Cl N <sub>2</sub> · F <sub>6</sub> P |



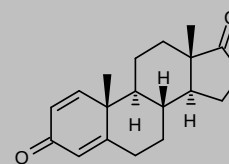
### Exemestane Related Compound A (6-Methylideneandrost-4-ene-3,17-dione)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 19457-55-7                                 |
| LGC      | <a href="#">MM1161.01</a> | 100mg              | M.W. 298.4192                                  |
| USP      | 1269061                   | 15mg               | C <sub>20</sub> H <sub>26</sub> O <sub>2</sub> |



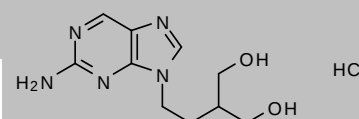
### Exemestane Related Compound C (Androsta-1,4-diene-3,17-dione; Androstadienedione)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 897-06-3                                   |
| LGC      | <a href="#">MM0323.07</a> | 100mg              | M.W. 284.3927                                  |
| USP      | 1269083                   | 15mg               | C <sub>19</sub> H <sub>24</sub> O <sub>2</sub> |



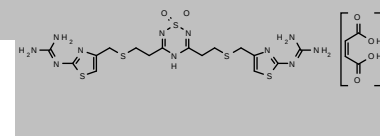
### Famciclovir Related Compound A (2-[2-(2-Amino-9H-purin-9-yl)ethyl]propane-1,3-diol Hydrochloride)

|          |                           |                    |                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 246021-75-0                                                      |
| LGC      | <a href="#">MM0620.02</a> | 100mg              | M.W. 273.7193                                                        |
| USP      | 1269174                   | 20mg               | C <sub>10</sub> H <sub>15</sub> N <sub>5</sub> O <sub>2</sub> · Cl H |



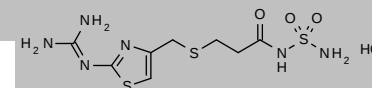
### Famotidine Related Compound B (3,5-Bis[2-[[[2-[(diaminomethylene)amino]thiazol-4-yl]methyl]sulfanyl]ethyl]-4H-1,2,4,6-thiatriazine 1,1-Dioxide Dimaleate)

|          |                           |                    |                                                                                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 109467-08-5                                                                                                                |
| LGC      | <a href="#">MM0029.05</a> | 50mg               | M.W. 793.8956                                                                                                                  |
| USP      | 1269221                   | 25mg, as free base | C <sub>16</sub> H <sub>23</sub> N <sub>11</sub> O <sub>2</sub> S <sub>5</sub> · 2 C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



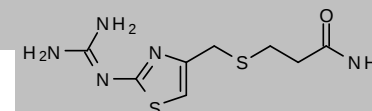
### Famotidine Related Compound C (3-[[[2-[(Diaminomethylene)amino]thiazol-4-yl]methyl]sulfanyl]-N-sulfamoylpropanamide Hydrochloride)

|          |                           |                    |                                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 76824-17-4                                                                     |
| LGC      | <a href="#">MM0029.01</a> | 100mg              | M.W. 374.8911                                                                      |
| USP      | 1269232                   | 25mg               | C <sub>8</sub> H <sub>14</sub> N <sub>6</sub> O <sub>3</sub> S <sub>3</sub> · Cl H |



### Famotidine Related Compound D (3-[[[2-[(Diaminomethylene)amino]thiazol-4-yl]methyl]sulfanyl]propanamide)

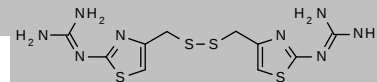
|          |                           |                    |                                                                |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 76824-16-3                                                 |
| LGC      | <a href="#">MM0029.02</a> | 100mg              | M.W. 259.3517                                                  |
| USP      | 1269243                   | 25mg               | C <sub>8</sub> H <sub>13</sub> N <sub>5</sub> O S <sub>2</sub> |



## LGC impurities according to USP declaration system

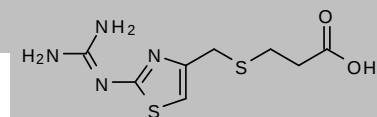
### Famotidine Related Compound E (2,2'-[Disulfanediylbis-(methylenethiazole-4,2-diyl)] diguanidine)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0029.07</a> | 100mg              | 129083-44-9                                                                    |
| USP      | 1269254                   | 25mg               | M.W. 374.5318<br>C <sub>10</sub> H <sub>14</sub> N <sub>8</sub> S <sub>4</sub> |



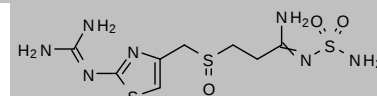
### Famotidine Related Compound F (3-[[[2-[(Diaminomethylene)amino]thiazol-4-yl]methyl]sulfanyl]propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                                          |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0029.03</a> | 100mg              | 107880-74-0                                                                                  |
| USP      | 1269265                   | 25mg               | M.W. 260.3365<br>C <sub>8</sub> H <sub>12</sub> N <sub>4</sub> O <sub>2</sub> S <sub>2</sub> |



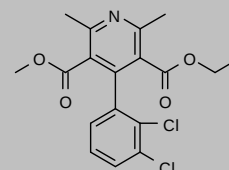
### Famotidine Sulfoxide

| Producer | Code                      | Quantity / Comment | CAS                                                                                          |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0029.04</a> | 100mg              | 90237-03-9                                                                                   |
| USP      | 1269298                   | 25mg               | M.W. 353.4448<br>C <sub>8</sub> H <sub>15</sub> N <sub>7</sub> O <sub>3</sub> S <sub>3</sub> |



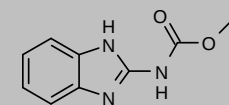
### Felodipine Related Compound A (Ethyl Methyl 4-(2,3-Dichlorophenyl)-2,6-dimethylpyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0139.01</a> | 50mg               | 96382-71-7                                                                        |
| USP      | 1269390                   | 15mg               | M.W. 382.2379<br>C <sub>18</sub> H <sub>17</sub> Cl <sub>2</sub> N O <sub>4</sub> |



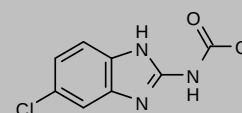
### Fenbendazole Related Compound A (Carbendazim)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM2500.00</a> | 100mg              | 10605-21-7                                                                   |
| USP      | 1269414                   | 30mg               | M.W. 191.1867<br>C <sub>9</sub> H <sub>9</sub> N <sub>3</sub> O <sub>2</sub> |



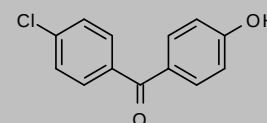
### Fenbendazole Related Compound B (Methyl (5-Chloro-1H-benzimidazol-2-yl)carbamate)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0518.04</a> | 100mg              | 20367-38-8                                                                      |
| USP      | 1269425                   | 30mg               | M.W. 225.6317<br>C <sub>9</sub> H <sub>8</sub> Cl N <sub>3</sub> O <sub>2</sub> |



### Fenofibrate Related Compound A ((4-Chlorophenyl)(4-hydroxyphenyl)methanone)

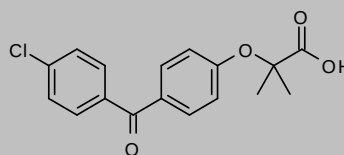
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0505.01</a> | 100mg              | 42019-78-3                                                        |
| USP      | 1269607                   | 25mg               | M.W. 232.6624<br>C <sub>13</sub> H <sub>9</sub> Cl O <sub>2</sub> |



## LGC impurities according to USP declaration system

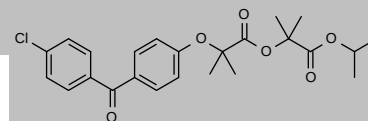
### Fenofibrate Related Compound B (2-[4-(4-Chlorobenzoyl)phenoxy]-2-methylpropanoic Acid; Fenofibric Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0505.02</a> | 100mg              | 42017-89-0                                                         |
| USP      | 1269618                   | 25mg               | M.W. 318.7516<br>C <sub>17</sub> H <sub>15</sub> Cl O <sub>4</sub> |



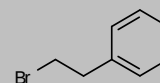
### Fenofibrate Related Compound C (1-Methylethyl 2-[[2-[4-(4-Chlorobenzoyl)phenoxy]-2-methylpropanoyl]oxy]-2-methylpropanoate)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0505.07</a> | 50mg               | 217636-48-1                                                        |
| USP      | 1269629                   | 25mg               | M.W. 446.9206<br>C <sub>24</sub> H <sub>27</sub> Cl O <sub>6</sub> |



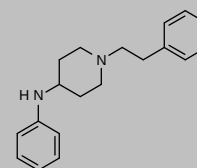
### Fentanyl Related Compound A ((2-Bromoethyl)benzene)

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0528.13</a> | 100mg              | 103-63-9                                          |
| USP      | 1269913                   | 100mg              | M.W. 185.0611<br>C <sub>8</sub> H <sub>9</sub> Br |



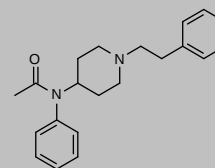
### Fentanyl Related Compound E (N-Phenyl-1-(2-phenylethyl)piperidin-4-amine)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0528.04</a> | 100mg              | 21409-26-7                                                      |
| USP      | 1269957                   | 10mg               | M.W. 280.4073<br>C <sub>19</sub> H <sub>24</sub> N <sub>2</sub> |



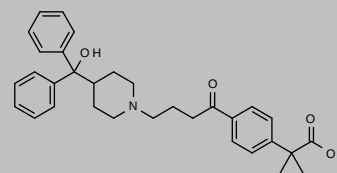
### Fentanyl Related Compound G (N-Phenyl-N-[1-(2-phenylethyl)piperidin-4-yl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0528.03</a> | 100mg              | 3258-84-2                                                         |
| USP      | 1269979                   | 10mg               | M.W. 322.4439<br>C <sub>21</sub> H <sub>26</sub> N <sub>2</sub> O |



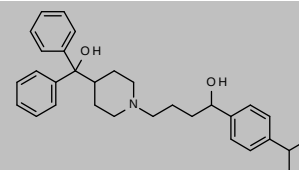
### Fexofenadine Related Compound A (2-[4-[4-(4-(Hydroxydiphenylmethyl)piperidin-1-yl]butanoyl]phenyl]-2-methylpropanoic Acid; Ketofexofenadine)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0507.01</a> | 100mg              | 76811-98-8                                                        |
| USP      | 1270388                   | 25mg               | M.W. 499.6405<br>C <sub>32</sub> H <sub>37</sub> N O <sub>4</sub> |



### Fexofenadine Related Compound C ((1RS)-4-[4-(4-(Hydroxydiphenylmethyl)piperidin-1-yl]-1-[4-(1-methylethyl)phenyl]butan-1-ol)

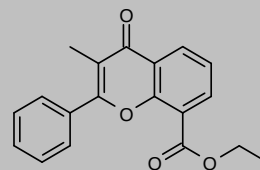
| Producer | Code                      | Quantity / Comment     | CAS                                                               |
|----------|---------------------------|------------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0507.03</a> | 100mg                  | 185066-37-9                                                       |
| USP      | 1270446                   | 15mg, as hydrochloride | M.W. 457.6469<br>C <sub>31</sub> H <sub>39</sub> N O <sub>2</sub> |



## LGC impurities according to USP declaration system

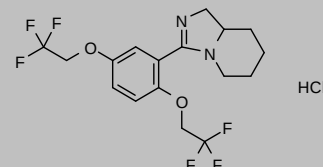
### Flavoxate Related Compound C (Ethyl 3-Methyl-4-oxo-2-phenyl-4H-1-benzopyran-8-carboxylate; 3-Methyl-flavone-8-carboxylic Acid Ethyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0156.02</a> | 100mg              | 35888-94-9                                                      |
| USP      | 1270731                   | 20mg               | M.W. 308.3279<br>C <sub>19</sub> H <sub>16</sub> O <sub>4</sub> |



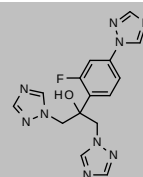
### Flecainide Related Compound A ((8aRS)-3-[2,5-Bis(2,2,2-trifluoroethoxy)phenyl]-1,5,6,7,8,8a-hexahydroimidazo[1,5-a]pyridine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0488.06</a> | 100mg              | n/a                                                                                                  |
| USP      | 1270821                   | 75mg               | M.W. 432.7884<br>C <sub>17</sub> H <sub>18</sub> F <sub>6</sub> N <sub>2</sub> O <sub>2</sub> · Cl H |



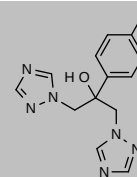
### Fluconazole Related Compound A (2-[2-Fluoro-4-(1H-1,2,4-triazol-1-yl)phenyl]-1,3-bis(1H-1,2,4-triazol-1-yl)propan-2-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0235.12</a> | 100mg              | 871550-15-1                                                         |
| USP      | 1271711                   | 10mg               | M.W. 355.3298<br>C <sub>15</sub> H <sub>14</sub> F N <sub>9</sub> O |



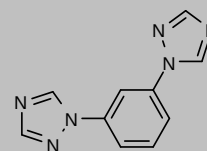
### Fluconazole Related Compound B (2-(4-Fluorophenyl)-1,3-bis(1H-1,2,4-triazol-1-yl)propan-2-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0235.14</a> | 100mg              | 81886-51-3                                                          |
| USP      | 1271722                   | 10mg               | M.W. 288.2803<br>C <sub>13</sub> H <sub>13</sub> F N <sub>6</sub> O |



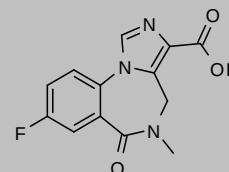
### Fluconazole Related Compound C (1,1'-(1,3-Phenylene)di-1H-1,2,4-triazole)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0235.13</a> | 50mg               | 514222-44-7                                                    |
| USP      | 1271733                   | 10mg               | M.W. 212.2107<br>C <sub>10</sub> H <sub>8</sub> N <sub>6</sub> |



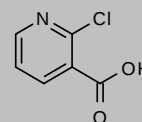
### Flumazenil Related Compound A (8-Fluoro-5-methyl-6-oxo-5,6-dihydro-4H-imidazo[1,5-a][1,4]benzodiazepine-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0762.01</a> | 100mg              | 84378-44-9                                                                       |
| USP      | 1273819                   | 20mg               | M.W. 275.2352<br>C <sub>13</sub> H <sub>10</sub> F N <sub>3</sub> O <sub>3</sub> |



### Flunixin Related Compound A (2-Chloropyridine-3-carboxylic Acid)

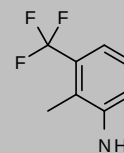
| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0915.01</a> | 100mg              | 2942-59-8                                                          |
| USP      | 1274629                   | 15mg               | M.W. 157.5545<br>C <sub>6</sub> H <sub>4</sub> Cl N O <sub>2</sub> |



## LGC impurities according to USP declaration system

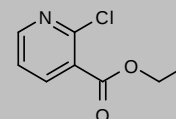
### Flunixin Related Compound B (2-Methyl-3-(trifluoromethyl)aniline)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0915.02</a> | 100mg              | 54396-44-0                                                     |
| USP      | 1274630                   | 25mg               | M.W. 175.151<br>C <sub>8</sub> H <sub>8</sub> F <sub>3</sub> N |



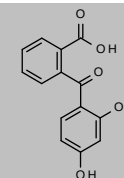
### Flunixin Related Compound C (Ethyl 2-Chloropyridine-3-carboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0915.03</a> | 100mg              | 1452-94-4                                                          |
| USP      | 1274631                   | 50mg               | M.W. 185.6076<br>C <sub>8</sub> H <sub>8</sub> Cl N O <sub>2</sub> |



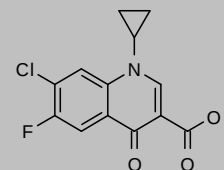
### Fluorescein Related Compound C (2-(2,4-Dihydroxybenzoyl)benzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0133.04</a> | 100mg              | 2513-33-9                                                       |
| USP      | 1277037                   | 25mg               | M.W. 258.2262<br>C <sub>14</sub> H <sub>10</sub> O <sub>5</sub> |



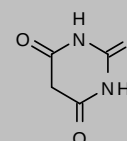
### Fluoroquinolonic Acid (7-Chloro-1-cyclopropyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                   |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM0018.01</a> | 100mg              | 86393-33-1                                                            |
| USP      | 1278302                   | 150mg              | M.W. 281.6669<br>C <sub>13</sub> H <sub>9</sub> Cl F N O <sub>3</sub> |



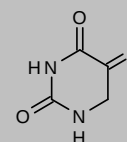
### Fluorouracil Related Compound A (Barbituric Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0265.03</a> | 100mg              | 67-52-7                                                                      |
| USP      | 1279019                   | 25mg               | M.W. 128.0862<br>C <sub>4</sub> H <sub>4</sub> N <sub>2</sub> O <sub>3</sub> |



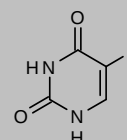
### Fluorouracil Related Compound B (Dihydropyrimidine-2,4,5(3H)-trione; Isobarbituric Acid; 5-Hydroxyuracil)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0593.01</a> | 100mg              | 496-76-4                                                                     |
| USP      | 1279021                   | 25mg               | M.W. 128.0862<br>C <sub>4</sub> H <sub>4</sub> N <sub>2</sub> O <sub>3</sub> |



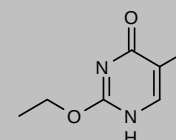
### Fluorouracil Related Compound E (5-Chloropyrimidine-2,4(1H,3H)-dione; 5-Chlorouracil)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0593.05</a> | 100mg              | 1820-81-1                                                                       |
| USP      | 1279054                   | 25mg               | M.W. 146.5318<br>C <sub>4</sub> H <sub>3</sub> Cl N <sub>2</sub> O <sub>2</sub> |



### Fluorouracil Related Compound F (2-Ethoxy-5-fluoropyrimidin-4(1H)-one; 2-Ethoxy-5-fluorouracil)

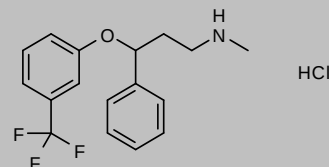
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0593.06</a> | 100mg              | 56177-80-1                                                                     |
| USP      | 1279065                   | 25mg               | M.W. 158.1304<br>C <sub>6</sub> H <sub>7</sub> F N <sub>2</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

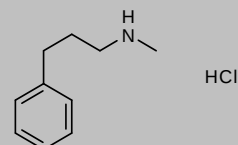
### Fluoxetine Related Compound A ((3RS)-N-Methyl-3-phenyl-3-[3-(trifluoromethyl)phenoxy]propan-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                            |
|----------|---------------------------|--------------------|------------------------------------------------|
| LGC      | <a href="#">MM0256.03</a> | 100mg              | 79088-29-2                                     |
| USP      | 1279815                   | 15mg               | M.W. 345.7871<br>$C_{17}H_{18}F_3NO \cdot ClH$ |



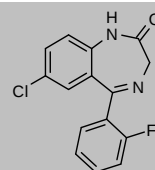
### Fluoxetine Related Compound B (N-Methyl-3-phenylpropan-1-amine Hydrochloride; Methyl-3-phenylpropylamine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                        |
|----------|---------------------------|--------------------|--------------------------------------------|
| LGC      | <a href="#">MM0256.02</a> | 100mg              | 30684-07-2                                 |
| USP      | 1279826                   | 5ml                | M.W. 185.6937<br>$C_{10}H_{15}N \cdot ClH$ |



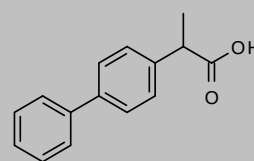
### Flurazepam Related Compound F (7-Chloro-5-(2-fluorophenyl)-1,3-dihydro-2H-1,4-benzodiazepin-2-one)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM0070.02</a> | 100mg              | 2886-65-9                              |
| USP      | 1285603                   | 50mg               | M.W. 288.7041<br>$C_{15}H_{10}ClFN_2O$ |



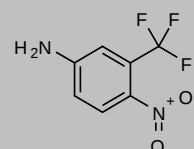
### Flurbiprofen Related Compound A ((2RS)-2-(Biphenyl-4-yl)propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0727.01</a> | 50mg               | 6341-72-6                          |
| USP      | 1285760                   | 100mg              | M.W. 226.2705<br>$C_{15}H_{14}O_2$ |



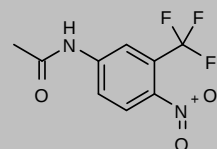
### Flutamide Related Compound A (4-Nitro-3-(trifluoromethyl)aniline)

| Producer | Code                      | Quantity / Comment | CAS                               |
|----------|---------------------------|--------------------|-----------------------------------|
| LGC      | <a href="#">MM0161.03</a> | 100mg              | 393-11-3                          |
| USP      | 1285997                   | 20mg               | M.W. 206.122<br>$C_7H_5F_3N_2O_2$ |



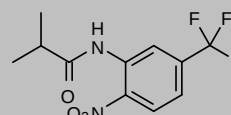
### Flutamide Related Compound B (N-[4-Nitro-3-(trifluoromethyl)phenyl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0161.04</a> | 100mg              | 393-12-4                           |
| USP      | 1285986                   | 20mg               | M.W. 248.1587<br>$C_9H_7F_3N_2O_3$ |



### o-Flutamide (2-Methyl-N-[2-nitro-5-(trifluoromethyl)phenyl]propanamide)

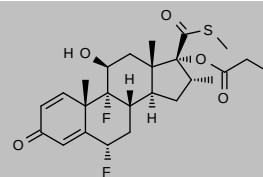
| Producer | Code                      | Quantity / Comment | CAS                                      |
|----------|---------------------------|--------------------|------------------------------------------|
| LGC      | <a href="#">MM0161.08</a> | 100mg              | 151262-93-0                              |
| USP      | 1285862                   | 50mg               | M.W. 276.2118<br>$C_{11}H_{11}F_3N_2O_3$ |



## LGC impurities according to USP declaration system

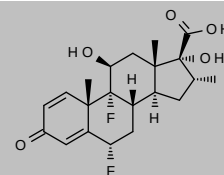
### Fluticasone Propionate Related Compound D (6 $\alpha$ ,9-Difluoro-11 $\beta$ -hydroxy-16 $\alpha$ -methyl-17-[(methylsulfanyl)carbonyl]-3-oxoandrosta-1,4-dien-17 $\alpha$ -yl Propanoate)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1244.04</a> | 100mg              | 73205-13-7                                                                       |
| USP      | 1285829                   | 15mg               | M.W. 482.5804<br>C <sub>25</sub> H <sub>32</sub> F <sub>2</sub> O <sub>5</sub> S |



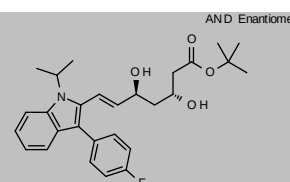
### Fluticasone Propionate Related Compound J (6 $\alpha$ ,9 $\alpha$ -Difluoro-11 $\beta$ ,17 $\alpha$ -dihydroxy-16 $\alpha$ -methyl-3-oxoandrosta-1,4-diene-17 $\beta$ -carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1244.10</a> | 100mg              | 28416-82-2                                                                     |
| USP      | 1285818                   | 15mg               | M.W. 396.4249<br>C <sub>21</sub> H <sub>26</sub> F <sub>2</sub> O <sub>5</sub> |



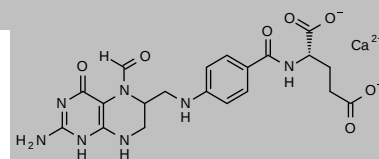
### Fluvastatin Related Compound B (1,1-Dimethylethyl (3RS,5SR,6E)-7-[3-(4-Fluorophenyl)-1-(1-methylethyl)-1H-indol-2-yl]-3,5-dihydroxyhept-6-enoate; Fluvastatin tert-Butyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0676.03</a> | 100mg              | 129332-29-2                                                         |
| USP      | 1285964                   | 15mg               | M.W. 467.5723<br>C <sub>28</sub> H <sub>34</sub> F N O <sub>4</sub> |



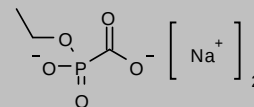
### Folic Acid Related Compound A (Calcium Folate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0324.00</a> | 250mg              | 1492-18-8                                                                           |
| USP      | 1286027                   | 50mg               | M.W. 511.5014<br>C <sub>20</sub> H <sub>21</sub> N <sub>7</sub> O <sub>7</sub> · Ca |



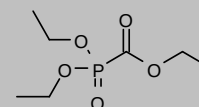
### Foscarnet Related Compound B (Disodium (Ethoxyoxydophosphanyl)formate)

| Producer | Code                      | Quantity / Comment | CAS                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM3500.01</a> | 50mg               | 55920-24-6                                                             |
| USP      | 1283313                   | 10mg               | M.W. 198.0221<br>C <sub>3</sub> H <sub>5</sub> O <sub>5</sub> P · 2 Na |



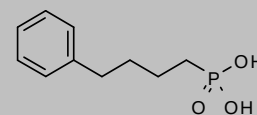
### Foscarnet Related Compound D (Ethyl (Diethoxyphosphoryl)formate)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM3500.02</a> | 100mg              | 1474-78-8                                                        |
| USP      | 1283324                   | 0.27ml             | M.W. 210.1648<br>C <sub>7</sub> H <sub>15</sub> O <sub>5</sub> P |



### Fosinopril Related Compound H ((4-Phenylbutyl)phosphonic Acid)

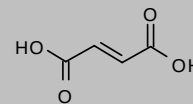
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0645.01</a> | 100mg              | 46348-61-2                                                        |
| USP      | 1283481                   | 25mg               | M.W. 214.1981<br>C <sub>10</sub> H <sub>15</sub> O <sub>3</sub> P |



## LGC impurities according to USP declaration system

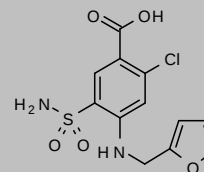
### Fumaric Acid

| Producer | Code                      | Quantity / Comment | CAS                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM0460.10</a> | 100mg              | 110-17-8                                                      |
| USP      | 1286708                   | 200mg              | M.W. 116.0722<br>C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



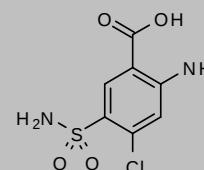
### Furosemide Related Compound A (2-Chloro-4-[(furan-2-ylmethyl)-amino]-5-sulphamoylbenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0014.02</a> | 100mg              | 4818-59-1                                                                           |
| USP      | 1287020                   | 50mg               | M.W. 330.7441<br>C <sub>12</sub> H <sub>11</sub> Cl N <sub>2</sub> O <sub>5</sub> S |



### Furosemide Related Compound B (2-Amino-4-chloro-5-sulphamoylbenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0014.01</a> | 100mg              | 3086-91-7                                                                         |
| USP      | 1287030                   | 100mg              | M.W. 250.6595<br>C <sub>7</sub> H <sub>7</sub> Cl N <sub>2</sub> O <sub>4</sub> S |



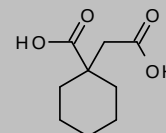
### Gabapentin Related Compound A (2-Azaspiro[4.5]decan-3-one; 3,3-Pentamethylene-4-butyrolactam)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM0684.01</a> | 100mg              | 64744-50-9                                          |
| USP      | 1287325                   | 50mg               | M.W. 153.2215<br>C <sub>9</sub> H <sub>15</sub> N O |



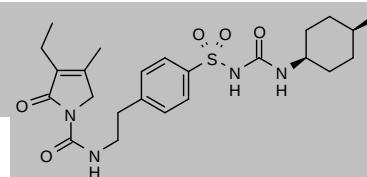
### Gabapentin Related Compound E (1-(Carboxymethyl)cyclohexanecarboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0684.07</a> | 100mg              | 67950-95-2                                                     |
| USP      | 1287369                   | 25mg               | M.W. 186.2051<br>C <sub>9</sub> H <sub>14</sub> O <sub>4</sub> |



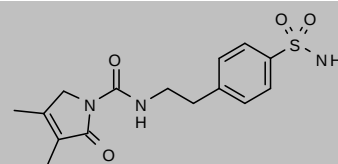
### Glimepiride Related Compound A (1-[[4-[2-[[[(3-Ethyl-4-methyl-2-oxo-2,3-dihydro-1H-pyrrol-1-yl)carbonyl]amino]ethyl]phenyl]sulphonyl]-3-(cis-4-methylcyclohexyl)urea; cis-Glimepiride)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0647.02</a> | 100mg              | 684286-46-2                                                                      |
| USP      | 1292314                   | 20mg               | M.W. 490.6156<br>C <sub>24</sub> H <sub>34</sub> N <sub>4</sub> O <sub>5</sub> S |



### Glimepiride Related Compound B (3-Ethyl-4-methyl-2-oxo-N-[2-(4-sulphamoylphenyl)ethyl]-2,3-dihydro-1H-pyrrole-1-carboxamide; Glimepiride Sulphonamide)

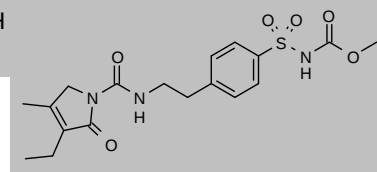
| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0647.01</a> | 100mg              | 119018-29-0                                                                      |
| USP      | 1292325                   | 20mg               | M.W. 351.4206<br>C <sub>16</sub> H <sub>21</sub> N <sub>3</sub> O <sub>4</sub> S |



## LGC impurities according to USP declaration system

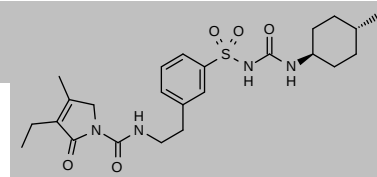
Glimepiride Related Compound C (Methyl [[4-[2-[[[(3-Ethyl-4-methyl-2-oxo-2,3-dihydro-1H-pyrrol-1-yl)carbonyl]amino]ethyl]phenyl]sulphonyl]carbamate; Glimepiride Carbamate)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 119018-30-3                                                 |
| LGC      | <a href="#">MM0647.03</a> | 100mg              | M.W. 409.4567                                                   |
| USP      | 1292336                   | 20mg               | C <sub>18</sub> H <sub>23</sub> N <sub>3</sub> O <sub>6</sub> S |



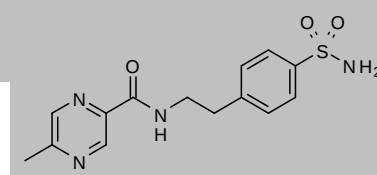
Glimepiride Related Compound D (1-[[3-[2-[[[(3-Ethyl-4-methyl-2-oxo-2,3-dihydro-1H-pyrrol-1-yl)carbonyl]amino]ethyl]phenyl]sulphonyl]-3-(trans-4-methylcyclohexyl)urea)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 791104-62-6                                                 |
| LGC      | <a href="#">MM0647.04</a> | 100mg              | M.W. 490.6156                                                   |
| USP      | 1292347                   | 20mg               | C <sub>24</sub> H <sub>34</sub> N <sub>4</sub> O <sub>5</sub> S |



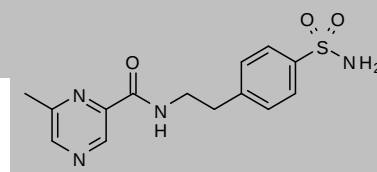
Glipizide Related Compound A (5-Methyl-N-[2-(4-sulphamoylphenyl)ethyl]pyrazine-2-carboxamide)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 33288-71-0                                                  |
| LGC      | <a href="#">MM0942.01</a> | 100mg              | M.W. 320.3668                                                   |
| USP      | 1292609                   | 25mg               | C <sub>14</sub> H <sub>16</sub> N <sub>4</sub> O <sub>3</sub> S |



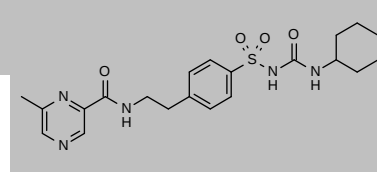
Glipizide Related Compound B (6-Methyl-N-[2-(4-sulphamoylphenyl)ethyl]pyrazine-2-carboxamide)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                                         |
| LGC      | <a href="#">MM0942.04</a> | 100mg              | M.W. 320.3668                                                   |
| USP      | 1292610                   | 15mg               | C <sub>14</sub> H <sub>16</sub> N <sub>4</sub> O <sub>3</sub> S |



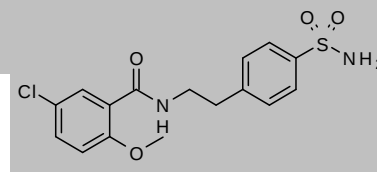
Glipizide Related Compound C (1-Cyclohexyl-3-[[4-[2-[[[(6-methylpyrazin-2-yl)carbonyl]amino]ethyl]phenyl]sulphonyl]urea)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 66375-96-0                                                  |
| LGC      | <a href="#">MM0942.05</a> | 100mg              | M.W. 445.5352                                                   |
| USP      | 1292631                   | 15mg               | C <sub>21</sub> H <sub>27</sub> N <sub>5</sub> O <sub>4</sub> S |



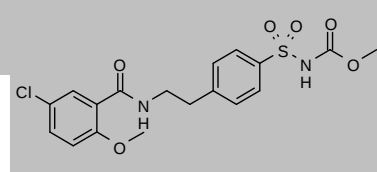
Glyburide Related Compound A (5-Chloro-2-methoxy-N-[2-(4-sulfamoylphenyl)ethyl]benzamide)

|          |                           |                    |                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 16673-34-0                                                     |
| LGC      | <a href="#">MM0008.01</a> | 100mg              | M.W. 368.8352                                                      |
| USP      | 1295516                   | 25mg               | C <sub>16</sub> H <sub>17</sub> Cl N <sub>2</sub> O <sub>4</sub> S |



Glyburide Related Compound B (Methyl [[4-[2-[(5-Chloro-2-methoxybenzoyl)amino]ethyl]phenyl]sulphonyl]carbamate)

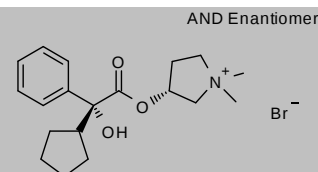
|          |                           |                    |                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 21165-77-5                                                     |
| LGC      | <a href="#">MM0008.02</a> | 100mg              | M.W. 426.8713                                                      |
| USP      | 1295527                   | 25mg               | C <sub>18</sub> H <sub>19</sub> Cl N <sub>2</sub> O <sub>6</sub> S |



## LGC impurities according to USP declaration system

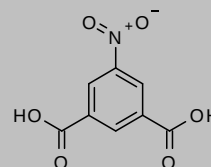
### Glycopyrrolate Erythro Isomer ((3RS)-3-[(2RS)-(2-Cyclopentyl-2-hydroxy-2-phenylacetyl)oxy]-1,1-dimethylpyrrolidinium Bromide)

| Producer | Code                      | Quantity / Comment | CAS                                           |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM0834.14</a> | 100mg              | 58493-54-2                                    |
| USP      | 1296010                   | 25mg               | M.W. 398.3345<br>$C_{19}H_{28}N O_3 \cdot Br$ |



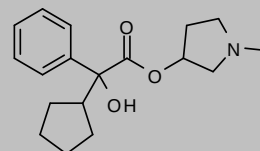
### Glycopyrrolate Related Compound A (5-Nitroisophthalic Acid)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0834.15</a> | 100mg              | 618-88-2                      |
| USP      | 1296029                   | 50mg               | M.W. 211.1284<br>$C_8H_5NO_6$ |



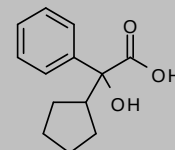
### Glycopyrrolate Related Compound B (1-Methylpyrrolidin-3-yl 2-Cyclopentyl-2-hydroxy-2-phenylacetate)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0834.12</a> | 100mg              | 13118-11-1                         |
| USP      | 1296031                   | 75mg               | M.W. 303.396<br>$C_{18}H_{25}NO_3$ |



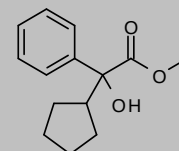
### Glycopyrrolate Related Compound C (2-(RS)-Cyclopentyl-2-hydroxy-2-phenylacetic Acid; α-Cyclopentylmandelic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0834.01</a> | 100mg              | 427-49-6                           |
| USP      | 1296042                   | 25mg               | M.W. 220.2643<br>$C_{13}H_{16}O_3$ |



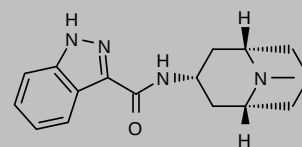
### Glycopyrrolate Related Compound L (Methyl (2RS)-2-Cyclopentyl-2-hydroxy-2-phenylacetate)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0834.09</a> | 100mg              | 19833-96-6                         |
| USP      | 1296100                   | 50mg               | M.W. 234.2909<br>$C_{14}H_{18}O_3$ |



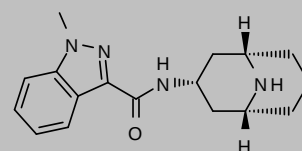
### Granisetron Related Compound B (N-[(1R,3r,5S)-9-Methyl-9-azabicyclo-[3.3.1]non-3-yl]-1H-indazole-3-carboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0398.02</a> | 50mg               | 107007-95-4                         |
| USP      | 1298128                   | 15mg               | M.W. 298.3828<br>$C_{17}H_{22}N_4O$ |



### Granisetron Related Compound C (N-[(1R,3r,5S)-9-Azabicyclo[3.3.1]non-3-yl]-1-methyl-1H-indazole-3-carboxamide)

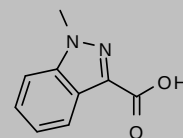
| Producer | Code                      | Quantity / Comment     | CAS                                 |
|----------|---------------------------|------------------------|-------------------------------------|
| LGC      | <a href="#">MM0398.03</a> | 50mg                   | 160177-67-3                         |
| USP      | 1298139                   | 15mg, as hydrochloride | M.W. 298.3828<br>$C_{17}H_{22}N_4O$ |



## LGC impurities according to USP declaration system

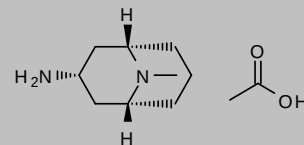
### Granisetron Related Compound D (1-Methyl-1H-indazole-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                            |
|----------|---------------------------|--------------------|--------------------------------|
| LGC      | <a href="#">MM0398.04</a> | 100mg              | 50890-83-0                     |
| USP      | 1298140                   | 15mg               | M.W. 176.172<br>$C_9H_8N_2O_2$ |



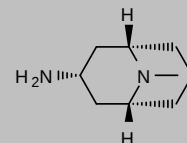
### Granisetron Related Compound E ((1R,3r,5S)-9-Methyl-9-azabicyclo[3.3.1]nonan-3-amine Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                             |
|----------|---------------------------|--------------------|-------------------------------------------------|
| LGC      | <a href="#">MM0398.12</a> | 50mg               | n/a                                             |
| USP      | 1298150                   | 15mg               | M.W. 214.3046<br>$C_9H_{18}N_2 \cdot C_2H_4O_2$ |



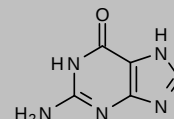
### Granisetron Related Compound E ((1R,3r,5S)-9-Methyl-9-azabicyclo[3.3.1]nonan-3-amine)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0398.05</a> | 100mg              | 76272-56-5                      |
| USP      | 1298150                   | 15mg, as acetate   | M.W. 154.2526<br>$C_9H_{18}N_2$ |



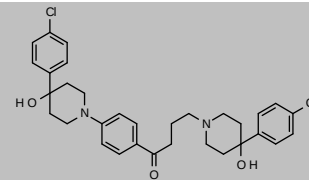
### Guanine (2-Amino-1,7-dihydro-6H-purin-6-one)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0061.02</a> | 100mg              | 73-40-5                       |
| USP      | 1302156                   | 100mg              | M.W. 151.1261<br>$C_5H_5N_5O$ |



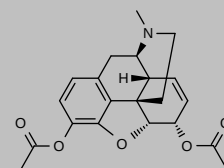
### Haloperidol Related Compound A (4-[4-(4-Chlorophenyl)-4-hydroxypiperidin-1-yl]-1-[4-(4-chlorophenyl)-4-hydroxypiperidin-1-yl]phenyl]butan-1-one)

| Producer | Code                      | Quantity / Comment | CAS                                       |
|----------|---------------------------|--------------------|-------------------------------------------|
| LGC      | <a href="#">MM1165.04</a> | 100mg              | 67987-08-0                                |
| USP      | 1303013                   | 10mg               | M.W. 567.5458<br>$C_{32}H_{36}Cl_2N_2O_3$ |



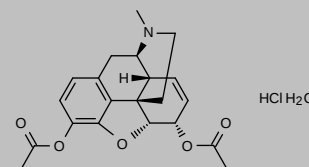
### Heroin (Diacetylmorphine)

| Producer | Code                      | Quantity / Comment     | CAS                                |
|----------|---------------------------|------------------------|------------------------------------|
| LGC      | <a href="#">MM0037.17</a> | 100mg                  | 561-27-3                           |
| USP      | 1183002                   | 25mg, as hydrochloride | M.W. 369.411<br>$C_{21}H_{23}NO_5$ |



### Heroin Hydrochloride Monohydrate (Diacetylmorphine Hydrochloride Monohydrate)

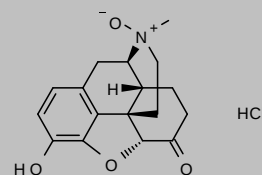
| Producer | Code                      | Quantity / Comment | CAS                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------|
| LGC      | <a href="#">MM0037.20</a> | 50mg               | 5893-91-4                                                |
| USP      | 1183002                   | 25mg, as anhydrate | M.W. 423.8872<br>$C_{21}H_{23}NO_5 \cdot ClH \cdot H_2O$ |



## LGC impurities according to USP declaration system

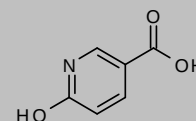
### Hydromorphone N-Oxide Hydrochloride (4,5α-Epoxy-3-hydroxy-17-methylmorphinan-6-one 17-Oxide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0371.09</a> | 100mg              | M.W. 337.798                                            |
| USP      | 1323019                   | 15mg               | C <sub>17</sub> H <sub>19</sub> N O <sub>4</sub> · Cl H |



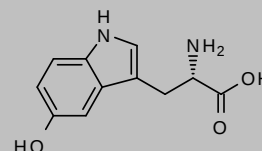
### 6-Hydroxynicotinic Acid

| Producer | Code                      | Quantity / Comment | CAS 5006-66-6                                  |
|----------|---------------------------|--------------------|------------------------------------------------|
| LGC      | <a href="#">MM0553.15</a> | 100mg              | M.W. 139.1088                                  |
| USP      | 1327408                   | 50mg               | C <sub>6</sub> H <sub>5</sub> N O <sub>3</sub> |



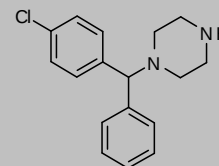
### 5-Hydroxy-L-tryptophan ((S)-2-Amino-3-(5-hydroxy-1H-indol-3-yl)propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS 4350-09-8                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM0172.03</a> | 100mg              | M.W. 220.2246                                                 |
| USP      | 1329913                   | 100mg              | C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O <sub>3</sub> |



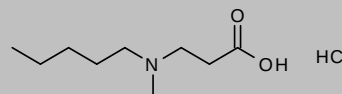
### Hydroxyzine Related Compound A ((RS)-1-[(4-Chlorophenyl)phenylmethyl]piperazine)

| Producer | Code                      | Quantity / Comment | CAS 303-26-4                                      |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0380.01</a> | 100mg              | M.W. 286.7992                                     |
| USP      | 1333058                   | 25mg               | C <sub>17</sub> H <sub>19</sub> Cl N <sub>2</sub> |



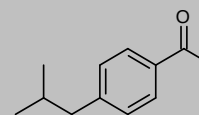
### Ibandronate Related Compound A (3-[Methyl(pentyl)amino]propanoic Acid Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS 625120-81-2                                        |
|----------|---------------------------|--------------------|--------------------------------------------------------|
| LGC      | <a href="#">MM1326.01</a> | 100mg              | M.W. 209.7136                                          |
| USP      | 1335428                   | 25mg               | C <sub>9</sub> H <sub>19</sub> N O <sub>2</sub> · Cl H |



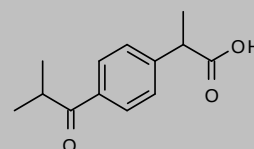
### Ibuprofen Related Compound C (1-[4-(2-Methylpropyl)phenyl]ethanone)

| Producer | Code                      | Quantity / Comment       | CAS 38861-78-8                    |
|----------|---------------------------|--------------------------|-----------------------------------|
| LGC      | <a href="#">MM0002.04</a> | 100mg                    | M.W. 176.2548                     |
| USP      | 1335541                   | 0.2 mL/ampule; 3 ampules | C <sub>12</sub> H <sub>16</sub> O |



### Ibuprofen Related Compound J ((2RS)-2-[4-(2-Methyl-propanoyl)phenyl]propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS 65813-55-0                                 |
|----------|---------------------------|--------------------|------------------------------------------------|
| LGC      | <a href="#">MM0002.02</a> | 100mg              | M.W. 220.2643                                  |
| USP      | 1335596                   | 25mg               | C <sub>13</sub> H <sub>16</sub> O <sub>3</sub> |



### Imidazole

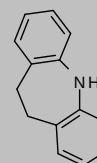
| Producer | Code                      | Quantity / Comment | CAS 288-32-4                                 |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM0015.02</a> | 100mg              | M.W. 68.0773                                 |
| USP      | 1336500                   | 200mg              | C <sub>3</sub> H <sub>4</sub> N <sub>2</sub> |



## LGC impurities according to USP declaration system

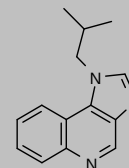
### Iminodibenzyl (10,11-Dihydro-5H-dibenzo[b,f]azepine)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM0076.06</a> | 100mg              | 494-19-9                                           |
| USP      | 1337004                   | 25mg               | M.W. 195.2597<br>C <sub>14</sub> H <sub>13</sub> N |



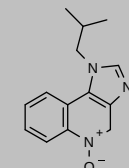
### Imiquimod Related Compound A (1-Isobutyl-1H-imidazo[4,5-c]quinoline; Desaminoimiquimod)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM1158.02</a> | 100mg              | 99010-24-9                                                     |
| USP      | 1338324                   | 25mg               | M.W. 225.289<br>C <sub>14</sub> H <sub>15</sub> N <sub>3</sub> |



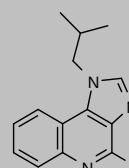
### Imiquimod Related Compound B (1-Isobutyl-1H-imidazo[4,5-c]quinoline 5-Oxide; Desaminoimiquimod N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM1158.03</a> | 100mg              | 99010-63-6                                                        |
| USP      | 1338335                   | 25mg               | M.W. 241.2884<br>C <sub>14</sub> H <sub>15</sub> N <sub>3</sub> O |



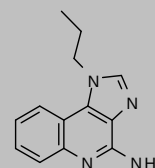
### Imiquimod Related Compound C (4-Chloro-1-isobutyl-1H-imidazo[4,5-c]quinoline)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM1158.04</a> | 100mg              | 99010-64-7                                                         |
| USP      | 1338346                   | 25mg               | M.W. 259.7341<br>C <sub>14</sub> H <sub>14</sub> Cl N <sub>3</sub> |



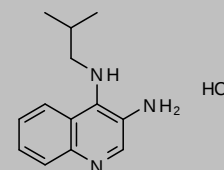
### Imiquimod Related Compound D (1-Propyl-1H-imidazo[4,5-c]quinolin-4-amine)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1158.05</a> | 50mg               | 853792-81-1                                                     |
| USP      | 1338357                   | 25mg               | M.W. 226.2771<br>C <sub>13</sub> H <sub>14</sub> N <sub>4</sub> |



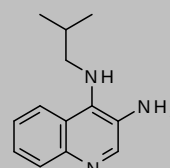
### Imiquimod Related Compound E (N4-Isobutylquinoline-3,4-diamine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM1158.07</a> | 100mg              | 935521-01-0                                                            |
| USP      | 1338368                   | 25mg, as free base | M.W. 251.7551<br>C <sub>13</sub> H <sub>17</sub> N <sub>3</sub> · Cl H |



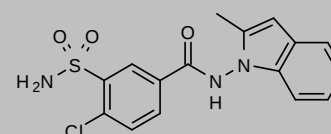
### Imiquimod Related Compound E (N4-Isobutylquinoline-3,4-diamine)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1158.06</a> | 100mg              | 99010-09-0                                                      |
| USP      | 1338368                   | 25mg               | M.W. 215.2942<br>C <sub>13</sub> H <sub>17</sub> N <sub>3</sub> |



### Indapamide Related Compound A (4-Chloro-N-(2-methyl-1H-indol-1-yl)-3-sulphamoylbenzamide)

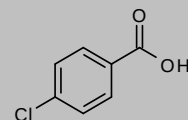
| Producer | Code                      | Quantity / Comment | CAS                                                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0477.02</a> | 100mg              | 63968-75-2                                                                          |
| USP      | 1338812                   | 50mg               | M.W. 363.8187<br>C <sub>16</sub> H <sub>14</sub> Cl N <sub>3</sub> O <sub>3</sub> S |



## LGC impurities according to USP declaration system

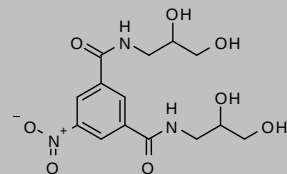
### Indomethacin Related Compound B (4-Chlorobenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0063.03</a> | 100mg              | 74-11-3                                                          |
| USP      | 1112423                   | 25mg               | M.W. 156.5664<br>C <sub>7</sub> H <sub>5</sub> Cl O <sub>2</sub> |



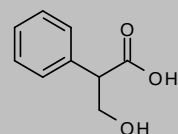
### Iohexol Related Compound C (N,N'-Bis(2,3-dihydroxypropyl)-5-nitro-1,3-benzenedicarboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1468.01</a> | 100mg              | 76820-34-3                                                                    |
| USP      | 1344666                   | 50mg               | M.W. 357.316<br>C <sub>14</sub> H <sub>19</sub> N <sub>3</sub> O <sub>8</sub> |



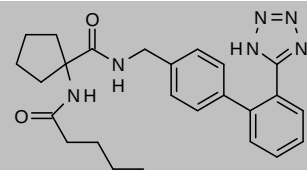
### Ipratropium Bromide Related Compound C ((2R)-3-Hydroxy-2-phenylpropanoic Acid; Tropic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0601.03</a> | 100mg              | 552-63-6                                                       |
| USP      | 1347530                   | 15mg               | M.W. 166.1739<br>C <sub>9</sub> H <sub>10</sub> O <sub>3</sub> |



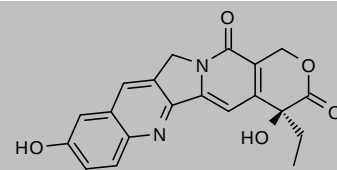
### Irbesartan Related Compound A (1-(Pentanoylamino)-N-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]cyclopentanecarboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0862.01</a> | 50mg               | 748812-53-5                                                                    |
| USP      | 1347711                   | 25mg               | M.W. 446.5447<br>C <sub>25</sub> H <sub>30</sub> N <sub>6</sub> O <sub>2</sub> |



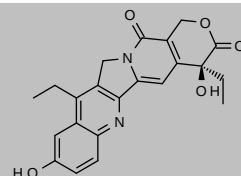
### Irinotecan Related Compound A ((S)-4-Ethyl-4,9-dihydroxy-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione; (S)-10-Hydroxycamptothecin)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1157.02</a> | 100mg              | 19685-09-7                                                                     |
| USP      | 1347610                   | 10mg               | M.W. 364.3514<br>C <sub>20</sub> H <sub>16</sub> N <sub>2</sub> O <sub>5</sub> |



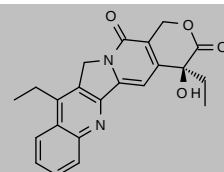
### Irinotecan Related Compound B (7-Ethyl-10-hydroxycamptothecin; (S)-4,11-Diethyl-4,9-dihydroxy-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1157.01</a> | 100mg              | 86639-52-3                                                                     |
| USP      | 1347631                   | 10mg               | M.W. 392.4046<br>C <sub>22</sub> H <sub>20</sub> N <sub>2</sub> O <sub>5</sub> |



### Irinotecan Related Compound E ((S)-4,11-Diethyl-4-hydroxy-1H-pyrano[3',4':6,7]indolizino[1,2-b]quinoline-3,14(4H,12H)-dione; 7-Ethyl-20(S)-camptothecin)

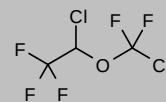
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1157.05</a> | 100mg              | 78287-27-1                                                                     |
| USP      | 1347664                   | 15mg               | M.W. 376.4052<br>C <sub>22</sub> H <sub>20</sub> N <sub>2</sub> O <sub>4</sub> |



## LGC impurities according to USP declaration system

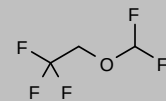
### Isoflurane Related Compound A ((2RS)-2-Chloro-2-(chlorodifluoromethoxy)-1,1,1-trifluoroethane)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0500.03</a> | 100mg              | 32778-08-8                      |
| USP      | 1349014                   | 0.1ml              | M.W. 218.9375<br>$C_3HCl_2F_5O$ |



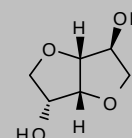
### Isoflurane Related Compound B (2-(Difluoromethoxy)-1,1,1-trifluoroethane)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0500.02</a> | 100mg              | 1885-48-9                     |
| USP      | 1349025                   | 0.1ml              | M.W. 150.0473<br>$C_3H_3F_5O$ |



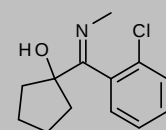
### Isosorbide

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0126.03</a> | 500mg              | 652-67-5                        |
| USP      | 1352008                   | 1g                 | M.W. 146.1412<br>$C_6H_{10}O_4$ |



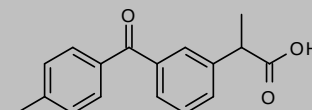
### Ketamine Related Compound A (1-[(2-Chlorophenyl)-(methylimino)methyl]cyclopentanol)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0144.01</a> | 100mg              | 6740-87-0                           |
| USP      | 1356020                   | 50mg               | M.W. 237.7252<br>$C_{13}H_{16}ClNO$ |



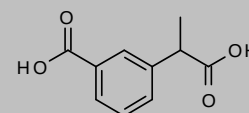
### Ketoprofen Related Compound A ((2RS)-2-[3-(4-Methylbenzoyl)phenyl]propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0001.12</a> | 100mg              | 107257-20-5                        |
| USP      | 1356643                   | 25mg               | M.W. 268.3071<br>$C_{17}H_{16}O_3$ |



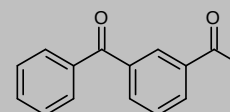
### Ketoprofen Related Compound C (3-[(1RS)-1-Carboxyethyl]benzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                               |
|----------|---------------------------|--------------------|-----------------------------------|
| LGC      | <a href="#">MM0001.07</a> | 100mg              | 68432-95-1                        |
| USP      | 1356552                   | 20mg               | M.W. 194.184<br>$C_{10}H_{10}O_4$ |



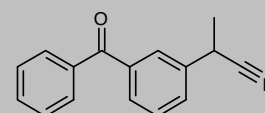
### Ketoprofen Related Compound D (1-(3-Benzoylphenyl)ethanone; 3-Acetylbenzophenone)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0001.01</a> | 100mg              | 66067-44-5                         |
| USP      | 1356563                   | 20mg               | M.W. 224.2546<br>$C_{15}H_{12}O_2$ |



### Ketoprofen Related Compound F ((2RS)-2-(3-Benzoylphenyl)propanenitrile)

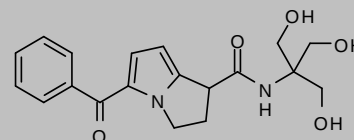
| Producer | Code                      | Quantity / Comment | CAS                               |
|----------|---------------------------|--------------------|-----------------------------------|
| LGC      | <a href="#">MM0001.04</a> | 100mg              | 42872-30-0                        |
| USP      | 1356585                   | 20mg               | M.W. 235.2805<br>$C_{16}H_{13}NO$ |



## LGC impurities according to USP declaration system

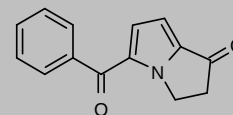
### Ketorolac Related Compound A ((1R)-5-Benzoyl-N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2,3-dihydro-1H-pyrrolizine-1-carboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0851.07</a> | 100mg              | 167105-80-8                                                                    |
| USP      | 1356315                   | 20mg               | M.W. 358.3884<br>C <sub>19</sub> H <sub>22</sub> N <sub>2</sub> O <sub>5</sub> |



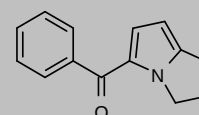
### Ketorolac Related Compound C (5-Benzoyl-2,3-dihydro-1H-pyrrolizin-1-one; Ketorolac 1-Keto Analog)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0851.02</a> | 100mg              | 113502-52-6                                                       |
| USP      | 1356337                   | 20mg               | M.W. 225.2426<br>C <sub>14</sub> H <sub>11</sub> N O <sub>2</sub> |



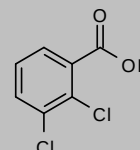
### Ketorolac Related Compound D (Phenyl(2,3-dihydro-1H-pyrrolizin-5-yl)methanone)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0851.03</a> | 100mg              | 113502-55-9                                          |
| USP      | 1356348                   | 20mg               | M.W. 211.2591<br>C <sub>14</sub> H <sub>13</sub> N O |



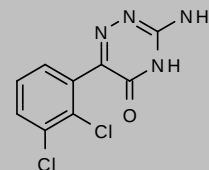
### Lamotrigine Related Compound B (2,3-Dichlorobenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0922.05</a> | 100mg              | 50-45-3                                                                       |
| USP      | 1356778                   | 20mg               | M.W. 191.0115<br>C <sub>7</sub> H <sub>4</sub> Cl <sub>2</sub> O <sub>2</sub> |



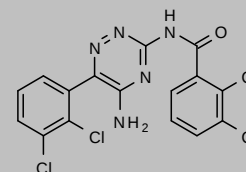
### Lamotrigine Related Compound C (3-Amino-6-(2,3-dichlorophenyl)-1,2,4-triazin-5(4H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0922.01</a> | 100mg              | 252186-78-0                                                                     |
| USP      | 1356789                   | 10mg               | M.W. 257.0761<br>C <sub>9</sub> H <sub>6</sub> Cl <sub>2</sub> N <sub>4</sub> O |



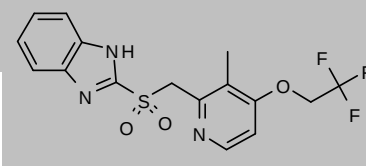
### Lamotrigine Related Compound D (N-[5-Amino-6-(2,3-dichlorophenyl)-1,2,4-triazin-3-yl]-2,3-dichlorobenzamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0922.06</a> | 50mg               | 252186-79-1                                                                      |
| USP      | 1356790                   | 10mg               | M.W. 429.0876<br>C <sub>16</sub> H <sub>9</sub> Cl <sub>4</sub> N <sub>5</sub> O |



### Lansoprazole Related Compound A (2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)pyridin-2-yl]methyl]sulphonyl]-1H-benzimidazole; Lansoprazole Sulphone)

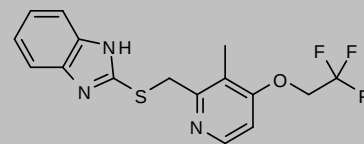
| Producer | Code                      | Quantity / Comment | CAS                                                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0474.01</a> | 100mg              | 131926-99-3                                                                                     |
| USP      | 1356927                   | 25mg               | M.W. 385.3609<br>C <sub>16</sub> H <sub>14</sub> F <sub>3</sub> N <sub>3</sub> O <sub>3</sub> S |



## LGC impurities according to USP declaration system

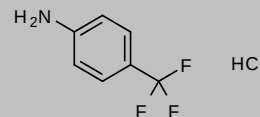
### Lansoprazole Related Compound B (2-[[[3-Methyl-4-(2,2,2-trifluoroethoxy)pyridin-2-yl]methyl]sulphonyl]-1H-benzimidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                                |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0474.06</a> | 100mg              | 103577-40-8                                                                        |
| USP      | 1356931                   | 25mg               | M.W. 353.3621<br>C <sub>16</sub> H <sub>14</sub> F <sub>3</sub> N <sub>3</sub> O S |



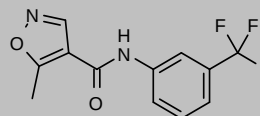
### Leflunomide Related Compound A (4-(Trifluoromethyl)aniline Hydrochloride)

| Producer | Code                      | Quantity / Comment  | CAS                                                                    |
|----------|---------------------------|---------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0859.01</a> | 100mg               | 90774-69-9                                                             |
| USP      | 1357045                   | 100mg, as free base | M.W. 197.5854<br>C <sub>7</sub> H <sub>6</sub> F <sub>3</sub> N . Cl H |



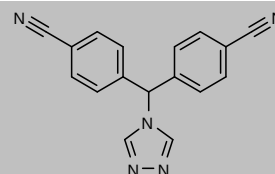
### Leflunomide Related Compound C (5-Methyl-N-[3-(trifluoromethyl)phenyl]isoxazole-4-carboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                                          |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0859.03</a> | 100mg              | 61643-23-0                                                                                   |
| USP      | 1357067                   | 10mg               | M.W. 270.2073<br>C <sub>12</sub> H <sub>9</sub> F <sub>3</sub> N <sub>2</sub> O <sub>2</sub> |



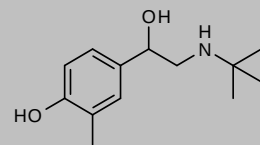
### Letrozole Related Compound A (4,4'-(4H-1,2,4-Triazol-4-ylmethylene)dibenzonitrile)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1143.02</a> | 50mg               | 112809-52-6                                                     |
| USP      | 1356982                   | 25mg               | M.W. 285.3027<br>C <sub>17</sub> H <sub>11</sub> N <sub>5</sub> |



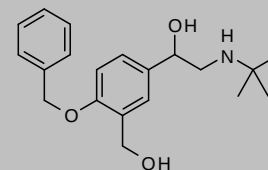
### Levalbuterol Related Compound B ((1RS)-2-[(1,1-Dimethylethyl)amino]-1-(4-hydroxy-3-methylphenyl)ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0381.03</a> | 50mg               | 18910-68-4                                                        |
| USP      | 1358809                   | 20mg               | M.W. 223.3113<br>C <sub>13</sub> H <sub>21</sub> N O <sub>2</sub> |



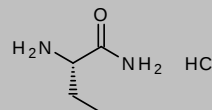
### Levalbuterol Related Compound F ((1RS)-2-[(1,1-Dimethylethyl)amino]-1-[4-(benzyloxy)-3-(hydroxymethyl)phenyl]ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0381.09</a> | 50mg               | 56796-66-8                                                        |
| USP      | 1358842                   | 30mg               | M.W. 329.4333<br>C <sub>20</sub> H <sub>27</sub> N O <sub>3</sub> |



### Levetiracetam Related Compound B ((S)-2-Aminobutanamide Hydrochloride)

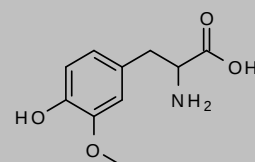
| Producer | Code                      | Quantity / Comment | CAS                                                                     |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------|
| LGC      | <a href="#">MM1372.05</a> | 100mg              | 7682-20-4                                                               |
| USP      | 1359437                   | 20mg               | M.W. 138.5959<br>C <sub>4</sub> H <sub>10</sub> N <sub>2</sub> O . Cl H |



## LGC impurities according to USP declaration system

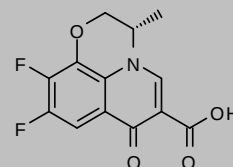
### Levodopa Related Compound B ((2R)-2-Amino-3-(4-hydroxy-3-methoxyphenyl)propanoic Acid; 3-Methoxy-DL-tyrosine; (DL)-3-O-Methyldopa)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0262.05</a> | 100mg              | 7636-26-2                                                         |
| USP      | 1420006                   | 50mg               | M.W. 211.2145<br>C <sub>10</sub> H <sub>13</sub> N O <sub>4</sub> |



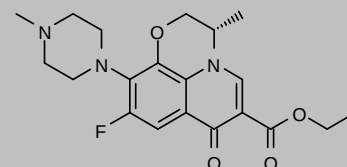
### Levofloxacin Related Compound B ((S)-9,10-Difluoro-3-methyl-7-oxo-2,3-dihydro-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0846.01</a> | 100mg              | 100986-89-8                                                                     |
| USP      | 1362125                   | 35mg               | M.W. 281.2117<br>C <sub>13</sub> H <sub>9</sub> F <sub>2</sub> N O <sub>4</sub> |



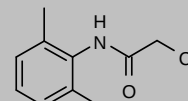
### Levofloxacin Related Compound C (Levofloxacin Ethyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0846.05</a> | 100mg              | 177472-30-9                                                                      |
| USP      | 1362136                   | 25mg               | M.W. 389.4207<br>C <sub>20</sub> H <sub>24</sub> F N <sub>3</sub> O <sub>4</sub> |



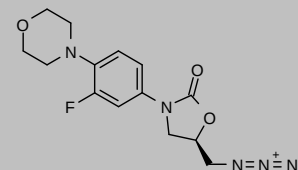
### Lidocaine Related Compound H (2-Chloro-N-(2,6-dimethylphenyl)acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0102.03</a> | 100mg              | 1131-01-7                                               |
| USP      | 1366080                   | 50mg               | M.W. 197.6614<br>C <sub>10</sub> H <sub>12</sub> Cl N O |



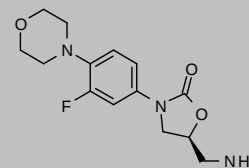
### Linezolid Related Compound A ((R)-5-(Azidomethyl)-3-(3-fluoro-4-morpholinophenyl)oxazolidin-2-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3300.02</a> | 100mg              | 168828-84-0                                                                      |
| USP      | 1367570                   | 20mg               | M.W. 321.3069<br>C <sub>14</sub> H <sub>16</sub> F N <sub>5</sub> O <sub>3</sub> |



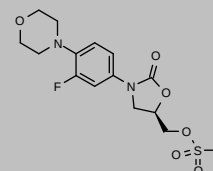
### Linezolid Related Compound C ((S)-5-(Aminomethyl)-3-(3-fluoro-4-morpholinophenyl)oxazolidin-2-one; Desacetyllinezolid)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3300.01</a> | 100mg              | 168828-90-8                                                                      |
| USP      | 1367592                   | 20mg               | M.W. 295.3094<br>C <sub>14</sub> H <sub>18</sub> F N <sub>3</sub> O <sub>3</sub> |



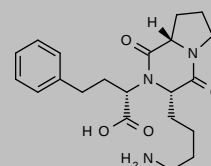
### Linezolid Related Compound D ((5R)-[3-(3-Fluoro-4-morpholinophenyl)-2-oxooxazolidin-5-yl]methyl Methanesulfonate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3300.06</a> | 100mg              | 174649-09-3                                                                        |
| USP      | 1367606                   | 20mg               | M.W. 374.3846<br>C <sub>15</sub> H <sub>19</sub> F N <sub>2</sub> O <sub>6</sub> S |



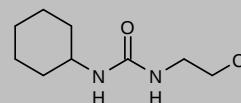
## LGC impurities according to USP declaration system

Lisinopril Related Compound A ((2S)-2-[(3S,8aS)-3-(4-Aminobutyl)-1,4-dioxohexahydropyrrolo[1,2-a]pyrazin-2(1H)-yl]-4-phenylbutanoic Acid; S,S,S-Diketopiperazine)



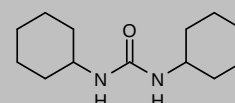
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0598.03</a> | 25mg               | 328385-86-0                                                                    |
| USP      | 1368610                   | 15mg               | M.W. 387.4727<br>C <sub>21</sub> H <sub>29</sub> N <sub>3</sub> O <sub>4</sub> |

Lomustine Related Compound B (1-(2-Chloroethyl)-3-cyclohexylurea)



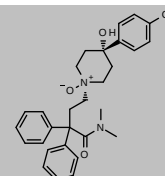
| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0923.02</a> | 100mg              | 13908-11-7                                                          |
| USP      | 1369431                   | 25mg               | M.W. 204.6971<br>C <sub>9</sub> H <sub>17</sub> Cl N <sub>2</sub> O |

Lomustine Related Compound C (1,3-Dicyclohexylurea)



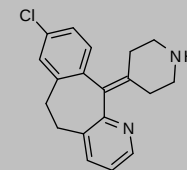
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0923.03</a> | 100mg              | 2387-23-7                                                         |
| USP      | 1369442                   | 25mg               | M.W. 224.3425<br>C <sub>13</sub> H <sub>24</sub> N <sub>2</sub> O |

Loperamide Related Compound F (Loperamide Oxide)



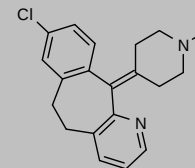
| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0025.09</a> | 100mg              | 106900-12-3                                                                       |
| USP      | 1370065                   | 25mg               | M.W. 493.0369<br>C <sub>29</sub> H <sub>33</sub> Cl N <sub>2</sub> O <sub>3</sub> |

Loratadine Related Compound A (8-Chloro-11-(piperidin-4-ylidene)-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine; Descarboethoxyloratadine; Desloratadine)



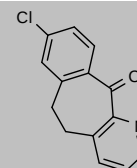
| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0257.01</a> | 50mg               | 100643-71-8                                                        |
| USP      | 1370280                   | 15mg               | M.W. 310.8206<br>C <sub>19</sub> H <sub>19</sub> Cl N <sub>2</sub> |

Loratadine Related Compound B (8-Chloro-11-(1-methylpiperidin-4-ylidene)-6,11-dihydro-5H-benzo[5,6]cyclohepta[1,2-b]pyridine)



| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0257.05</a> | 100mg              | 38092-89-6                                                         |
| USP      | 1370291                   | 15mg               | M.W. 324.8471<br>C <sub>20</sub> H <sub>21</sub> Cl N <sub>2</sub> |

Loratadine Related Compound C (8-Chloro-5,6-dihydro-11H-benzo[5,6]cyclohepta[1,2-b]pyridin-11-one)

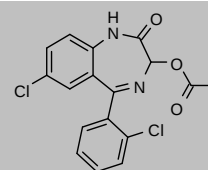


| Producer | Code                      | Quantity / Comment | CAS                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0257.02</a> | 100mg              | 31251-41-9                                              |
| USP      | 1370269                   | 15mg               | M.W. 243.6883<br>C <sub>14</sub> H <sub>10</sub> Cl N O |

## LGC impurities according to USP declaration system

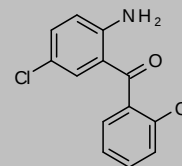
### Lorazepam Related Compound A ((3RS)-7-Chloro-5-(2-chlorophenyl)-2-oxo-2,3-dihydro-1H-1,4-benzodiazepin-3-yl Acetate; Lorazepam Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                            |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0071.07</a> | 100mg              | 2848-96-6                                                                                      |
| USP      | 1370327                   | 25mg               | M.W. 363.1948<br>C <sub>17</sub> H <sub>12</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>3</sub> |



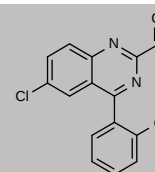
### Lorazepam Related Compound B ((2-Amino-5-chlorophenyl)(2-chlorophenyl)methanone; 2-Amino-2',5-dichlorobenzophenone)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0071.01</a> | 100mg              | 2958-36-3                                                           |
| USP      | 1370338                   | 25mg               | M.W. 266.1227<br>C <sub>13</sub> H <sub>9</sub> Cl <sub>2</sub> N O |



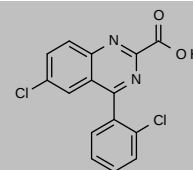
### Lorazepam Related Compound C (6-Chloro-4-(2-chlorophenyl)-quinazoline-2-carbaldehyde)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0071.02</a> | 100mg              | 93955-15-8                                                                       |
| USP      | 1370349                   | 25mg               | M.W. 303.1428<br>C <sub>15</sub> H <sub>8</sub> Cl <sub>2</sub> N <sub>2</sub> O |



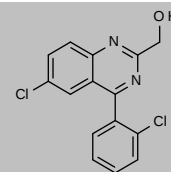
### Lorazepam Related Compound D (6-Chloro-4-(2-chlorophenyl)-2-quinazolinecarboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                                           |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0071.04</a> | 100mg              | 54643-79-7                                                                                    |
| USP      | 1370350                   | 25mg               | M.W. 319.1422<br>C <sub>15</sub> H <sub>8</sub> Cl <sub>2</sub> N <sub>2</sub> O <sub>2</sub> |



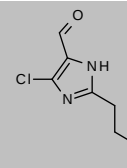
### Lorazepam Related Compound E (6-Chloro-4-(2-chlorophenyl)-2-quinazoline-methanol)

| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0071.08</a> | 100mg              | 773871-49-1                                                                       |
| USP      | 1370360                   | 25mg               | M.W. 305.1587<br>C <sub>15</sub> H <sub>10</sub> Cl <sub>2</sub> N <sub>2</sub> O |



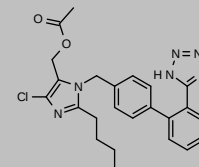
### Losartan Related Compound A (2-Butyl-4-chloro-1H-imidazole-5-carbaldehyde)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0168.08</a> | 100mg              | 83857-96-9                                                          |
| USP      | 1370473                   | 20mg               | M.W. 186.6387<br>C <sub>8</sub> H <sub>11</sub> Cl N <sub>2</sub> O |



### Losartan Related Compound B ([2-Butyl-4-chloro-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-imidazol-5-yl]methyl Acetate)

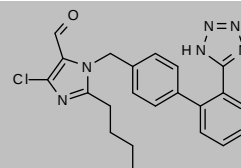
| Producer | Code                      | Quantity / Comment | CAS                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0168.18</a> | 100mg              | 1006062-27-6                                                                      |
| USP      | 1370484                   | 20mg               | M.W. 464.9473<br>C <sub>24</sub> H <sub>25</sub> Cl N <sub>6</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

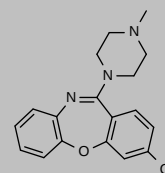
### Losartan Related Compound C (2-Butyl-4-chloro-1-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-1H-imidazol-5-carbaldehyde)

| Producer | Code                      | Quantity / Comment | CAS                                                                  |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| LGC      | <a href="#">MM0168.10</a> | 100mg              | 114798-36-6                                                          |
| USP      | 1370495                   | 20mg               | M.W. 420.8947<br>C <sub>22</sub> H <sub>21</sub> Cl N <sub>6</sub> O |



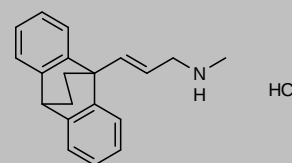
### Loxapine Related Compound A (3-Chloro-11-(4-methylpiperazin-1-yl)dibenzo[b,f][1,4]oxazepine)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM1530.01</a> | 100mg              | 3454-96-4                                                           |
| USP      | 1370713                   | 20mg               | M.W. 327.808<br>C <sub>18</sub> H <sub>18</sub> Cl N <sub>3</sub> O |



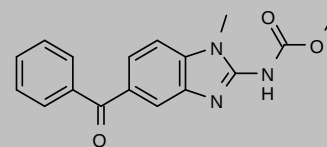
### Maprotiline Related Compound D (3-(9,10-Ethanoanthracen-9(10H)-yl)-N-methylprop-2-en-1-amine Hydrochloride; Dehydromaprotiline Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                       |
|----------|---------------------------|--------------------|-----------------------------------------------------------|
| LGC      | <a href="#">MM0820.04</a> | 50mg               | 38849-14-8                                                |
| USP      | 1375241                   | 15mg               | M.W. 311.8484<br>C <sub>20</sub> H <sub>21</sub> N . Cl H |



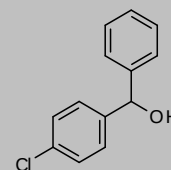
### Mebendazole Related Compound D (Methyl (5-Benzoyl-1-methyl-1H-benzimidazol-2-yl)carbamate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0882.04</a> | 50mg               | 132119-11-0                                                                    |
| USP      | 1375524                   | 15mg               | M.W. 309.3193<br>C <sub>17</sub> H <sub>15</sub> N <sub>3</sub> O <sub>3</sub> |



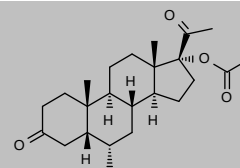
### Meclizine Related Compound A (4-Chlorobenzhydryl)

| Producer | Code                      | Quantity / Comment | CAS                                                   |
|----------|---------------------------|--------------------|-------------------------------------------------------|
| LGC      | <a href="#">MM0380.09</a> | 100mg              | 119-56-2                                              |
| USP      | 1377010                   | 15mg               | M.W. 218.6788<br>C <sub>13</sub> H <sub>11</sub> Cl O |



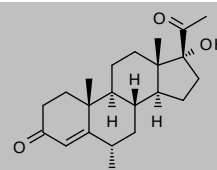
### Medroxyprogesterone Acetate Related Compound A (6α-Methyl-3,20-dioxo-5β-pregnan-17-yl Acetate; 4,5β-Dihydromedroxyprogesterone Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0532.06</a> | 50mg               | 69688-15-9                                                      |
| USP      | 1378012                   | 25mg               | M.W. 388.5402<br>C <sub>24</sub> H <sub>36</sub> O <sub>4</sub> |



### Medroxyprogesterone Acetate Related Compound B (Medroxyprogesterone)

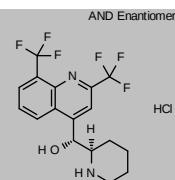
| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0635.00</a> | 100mg              | 520-85-4                                                        |
| USP      | 1378023                   | 25mg               | M.W. 344.4877<br>C <sub>22</sub> H <sub>32</sub> O <sub>3</sub> |



## LGC impurities according to USP declaration system

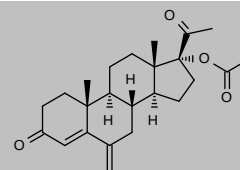
### Mefloquine Related Compound A ((RS)-[2,8-Bis(trifluoromethyl)quinolin-4-yl][(2RS)-piperidin-2-yl]methanol Hydrochloride; threo-Mefloquine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM1198.03</a> | 100mg              | 58560-52-4                                         |
| USP      | 1379060                   | 20mg               | M.W. 414.7731<br>$C_{17}H_{16}F_6N_2O \cdot Cl\ H$ |



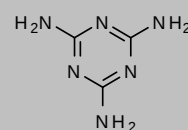
### Megestrol Acetate Related Compound D (6-Methylidene-3,20-dioxopregn-4-en-17-yl Acetate; 6-Methylenehydroxyprogesterone Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0532.05</a> | 100mg              | 32634-95-0                         |
| USP      | 1379139                   | 20mg               | M.W. 384.5085<br>$C_{24}H_{32}O_4$ |



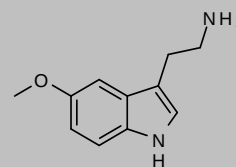
### Melamine (1,3,5-Triazine-2,4,6-triamine)

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM0056.04</a> | 100mg              | 108-78-1                     |
| USP      | 1379183                   | 250mg              | M.W. 126.1199<br>$C_3H_6N_6$ |



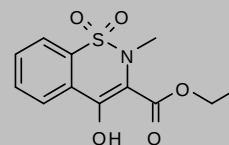
### Melatonin Related Compound A (2-(5-Methoxy-1H-indol-3-yl)ethanamine; 5-Methoxytryptamine)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM1373.01</a> | 100mg              | 608-07-1                            |
| USP      | 1380116                   | 15mg               | M.W. 190.2417<br>$C_{11}H_{14}N_2O$ |



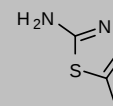
### Meloxicam Related Compound A (Ethyl 4-Hydroxy-2-methyl-2H-1,2-benzothiazine-3-carboxylate 1,1-Dioxide)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM0084.03</a> | 100mg              | 24683-26-9                             |
| USP      | 1379412                   | 25mg               | M.W. 283.3003<br>$C_{12}H_{13}N_2O_5S$ |



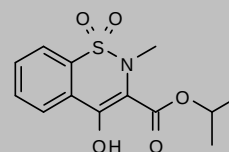
### Meloxicam Related Compound B (5-Methylthiazol-2-amine)

| Producer | Code                      | Quantity / Comment | CAS                           |
|----------|---------------------------|--------------------|-------------------------------|
| LGC      | <a href="#">MM0246.01</a> | 100mg              | 7305-71-7                     |
| USP      | 1379423                   | 25mg               | M.W. 114.1688<br>$C_4H_6N_2S$ |



### Meloxicam Related Compound C (1-Methylethyl 4-Hydroxy-2-methyl-2H-1,2-benzothiazine-3-carboxylate 1,1-Dioxide)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM0084.12</a> | 100mg              | 118854-48-1                            |
| USP      | 1379434                   | 30mg               | M.W. 297.3269<br>$C_{13}H_{15}N_2O_5S$ |



## LGC impurities according to USP declaration system

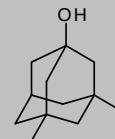
### Memantine Related Compound A (1,3-Dimethyladamantane)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM1045.06</a> | 100mg              | 702-79-4                                         |
| USP      | 1380513                   | 50mg               | M.W. 164.2872<br>C <sub>12</sub> H <sub>20</sub> |



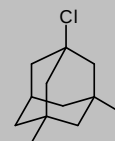
### Memantine Related Compound B (1-Hydroxy-3,5-dimethyladamantane)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM1045.01</a> | 100mg              | 707-37-9                                           |
| USP      | 1380524                   | 15mg               | M.W. 180.2866<br>C <sub>12</sub> H <sub>20</sub> O |



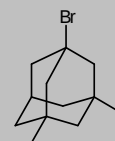
### Memantine Related Compound C (1-Chloro-3,5-dimethyladamantane)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM1045.04</a> | 100mg              | 707-36-8                                            |
| USP      | 1380535                   | 50mg               | M.W. 198.7323<br>C <sub>12</sub> H <sub>19</sub> Cl |



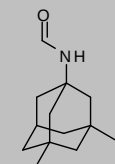
### Memantine Related Compound D (1-Bromo-3,5-dimethyladamantane)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM1045.05</a> | 100mg              | 941-37-7                                            |
| USP      | 1380546                   | 50mg               | M.W. 243.1833<br>C <sub>12</sub> H <sub>19</sub> Br |



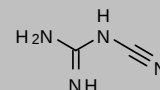
### Memantine Related Compound E (N-Formylmemantine)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM1045.07</a> | 100mg              | 351329-88-9                                          |
| USP      | 1380557                   | 15mg               | M.W. 207.3119<br>C <sub>13</sub> H <sub>21</sub> N O |



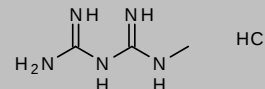
### Metformin Related Compound A (Cyanoguanidine)

| Producer | Code                      | Quantity / Comment | CAS                                                        |
|----------|---------------------------|--------------------|------------------------------------------------------------|
| LGC      | <a href="#">MM0056.01</a> | 100mg              | 461-58-5                                                   |
| USP      | 1396310                   | 30mg               | M.W. 84.08<br>C <sub>2</sub> H <sub>4</sub> N <sub>4</sub> |



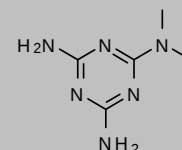
### Metformin Related Compound B (1-Methylbiguanide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0056.05</a> | 100mg              | 1674-62-0                                                           |
| USP      | 1396331                   | 25mg               | M.W. 151.598<br>C <sub>3</sub> H <sub>9</sub> N <sub>5</sub> · Cl H |



### Metformin Related Compound C (N,N-Dimethyl-1,3,5-triazine-2,4,6-triamine)

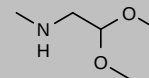
| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0056.03</a> | 100mg              | 1985-46-2                                                      |
| USP      | 1396342                   | 25mg               | M.W. 154.1731<br>C <sub>5</sub> H <sub>10</sub> N <sub>6</sub> |



## LGC impurities according to USP declaration system

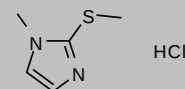
### Methimazole Related Compound A (2,2-Dimethoxy-N-methylethanamine)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 122-07-6                                    |
| LGC      | <a href="#">MM0889.05</a> | 100mg              | M.W. 119.1622                                   |
| USP      | 1411016                   | 3 x 50 mg          | C <sub>5</sub> H <sub>13</sub> N O <sub>2</sub> |



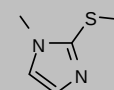
### Methimazole Related Compound C (1-Methyl-2-(methylsulphonyl)-1H-imidazole Hydrochloride)

|          |                           |                         |                                                       |
|----------|---------------------------|-------------------------|-------------------------------------------------------|
| Producer | Code                      | Quantity / Comment      | CAS 858220-92-5                                       |
| LGC      | <a href="#">MM0889.04</a> | 100mg                   | M.W. 164.6564                                         |
| USP      | 1411038                   | 3 x 50 mg, as free base | C <sub>5</sub> H <sub>8</sub> N <sub>2</sub> S . Cl H |



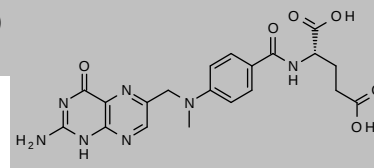
### Methimazole Related Compound C (1-Methyl-2-(methylsulphonyl)-1H-imidazole)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 14486-52-3                                 |
| LGC      | <a href="#">MM0889.03</a> | 100mg              | M.W. 128.1954                                  |
| USP      | 1411038                   | 3 x 50 mg          | C <sub>5</sub> H <sub>8</sub> N <sub>2</sub> S |



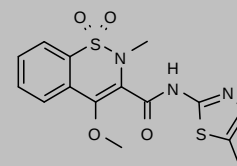
### Methotrexate Related Compound C ((2S)-2-[[4-[[[(2-Amino-4-oxo-1,4-dihydropteridin-6-yl)methyl]methylamino]benzoyl]amino]pentanedioic Acid; N-Methylfolic Acid, Methopterin)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 2410-93-7                                                 |
| LGC      | <a href="#">MM0040.06</a> | 50mg               | M.W. 455.424                                                  |
| USP      | 1414036                   | 50mg               | C <sub>20</sub> H <sub>21</sub> N <sub>7</sub> O <sub>6</sub> |



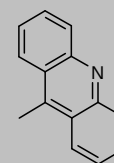
### 4-Methoxymeloxicam (O-Methylmeloxicam)

|          |                           |                    |                                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1391051-96-9                                                             |
| LGC      | <a href="#">MM0246.13</a> | 100mg              | M.W. 365.4273                                                                |
| USP      | 1379445                   | 30mg               | C <sub>15</sub> H <sub>15</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> |



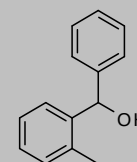
### 9-Methylacridine

|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 611-64-3                      |
| LGC      | <a href="#">MM0076.09</a> | 100mg              | M.W. 193.2438                     |
| USP      | 1424084                   | 25mg               | C <sub>14</sub> H <sub>11</sub> N |



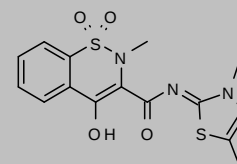
### 2-Methylbenzhydrol ((RS)-(2-Methylphenyl)phenylmethanol)

|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5472-13-9                     |
| LGC      | <a href="#">MM0801.01</a> | 100mg              | M.W. 198.2604                     |
| USP      | 1424209                   | 50mg               | C <sub>14</sub> H <sub>14</sub> O |



### (Z)-N'-Methylmeloxicam (N-[(2Z)-3,5-Dimethylthiazol-2(3H)-ylidene]-4-hydroxy-2-methyl-2H-1,2-benzothiazine-3-carboxamide 1,1-Dioxide)

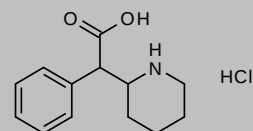
|          |                           |                    |                                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS n/a                                                                      |
| LGC      | <a href="#">MM0246.16</a> | 50mg               | M.W. 365.4273                                                                |
| USP      | 1379456                   | 30mg               | C <sub>15</sub> H <sub>15</sub> N <sub>3</sub> O <sub>4</sub> S <sub>2</sub> |



## LGC impurities according to USP declaration system

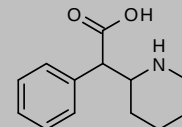
### Methylphenidate Related Compound A (Ritalinic Acid Hydrochloride)

|          |                           |                    |                                                         |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 19395-40-5                                          |
| LGC      | <a href="#">MM1031.11</a> | 100mg              | M.W. 255.7405                                           |
| USP      | 1434022                   | 50mg               | C <sub>13</sub> H <sub>17</sub> N O <sub>2</sub> · Cl H |



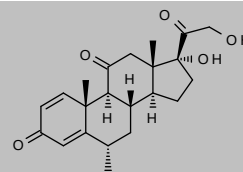
### Methylphenidate Related Compound A (Ritalinic Acid)

|          |                           |                        |                                                  |
|----------|---------------------------|------------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment     | CAS 19395-41-6                                   |
| LGC      | <a href="#">MM1031.04</a> | 100mg                  | M.W. 219.2796                                    |
| USP      | 1434022                   | 50mg, as hydrochloride | C <sub>13</sub> H <sub>17</sub> N O <sub>2</sub> |



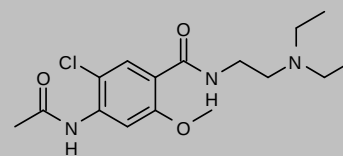
### Methylprednisolone Related Compound A (17,21-Dihydroxy-6α-methylpregna-1,4-diene-3,11,20-trione)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 91523-05-6                                 |
| LGC      | <a href="#">MM0190.01</a> | 50mg               | M.W. 372.4547                                  |
| USP      | 1435014                   | 25mg               | C <sub>22</sub> H <sub>28</sub> O <sub>5</sub> |



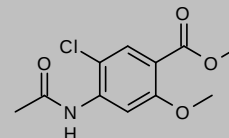
### Metoclopramide Related Compound A (4-(Acetylamino)-5-chloro-N-[2-(diethylamino)ethyl]-2-methoxybenzamide)

|          |                           |                    |                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5608-13-9                                                    |
| LGC      | <a href="#">MM0073.03</a> | 100mg              | M.W. 341.8331                                                    |
| USP      | 1440819                   | 15mg               | C <sub>16</sub> H <sub>24</sub> Cl N <sub>3</sub> O <sub>3</sub> |



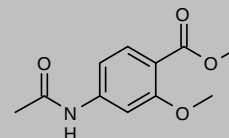
### Metoclopramide Related Compound B (Methyl 4-(Acetylamino)-5-chloro-2-methoxybenzoate)

|          |                           |                    |                                                     |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 4093-31-6                                       |
| LGC      | <a href="#">MM0073.04</a> | 100mg              | M.W. 257.6703                                       |
| USP      | 1440820                   | 15mg               | C <sub>11</sub> H <sub>12</sub> Cl N O <sub>4</sub> |



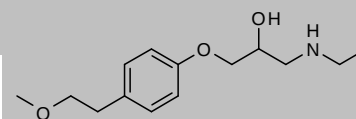
### Metoclopramide Related Compound D (Methyl 4-(Acetylamino)-2-methoxybenzoate)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 4093-29-2                                    |
| LGC      | <a href="#">MM0073.05</a> | 100mg              | M.W. 223.2252                                    |
| USP      | 1440841                   | 15mg               | C <sub>11</sub> H <sub>13</sub> N O <sub>4</sub> |



### Metoprolol Related Compound A ((2RS)-1-(Ethylamino)-3-[4-(2-methoxyethyl)phenoxy]propan-2-ol)

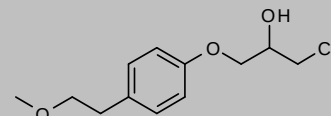
|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 109632-08-8                                  |
| LGC      | <a href="#">MM0027.04</a> | 100mg              | M.W. 253.3373                                    |
| USP      | 1441232                   | 20mg               | C <sub>14</sub> H <sub>23</sub> N O <sub>3</sub> |



## LGC impurities according to USP declaration system

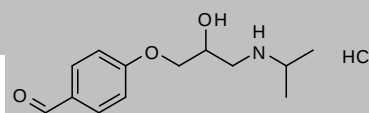
### Metoprolol Related Compound B (1-Chloro-3-[4-(2-methoxyethyl)phenoxy]propan-2-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM0027.17</a> | 100mg              | 56718-76-4                                                         |
| USP      | 1441243                   | 100mg              | M.W. 244.7146<br>C <sub>12</sub> H <sub>17</sub> Cl O <sub>3</sub> |



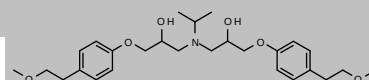
### Metoprolol Related Compound C (4-[(2RS)-2-Hydroxy-3-[(1-methylethyl)amino]propoxy]benzaldehyde Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0027.24</a> | 100mg              | n/a                                                                      |
| USP      | 1441254                   | 15mg               | M.W. 273.7558<br>C <sub>13</sub> H <sub>19</sub> N O <sub>3</sub> . Cl H |



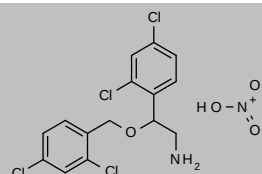
### Metoprolol Related Compound D (1,1'-[(1-Methylethyl)imino]bis[3-[4-(2-methoxyethyl)phenoxy]propan-2-ol])

| Producer | Code                      | Quantity / Comment     | CAS                                                               |
|----------|---------------------------|------------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0027.03</a> | 100mg                  | 154784-36-8                                                       |
| USP      | 1441265                   | 50mg, as hydrochloride | M.W. 475.6175<br>C <sub>27</sub> H <sub>41</sub> N O <sub>6</sub> |



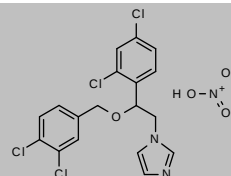
### Miconazole Related Compound C ((2RS)-2-[(2,4-Dichlorobenzyl)oxy]-2-(2,4-dichlorophenyl)ethanamine Nitrate)

| Producer | Code                      | Quantity / Comment     | CAS                                                                                       |
|----------|---------------------------|------------------------|-------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0281.03</a> | 100mg                  | n/a                                                                                       |
| USP      | 1443431                   | 50mg, as hydrochloride | M.W. 428.0947<br>C <sub>15</sub> H <sub>13</sub> Cl <sub>4</sub> N O . H N O <sub>3</sub> |



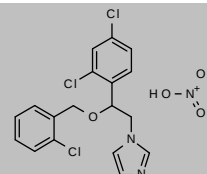
### Miconazole Related Compound F (1-[(2RS)-2-[(3,4-Dichlorobenzyl)oxy]-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole Nitrate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0281.06</a> | 100mg              | 27220-35-5                                                                                             |
| USP      | 1443464                   | 50mg, as free base | M.W. 479.1414<br>C <sub>18</sub> H <sub>14</sub> Cl <sub>4</sub> N <sub>2</sub> O . H N O <sub>3</sub> |



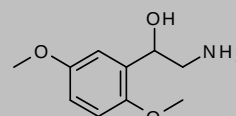
### Miconazole Related Compound I (1-[(2RS)-2-[(2-Chlorobenzyl)oxy]-2-(2,4-dichlorophenyl)ethyl]-1H-imidazole Nitrate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0281.09</a> | 100mg              | 24169-00-4                                                                                             |
| USP      | 1443497                   | 50mg               | M.W. 444.6963<br>C <sub>18</sub> H <sub>15</sub> Cl <sub>3</sub> N <sub>2</sub> O . H N O <sub>3</sub> |



### Midodrine Related Compound A (2-Amino-1-(2,5-dimethoxyphenyl)ethanol)

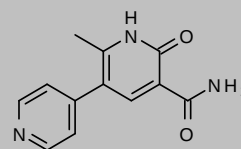
| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM3328.01</a> | 100mg              | 3600-87-1                                                        |
| USP      | 1443715                   | 40mg               | M.W. 197.231<br>C <sub>10</sub> H <sub>15</sub> N O <sub>3</sub> |



## LGC impurities according to USP declaration system

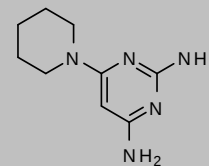
### Milrinone Related Compound A (6-Methyl-2-oxo-5-(4-pyridyl)-1H-pyridine-3-carboxamide)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 80047-24-1                                                |
| LGC      | <a href="#">MM1539.01</a> | 100mg              | M.W. 229.2346                                                 |
| USP      | 1443919                   | 50mg               | C <sub>12</sub> H <sub>11</sub> N <sub>3</sub> O <sub>2</sub> |



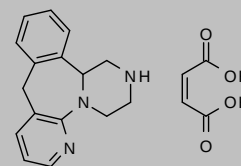
### Minoxidil Related Compound E (6-(Piperidin-1-yl)pyrimidine-2,4-diamine; Desoxyminoxidil)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 24867-26-3                                |
| LGC      | <a href="#">MM0521.05</a> | 100mg              | M.W. 193.2489                                 |
| USP      | 1444220                   | 25mg               | C <sub>9</sub> H <sub>15</sub> N <sub>5</sub> |



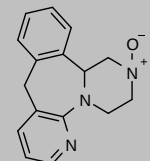
### Mirtazapine Related Compound A ((14bRS)-1,2,3,4,10,14b-Hexahydropyrazino[2,1-a]pyrido[2,3-c][2]benzazepine Maleate)

|          |                           |                    |                                                                                               |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 135928-31-3                                                                               |
| LGC      | <a href="#">MM1005.09</a> | 50mg               | M.W. 367.3984                                                                                 |
| USP      | 1444285                   | 15mg, as free base | C <sub>16</sub> H <sub>17</sub> N <sub>3</sub> · C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



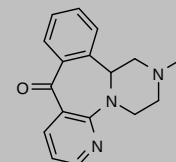
### Mirtazapine Related Compound B ((14bRS)-2-Methyl-1,2,3,4,10-14b-hexahydropyrazino[2,1-a]pyrido[2,3-c][2]benzazepine 2-Oxide)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 155172-12-6                                  |
| LGC      | <a href="#">MM1005.02</a> | 100mg              | M.W. 281.3523                                    |
| USP      | 1444235                   | 25mg, as hydrate   | C <sub>17</sub> H <sub>19</sub> N <sub>3</sub> O |



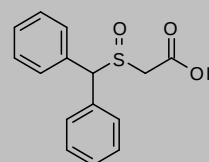
### Mirtazapine Related Compound D ((14bRS)-2-Methyl-1,3,4,14b-tetrahydropyrazino[2,1-a]pyrido-[2,3-c][2]benzazepin-10(2H)-one; 10-Oxomirtazapine)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 191546-97-1                                  |
| LGC      | <a href="#">MM1005.06</a> | 100mg              | M.W. 279.3364                                    |
| USP      | 1444252                   | 50mg               | C <sub>17</sub> H <sub>17</sub> N <sub>3</sub> O |



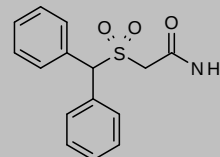
### Modafinil Related Compound A ((RS)-(Diphenylmethyl)sulfinyl]acetic Acid)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 63547-24-0                                   |
| LGC      | <a href="#">MM0540.01</a> | 50mg               | M.W. 274.3349                                    |
| USP      | 1445346                   | 20mg               | C <sub>15</sub> H <sub>14</sub> O <sub>3</sub> S |



### Modafinil Related Compound B (2-[(Diphenylmethyl)sulfonyl]acetamide)

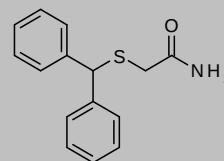
|          |                           |                    |                                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 118779-53-6                                    |
| LGC      | <a href="#">MM0540.02</a> | 50mg               | M.W. 289.3495                                      |
| USP      | 1445357                   | 20mg               | C <sub>15</sub> H <sub>15</sub> N O <sub>3</sub> S |



## LGC impurities according to USP declaration system

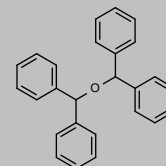
### Modafinil Related Compound C (2-[(Diphenylmethyl)sulfonyl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------|
| LGC      | <a href="#">MM0540.04</a> | 50mg               | 68524-30-1                                             |
| USP      | 1445368                   | 20mg               | M.W. 257.3507<br>C <sub>15</sub> H <sub>15</sub> N O S |



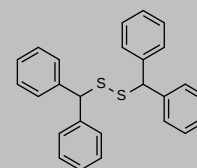
### Modafinil Related Compound D ([Oxybis(methanetriyl)]tetrabenzene; Bis(diphenylmethyl) Ether)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM0599.14</a> | 50mg               | 574-42-5                                           |
| USP      | 1445379                   | 20mg               | M.W. 350.4523<br>C <sub>26</sub> H <sub>22</sub> O |



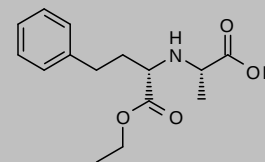
### Modafinil Related Compound E (Bis(diphenylmethyl)disulfide)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0540.06</a> | 50mg               | 1726-02-9                                                       |
| USP      | 1445380                   | 20mg               | M.W. 398.5829<br>C <sub>26</sub> H <sub>22</sub> S <sub>2</sub> |



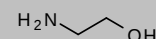
### Moexipril Related Compound F ((2S)-2-[[[(1S)-1-(Ethoxycarbonyl)-3-phenylpropyl]amino]propanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0010.05</a> | 100mg              | 82717-96-2                                                        |
| USP      | 1445653                   | 20mg               | M.W. 279.3315<br>C <sub>15</sub> H <sub>21</sub> N O <sub>4</sub> |



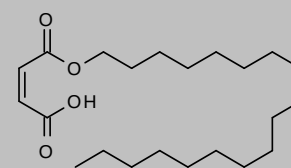
### Monoethanolamine (2-Aminoethanol; Ethanolamine)

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM1204.01</a> | 100mg              | 141-43-5                                          |
| USP      | 1445925                   | 1ml                | M.W. 61.0831<br>C <sub>2</sub> H <sub>7</sub> N O |



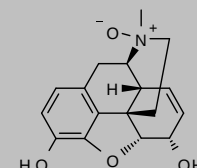
### Monostearyl Maleate

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1488.01</a> | 100mg              | 2424-62-6                                                       |
| USP      | 1446804                   | 100mg              | M.W. 368.5506<br>C <sub>22</sub> H <sub>40</sub> O <sub>4</sub> |



### Morphine Related Compound A ((17S)-7,8-Didehydro-4,5α-epoxy-17-methylmorphinan-3,6α-diol 17-Oxide; Morphine N-Oxide)

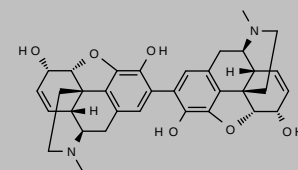
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0037.03</a> | 100mg              | 639-46-3                                                          |
| USP      | 1448016                   | 20mg               | M.W. 301.3371<br>C <sub>17</sub> H <sub>19</sub> N O <sub>4</sub> |



## LGC impurities according to USP declaration system

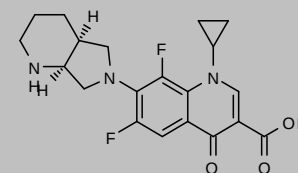
Morphine Related Compound B (7,7',8,8'-Tetrahydro-4,5 $\alpha$ :4',5' $\alpha$ -diepoxy-17,17'-dimethyl-2,2'-bimorphinan-3,3',6 $\alpha$ ,6' $\alpha$ -tetrol; Pseudomorphine; 2,2'-Bismorphine)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0037.01</a> | 100mg              | 125-24-6                                                                       |
| USP      | 1448027                   | 20mg               | M.W. 568.6594<br>C <sub>34</sub> H <sub>36</sub> N <sub>2</sub> O <sub>6</sub> |



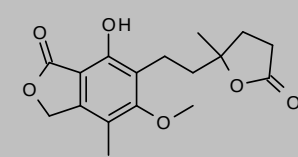
Moxifloxacin Related Compound A (1-Cyclopropyl-6,8-difluoro-7-[(4aS,7aS)-octahydro-6H-pyrrolo[3,4-b]pyridin-6-yl]-4-oxo-1,4-dihydroquinoline-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                                           |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0885.04</a> | 100mg              | 151213-15-9                                                                                   |
| USP      | 1448617                   | 25mg               | M.W. 389.3958<br>C <sub>20</sub> H <sub>21</sub> F <sub>2</sub> N <sub>3</sub> O <sub>3</sub> |



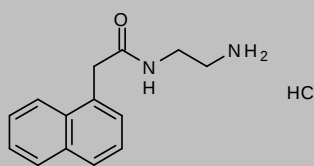
Mycophenolate Mofetil Related Compound B (7-Hydroxy-5-methoxy-4-methyl-6-[2-[(2RS)-2-methyl-5-oxotetrahydrofuran-2-yl]ethyl]isobenzofuran-1(3H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1001.08</a> | 100mg              | 26675-76-3                                                      |
| USP      | 1448978                   | 15mg               | M.W. 320.3371<br>C <sub>17</sub> H <sub>20</sub> O <sub>6</sub> |



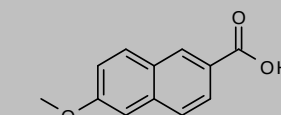
Naphazoline Related Compound A (N-(2-Aminoethyl)-2-(naphthalen-1-yl)acetamide Hydrochloride; Naphthylacetylenediamine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0075.06</a> | 100mg              | 73664-32-1                                                               |
| USP      | 1457017                   | 30mg, as free base | M.W. 264.7506<br>C <sub>14</sub> H <sub>16</sub> N <sub>2</sub> O . Cl H |



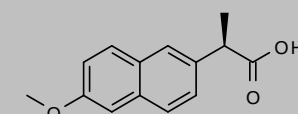
Naproxen Related Compound A (6-Methoxynaphthalene-2-carboxylic Acid; 6-Methoxy-2-naphthoic Acid; 2-Carboxy-6-methoxynaphthalene)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0152.15</a> | 100mg              | 2471-70-7                                                      |
| USP      | 1457312                   | 20mg               | M.W. 202.206<br>C <sub>12</sub> H <sub>10</sub> O <sub>3</sub> |



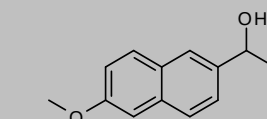
Naproxen Related Compound G ((2R)-2-(6-Methoxynaphthalen-2-yl)propanoic Acid; (R)-Naproxen)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0152.25</a> | 100mg              | 23979-41-1                                                      |
| USP      | 1457436                   | 50mg               | M.W. 230.2592<br>C <sub>14</sub> H <sub>14</sub> O <sub>3</sub> |



Naproxen Related Compound K ((1R)-1-(6-Methoxynaphthalen-2-yl)ethanol)

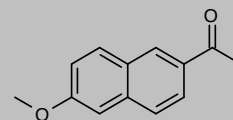
| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0152.16</a> | 100mg              | 77301-42-9                                                      |
| USP      | 1457414                   | 50mg               | M.W. 202.2491<br>C <sub>13</sub> H <sub>14</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

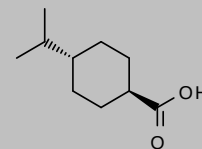
### Naproxen Related Compound L (1-(6-Methoxynaphthalen-2-yl)ethanone; Acetylnerolin)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 3900-45-6                                  |
| LGC      | <a href="#">MM0152.07</a> | 100mg              | M.W. 200.2332                                  |
| USP      | 1457425                   | 15mg               | C <sub>13</sub> H <sub>12</sub> O <sub>2</sub> |



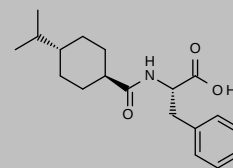
### Nateglinide Related Compound A (trans-4-(1-Methylethyl)cyclohexanecarboxylic Acid)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 7077-05-6                                  |
| LGC      | <a href="#">MM0847.02</a> | 100mg              | M.W. 170.2487                                  |
| USP      | 1457618                   | 10mg               | C <sub>10</sub> H <sub>18</sub> O <sub>2</sub> |



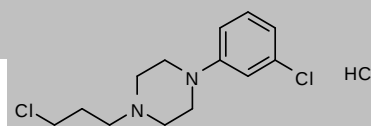
### Nateglinide Related Compound B (N-[[trans-4-(1-Methylethyl)cyclohexyl]carbonyl]-L-phenylalanine; Nateglinide L-Phenylalanine Isomer)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 105816-05-5                                  |
| LGC      | <a href="#">MM0847.03</a> | 50mg               | M.W. 317.4226                                    |
| USP      | 1457629                   | 10mg               | C <sub>19</sub> H <sub>27</sub> N O <sub>3</sub> |



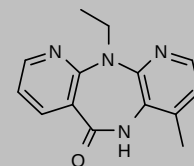
### Nefazodone Related Compound A (1-(3-Chloropropyl)-4-(3-chlorophenyl)piperazine Hydrochloride)

|          |                           |                    |                                                                       |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 52605-52-4                                                        |
| LGC      | <a href="#">MM0421.06</a> | 100mg              | M.W. 309.6624                                                         |
| USP      | 1457913                   | 25mg               | C <sub>13</sub> H <sub>18</sub> Cl <sub>2</sub> N <sub>2</sub> · Cl H |



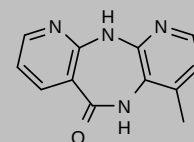
### Nevirapine Related Compound A (11-Ethyl-4-methyl-5,11-dihydro-6H-dipyrido [3,2-b:2',3'-e][1,4]diazepin-6-one)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 133627-17-5                                  |
| LGC      | <a href="#">MM1146.01</a> | 100mg              | M.W. 254.2872                                    |
| USP      | 1460725                   | 15mg               | C <sub>14</sub> H <sub>14</sub> N <sub>4</sub> O |



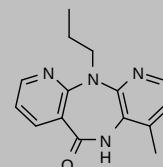
### Nevirapine Related Compound B (4-Methyl-5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-one)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 287980-84-1                                  |
| LGC      | <a href="#">MM1146.02</a> | 100mg              | M.W. 226.234                                     |
| USP      | 1460736                   | 10mg               | C <sub>12</sub> H <sub>10</sub> N <sub>4</sub> O |



### Nevirapine Related Compound C (4-Methyl-11-propyl-5,11-dihydro-6H-dipyrido[3,2-b:2',3'-e][1,4]diazepin-6-one)

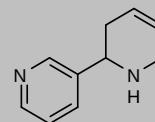
|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 287980-85-2                                  |
| LGC      | <a href="#">MM1146.03</a> | 100mg              | M.W. 268.3137                                    |
| USP      | 1460747                   | 15mg               | C <sub>15</sub> H <sub>16</sub> N <sub>4</sub> O |



## LGC impurities according to USP declaration system

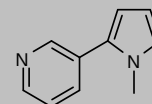
### Nicotine Related Compound A ((2RS)-1,2,3,6-Tetrahydro-2,3'-bipyridyl; (RS)-Anatabine)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 2743-90-0                                  |
| LGC      | <a href="#">MM0517.11</a> | 100mg              | M.W. 160.2157                                  |
| USP      | 1463326                   | 20mg               | C <sub>10</sub> H <sub>12</sub> N <sub>2</sub> |



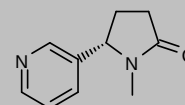
### Nicotine Related Compound B (3-(1-Methyl-1H-pyrrol-2-yl)pyridine; β-Nicotyrine)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 487-19-4                                   |
| LGC      | <a href="#">MM0517.06</a> | 100mg              | M.W. 158.1998                                  |
| USP      | 1463337                   | 20mg               | C <sub>10</sub> H <sub>10</sub> N <sub>2</sub> |



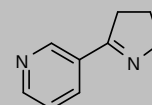
### Nicotine Related Compound C ((5S)-1-Methyl-5-(pyridin-3-yl)pyrrolidin-2-one; (-)-Cotinine)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 486-56-6                                     |
| LGC      | <a href="#">MM0517.03</a> | 100mg              | M.W. 176.2151                                    |
| USP      | 1463348                   | 20mg               | C <sub>10</sub> H <sub>12</sub> N <sub>2</sub> O |



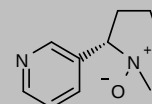
### Nicotine Related Compound D (3-(4,5-Dihydro-3H-pyrrol-2-yl)pyridine; Myosmine)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 532-12-7                                  |
| LGC      | <a href="#">MM0517.02</a> | 100mg              | M.W. 146.1891                                 |
| USP      | 1463359                   | 20mg, as fumarate  | C <sub>9</sub> H <sub>10</sub> N <sub>2</sub> |



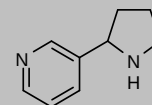
### Nicotine Related Compound E ((1RS,2S)-1-Methyl-2-(pyridin-3-yl)pyrrolidine 1-Oxide; Nicotine N'-Oxide)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 491-26-9                                     |
| LGC      | <a href="#">MM0517.07</a> | 100mg              | M.W. 178.231                                     |
| USP      | 1463360                   | 20mg, as oxalate   | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O |



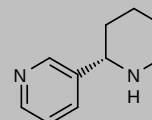
### Nicotine Related Compound F (3-[(2RS)-Pyrrolidin-2-yl]pyridine; (RS)-Nornicotine)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5746-86-1                                 |
| LGC      | <a href="#">MM0517.13</a> | 100mg              | M.W. 148.205                                  |
| USP      | 1463371                   | 20mg               | C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> |



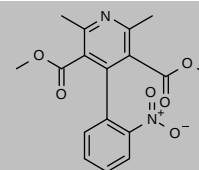
### Nicotine Related Compound G (3-[(2S)-Piperidin-2-yl]pyridine; Anabasine)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 494-52-0                                   |
| LGC      | <a href="#">MM0517.01</a> | 100mg              | M.W. 162.2316                                  |
| USP      | 1463382                   | 20mg               | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> |



### Nifedipine Nitrophenylpyridine Analog (Dimethyl 2,6-Dimethyl-4-(2-nitrophenyl)pyridine-3,5-dicarboxylate)

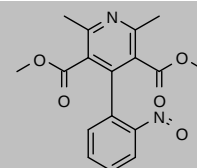
|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 67035-22-7                                                |
| LGC      | <a href="#">MM0003.02</a> | 100mg              | M.W. 344.3187                                                 |
| USP      | 1463600                   | 25mg               | C <sub>17</sub> H <sub>16</sub> N <sub>2</sub> O <sub>6</sub> |



## LGC impurities according to USP declaration system

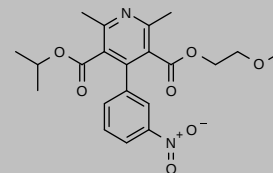
### Nifedipine Nitrosophenylpyridine Analog (Dimethyl 2,6-Dimethyl-4-(2-nitrosophenyl)pyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0003.01</a> | 100mg              | 50428-14-3                                                                     |
| USP      | 1463701                   | 25mg               | M.W. 328.3193<br>C <sub>17</sub> H <sub>16</sub> N <sub>2</sub> O <sub>5</sub> |



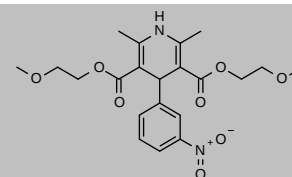
### Nimodipine Related Compound A (2-Methoxyethyl 1-Methylethyl 2,6-Dimethyl-4-(3-nitrophenyl)pyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0416.01</a> | 100mg              | 85677-93-6                                                                     |
| USP      | 1463870                   | 50mg               | M.W. 416.4245<br>C <sub>21</sub> H <sub>24</sub> N <sub>2</sub> O <sub>7</sub> |



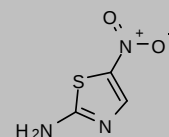
### Nimodipine Related Compound B (Bis(2-methoxyethyl) 2,6-Dimethyl-4-(3-nitrophenyl)-1,4-dihydropyridine-3,5-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0416.03</a> | 100mg              | 70172-96-2                                                                     |
| USP      | 1463869                   | 50mg               | M.W. 434.4397<br>C <sub>21</sub> H <sub>26</sub> N <sub>2</sub> O <sub>8</sub> |



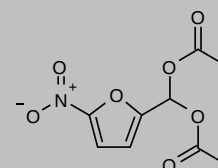
### Nitazoxanide Related Compound A (2-Amino-5-nitrothiazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM3279.01</a> | 100mg              | 121-66-4                                                                       |
| USP      | 1463971                   | 25mg               | M.W. 145.1398<br>C <sub>3</sub> H <sub>3</sub> N <sub>3</sub> O <sub>2</sub> S |



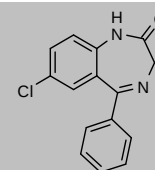
### Nitrofurfural Diacetate ((5-Nitrofuran-2-yl)methylene Diacetate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0943.02</a> | 100mg              | 92-55-7                                                         |
| USP      | 1465503                   | 100mg              | M.W. 243.1703<br>C <sub>9</sub> H <sub>9</sub> N O <sub>7</sub> |



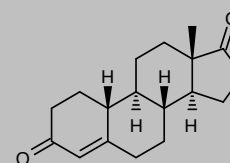
### Nordazepam (7-Chloro-5-phenyl-1,3-dihydro-2H-1,4-benzodiazepin-2-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                  |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| LGC      | <a href="#">MM0023.02</a> | 100mg              | 1088-11-5                                                            |
| USP      | 1468400                   | 50mg               | M.W. 270.7136<br>C <sub>15</sub> H <sub>11</sub> Cl N <sub>2</sub> O |



### Norethindrone Related Compound B (Estr-4-ene-3,17-dione)

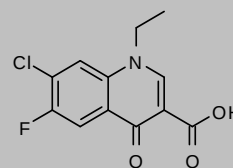
| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0660.01</a> | 100mg              | 734-32-7                                                       |
| USP      | 1470026                   | 30mg               | M.W. 272.382<br>C <sub>18</sub> H <sub>24</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

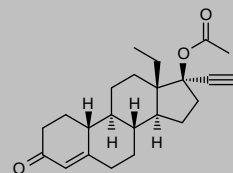
### Norfloxacin Related Compound A (7-Chloro-1-ethyl-6-fluoro-4-oxo-1,4-dihydroquinoline-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0350.01</a> | 100mg              | 68077-26-9                           |
| USP      | 1471517                   | 15mg               | M.W. 269.6562<br>$C_{12}H_9ClFN O_3$ |



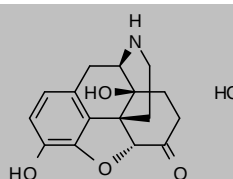
### Norgestimate Related Compound A (13β-Ethyl-3-oxo-18,19-dinor-17α-pregn-4-en-20-yn-17-yl Acetate; Levonorgestrel Acetate)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0978.03</a> | 50mg               | 13732-69-9                         |
| USP      | 1471925                   | 25mg               | M.W. 354.4825<br>$C_{23}H_{30}O_3$ |



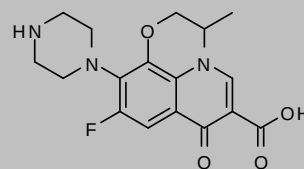
### Noroxymorphone Hydrochloride

| Producer | Code                      | Quantity / Comment | CAS                                           |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM0673.03</a> | 100mg              | 52446-24-9                                    |
| USP      | 1473002                   | 50mg               | M.W. 323.7714<br>$C_{16}H_{17}NO_4 \cdot ClH$ |



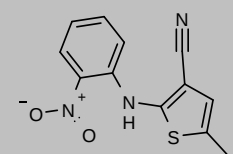
### Ofloxacin Related Compound A ((RS)-9-Fluoro-3-methyl-7-oxo-10-(piperazin-1-yl)-2,3-dihydro-7H-pyrido[1,2,3-de]-1,4-benzoxazine-6-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                      |
|----------|---------------------------|--------------------|------------------------------------------|
| LGC      | <a href="#">MM0228.08</a> | 100mg              | 82419-52-1                               |
| USP      | 1478119                   | 25mg               | M.W. 347.3409<br>$C_{17}H_{18}F N_3 O_4$ |



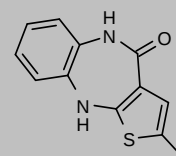
### Olanzapine Related Compound A (5-Methyl-2-[(2-nitrophenyl)amino]thiophene-3-carbonitrile)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0329.08</a> | 50mg               | 138564-59-7                         |
| USP      | 1478312                   | 15mg               | M.W. 259.2838<br>$C_{12}H_9N_3O_2S$ |



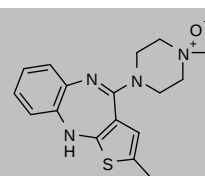
### Olanzapine Related Compound B (2-Methyl-5,10-dihydro-4H-thieno[2,3-b][1,5]benzodiazepin-4-one; Olanzapine Lactame)

| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0329.02</a> | 50mg               | 221176-49-4                          |
| USP      | 1478323                   | 15mg               | M.W. 230.2856<br>$C_{12}H_{10}N_2OS$ |



### Olanzapine Related Compound C (1-Methyl-4-(2-methyl-10H-thieno[2,3-b][1,5]benzodiazepin-4-yl)piperazin-1-oxide; Olanzapine N-Oxide)

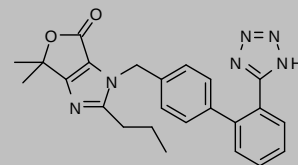
| Producer | Code                      | Quantity / Comment | CAS                                  |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM0329.03</a> | 50mg               | 174794-02-6                          |
| USP      | 1478334                   | 5mg                | M.W. 328.4319<br>$C_{17}H_{20}N_4OS$ |



## LGC impurities according to USP declaration system

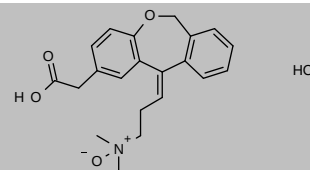
Olmesartan Medoxomil Related Compound A (6,6-Dimethyl-2-propyl-3-[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]-3,6-dihydro-4H-furo[3,4-d]imidazol-4-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1317.02</a> | 100mg              | 849206-43-5                                                                    |
| USP      | 1478378                   | 20mg               | M.W. 428.4864<br>C <sub>24</sub> H <sub>24</sub> N <sub>6</sub> O <sub>2</sub> |



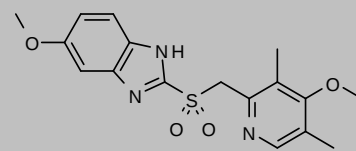
Olopatadine Related Compound B ((Z)-3-[2-(Carboxymethyl)dibenzo[b,e]oxepin-11(6H)-ylidene]-N,N-dimethylpropan-1-amine Oxide Hydrochloride; Olopatadine N-Oxide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM1261.09</a> | 100mg              | n/a                                                                      |
| USP      | 1478425                   | 35mg, as free base | M.W. 389.8726<br>C <sub>21</sub> H <sub>23</sub> N O <sub>4</sub> · Cl H |



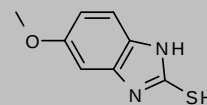
Omeprazole Related Compound A (5-Methoxy-2-[[[(4-methoxy-3,5-dimethylpyridin-2-yl)methyl]sulphonyl]-1H-benzimidazole; Omeprazole Sulphone)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.05</a> | 100mg              | 88546-55-8                                                                       |
| USP      | 1478516                   | 15mg               | M.W. 361.4155<br>C <sub>17</sub> H <sub>19</sub> N <sub>3</sub> O <sub>4</sub> S |



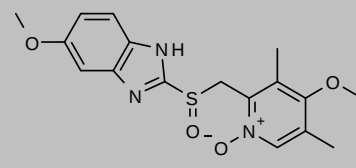
Omeprazole Related Compound B (5-Methoxy-1H-benzimidazole-2-thiol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.03</a> | 100mg              | 37052-78-1                                                        |
| USP      | 1478480                   | 15mg               | M.W. 180.2269<br>C <sub>8</sub> H <sub>8</sub> N <sub>2</sub> O S |



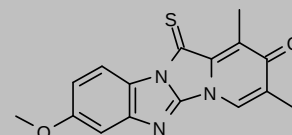
Omeprazole Related Compound E (4-Methoxy-2-[[[(RS)-(5-methoxy-1H-benzimidazol-2-yl)sulphonyl]methyl]-3,5-dimethylpyridine 1-Oxide; Omeprazole N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.07</a> | 100mg              | 176219-04-8                                                                      |
| USP      | 1478527                   | 15mg               | M.W. 361.4155<br>C <sub>17</sub> H <sub>19</sub> N <sub>3</sub> O <sub>4</sub> S |



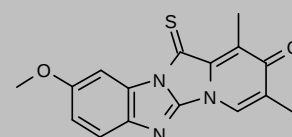
Omeprazole Related Compound F (8-Methoxy-1,3-dimethyl-12-thioxopyrido[1',2':3,4]imidazo[1,2-a]benzimidazol-2(12H)-one)

| Producer | Code                      | Quantity / Comment                | CAS                                                                              |
|----------|---------------------------|-----------------------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.01</a> | 50mg                              | 125656-82-8                                                                      |
| USP      | 1478491                   | 25mg, mixture of rel. comp. F + G | M.W. 311.3583<br>C <sub>16</sub> H <sub>13</sub> N <sub>3</sub> O <sub>2</sub> S |



Omeprazole Related Compound G (9-Methoxy-1,3-dimethyl-12-thioxopyrido[1',2':3,4]imidazo[1,2-a]benzimidazol-2(12H)-one)

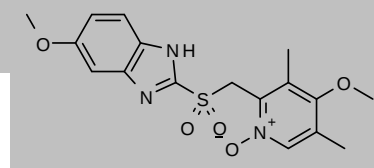
| Producer | Code                      | Quantity / Comment                | CAS                                                                              |
|----------|---------------------------|-----------------------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.02</a> | 50mg                              | 125656-83-9                                                                      |
| USP      | 1478491                   | 25mg, mixture of rel. comp. F + G | M.W. 311.3583<br>C <sub>16</sub> H <sub>13</sub> N <sub>3</sub> O <sub>2</sub> S |



## LGC impurities according to USP declaration system

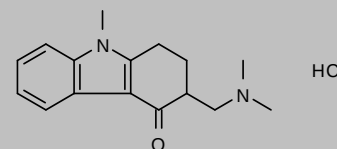
### Omeprazole Related Compound I (4-Methoxy-2-[[[(5-methoxy-1H-benzimidazol-2-yl) sulphonyl]methyl]-3,5-dimethylpyridine 1-Oxide; Omeprazole Sulphone N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0095.16</a> | 100mg              | 158812-85-2                                                                      |
| USP      | 1478561                   | 15mg               | M.W. 377.4149<br>C <sub>17</sub> H <sub>19</sub> N <sub>3</sub> O <sub>5</sub> S |



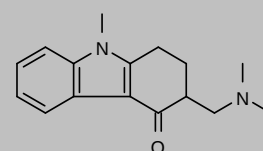
### Ondansetron Related Compound A ((3RS)-3-(Dimethylamino)methyl-9-methyl-1,2,3,9-tetrahydro-4H-carbazol-4-one Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0252.10</a> | 100mg              | 119812-29-2                                                              |
| USP      | 1478593                   | 50mg               | M.W. 292.8037<br>C <sub>16</sub> H <sub>20</sub> N <sub>2</sub> O · Cl H |



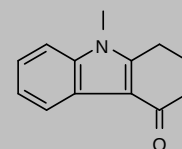
### Ondansetron Related Compound A ((3RS)-3-(Dimethylamino)methyl-9-methyl-1,2,3,9-tetrahydro-4H-carbazol-4-one)

| Producer | Code                      | Quantity / Comment     | CAS                                                               |
|----------|---------------------------|------------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0252.03</a> | 100mg                  | 153139-56-1                                                       |
| USP      | 1478593                   | 50mg, as hydrochloride | M.W. 256.3428<br>C <sub>16</sub> H <sub>20</sub> N <sub>2</sub> O |



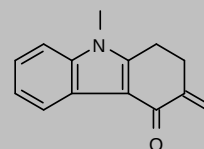
### Ondansetron Related Compound C (9-Methyl-1,2,3,9-tetrahydro-4H-carbazol-4-one)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0252.01</a> | 100mg              | 27387-31-1                                           |
| USP      | 1478618                   | 30mg               | M.W. 199.2484<br>C <sub>13</sub> H <sub>13</sub> N O |



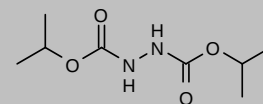
### Ondansetron Related Compound D (9-Methyl-3-methylene-1,2,3,9-tetrahydro-4H-carbazol-4-one)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0252.04</a> | 100mg              | 99614-64-9                                           |
| USP      | 1478629                   | 30mg               | M.W. 211.2591<br>C <sub>14</sub> H <sub>13</sub> N O |



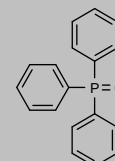
### Orlistat Related Compound B (Diisopropyl Hydrazine-1,2-dicarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1219.09</a> | 100mg              | 19740-72-8                                                                    |
| USP      | 1478822                   | 15mg               | M.W. 204.2236<br>C <sub>8</sub> H <sub>16</sub> N <sub>2</sub> O <sub>4</sub> |



### Orlistat Related Compound C (Triphenylphosphine Oxide)

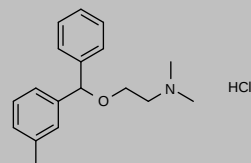
| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM1219.10</a> | 100mg              | 791-28-6                                             |
| USP      | 1478833                   | 25mg               | M.W. 278.2849<br>C <sub>18</sub> H <sub>15</sub> O P |



## LGC impurities according to USP declaration system

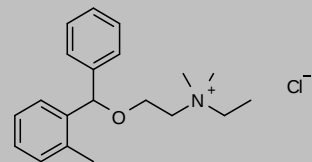
Orphenadrine Related Compound A ((RS)-N,N-Dimethyl-2-[(3-methylphenyl)phenylmethoxy]ethanamine Hydrochloride; Orphenadrine meta-Methylbenzyl Isomer Hydrochloride)

|          |                           |                    |                                            |
|----------|---------------------------|--------------------|--------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 17630-53-4                             |
| LGC      | <a href="#">MM0801.05</a> | 100mg              | M.W. 305.8423                              |
| USP      | 1479010                   | 50mg, as citrate   | C <sub>18</sub> H <sub>23</sub> N O . Cl H |



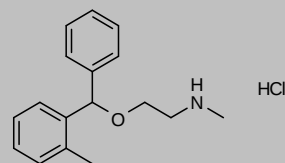
Orphenadrine Related Compound B (N-Ethyl-N,N-dimethyl-[2-(2-methylbenzhydryloxy)ethyl]ammonium Chloride)

|          |                           |                    |                                          |
|----------|---------------------------|--------------------|------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 93940-17-1                           |
| LGC      | <a href="#">MM0801.08</a> | 100mg              | M.W. 333.8954                            |
| USP      | 1479020                   | 20mg               | C <sub>20</sub> H <sub>28</sub> N O . Cl |



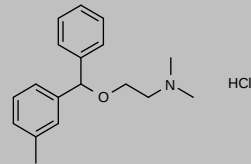
Orphenadrine Related Compound C (N-Desmethylophenadrine Hydrochloride)

|          |                           |                    |                                            |
|----------|---------------------------|--------------------|--------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 10488-36-5                             |
| LGC      | <a href="#">MM0801.07</a> | 100mg              | M.W. 291.8157                              |
| USP      | 1479031                   | 20mg               | C <sub>17</sub> H <sub>21</sub> N O . Cl H |



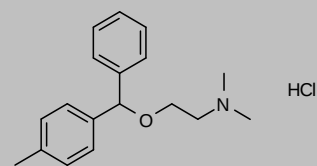
Orphenadrine Related Compound E ((RS)-N,N-Dimethyl-2-[(3-methylphenyl)phenylmethoxy]ethanamine Hydrochloride; Orphenadrine meta-Methylbenzyl Isomer Hydrochloride)

|          |                           |                    |                                            |
|----------|---------------------------|--------------------|--------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 17630-53-4                             |
| LGC      | <a href="#">MM0801.05</a> | 100mg              | M.W. 305.8423                              |
| USP      | 1479053                   | 50mg, as free base | C <sub>18</sub> H <sub>23</sub> N O . Cl H |



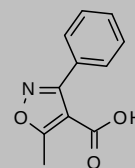
Orphenadrine Related Compound F (2-[(RS)-(4-Methylphenyl)phenylmethoxy]-N,N-dimethylethanamine Hydrochloride; 4-Methyldiphenhydramine Hydrochloride)

|          |                           |                    |                                            |
|----------|---------------------------|--------------------|--------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 4024-34-4                              |
| LGC      | <a href="#">MM0490.04</a> | 100mg              | M.W. 305.8423                              |
| USP      | 1479064                   | 50mg, as citrate   | C <sub>18</sub> H <sub>23</sub> N O . Cl H |



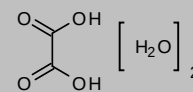
Oxacillin Related Compound C (5-Methyl-3-phenylisoxazole-4-carboxylic Acid)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1136-45-4                                   |
| LGC      | <a href="#">MM0686.10</a> | 100mg              | M.W. 203.1941                                   |
| USP      | 1481044                   | 15mg               | C <sub>11</sub> H <sub>9</sub> N O <sub>3</sub> |



Oxaliplatin Related Compound A (Oxalic Acid Dihydrate)

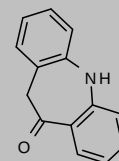
|          |                           |                    |                                                                   |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 6153-56-6                                                     |
| LGC      | <a href="#">MM0928.00</a> | 500mg              | M.W. 126.0654                                                     |
| USP      | 1481215                   | 100mg              | C <sub>2</sub> H <sub>2</sub> O <sub>4</sub> . 2 H <sub>2</sub> O |



## LGC impurities according to USP declaration system

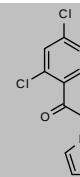
### Oxcarbazepine Related Compound E (10-Ketoiminodibenzyl; 10-Oxo-10,11-dihydro-5H-dibenz[b,f]azepine)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0076.14</a> | 100mg              | 21737-58-6                                           |
| USP      | 1483200                   | 10mg               | M.W. 209.2432<br>C <sub>14</sub> H <sub>11</sub> N O |



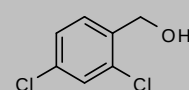
### Oxiconazole Related Compound C (1-(2,4-Dichlorobenzoylmethyl)imidazole)

| Producer | Code                      | Quantity / Comment     | CAS                                                                           |
|----------|---------------------------|------------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0281.10</a> | 100mg                  | 46503-52-0                                                                    |
| USP      | 1483458                   | 20mg, as hydrochloride | M.W. 255.1<br>C <sub>11</sub> H <sub>8</sub> Cl <sub>2</sub> N <sub>2</sub> O |



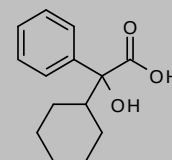
### Oxiconazole Related Compound D (2,4-Dichlorobenzyl Alcohol)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0739.00</a> | 250mg              | 1777-82-8                                                        |
| USP      | 1483469                   | 50mg               | M.W. 177.0279<br>C <sub>7</sub> H <sub>6</sub> Cl <sub>2</sub> O |



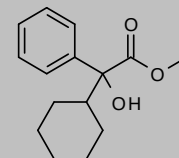
### Oxybutynin Related Compound A ((RS)-2-Cyclohexyl-2-hydroxy-2-phenylacetic Acid; Phenylcyclohexylglycolic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0047.01</a> | 100mg              | 4335-77-7                                                       |
| USP      | 1485114                   | 100mg              | M.W. 234.2909<br>C <sub>14</sub> H <sub>18</sub> O <sub>3</sub> |



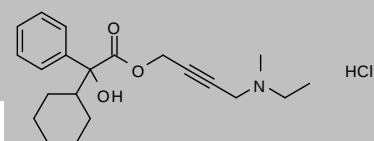
### Oxybutynin Related Compound B (Methyl (RS)-2-Cyclohexyl-2-hydroxy-2-phenylacetate; Phenylcyclohexylglycolic Acid Methyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0047.02</a> | 100mg              | 10399-13-0                                                      |
| USP      | 1485125                   | 20mg               | M.W. 248.3175<br>C <sub>15</sub> H <sub>20</sub> O <sub>3</sub> |



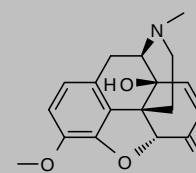
### Oxybutynin Related Compound C (4-(Ethylmethylamino)but-2-ynyl (RS)-2-Cyclohexyl-2-hydroxy-2-phenylacetate Hydrochloride; Methylethyl Analogue of Oxybutynin Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0047.04</a> | 100mg              | n/a                                                                      |
| USP      | 1485136                   | 20mg               | M.W. 379.9208<br>C <sub>21</sub> H <sub>29</sub> N O <sub>3</sub> · Cl H |



### Oxycodone Related Compound A (7,8-Didehydro-4,5α-epoxy-14-hydroxy-3-methoxy-17-methylmorphinan-6-one; 14-Hydroxycodeinone)

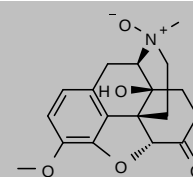
| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0672.04</a> | 100mg              | 508-54-3                                                          |
| USP      | 1485216                   | 10mg               | M.W. 313.3478<br>C <sub>18</sub> H <sub>19</sub> N O <sub>4</sub> |



## LGC impurities according to USP declaration system

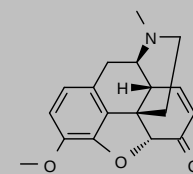
### Oxycodone Related Compound B (Oxycodone N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0672.06</a> | 50mg               | 71539-52-1                                                       |
| USP      | 1485227                   | 15mg               | M.W. 331.363<br>C <sub>18</sub> H <sub>21</sub> N O <sub>5</sub> |



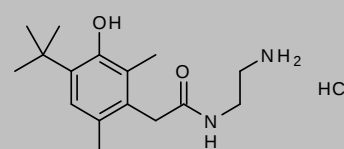
### Oxycodone Related Compound C (Codeinone)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0004.02</a> | 100mg              | 467-13-0                                                          |
| USP      | 1485238                   | 15mg               | M.W. 297.3484<br>C <sub>18</sub> H <sub>19</sub> N O <sub>3</sub> |



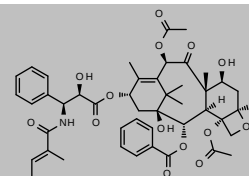
### Oxymetazoline Related Compound A (N-(2-Amino-ethyl)-2-[4-(1,1-dimethylethyl)-3-hydroxy-2,6-dimethylphenyl]acetamide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0177.01</a> | 100mg              | 1391053-50-1                                                                          |
| USP      | 1486015                   | 15mg               | M.W. 314.8508<br>C <sub>16</sub> H <sub>26</sub> N <sub>2</sub> O <sub>2</sub> · Cl H |



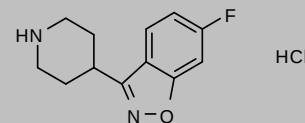
### Paclitaxel Related Compound A (N-Debenzoyl-N-tigloylpaclitaxel; Cephalomannine)

| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM1489.02</a> | 100mg              | 71610-00-9                                                         |
| USP      | 1491343                   | 20mg               | M.W. 831.9006<br>C <sub>45</sub> H <sub>53</sub> N O <sub>14</sub> |



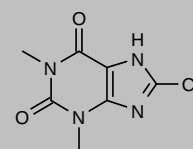
### Paliperidone Related Compound B (6-Fluoro-3-(piperidin-4-yl)-1,2-benzisoxazole Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                        |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------|
| LGC      | <a href="#">MM0491.16</a> | 100mg              | 84163-13-3                                                                 |
| USP      | 1491820                   | 20mg               | M.W. 256.7038<br>C <sub>12</sub> H <sub>13</sub> F N <sub>2</sub> O · Cl H |



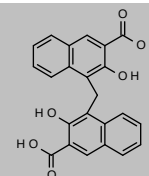
### Pamabrom Related Compound A (8-Chlorotheophylline)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0155.02</a> | 100mg              | 85-18-7                                                                         |
| USP      | 1492700                   | 30mg               | M.W. 214.6091<br>C <sub>7</sub> H <sub>7</sub> Cl N <sub>4</sub> O <sub>2</sub> |



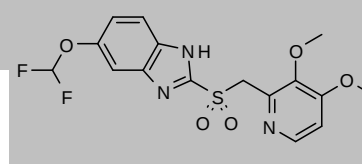
### Pamoic Acid

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0893.01</a> | 100mg              | 130-85-8                                                        |
| USP      | 1493000                   | 250mg              | M.W. 388.3695<br>C <sub>23</sub> H <sub>16</sub> O <sub>6</sub> |



### Pantoprazole Related Compound A (5-(Difluoromethoxy)-2-[[[(3,4-dimethoxypyridin-2-yl)methyl]sulphonyl]-1H-benzimidazole; Pantoprazole Sulphone)

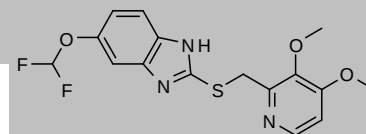
| Producer | Code                      | Quantity / Comment | CAS                                                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0099.02</a> | 100mg              | 127780-16-9                                                                                     |
| USP      | 1494909                   | 25mg               | M.W. 399.3692<br>C <sub>16</sub> H <sub>15</sub> F <sub>2</sub> N <sub>3</sub> O <sub>5</sub> S |



## LGC impurities according to USP declaration system

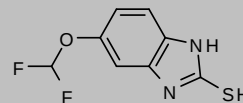
### Pantoprazole Related Compound B (5-(Difluoromethoxy)-2-[[[(3,4-dimethoxypyridin-2-yl)methyl]sulphanyl]-1H-benzimidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0099.03</a> | 100mg              | 102625-64-9                                                                                     |
| USP      | 1494910                   | 25mg               | M.W. 367.3704<br>C <sub>16</sub> H <sub>15</sub> F <sub>2</sub> N <sub>3</sub> O <sub>3</sub> S |



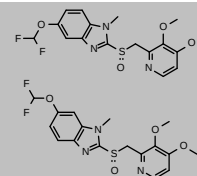
### Pantoprazole Related Compound C (5-(Difluoromethoxy)-1H-benzimidazole-2-thiol)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0099.04</a> | 100mg              | 97963-62-7                                                                       |
| USP      | 1494920                   | 20mg               | M.W. 216.2078<br>C <sub>8</sub> H <sub>6</sub> F <sub>2</sub> N <sub>2</sub> O S |



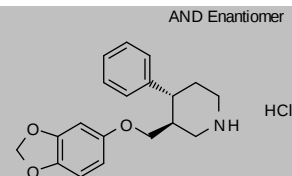
### Pantoprazole Related Compounds D and F Mixture (5- and 6-(Di-fluoromethoxy)-2-[(RS)-[(3,4-dimethoxypyridin-2-yl)methyl]sulphanyl]-1-methyl-1H-benzimidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0099.11</a> | 100mg              | 624742-53-6 and 721924-06-7                                                                       |
| USP      | 1494931                   | 20mg               | M.W. 794.7928<br>2 C <sub>17</sub> H <sub>17</sub> F <sub>2</sub> N <sub>3</sub> O <sub>4</sub> S |



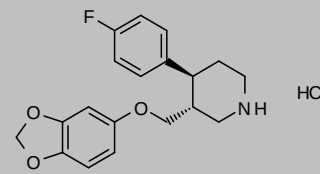
### Paroxetine Related Compound B ((3RS,4SR)-3-[(1,3-Benzodioxol-5-yloxy)methyl]-4-phenylpiperidine Hydrochloride; rac-trans-Desfluoroparoxetine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM1032.19</a> | 100mg              | n/a                                                                      |
| USP      | 1500230                   | 15mg               | M.W. 347.8359<br>C <sub>19</sub> H <sub>21</sub> N O <sub>3</sub> . Cl H |



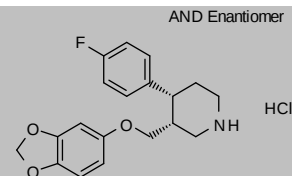
### Paroxetine Related Compound C ((3R,4S)-3-[(1,3-Benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)piperidine Hydrochloride; (+)-trans-Paroxetine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                        |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------|
| LGC      | <a href="#">MM1032.04</a> | 50mg               | 130855-30-0                                                                |
| USP      | 1500240                   | 30mg               | M.W. 365.8263<br>C <sub>19</sub> H <sub>20</sub> F N O <sub>3</sub> . Cl H |



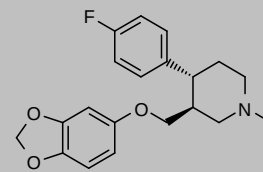
### Paroxetine Related Compound D ((3RS,4RS)-3-[(1,3-Benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)piperidine Hydrochloride; cis-Paroxetine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                        |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------|
| LGC      | <a href="#">MM1032.05</a> | 100mg              | n/a                                                                        |
| USP      | 1500251                   | 10mg               | M.W. 365.8263<br>C <sub>19</sub> H <sub>20</sub> F N O <sub>3</sub> . Cl H |



### Paroxetine Related Compound F (trans(-)-1-Methyl-3-[(1,3-benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)piperidine)

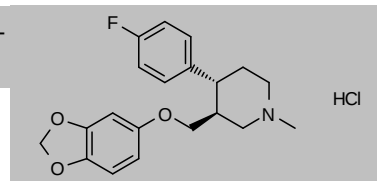
| Producer | Code                      | Quantity / Comment | CAS                                                                |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|
| LGC      | <a href="#">MM1032.18</a> | 100mg              | 110429-36-2                                                        |
| USP      | 1500273                   | 25mg               | M.W. 343.392<br>C <sub>20</sub> H <sub>22</sub> F N O <sub>3</sub> |



## LGC impurities according to USP declaration system

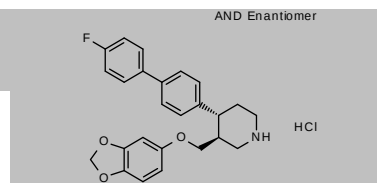
### Paroxetine Related Compound F (trans(-)-1-Methyl-3-[1,3-benzodioxol-5-yloxy)methyl]-4-(4-fluorophenyl)piperidine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                       | n/a      |
|----------|---------------------------|--------------------|-----------------------------------------------------------|----------|
| LGC      | <a href="#">MM1032.13</a> | 100mg              | M.W.                                                      | 379.8529 |
| USP      | 1500273                   | 25mg, as free base | C <sub>20</sub> H <sub>22</sub> F N O <sub>3</sub> . Cl H |          |



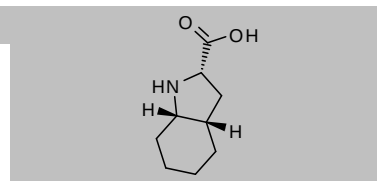
### Paroxetine Related Compound G ((±)trans-3-[(1,3-Benzodioxol-5-yloxy)methyl]-4-(4"-fluorophenyl-4'-phenyl)piperidine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                       | 1217655-87-2 |
|----------|---------------------------|--------------------|-----------------------------------------------------------|--------------|
| LGC      | <a href="#">MM1032.15</a> | 100mg              | M.W.                                                      | 441.9223     |
| USP      | 1500284                   | 10mg               | C <sub>25</sub> H <sub>24</sub> F N O <sub>3</sub> . Cl H |              |



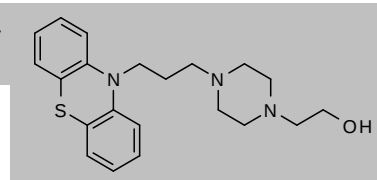
### Perindopril Related Compound A ((2S,3aS,7aS)-Octahydro-1H-indole-2-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                             | 80875-98-5 |
|----------|---------------------------|--------------------|-------------------------------------------------|------------|
| LGC      | <a href="#">MM0926.01</a> | 100mg              | M.W.                                            | 169.2209   |
| USP      | 1510890                   | 20mg               | C <sub>9</sub> H <sub>15</sub> N O <sub>2</sub> |            |



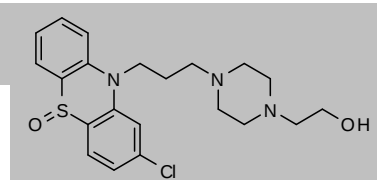
### Perphenazine Related Compound B (2-[4-[3-(10H-Phenothiazin-10-yl)propyl]piperazin-1-yl]ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                | 3533-97-9 |
|----------|---------------------------|--------------------|----------------------------------------------------|-----------|
| LGC      | <a href="#">MM0826.02</a> | 50mg               | M.W.                                               | 369.5236  |
| USP      | 1511021                   | 15mg               | C <sub>21</sub> H <sub>27</sub> N <sub>3</sub> O S |           |



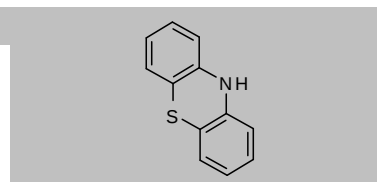
### Perphenazine Sulfoxide (2-[4-[3-(2-Chloro-5-oxido-10H-phenothiazin-10-yl)propyl]piperazin-1-yl]ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                                | 10078-25-8 |
|----------|---------------------------|--------------------|--------------------------------------------------------------------|------------|
| LGC      | <a href="#">MM0826.01</a> | 100mg              | M.W.                                                               | 419.968    |
| USP      | 1511203                   | 100mg              | C <sub>21</sub> H <sub>26</sub> Cl N <sub>3</sub> O <sub>2</sub> S |            |



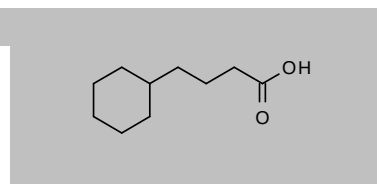
### Phenothiazine

| Producer | Code                      | Quantity / Comment | CAS                                | 92-84-2  |
|----------|---------------------------|--------------------|------------------------------------|----------|
| LGC      | <a href="#">MM0157.02</a> | 100mg              | M.W.                               | 199.2716 |
| USP      | 1525707                   | 500mg              | C <sub>12</sub> H <sub>9</sub> N S |          |



### Phenylbutyrate Related Compound C (4-Cyclohexylbutanoic Acid)

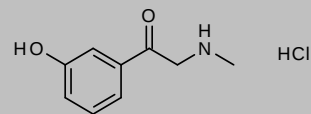
| Producer | Code                      | Quantity / Comment | CAS                                            | 4441-63-8 |
|----------|---------------------------|--------------------|------------------------------------------------|-----------|
| LGC      | <a href="#">MM3397.01</a> | 100mg              | M.W.                                           | 170.2487  |
| USP      | 1614534                   | 25mg               | C <sub>10</sub> H <sub>18</sub> O <sub>2</sub> |           |



## LGC impurities according to USP declaration system

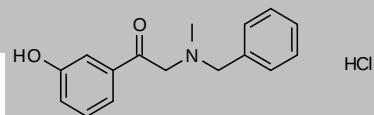
### Phenylephrine Related Compound C (1-(3-Hydroxyphenyl)-2-(methylamino)ethanone Hydrochloride; Phenylephrine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                        |
|----------|---------------------------|--------------------|--------------------------------------------|
| LGC      | <a href="#">MM0081.03</a> | 100mg              | 94240-17-2                                 |
| USP      | 1533024                   | 30mg               | M.W. 201.6501<br>$C_9H_{11}NO_2 \cdot ClH$ |



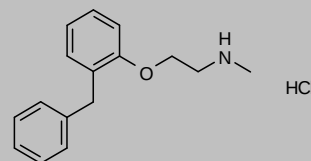
### Phenylephrine Related Compound E (2-(Benzyl-methylamino)-1-(3-hydroxyphenyl)ethanone Hydrochloride; Benzylphenylephrine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                           |
|----------|---------------------------|--------------------|-----------------------------------------------|
| LGC      | <a href="#">MM0081.08</a> | 100mg              | 71786-67-9                                    |
| USP      | 1533046                   | 30mg               | M.W. 291.7726<br>$C_{16}H_{17}NO_2 \cdot ClH$ |



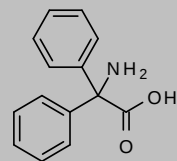
### Phenyltoloxamine Related Compound A (2-(2-Benzylphenoxy)-N-methylethanamine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                         |
|----------|---------------------------|--------------------|---------------------------------------------|
| LGC      | <a href="#">MM0770.01</a> | 100mg              | 75859-72-2                                  |
| USP      | 1534413                   | 50mg               | M.W. 277.7891<br>$C_{16}H_{19}NO \cdot ClH$ |



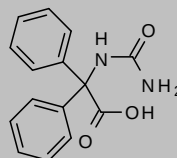
### Phenytoin Related Compound A (Amino(diphenyl)acetic Acid; 2,2-Diphenylglycine)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0630.04</a> | 100mg              | 3060-50-2                           |
| USP      | 1535019                   | 50mg               | M.W. 227.2585<br>$C_{14}H_{13}NO_2$ |



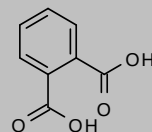
### Phenytoin Related Compound B ((Carbamoylamino)(diphenyl)acetic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0630.06</a> | 50mg               | 6802-95-5                             |
| USP      | 1535020                   | 50mg               | M.W. 270.2833<br>$C_{15}H_{14}N_2O_3$ |



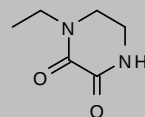
### Phthalic Acid (Benzene-1,2-dicarboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                          |
|----------|---------------------------|--------------------|------------------------------|
| LGC      | <a href="#">MM1057.02</a> | 100mg              | 88-99-3                      |
| USP      | 1535899                   | 50mg               | M.W. 166.1308<br>$C_8H_6O_4$ |



### Piperacillin Related Compound E (1-Ethylpiperazine-2,3-dione)

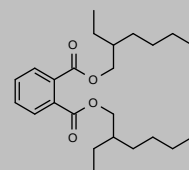
| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0296.05</a> | 100mg              | 59702-31-7                         |
| USP      | 1541529                   | 25mg               | M.W. 142.1558<br>$C_6H_{10}N_2O_2$ |



## LGC impurities according to USP declaration system

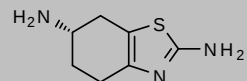
### Plastic Additive 14 (Diethylhexylphthalate; Bis-(2-ethylhexyl) Phthalate)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 117-81-7                                   |
| LGC      | <a href="#">MM0334.01</a> | 500mg              | M.W. 390.5561                                  |
| USP      | 1545056                   | 100mg              | C <sub>24</sub> H <sub>38</sub> O <sub>4</sub> |



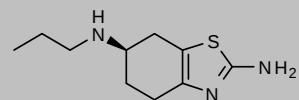
### Pramipexole Related Compound A ((6S)-4,5,6,7-Tetrahydro-1,3-benzothiazole-2,6-diamine)

|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 106092-09-5                                 |
| LGC      | <a href="#">MM0332.02</a> | 100mg              | M.W. 169.2473                                   |
| USP      | 1553768                   | 15mg               | C <sub>7</sub> H <sub>11</sub> N <sub>3</sub> S |



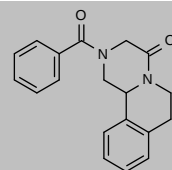
### Pramipexole Related Compound D ((6R)-6-N-Propyl-4,5,6,7-tetrahydro-1,3-benzothiazole-2,6-diamine)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 104632-28-2                                  |
| LGC      | <a href="#">MM0332.07</a> | 100mg              | M.W. 211.3271                                    |
| USP      | 1553815                   | 25mg               | C <sub>10</sub> H <sub>17</sub> N <sub>3</sub> S |



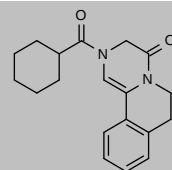
### Praziquantel Related Compound A ((11bRS)-2-Benzoyl-1,2,3,6,7,11b-hexahydro-4H-pyrazino[2,1-a]isoquinolin-4-one)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 54761-87-4                                                |
| LGC      | <a href="#">MM0615.01</a> | 100mg              | M.W. 306.3584                                                 |
| USP      | 1554658                   | 20mg               | C <sub>19</sub> H <sub>18</sub> N <sub>2</sub> O <sub>2</sub> |



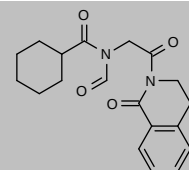
### Praziquantel Related Compound B (2-(Cyclohexylcarbonyl)-2,3,6,7-tetrahydro-4H-pyrazino[2,1-a]isoquinolin-4-one)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 125273-86-1                                               |
| LGC      | <a href="#">MM0615.02</a> | 100mg              | M.W. 310.3902                                                 |
| USP      | 1554669                   | 50mg               | C <sub>19</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> |



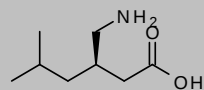
### Praziquantel Related Compound C (N-Formyl-N-[2-oxo2-(1-oxo-3,4-dihydroisoquinolin-2(1H)-yl)ethyl]cyclohexanecarboxamide)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 125273-88-3                                               |
| LGC      | <a href="#">MM0615.03</a> | 100mg              | M.W. 342.389                                                  |
| USP      | 1554670                   | 50mg               | C <sub>19</sub> H <sub>22</sub> N <sub>2</sub> O <sub>4</sub> |



### Pregabalin Related Compound A ((R)-Pregabalin)

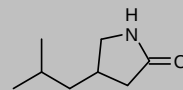
|          |                           |                    |                                                 |
|----------|---------------------------|--------------------|-------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 148553-51-9                                 |
| LGC      | <a href="#">MM1376.02</a> | 100mg              | M.W. 159.2261                                   |
| USP      | 1559629                   | 25mg               | C <sub>8</sub> H <sub>17</sub> N O <sub>2</sub> |



## LGC impurities according to USP declaration system

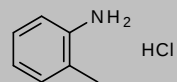
### Pregabalin Related Compound C ((4RS)-4-(2-Methylpropyl)pyrrolidin-2-one; 4-Isobutylpyrrolidin-2-one; (RS)-Pregabalin Lactam)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM1376.03</a> | 100mg              | 61312-87-6                                          |
| USP      | 1559647                   | 25mg               | M.W. 141.2108<br>C <sub>8</sub> H <sub>15</sub> N O |



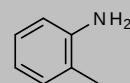
### Prilocaine Related Compound A (2-Methylbenzenamine Hydrochloride; o-Toluidine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                    |
|----------|---------------------------|--------------------|--------------------------------------------------------|
| LGC      | <a href="#">MM0563.07</a> | 100mg              | 636-21-5                                               |
| USP      | 1561019                   | 100mg              | M.W. 143.614<br>C <sub>7</sub> H <sub>9</sub> N . Cl H |



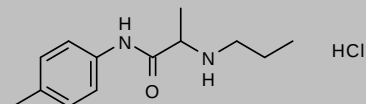
### Prilocaine Related Compound A (2-Methylbenzenamine; o-Toluidine)

| Producer | Code                      | Quantity / Comment      | CAS                                              |
|----------|---------------------------|-------------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0563.02</a> | 100mg                   | 95-53-4                                          |
| USP      | 1561019                   | 100mg, as hydrochloride | M.W. 107.1531<br>C <sub>7</sub> H <sub>9</sub> N |



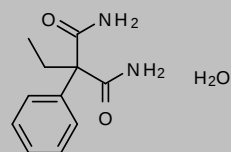
### Prilocaine Related Compound B ((RS)-N-(4-Methyl-phenyl)-2-(propylamino)propanamide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0563.05</a> | 50mg               | 35891-99-7                                                               |
| USP      | 1561020                   | 50mg, as free base | M.W. 256.7716<br>C <sub>13</sub> H <sub>20</sub> N <sub>2</sub> O . Cl H |



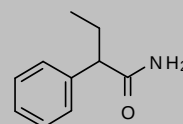
### Primidone Related Compound A (2-Ethyl-2-phenylpropane-diamide Hydrate; Ethylphenylmalonamide Hydrate)

| Producer | Code                      | Quantity / Comment | CAS                                                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1030.01</a> | 100mg              | 80866-90-6                                                                                        |
| USP      | 1562011                   | 20mg, as anhydrate | M.W. 224.2563<br>C <sub>11</sub> H <sub>14</sub> N <sub>2</sub> O <sub>2</sub> . H <sub>2</sub> O |



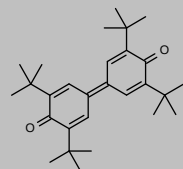
### Primidone Related Compound C ((2RS)-2-Phenylbutanamide)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM1030.03</a> | 100mg              | 90-26-6                                              |
| USP      | 1562033                   | 20mg               | M.W. 163.2163<br>C <sub>10</sub> H <sub>13</sub> N O |



### Probucol Related Compound A (2,2',6,6'-Tetra-tert-butylidiphenylquinone)

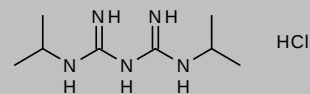
| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM1068.01</a> | 50mg               | 2455-14-3                                                      |
| USP      | 1563320                   | 25mg               | M.W. 408.616<br>C <sub>28</sub> H <sub>40</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

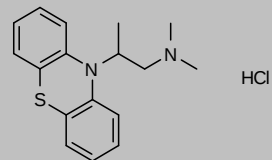
### Proguanil Related Compound D (1,5-Bis(1-methylethyl)biguanide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                   |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM0840.05</a> | 100mg              | 35708-82-8                                                            |
| USP      | 1568062                   | 25mg               | M.W. 221.7309<br>C <sub>8</sub> H <sub>19</sub> N <sub>5</sub> · Cl H |



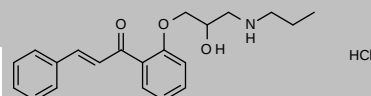
### Promethazine Related Compound B ((2RS)-N,N-Dimethyl-2-(10H-phenothiazin-10-yl)propan-1-amine Hydrochloride; Isopromethazine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0412.02</a> | 100mg              | 5568-90-1                                                              |
| USP      | 1570029                   | 25mg               | M.W. 320.88<br>C <sub>17</sub> H <sub>20</sub> N <sub>2</sub> S · Cl H |



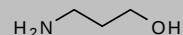
### Propafenone Related Compound B ((2E)-1-[2-[(2RS)-2-Hydroxy-3-(propylamino)propoxy]phenyl]-3-phenylprop-2-en-1-one Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                     |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------|
| LGC      | <a href="#">MM0405.03</a> | 50mg               | n/a                                                                     |
| USP      | 1570326                   | 50mg, as free base | M.W. 375.889<br>C <sub>21</sub> H <sub>25</sub> N O <sub>3</sub> · Cl H |



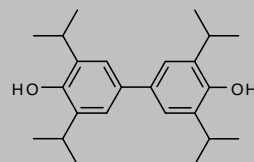
### Propanolamine (3-Aminopropanol)

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM1352.01</a> | 100mg              | 156-87-6                                          |
| USP      | 1570450                   | 100mg              | M.W. 75.1097<br>C <sub>3</sub> H <sub>9</sub> N O |



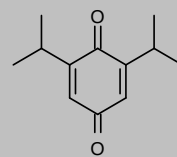
### Propofol Related Compound A (3,3',5,5'-Tetrakis(1-methylethyl)biphenyl-4,4'-diol)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0461.02</a> | 100mg              | 2416-95-7                                                       |
| USP      | 1572536                   | 25mg               | M.W. 354.5256<br>C <sub>24</sub> H <sub>34</sub> O <sub>2</sub> |



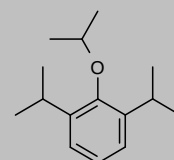
### Propofol Related Compound B (2,6-Bis(1-methylethyl)benzene-1,4-dione)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0461.13</a> | 50mg               | 1988-11-0                                                       |
| USP      | 1572547                   | 30mg               | M.W. 192.2542<br>C <sub>12</sub> H <sub>16</sub> O <sub>2</sub> |



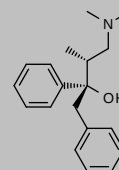
### Propofol Related Compound C (2-(1-Methylethoxy)-1,3-bis(1-methylethyl)benzene)

| Producer | Code                      | Quantity / Comment | CAS                                                |
|----------|---------------------------|--------------------|----------------------------------------------------|
| LGC      | <a href="#">MM0461.08</a> | 100mg              | 141214-18-8                                        |
| USP      | 1572558                   | 25mg               | M.W. 220.3505<br>C <sub>15</sub> H <sub>24</sub> O |



### Propoxyphene Related Compound A ((2S,3R)-4-(Dimethylamino)-1,2-diphenyl-3-methylbutan-2-ol; Oxyphene)

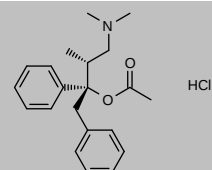
| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM0098.06</a> | 100mg              | 38345-66-3                                           |
| USP      | 1575206                   | 50mg               | M.W. 283.4079<br>C <sub>19</sub> H <sub>25</sub> N O |



## LGC impurities according to USP declaration system

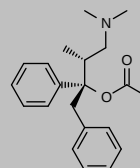
### Propoxyphene Related Compound B ((1S,2R)-1-Benzyl-3-(dimethylamino)-2-methyl-1-phenylpropyl Acetate Hydrochloride; Acetoxyphe Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                                 |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0098.07</a> | 100mg              | M.W. 361.9055                                           |
| USP      | 1008002                   | 50mg, as free base | C <sub>21</sub> H <sub>27</sub> N O <sub>2</sub> · Cl H |



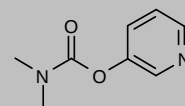
### Propoxyphene Related Compound B ((1S,2R)-1-Benzyl-3-(dimethylamino)-2-methyl-1-phenylpropyl Acetate; Acetoxyphe)

| Producer | Code                      | Quantity / Comment | CAS 33318-28-4                                   |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0098.12</a> | 100mg              | M.W. 325.4446                                    |
| USP      | 1008002                   | 50mg               | C <sub>21</sub> H <sub>27</sub> N O <sub>2</sub> |



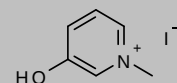
### Pyridostigmine Related Compound A (Pyridin-3-yl Dimethylcarbamate)

| Producer | Code                      | Quantity / Comment | CAS 51581-32-9                                               |
|----------|---------------------------|--------------------|--------------------------------------------------------------|
| LGC      | <a href="#">MM0429.01</a> | 100mg              | M.W. 166.1772                                                |
| USP      | 1586020                   | 50mg               | C <sub>8</sub> H <sub>10</sub> N <sub>2</sub> O <sub>2</sub> |



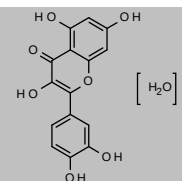
### Pyridostigmine Related Compound B (3-Hydroxy-1-methyl-pyridinium Iodide)

| Producer | Code                      | Quantity / Comment | CAS 7500-05-2                         |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0429.02</a> | 100mg              | M.W. 237.0383                         |
| USP      | 1586031                   | 10mg, as bromide   | C <sub>6</sub> H <sub>8</sub> N O · I |



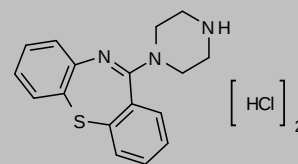
### Quercetin Dihydrate (2-(3,4-Dihydroxyphenyl)-3,5,7-trihydroxy-4H-1-benzopyran-4-one Dihydrate)

| Producer | Code                      | Quantity / Comment | CAS 6151-25-3                                                       |
|----------|---------------------------|--------------------|---------------------------------------------------------------------|
| LGC      | <a href="#">MM0109.03</a> | 100mg              | M.W. 338.2663                                                       |
| USP      | 1592409                   | 500mg              | C <sub>15</sub> H <sub>10</sub> O <sub>7</sub> · 2 H <sub>2</sub> O |



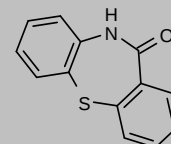
### Quetiapine Related Compound B (11-(Piperazin-1-yl)dibenzo[b,f][1,4]thiazepine Dihydrochloride)

| Producer | Code                      | Quantity / Comment | CAS 111974-74-4                                           |
|----------|---------------------------|--------------------|-----------------------------------------------------------|
| LGC      | <a href="#">MM1130.01</a> | 100mg              | M.W. 368.3239                                             |
| USP      | 1592737                   | 15mg               | C <sub>17</sub> H <sub>17</sub> N <sub>3</sub> S · 2 Cl H |



### Quetiapine Related Compound G (Dibenzo[b,f][1,4]thiazepin-11(10H)-one)

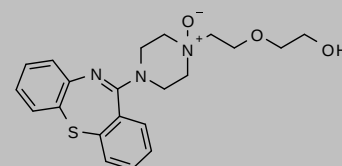
| Producer | Code                      | Quantity / Comment | CAS 3159-07-7                        |
|----------|---------------------------|--------------------|--------------------------------------|
| LGC      | <a href="#">MM1130.09</a> | 100mg              | M.W. 227.2817                        |
| USP      | 1592781                   | 15mg               | C <sub>13</sub> H <sub>9</sub> N O S |



## LGC impurities according to USP declaration system

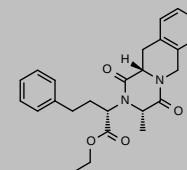
Quetiapine Related Compound H (2-[2-[4-(Dibenzo[b,f][1,4]thiazepin-11-yl)-1-oxidopiperazin-1-yl]ethoxy]ethanol; Quetiapine N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1130.10</a> | 50mg               | 1076199-40-0                                                                     |
| USP      | 1592792                   | 15mg               | M.W. 399.5065<br>C <sub>21</sub> H <sub>25</sub> N <sub>3</sub> O <sub>3</sub> S |



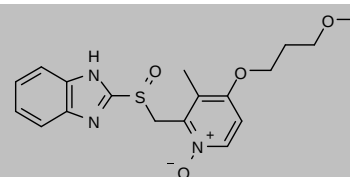
Quinapril Related Compound A (Ethyl (2S)-2-[(3S,11aS)-3-Methyl-1,4-dioxo-1,3,4,6,11,11a-hexahydro-2H-pyrazino[1,2-b]isoquinolin-2-yl]-4-phenylbutanoate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0628.05</a> | 50mg               | 103733-49-9                                                                    |
| USP      | 1593412                   | 50mg               | M.W. 420.5008<br>C <sub>25</sub> H <sub>28</sub> N <sub>2</sub> O <sub>4</sub> |



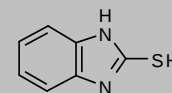
Rabeprazole Related Compound B (Rabeprazole N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0618.04</a> | 100mg              | 924663-38-7                                                                     |
| USP      | 1598031                   | 15mg               | M.W. 375.442<br>C <sub>18</sub> H <sub>21</sub> N <sub>3</sub> O <sub>4</sub> S |



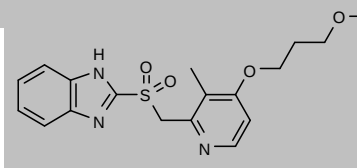
Rabeprazole Related Compound C (1H-Benzimidazole-2-thiol)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0474.05</a> | 100mg              | 583-39-1                                                        |
| USP      | 1598042                   | 25mg               | M.W. 150.2009<br>C <sub>7</sub> H <sub>6</sub> N <sub>2</sub> S |



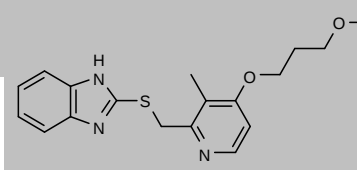
Rabeprazole Related Compound D (Rabeprazole Sulphone)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0618.03</a> | 100mg              | 117976-47-3                                                                     |
| USP      | 1598053                   | 25mg               | M.W. 375.442<br>C <sub>18</sub> H <sub>21</sub> N <sub>3</sub> O <sub>4</sub> S |



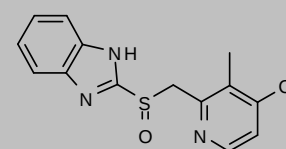
Rabeprazole Related Compound E (2-[[[4-(3-Methoxypropoxy)-3-methyl-2-pyridinyl]methyl]thio]-1H-benzimidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0618.02</a> | 100mg              | 117977-21-6                                                                      |
| USP      | 1598064                   | 25mg               | M.W. 343.4432<br>C <sub>18</sub> H <sub>21</sub> N <sub>3</sub> O <sub>2</sub> S |



Rabeprazole Related Compound F (2-[(RS)-[(4-Chloro-3-methylpyridin-2-yl)methyl]sulphonyl]-1H-benzimidazole)

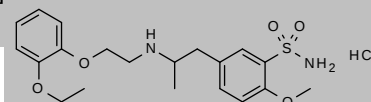
| Producer | Code                      | Quantity / Comment | CAS                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0474.02</a> | 100mg              | 168167-42-8                                                            |
| USP      | 1598075                   | 15mg               | M.W. 305.7826<br>C <sub>14</sub> H <sub>12</sub> Cl N <sub>3</sub> O S |



## LGC impurities according to USP declaration system

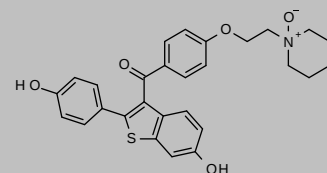
### Racemic Tamsulosin Hydrochloride (5-[(2RS)-2-[(2-(2-Ethoxyphenoxy)ethyl)amino]propyl]-2-methoxybenzenesulfonamide Hydrochloride)

|          |                           |                    |                                                                        |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 80223-99-0                                                         |
| LGC      | <a href="#">MM0938.10</a> | 50mg               | M.W. 444.9727                                                          |
| USP      | 1643281                   | 50mg               | C <sub>20</sub> H <sub>28</sub> N <sub>2</sub> O <sub>5</sub> S . Cl H |



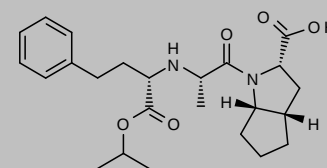
### Raloxifene Related Compound C ([6-Hydroxy-2-(4-hydroxyphenyl)-1-benzothiophen-3-yl][4-[2-(piperidin-1-yl)ethoxy]phenyl]methanone N-Oxide; Raloxifene N-Oxide)

|          |                           |                    |                                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 195454-31-0                                    |
| LGC      | <a href="#">MM0738.01</a> | 50mg               | M.W. 489.5827                                      |
| USP      | 1598234                   | 20mg               | C <sub>28</sub> H <sub>27</sub> N O <sub>5</sub> S |



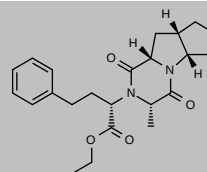
### Ramipril Related Compound B ((2S,3aS,6aS)-1-[(2S)-2-[[[(1S)-1-[(1-Methylethoxy)carbonyl]-3-phenylpropyl]amino]propanoyl]octahydrocyclopenta[b]pyrrole-2-carboxylic Acid; Ramipril Isopropyl Ester)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 295328-72-2                                               |
| LGC      | <a href="#">MM0448.07</a> | 50mg               | M.W. 430.5372                                                 |
| USP      | 1598323                   | 20mg               | C <sub>24</sub> H <sub>34</sub> N <sub>2</sub> O <sub>5</sub> |



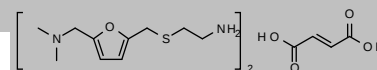
### Ramipril Related Compound D (Ethyl (2S)-2-[(3S,5aS,8aS,9aS)-3-Methyl-1,4-dioxodecahydro-2H-cyclopenta[4,5]pyrrolo[1,2-a]pyrazin-2-yl]-4-phenylbutanoate; Ramipril Diketopiperazine)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 108731-95-9                                               |
| LGC      | <a href="#">MM0448.05</a> | 100mg              | M.W. 398.4953                                                 |
| USP      | 1598347                   | 20mg               | C <sub>23</sub> H <sub>30</sub> N <sub>2</sub> O <sub>4</sub> |



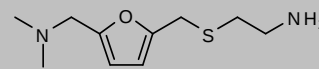
### Ranitidine Related Compound A (2-[[[5-[(Dimethylamino)methyl]furan-2-yl]methyl]sulfonyl]ethanamine Hemifumarate)

|          |                           |                    |                                                                                                     |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 256948-32-0                                                                                     |
| LGC      | <a href="#">MM0086.15</a> | 100mg              | M.W. 544.7276                                                                                       |
| USP      | 1598507                   | 50mg               | 2 C <sub>10</sub> H <sub>18</sub> N <sub>2</sub> O S . C <sub>4</sub> H <sub>4</sub> O <sub>4</sub> |



### Ranitidine Related Compound A (2-[[[5-[(Dimethylamino)methyl]furan-2-yl]methyl]sulphonyl]ethanamine)

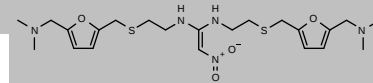
|          |                           |                    |                                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 66356-53-4                                     |
| LGC      | <a href="#">MM0086.01</a> | 100mg              | M.W. 214.3277                                      |
| USP      | 1598507                   | 50mg, as fumarate  | C <sub>10</sub> H <sub>18</sub> N <sub>2</sub> O S |



## LGC impurities according to USP declaration system

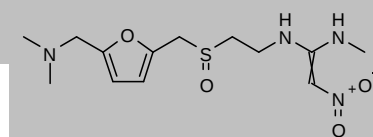
### Ranitidine Related Compound B (N,N'-Bis[2-[[[5-[(dimethylamino)methyl]furan-2-yl]-methyl]sulphanyl]ethyl]-2-nitroethene-1,1-diamine)

|          |                           |                    |                                                                              |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 72126-78-4                                                               |
| LGC      | <a href="#">MM0086.02</a> | 100mg              | M.W. 497.6744                                                                |
| USP      | 1598609                   | 50mg               | C <sub>22</sub> H <sub>35</sub> N <sub>5</sub> O <sub>4</sub> S <sub>2</sub> |



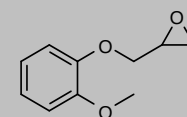
### Ranitidine Related Compound C (N-[2-[[[5-[(Dimethylamino)methyl]furan-2-yl]methyl]sulphanyl]ethyl]-N'-methyl-2-nitroethene-1,1-diamine; Ranitidine Sulphoxide)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 73851-70-4                                                  |
| LGC      | <a href="#">MM0086.03</a> | 100mg              | M.W. 330.4032                                                   |
| USP      | 1598700                   | 50mg               | C <sub>13</sub> H <sub>22</sub> N <sub>4</sub> O <sub>4</sub> S |



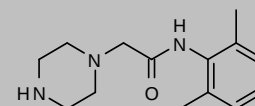
### Ranolazine Related Compound A (2-[(2-Methoxyphenoxy)methyl]oxirane)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 2210-74-4                                  |
| LGC      | <a href="#">MM1320.01</a> | 100mg              | M.W. 180.2005                                  |
| USP      | 1598755                   | 50mg               | C <sub>10</sub> H <sub>12</sub> O <sub>3</sub> |



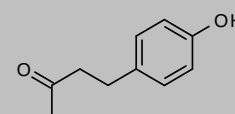
### Ranolazine Related Compound C (N-(2,6-Dimethylphenyl)-2-(piperazin-1-yl)acetamide)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5294-61-1                                    |
| LGC      | <a href="#">MM1320.02</a> | 100mg              | M.W. 247.336                                     |
| USP      | 1598777                   | 50mg               | C <sub>14</sub> H <sub>21</sub> N <sub>3</sub> O |



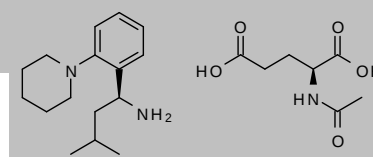
### Raspberry Ketone (4-(4-Hydroxyphenyl)butan-2-one)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5471-51-2                                  |
| LGC      | <a href="#">MM0675.02</a> | 100mg              | M.W. 164.2011                                  |
| USP      | 1598813                   | 100mg              | C <sub>10</sub> H <sub>12</sub> O <sub>2</sub> |



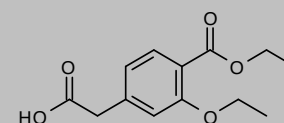
### Repaglinide Related Compound A ((1S)-3-Methyl-1-[2-(piperidin-1-yl)phenyl]butan-1-amine N-Acetyl-L-glutamate)

|          |                           |                    |                                                                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 219921-94-5                                                                                  |
| LGC      | <a href="#">MM0944.01</a> | 100mg              | M.W. 435.557                                                                                     |
| USP      | 1600824                   | 10mg               | C <sub>16</sub> H <sub>26</sub> N <sub>2</sub> · C <sub>7</sub> H <sub>11</sub> N O <sub>5</sub> |



### Repaglinide Related Compound B ([3-Ethoxy-4-(ethoxycarbonyl)phenyl]acetic Acid)

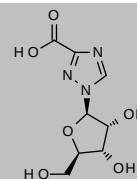
|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 99469-99-5                                 |
| LGC      | <a href="#">MM0944.02</a> | 100mg              | M.W. 252.2631                                  |
| USP      | 1600835                   | 50mg               | C <sub>13</sub> H <sub>16</sub> O <sub>5</sub> |



## LGC impurities according to USP declaration system

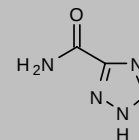
### Ribavirin Related Compound A (1-β-D-Ribofuranosyl-1H-1,2,4-triazole-3-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0542.01</a> | 100mg              | 39925-19-4                                                                    |
| USP      | 1602717                   | 15mg               | M.W. 245.1894<br>C <sub>8</sub> H <sub>11</sub> N <sub>3</sub> O <sub>6</sub> |



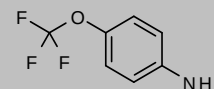
### Ribavirin Related Compound D (1H-1,2,4-Triazole-3-carboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0542.04</a> | 100mg              | 3641-08-5                                                       |
| USP      | 1602740                   | 15mg               | M.W. 112.0901<br>C <sub>3</sub> H <sub>4</sub> N <sub>4</sub> O |



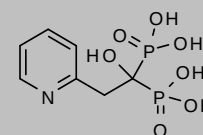
### Riluzole Related Compound A (4-Trifluoromethoxyaniline)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM1382.01</a> | 100mg              | 461-82-5                                                          |
| USP      | 1604348                   | 25mg               | M.W. 177.1238<br>C <sub>7</sub> H <sub>6</sub> F <sub>3</sub> N O |



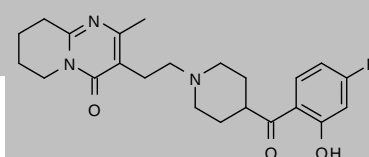
### Risedronate Related Compound A ([1-Hydroxy-2-(pyridin-2-yl)ethylidene]bis(phosphonic Acid); [1-Hydroxy-2-(pyridin-2-yl)ethane-1,1-diyl]bis(phosphonic Acid))

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0777.02</a> | 50mg               | 105462-23-5                                                                     |
| USP      | 1604621                   | 20mg               | M.W. 283.1123<br>C <sub>7</sub> H <sub>11</sub> N O <sub>7</sub> P <sub>2</sub> |



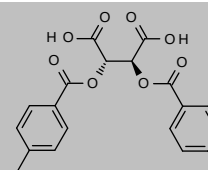
### Risperidone Related Compound G (3-[2-[4-(4-Fluoro-2-hydroxybenzoyl)piperidin-1-yl]ethyl]-2-methyl-6,7,8,9-tetrahydro-4H-pyrido[1,2-a]pyrimidin-4-one)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0491.09</a> | 100mg              | 152542-00-2                                                                      |
| USP      | 1604756                   | 25mg               | M.W. 413.4851<br>C <sub>23</sub> H <sub>28</sub> F N <sub>3</sub> O <sub>3</sub> |



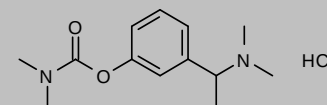
### Rivastigmine Related Compound A ((+)-Di-p-toluoyl-D-(+)-tartaric Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1497.03</a> | 100mg              | 32634-68-7                                                      |
| USP      | 1604869                   | 15mg               | M.W. 386.3521<br>C <sub>20</sub> H <sub>18</sub> O <sub>8</sub> |



### Rivastigmine Related Compound B (3-[(1RS)-1-(Dimethylamino)ethyl]phenyl Dimethylcarbamate Hydrochloride)

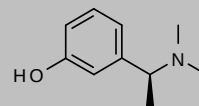
| Producer | Code                      | Quantity / Comment | CAS                                                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1497.06</a> | 100mg              | 105601-13-6                                                                          |
| USP      | 1604870                   | 15mg, as free base | M.W. 272.771<br>C <sub>13</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub> · Cl H |



## LGC impurities according to USP declaration system

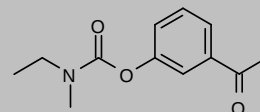
### Rivastigmine Related Compound C (3-[(1S)-1-(Dimethylamino)ethyl]phenol; Dimetol)

|          |                           |                    |                                     |
|----------|---------------------------|--------------------|-------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 139306-10-8                     |
| LGC      | <a href="#">MM1497.04</a> | 100mg              | M.W. 165.2322                       |
| USP      | 1604811                   | 15mg               | C <sub>10</sub> H <sub>15</sub> N O |



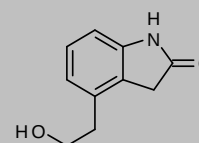
### Rivastigmine Related Compound D (3-Acetylphenyl Ethyl(methyl)carbamate)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 855300-09-3                                  |
| LGC      | <a href="#">MM1497.05</a> | 100mg              | M.W. 221.2524                                    |
| USP      | 1604825                   | 50mg               | C <sub>12</sub> H <sub>15</sub> N O <sub>3</sub> |



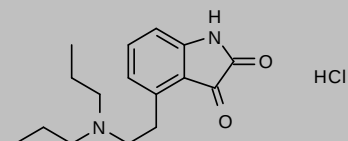
### Ropinirole Related Compound A (4-(2-Hydroxyethyl)indolin-2-one)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 139122-19-3                                  |
| LGC      | <a href="#">MM0331.08</a> | 100mg              | M.W. 177.1998                                    |
| USP      | 1605216                   | 50mg               | C <sub>10</sub> H <sub>11</sub> N O <sub>2</sub> |



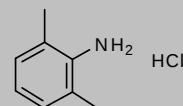
### Ropinirole Related Compound B (4-[2-(Dipropylamino)ethyl]indoline-2,3-dione Hydrochloride)

|          |                           |                    |                                                                      |
|----------|---------------------------|--------------------|----------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 221264-21-7                                                      |
| LGC      | <a href="#">MM0331.02</a> | 50mg               | M.W. 310.819                                                         |
| USP      | 1605227                   | 50mg               | C <sub>16</sub> H <sub>22</sub> N <sub>2</sub> O <sub>2</sub> · Cl H |



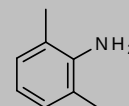
### Ropivacaine Related Compound A (2,6-Dimethylaniline Hydrochloride)

|          |                           |                    |                                         |
|----------|---------------------------|--------------------|-----------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 21436-98-6                          |
| LGC      | <a href="#">MM0102.15</a> | 100mg              | M.W. 157.6406                           |
| USP      | 1605512                   | 25mg               | C <sub>8</sub> H <sub>11</sub> N · Cl H |



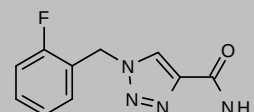
### Ropivacaine Related Compound A (2,6-Dimethylaniline)

|          |                           |                        |                                  |
|----------|---------------------------|------------------------|----------------------------------|
| Producer | Code                      | Quantity / Comment     | CAS 87-62-7                      |
| LGC      | <a href="#">MM0102.02</a> | 100mg                  | M.W. 121.1796                    |
| USP      | 1605512                   | 25mg, as hydrochloride | C <sub>8</sub> H <sub>11</sub> N |



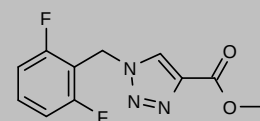
### Rufinamide Related Compound A (1-(2-Fluorobenzyl)-1H-1,2,3-triazole-4-carboxamide)

|          |                           |                    |                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 106308-41-2                                   |
| LGC      | <a href="#">MM3338.01</a> | 100mg              | M.W. 220.2031                                     |
| USP      | 1606412                   | 25mg               | C <sub>10</sub> H <sub>9</sub> F N <sub>4</sub> O |



### Rufinamide Related Compound B (Methyl 1-(2,6-Difluorobenzyl)-1H-1,2,3-triazole-4-carboxylate)

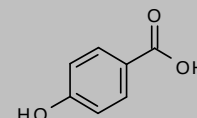
|          |                           |                    |                                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 217448-86-7                                                             |
| LGC      | <a href="#">MM3338.02</a> | 100mg              | M.W. 253.2049                                                               |
| USP      | 1606423                   | 25mg               | C <sub>11</sub> H <sub>9</sub> F <sub>2</sub> N <sub>3</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

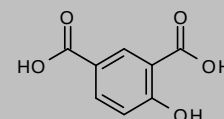
### Salicylic Acid Related Compound A (4-Hydroxybenzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM0045.01</a> | 100mg              | 99-96-7                                                       |
| USP      | 1609013                   | 100mg              | M.W. 138.1207<br>C <sub>7</sub> H <sub>6</sub> O <sub>3</sub> |



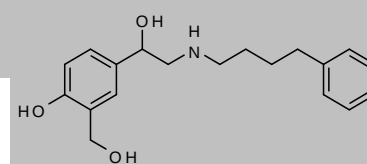
### Salicylic Acid Related Compound B (4-Hydroxyisophthalic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| LGC      | <a href="#">MM0045.02</a> | 100mg              | 636-46-4                                                      |
| USP      | 1609024                   | 100mg              | M.W. 182.1302<br>C <sub>8</sub> H <sub>6</sub> O <sub>5</sub> |



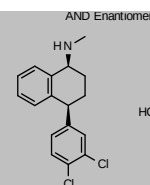
### Salmeterol Related Compound A ((1RS)-1-[4-Hydroxy-3-(hydroxymethyl)phenyl]-2-[(4-phenylbutyl)amino]ethanol)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0536.02</a> | 50mg               | n/a                                                               |
| USP      | 1609614                   | 20mg               | M.W. 315.4067<br>C <sub>19</sub> H <sub>25</sub> N O <sub>3</sub> |



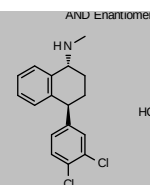
### Sertraline Hydrochloride Racemic Mixture (rac-Sertraline Hydrochloride; (1RS,4RS)-4-(3,4-Dichlorophenyl)-N-methyl-1,2,3,4-tetrahydronaphthalen-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                       |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------|
| LGC      | <a href="#">MM0317.16</a> | 100mg              | 79617-89-3                                                                |
| USP      | 1612517                   | 25mg               | M.W. 342.6905<br>C <sub>17</sub> H <sub>17</sub> Cl <sub>2</sub> N . Cl H |



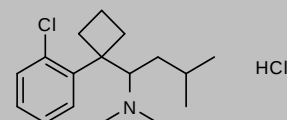
### Sertraline Hydrochloride Related Compound A ((1RS,4SR)-4-(3,4-Dichlorophenyl)-N-methyl-1,2,3,4-tetrahydronaphthalen-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                       |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------|
| LGC      | <a href="#">MM0317.04</a> | 100mg              | 79617-99-5                                                                |
| USP      | 1612528                   | 25mg               | M.W. 342.6905<br>C <sub>17</sub> H <sub>17</sub> Cl <sub>2</sub> N . Cl H |



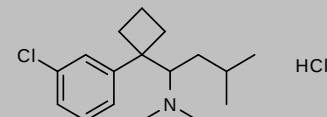
### Sibutramine Related Compound A ((1RS)-1-[1-(2-Chlorophenyl)cyclobutyl]-N,N,3-trimethylbutan-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                         |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| LGC      | <a href="#">MM0991.04</a> | 50mg               | n/a                                                         |
| USP      | 1612856                   | 20mg               | M.W. 316.309<br>C <sub>17</sub> H <sub>26</sub> Cl N . Cl H |



### Sibutramine Related Compound B ((1RS)-1-[1-(3-Chlorophenyl)cyclobutyl]-N,N,3-trimethylbutan-1-amine Hydrochloride)

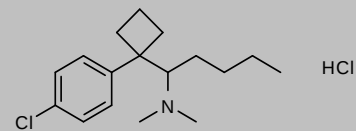
| Producer | Code                      | Quantity / Comment | CAS                                                         |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| LGC      | <a href="#">MM0991.05</a> | 50mg               | n/a                                                         |
| USP      | 1612867                   | 20mg               | M.W. 316.309<br>C <sub>17</sub> H <sub>26</sub> Cl N . Cl H |



## LGC impurities according to USP declaration system

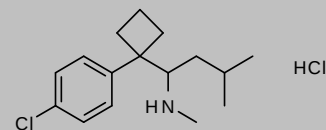
### Sibutramine Related Compound C ((1RS)-1-[1-(4-Chlorophenyl)cyclobutyl]-N,N-dimethylpentan-1-amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS n/a                                     |
|----------|---------------------------|--------------------|---------------------------------------------|
| LGC      | <a href="#">MM0991.06</a> | 50mg               | M.W. 316.309                                |
| USP      | 1612878                   | 20mg               | C <sub>17</sub> H <sub>26</sub> Cl N . Cl H |



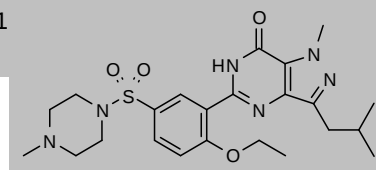
### Sibutramine Related Compound D ((1RS)-1-[1-(4-Chlorophenyl)cyclobutyl]-N,3-dimethylbutan-1-amine Hydrochloride; N-Monodesmethylsibutramine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS 84467-94-7                              |
|----------|---------------------------|--------------------|---------------------------------------------|
| LGC      | <a href="#">MM0991.02</a> | 100mg              | M.W. 302.2824                               |
| USP      | 1612889                   | 20mg               | C <sub>16</sub> H <sub>24</sub> Cl N . Cl H |



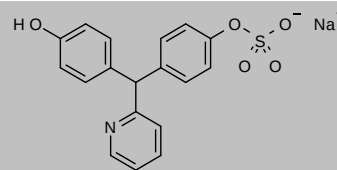
### Sildenafil Related Compound A (5-[2-Ethoxy-5-[(4-methylpiperazin-1-yl)sulfonyl]phenyl]-1-methyl-3-(2-methylpropyl)-1,6-dihydro-7H-pyrazolo[4,3-d]pyrimidin-7-one)

| Producer | Code                      | Quantity / Comment | CAS 1391053-95-4                                                |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0254.30</a> | 50mg               | M.W. 488.603                                                    |
| USP      | 1612685                   | 10mg               | C <sub>23</sub> H <sub>32</sub> N <sub>6</sub> O <sub>4</sub> S |



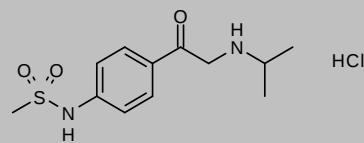
### Sodium Picosulfate Related Compound A (4-[(RS)-(4-Hydroxyphenyl)(pyridin-2-yl)methyl]phenyl Sodium Sulphate; 4-[(Pyridin-2-yl)(4-hydroxyphenyl)methyl]phenyl Sodium Sulphate)

| Producer | Code                      | Quantity / Comment | CAS 32500-19-9                                          |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0054.01</a> | 100mg              | M.W. 379.3622                                           |
| USP      | 1614589                   | 20mg               | C <sub>18</sub> H <sub>14</sub> N O <sub>5</sub> S . Na |



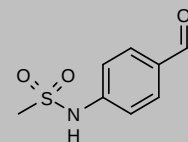
### Sotalol Related Compound A (N-[4-[(1-Methylethyl)amino]acetyl]phenyl]methanesulphonamide Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS 5576-49-8                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0046.02</a> | 100mg              | M.W. 306.8089                                                          |
| USP      | 1617419                   | 50mg               | C <sub>12</sub> H <sub>18</sub> N <sub>2</sub> O <sub>3</sub> S . Cl H |



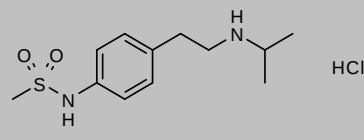
### Sotalol Related Compound B (N-(4-Formylphenyl)methanesulphonamide)

| Producer | Code                      | Quantity / Comment | CAS 83922-54-7                                   |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0046.03</a> | 100mg              | M.W. 199.227                                     |
| USP      | 1617420                   | 50mg               | C <sub>8</sub> H <sub>9</sub> N O <sub>3</sub> S |



### Sotalol Related Compound C (N-[4-[2-[(1-Methylethyl)amino]ethyl]phenyl]methanesulphonamide Hydrochloride)

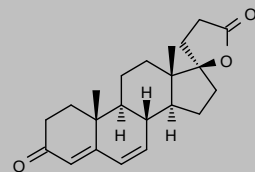
| Producer | Code                      | Quantity / Comment | CAS 16974-44-0                                                         |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0046.01</a> | 100mg              | M.W. 292.8253                                                          |
| USP      | 1617430                   | 50mg               | C <sub>12</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub> S . Cl H |



## LGC impurities according to USP declaration system

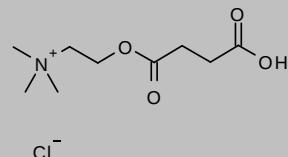
### Spironolactone Related Compound A ((2'R)-3',4'-Dihydro-5'H-spiro[androst-4,6-diene-17,2'-furan]-3,5'-dione; Canrenone)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0197.01</a> | 100mg              | 976-71-6                                                        |
| USP      | 1619017                   | 100mg              | M.W. 340.4559<br>C <sub>22</sub> H <sub>28</sub> O <sub>3</sub> |



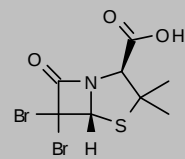
### Succinylmonocholine Chloride

| Producer | Code                      | Quantity / Comment | CAS                                                                   |
|----------|---------------------------|--------------------|-----------------------------------------------------------------------|
| LGC      | <a href="#">MM1502.01</a> | 100mg              | 5297-17-6                                                             |
| USP      | 1623604                   | 125mg              | M.W. 239.6965<br>C <sub>9</sub> H <sub>18</sub> N O <sub>4</sub> . Cl |



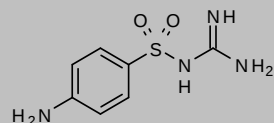
### Sulbactam Related Compound F ((2S,5R)-6,6-Dibromo-3,3-dimethyl-7-oxo-4-thia-1-azabicyclo[3.2.0]heptane-2-carboxylic Acid; 6,6-Dibromopenicillanic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0308.04</a> | 100mg              | 24158-88-1                                                                       |
| USP      | 1623794                   | 15mg               | M.W. 359.035<br>C <sub>8</sub> H <sub>9</sub> Br <sub>2</sub> N O <sub>3</sub> S |



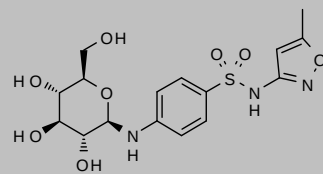
### Sulfamethazine Related Compound A (Sulfaguanidine)

| Producer | Code                      | Quantity / Comment | CAS                                                                             |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0883.00</a> | 100mg              | 57-67-0                                                                         |
| USP      | 1629019                   | 100mg, as hydrate  | M.W. 214.2449<br>C <sub>7</sub> H <sub>10</sub> N <sub>4</sub> O <sub>2</sub> S |



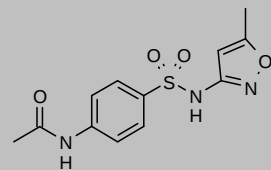
### Sulfamethoxazole N4-glucoside

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0227.07</a> | 100mg              | 119691-75-7                                                                      |
| USP      | 1631500                   | 25mg               | M.W. 415.4182<br>C <sub>16</sub> H <sub>21</sub> N <sub>3</sub> O <sub>8</sub> S |



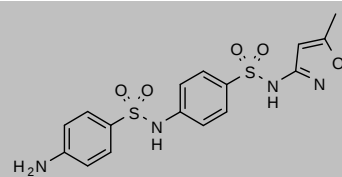
### Sulfamethoxazole Related Compound A (N-[4-[(5-Methylisoxazol-3-yl)sulphamoyl]phenyl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                              |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0227.01</a> | 100mg              | 21312-10-7                                                                       |
| USP      | 1631511                   | 15mg               | M.W. 295.3143<br>C <sub>12</sub> H <sub>13</sub> N <sub>3</sub> O <sub>4</sub> S |



### Sulfamethoxazole Related Compound B (4-[[[(4-Aminophenyl)sulphonyl]amino]-N-(5-methylisoxazol-3-yl)benzenesulphonamide)

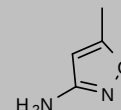
| Producer | Code                      | Quantity / Comment | CAS                                                                                          |
|----------|---------------------------|--------------------|----------------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0227.03</a> | 100mg              | 135529-16-7                                                                                  |
| USP      | 1631522                   | 15mg               | M.W. 408.452<br>C <sub>16</sub> H <sub>16</sub> N <sub>4</sub> O <sub>5</sub> S <sub>2</sub> |



## LGC impurities according to USP declaration system

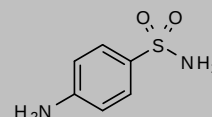
### Sulfamethoxazole Related Compound C (5-Methylisoxazol-3-amine)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0227.02</a> | 100mg              | 1072-67-9                                                      |
| USP      | 1631533                   | 15mg               | M.W. 98.1032<br>C <sub>4</sub> H <sub>6</sub> N <sub>2</sub> O |



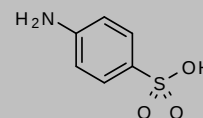
### Sulfanilamide (4-Aminobenzenesulphonamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0227.05</a> | 100mg              | 63-74-1                                                                        |
| USP      | 1632004                   | 5g                 | M.W. 172.2049<br>C <sub>6</sub> H <sub>8</sub> N <sub>2</sub> O <sub>2</sub> S |



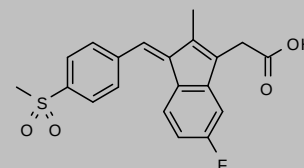
### Sulfanilic Acid (4-Aminobenzenesulphonic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0227.04</a> | 100mg              | 121-57-3                                                          |
| USP      | 1633506                   | 200mg              | M.W. 173.1897<br>C <sub>6</sub> H <sub>7</sub> N O <sub>3</sub> S |



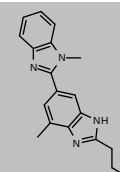
### Sulindac Related Compound B ((Z)-[5-Fluoro-2-methyl-1-[4-(methylsulfonyl)benzylidene]-1H-inden-3-yl]acetic Acid; Sulindac Sulfone)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0624.02</a> | 100mg              | 59973-80-7                                                        |
| USP      | 1642020                   | 20mg               | M.W. 372.41<br>C <sub>20</sub> H <sub>17</sub> F O <sub>4</sub> S |



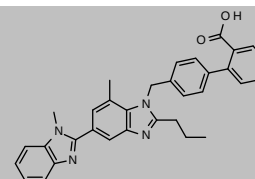
### Telmisartan Related Compound A (4-Methyl-6-(1-methyl-1H-benzimidazol-2-yl)-2-propyl-1H-benzimidazole)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0939.01</a> | 100mg              | 152628-02-9                                                     |
| USP      | 1643420                   | 20mg               | M.W. 304.3889<br>C <sub>19</sub> H <sub>20</sub> N <sub>4</sub> |



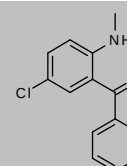
### Telmisartan Related Compound B (4'-[[7-Methyl-5-(1-methyl-1H-benzimidazol-2-yl)-2-propyl-1H-benzimidazol-1-yl]methyl]biphenyl-2-carboxylic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0939.02</a> | 100mg              | 1026353-20-7                                                                   |
| USP      | 1643437                   | 15mg               | M.W. 514.6169<br>C <sub>33</sub> H <sub>30</sub> N <sub>4</sub> O <sub>2</sub> |



### Temazepam Related Compound A ([5-Chloro-2-(methylamino)phenyl]-phenylmethanone; 5-Chloro-2-(methylamino)benzophenone)

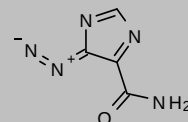
| Producer | Code                      | Quantity / Comment | CAS                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM0023.01</a> | 100mg              | 1022-13-5                                               |
| USP      | 1644319                   | 15mg               | M.W. 245.7042<br>C <sub>14</sub> H <sub>12</sub> Cl N O |



## LGC impurities according to USP declaration system

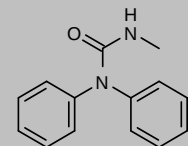
### Temozolomide Related Compound A (4-Diazo-4H-imidazole-5-carboxamide)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM1480.02</a> | 100mg              | 7008-85-7                                                       |
| USP      | 1643554                   | 15mg               | M.W. 137.0995<br>C <sub>4</sub> H <sub>3</sub> N <sub>5</sub> O |



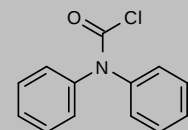
### Temozolomide Related Compound B (3-Methyl-1,1-diphenylurea)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM1480.03</a> | 100mg              | 13114-72-2                                                        |
| USP      | 1643565                   | 15mg               | M.W. 226.2738<br>C <sub>14</sub> H <sub>14</sub> N <sub>2</sub> O |



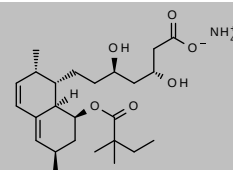
### Temozolomide Related Compound C (Diphenylcarbamic Chloride)

| Producer | Code                      | Quantity / Comment | CAS                                                     |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| LGC      | <a href="#">MM1480.01</a> | 100mg              | 83-01-2                                                 |
| USP      | 1643576                   | 15mg               | M.W. 231.6776<br>C <sub>13</sub> H <sub>10</sub> Cl N O |



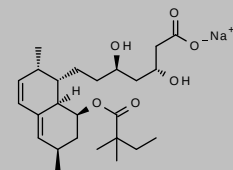
### Tenivastatin Ammonium ((3R,5R)-7-[(1S,2S,6R,8S,8aR)-8-[(2,2-Dimethylbutanoyl)oxy]-2,6-dimethyl-1,2,6,7,8,8a-hexahydronaphthalen-1-yl]-3,5-dihydroxyheptanoic Acid Ammonium Salt)

| Producer | Code                      | Quantity / Comment    | CAS                                                                               |
|----------|---------------------------|-----------------------|-----------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0158.13</a> | 100mg                 | 139893-43-9                                                                       |
| USP      | 1612719                   | 30mg, as calcium salt | M.W. 453.612<br>C <sub>25</sub> H <sub>39</sub> O <sub>6</sub> · H <sub>4</sub> N |



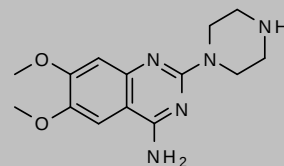
### Tenivastatin Sodium ((3R,5R)-7-[(1S,2S,6R,8S,8aR)-8-[(2,2-Dimethylbutanoyl)oxy]-2,6-dimethyl-1,2,6,7,8,8a-hexahydronaphthalen-1-yl]-3,5-dihydroxyheptanoic Acid Sodium Salt)

| Producer | Code                      | Quantity / Comment    | CAS                                                                  |
|----------|---------------------------|-----------------------|----------------------------------------------------------------------|
| LGC      | <a href="#">MM0158.01</a> | 100mg                 | 101314-97-0                                                          |
| USP      | 1612719                   | 30mg, as calcium salt | M.W. 458.5633<br>C <sub>25</sub> H <sub>39</sub> O <sub>6</sub> · Na |



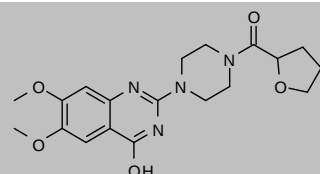
### Terazosin Related Compound A (6,7-Dimethoxy-2-(piperazin-1-yl)quinazolin-4-amine)

| Producer | Code                      | Quantity / Comment             | CAS                                                                           |
|----------|---------------------------|--------------------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0085.01</a> | 100mg                          | 60547-97-9                                                                    |
| USP      | 1643463                   | 50mg, as hydrochloride hydrate | M.W. 289.333<br>C <sub>14</sub> H <sub>19</sub> N <sub>5</sub> O <sub>2</sub> |



### Terazosin Related Compound B (1-(4-Hydroxy-6,7-dimethoxyquinazolin-2-yl)-4-[[[(2RS)-tetrahydrofuran-2-yl]carbonyl]piperazine)

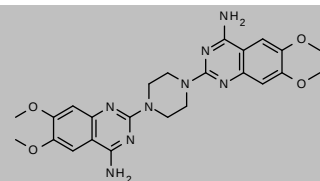
| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0843.02</a> | 100mg              | n/a                                                                            |
| USP      | 1643474                   | 50mg               | M.W. 388.4177<br>C <sub>19</sub> H <sub>24</sub> N <sub>4</sub> O <sub>5</sub> |



## LGC impurities according to USP declaration system

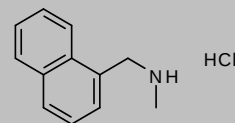
### Terazosin Related Compound C (2,2'-(Piperazin-1,4-diyl)bis(6,7-dimethoxyquinazolin-4-amine))

| Producer | Code                      | Quantity / Comment     | CAS                                   |
|----------|---------------------------|------------------------|---------------------------------------|
| LGC      | <a href="#">MM0085.03</a> | 100mg                  | 102839-00-9                           |
| USP      | 1643485                   | 25mg, as hydrochloride | M.W. 492.5303<br>$C_{24}H_{28}N_8O_4$ |



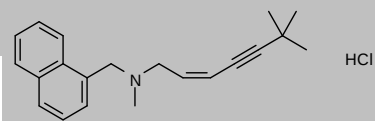
### Terbinafine Related Compound A (N-Methyl-C-(naphthalen-1-yl)methanamine Hydrochloride; Terbinafine Secondary Amine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                          |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM0696.02</a> | 100mg              | 65473-13-4                                   |
| USP      | 1424608                   | 25mg               | M.W. 207.6993<br>$C_{12}H_{13}N \cdot Cl\ H$ |



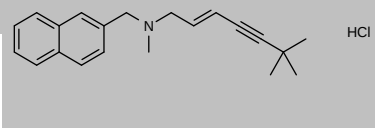
### Terbinafine Related Compound B ((2Z)-N,6,6-Trimethyl-N-(naphthalen-1-ylmethyl)hept-2-en-4-yn-1-amine Hydrochloride; cis-Terbinafine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                          |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM0696.03</a> | 100mg              | 176168-78-8                                  |
| USP      | 1643532                   | 25mg               | M.W. 327.8908<br>$C_{21}H_{25}N \cdot Cl\ H$ |



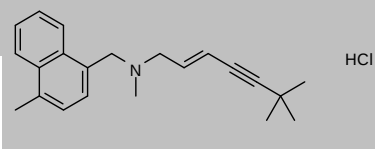
### Terbinafine Related Compound C ((2E)-N,6,6-Trimethyl-N-(naphthalen-2-ylmethyl)hept-2-en-4-yn-1-amine Hydrochloride; trans-Isoterbinafine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                          |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM0696.04</a> | 100mg              | 877265-30-0                                  |
| USP      | 1353215                   | 25mg               | M.W. 327.8908<br>$C_{21}H_{25}N \cdot Cl\ H$ |



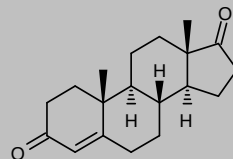
### Terbinafine Related Compound D ((2E)-N,6,6-Trimethyl-N-[(4-methylnaphthalen-1-yl)methyl]-hept-2-en-4-yn-1-amine Hydrochloride; 4-Methylterbinafine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                          |
|----------|---------------------------|--------------------|----------------------------------------------|
| LGC      | <a href="#">MM0696.05</a> | 100mg              | 877265-33-3                                  |
| USP      | 1437701                   | 25mg               | M.W. 341.9174<br>$C_{22}H_{27}N \cdot Cl\ H$ |



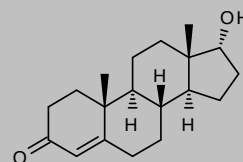
### Testosterone Related Compound A (Androst-4-ene-3,17-dione; Androstenedione)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0323.01</a> | 100mg              | 63-05-8                            |
| USP      | 1646010                   | 20mg               | M.W. 286.4085<br>$C_{19}H_{26}O_2$ |



### Testosterone Related Compound C (17α-Hydroxyandrost-4-en-3-one; Epitestosterone)

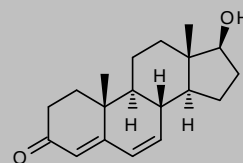
| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0323.03</a> | 100mg              | 481-30-1                           |
| USP      | 1646031                   | 15mg               | M.W. 288.4244<br>$C_{19}H_{28}O_2$ |



## LGC impurities according to USP declaration system

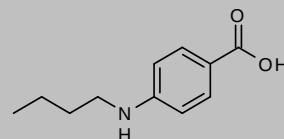
### Testosterone Related Compound I (17 $\beta$ -Hydroxyandrosta-4,6-dien-3-one; $\Delta^6$ -Testosterone)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0323.12</a> | 100mg              | 2484-30-2                                                       |
| USP      | 1646097                   | 15mg               | M.W. 286.4085<br>C <sub>19</sub> H <sub>26</sub> O <sub>2</sub> |



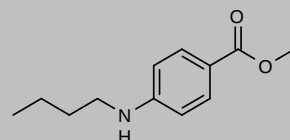
### Tetracaine Related Compound B (4-(Butylamino)benzoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0504.01</a> | 100mg              | 4740-24-3                                                         |
| USP      | 1650017                   | 25mg               | M.W. 193.2423<br>C <sub>11</sub> H <sub>15</sub> N O <sub>2</sub> |



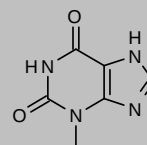
### Tetracaine Related Compound C (Methyl 4-(Butylamino)benzoate)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0504.04</a> | 100mg              | 71839-12-8                                                        |
| USP      | 1650028                   | 25mg               | M.W. 207.2689<br>C <sub>12</sub> H <sub>17</sub> N O <sub>2</sub> |



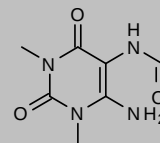
### Theophylline Related Compound B (3-Methyl-3,7-dihydro-1H-purine-2,6-dione; 3-Methylxanthine)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0176.03</a> | 100mg              | 1076-22-8                                                                    |
| USP      | 1653026                   | 25mg               | M.W. 166.1374<br>C <sub>6</sub> H <sub>6</sub> N <sub>4</sub> O <sub>2</sub> |



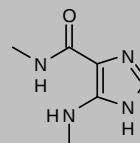
### Theophylline Related Compound C (N-(6-Amino-1,3-dimethyl-2,4-dioxo-1,2,3,4-tetrahydropyrimidin-5-yl)formamide)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0176.02</a> | 100mg              | 7597-60-6                                                                     |
| USP      | 1653037                   | 25mg               | M.W. 198.1793<br>C <sub>7</sub> H <sub>10</sub> N <sub>4</sub> O <sub>3</sub> |



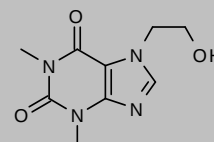
### Theophylline Related Compound D (N-Methyl-5-(methylamino)-1H-imidazole-4-carboxamide; Theophyllidine)

| Producer | Code                      | Quantity / Comment             | CAS                                                              |
|----------|---------------------------|--------------------------------|------------------------------------------------------------------|
| LGC      | <a href="#">MM0176.01</a> | 100mg                          | 6736-40-9                                                        |
| USP      | 1653048                   | 30mg, as hydrochloride hydrate | M.W. 154.1698<br>C <sub>6</sub> H <sub>10</sub> N <sub>4</sub> O |



### Theophylline Related Compound F (Etofylline)

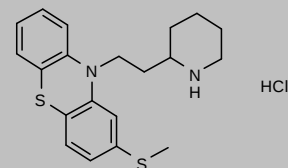
| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0603.00</a> | 500mg              | 519-37-9                                                                      |
| USP      | 1653060                   | 25mg               | M.W. 224.2166<br>C <sub>9</sub> H <sub>12</sub> N <sub>4</sub> O <sub>3</sub> |



## LGC impurities according to USP declaration system

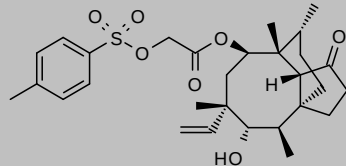
Thioridazine Related Compound F (2-(Methylsulfonyl)-10-[2-[(2RS)-piperidin-2-yl]ethyl]-10H-phenothiazine Hydrochloride; N-Desmethylthioridazine Hydrochloride; Northioridazine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                               |
|----------|---------------------------|--------------------|---------------------------------------------------|
| LGC      | <a href="#">MM0116.14</a> | 100mg              | 13002-81-8                                        |
| USP      | 1663063                   | 20mg               | M.W. 393.0089<br>$C_{20}H_{24}N_2S_2 \cdot Cl\ H$ |



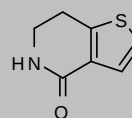
Tiamulin Related Compound A (Pleuromutilin 22-Tosylate)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0394.15</a> | 50mg               | 31716-01-5                            |
| USP      | 1667337                   | 50mg               | M.W. 532.6887<br>$C_{29}H_{40}O_7\ S$ |



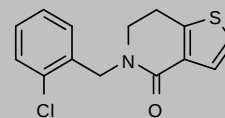
Ticlopidine Related Compound A (6,7-Dihydrothieno[3,2-c]-pyridin-4(5H)-one)

| Producer | Code                      | Quantity / Comment | CAS                            |
|----------|---------------------------|--------------------|--------------------------------|
| LGC      | <a href="#">MM0150.06</a> | 100mg              | 68559-60-4                     |
| USP      | 1667155                   | 20mg               | M.W. 153.2016<br>$C_7H_7NO\ S$ |



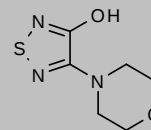
Ticlopidine Related Compound B (5-(2-Chlorobenzyl)-6,7-dihydrothieno[3,2-c]pyridin-4(5H)-one)

| Producer | Code                      | Quantity / Comment | CAS                                    |
|----------|---------------------------|--------------------|----------------------------------------|
| LGC      | <a href="#">MM0150.15</a> | 50mg               | 68559-55-7                             |
| USP      | 1667166                   | 20mg               | M.W. 277.7692<br>$C_{14}H_{12}ClNO\ S$ |



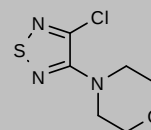
Timolol Related Compound D (4-(Morpholin-4-yl)-1,2,5-thiadiazol-3-ol)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0440.04</a> | 100mg              | 30165-97-0                         |
| USP      | 1667369                   | 20mg               | M.W. 187.2196<br>$C_6H_9N_3O_2\ S$ |



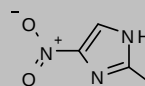
Timolol Related Compound F (4-(4-Chloro-1,2,5-thiadiazol-3-yl)morpholine)

| Producer | Code                      | Quantity / Comment | CAS                                |
|----------|---------------------------|--------------------|------------------------------------|
| LGC      | <a href="#">MM0440.10</a> | 100mg              | 30165-96-9                         |
| USP      | 1667348                   | 20mg               | M.W. 205.6652<br>$C_6H_8ClN_3O\ S$ |



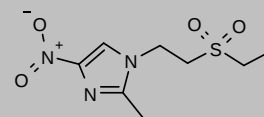
Tinidazole Related Compound A (2-Methyl-4-nitroimidazole)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0012.02</a> | 100mg              | 696-23-1                        |
| USP      | 1667530                   | 100mg              | M.W. 127.1014<br>$C_4H_5N_3O_2$ |



Tinidazole Related Compound B (1-[2-(Ethylsulfonyl)ethyl]-2-methyl-4-nitro-1H-imidazole)

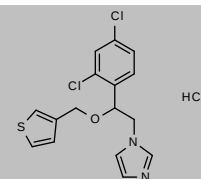
| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0151.02</a> | 100mg              | 25459-12-5                            |
| USP      | 1667541                   | 20mg               | M.W. 247.2715<br>$C_8H_{13}N_3O_4\ S$ |



## LGC impurities according to USP declaration system

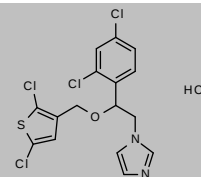
### Tioconazole Related Compound A (1-[(2RS)-2-(2,4-Dichlorophenyl)-2-[(thiophen-3-yl)methoxy]ethyl]-1H-imidazole Hydrochloride)

|          |                           |                    |                                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 61709-33-9                                                            |
| LGC      | <a href="#">MM1307.05</a> | 100mg              | M.W. 389.7271                                                             |
| USP      | 1667450                   | 25mg               | C <sub>16</sub> H <sub>14</sub> Cl <sub>2</sub> N <sub>2</sub> O S . Cl H |



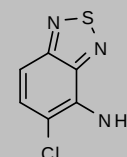
### Tioconazole Related Compound B (1-[(2RS)-2-(2,4-Dichlorophenyl)-2-[(2,5-dichlorothiophen-3-yl)methoxy]ethyl]-1H-imidazole Hydrochloride)

|          |                           |                    |                                                                           |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 61675-62-5                                                            |
| LGC      | <a href="#">MM1307.06</a> | 100mg              | M.W. 458.6172                                                             |
| USP      | 1667461                   | 25mg               | C <sub>16</sub> H <sub>12</sub> Cl <sub>4</sub> N <sub>2</sub> O S . Cl H |



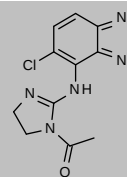
### Tizanidine Related Compound A (5-Chloro-2,1,3-benzothiadiazol-4-amine; 4-Amino-5-chloro-2,1,3-benzothiadiazole)

|          |                           |                    |                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 30536-19-7                                    |
| LGC      | <a href="#">MM0887.03</a> | 100mg              | M.W. 185.6341                                     |
| USP      | 1667916                   | 50mg               | C <sub>6</sub> H <sub>4</sub> Cl N <sub>3</sub> S |



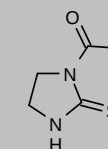
### Tizanidine Related Compound B (N-Acetyltizanidine)

|          |                           |                    |                                                       |
|----------|---------------------------|--------------------|-------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 173532-15-5                                       |
| LGC      | <a href="#">MM0887.04</a> | 50mg               | M.W. 295.748                                          |
| USP      | 1667924                   | 50mg               | C <sub>11</sub> H <sub>10</sub> Cl N <sub>5</sub> O S |



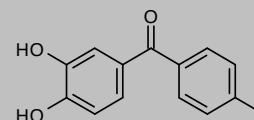
### Tizanidine Related Compound C (1-Acetylimidazolidine-2-thione)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 5391-52-6                                    |
| LGC      | <a href="#">MM0887.05</a> | 50mg               | M.W. 144.1948                                    |
| USP      | 1667938                   | 50mg               | C <sub>5</sub> H <sub>8</sub> N <sub>2</sub> O S |



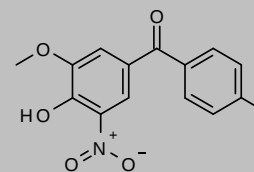
### Tolcapone Related Compound A (4'-Methyl-3,4-dihydroxybenzophenone)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 1391053-03-4                               |
| LGC      | <a href="#">MM3329.02</a> | 100mg              | M.W. 228.2433                                  |
| USP      | 1670218                   | 25mg               | C <sub>14</sub> H <sub>12</sub> O <sub>3</sub> |



### Tolcapone Related Compound B (4-Hydroxy-3-methoxy-4'-methyl-5-nitrobenzophenone)

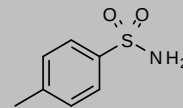
|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 134612-80-9                                  |
| LGC      | <a href="#">MM3329.01</a> | 100mg              | M.W. 287.2674                                    |
| USP      | 1670229                   | 25mg               | C <sub>15</sub> H <sub>13</sub> N O <sub>5</sub> |



## LGC impurities according to USP declaration system

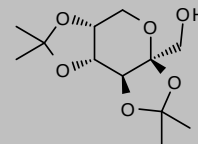
### p-Toluenesulfonamide (4-Methylbenzenesulphonamide)

|          |                           |                    |                                                  |
|----------|---------------------------|--------------------|--------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 70-55-3                                      |
| LGC      | <a href="#">MM0325.01</a> | 100mg              | M.W. 171.2169                                    |
| USP      | 1672020                   | 200mg              | C <sub>7</sub> H <sub>9</sub> N O <sub>2</sub> S |



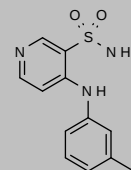
### Topiramate Related Compound A (2,3:4,5-Bis-O-(1-methylethylidene)-β-D-fructopyranose)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 20880-92-6                                 |
| LGC      | <a href="#">MM1348.01</a> | 100mg              | M.W. 260.2836                                  |
| USP      | 1672210                   | 25mg               | C <sub>12</sub> H <sub>20</sub> O <sub>6</sub> |



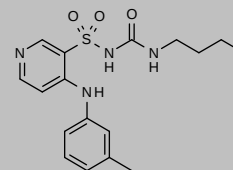
### Torsemide Related Compound A (4-[(3-Methylphenyl)amino]pyridine-3-sulfonamide)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 72811-73-5                                                  |
| LGC      | <a href="#">MM1283.02</a> | 100mg              | M.W. 263.3155                                                   |
| USP      | 1672315                   | 75mg               | C <sub>12</sub> H <sub>13</sub> N <sub>3</sub> O <sub>2</sub> S |



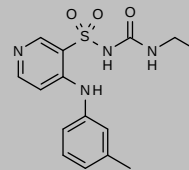
### Torsemide Related Compound B (1-Butyl-3-[[4-[(3-methylphenyl)amino]pyridin-3-yl]sulfonyl]urea)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 160972-33-8                                                 |
| LGC      | <a href="#">MM1283.04</a> | 50mg               | M.W. 362.4466                                                   |
| USP      | 1672326                   | 50mg               | C <sub>17</sub> H <sub>22</sub> N <sub>4</sub> O <sub>3</sub> S |



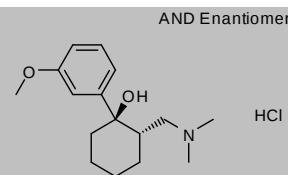
### Torsemide Related Compound C (1-Ethyl-3-[[4-[(3-methylphenyl)amino]pyridin-3-yl]sulfonyl]urea)

|          |                           |                    |                                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 58155-35-4                                                  |
| LGC      | <a href="#">MM1283.03</a> | 50mg               | M.W. 334.3934                                                   |
| USP      | 1672337                   | 30mg               | C <sub>15</sub> H <sub>18</sub> N <sub>4</sub> O <sub>3</sub> S |



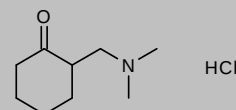
### Tramadol Related Compound A ((1RS,2SR)-2-[(Dimethylamino)methyl]-1-(3-methoxyphenyl)cyclohexanol Hydrochloride)

|          |                           |                    |                                                         |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 73806-49-2                                          |
| LGC      | <a href="#">MM0007.01</a> | 100mg              | M.W. 299.8361                                           |
| USP      | 1672610                   | 25mg               | C <sub>16</sub> H <sub>25</sub> N O <sub>2</sub> · Cl H |



### Tramadol Related Compound B ((2RS)-2-[(Dimethylamino)methyl]cyclohexanone Hydrochloride)

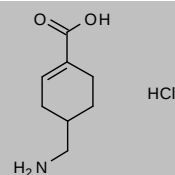
|          |                           |                    |                                           |
|----------|---------------------------|--------------------|-------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 42036-65-7                            |
| LGC      | <a href="#">MM0007.02</a> | 100mg              | M.W. 191.6983                             |
| USP      | 1672621                   | 25mg               | C <sub>9</sub> H <sub>17</sub> N O · Cl H |



## LGC impurities according to USP declaration system

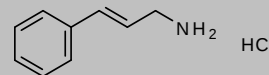
### Tranexamic Acid Related Compound C ((RS)-4-(Aminomethyl)cyclohex-1-enecarboxylic Acid Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                        |
|----------|---------------------------|--------------------|--------------------------------------------|
| LGC      | <a href="#">MM0330.05</a> | 100mg              | 1803601-44-6                               |
| USP      | 1672756                   | 15mg, as free base | M.W. 191.6553<br>$C_8H_{13}NO_2 \cdot ClH$ |



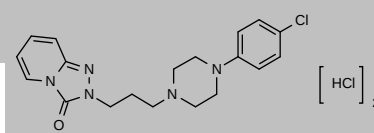
### Tranlylcypromine Related Compound B (trans-3-Phenylallylamine Hydrochloride; Cinnamylamine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                     |
|----------|---------------------------|--------------------|-----------------------------------------|
| LGC      | <a href="#">MM1687.01</a> | 100mg              | 5586-89-0                               |
| USP      | 1672927                   | 40mg               | M.W. 169.6513<br>$C_9H_{11}N \cdot ClH$ |



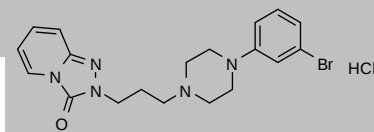
### Trazodone Related Compound C (2-[3-[4-(4-Chlorophenyl)piperazin-1-yl]propyl]-1,2,4-triazolo[4,3-a]pyridin-3(2H)-one Dihydrochloride)

| Producer | Code                      | Quantity / Comment         | CAS                                              |
|----------|---------------------------|----------------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0421.03</a> | request                    | n/a                                              |
| USP      | 1673533                   | 20mg, as monohydrochloride | M.W. 444.7858<br>$C_{19}H_{22}ClN_5O \cdot 2ClH$ |



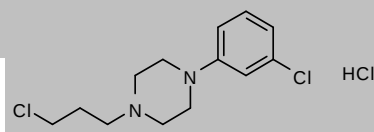
### Trazodone Related Compound D (2-3-[4-(3-Bromophenyl)piperazin-1-yl]propyl-1,2,4-triazolo[4,3-a]-pyridin-3(2H)-one Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                             |
|----------|---------------------------|--------------------|-------------------------------------------------|
| LGC      | <a href="#">MM0421.04</a> | 50mg               | 1263278-80-3                                    |
| USP      | 1673544                   | 20mg               | M.W. 452.7758<br>$C_{19}H_{22}BrN_5O \cdot ClH$ |



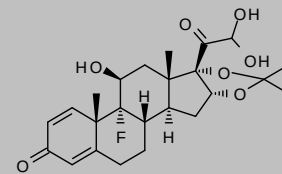
### Trazodone Related Compound F (1-(3-Chloropropyl)-4-(3-chlorophenyl)piperazine Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0421.06</a> | 100mg              | 52605-52-4                                       |
| USP      | 1673566                   | 25mg               | M.W. 309.6624<br>$C_{13}H_{18}Cl_2N_2 \cdot ClH$ |



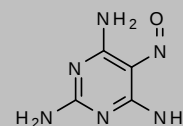
### Triamcinolone Acetonide Related Compound C (9-Fluoro-11β,21,21-trihydroxy-16α,17-(1-methylethylidenedioxy)pregna-1,4-diene-3,20-dione; Triamcinolone Acetonide 21-Aldehyde Hydrate)

| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM0198.05</a> | 100mg              | 161740-69-8                         |
| USP      | 1679037                   | 15mg               | M.W. 450.4971<br>$C_{24}H_{31}FO_7$ |



### Triamterene Related Compound A (5-Nitrosopyrimidine-2,4,6-triamine; Nitrosotriaminopyrimidine)

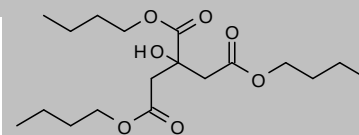
| Producer | Code                      | Quantity / Comment | CAS                         |
|----------|---------------------------|--------------------|-----------------------------|
| LGC      | <a href="#">MM0269.02</a> | 100mg              | 1006-23-1                   |
| USP      | 1680018                   | 50mg               | M.W. 154.13<br>$C_4H_6N_6O$ |



## LGC impurities according to USP declaration system

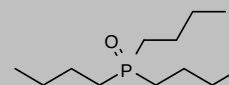
### Tributyl Citrate (Tributyl 2-Hydroxypropane-1,2,3-tricarboxylate)

| Producer | Code                      | Quantity / Comment | CAS                                                             |
|----------|---------------------------|--------------------|-----------------------------------------------------------------|
| LGC      | <a href="#">MM0499.01</a> | 100mg              | 77-94-1                                                         |
| USP      | 1680608                   | 500mg              | M.W. 360.4425<br>C <sub>18</sub> H <sub>32</sub> O <sub>7</sub> |



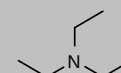
### Tributyl Phosphine Oxide (Tributylphosphane Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------|
| LGC      | <a href="#">MM1239.03</a> | 100mg              | 814-29-9                                             |
| USP      | 1680685                   | 25mg               | M.W. 218.3159<br>C <sub>12</sub> H <sub>27</sub> O P |



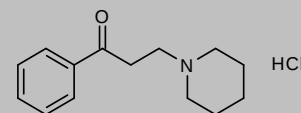
### Triethylamine

| Producer | Code                      | Quantity / Comment     | CAS                                             |
|----------|---------------------------|------------------------|-------------------------------------------------|
| LGC      | <a href="#">MM0477.07</a> | 100mg                  | 121-44-8                                        |
| USP      | 1683559                   | 2 mL/ampule; 4 ampules | M.W. 101.19<br>C <sub>6</sub> H <sub>15</sub> N |



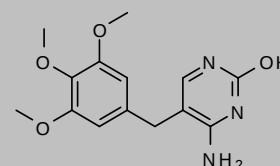
### Trihexyphenidyl Related Compound A (1-Phenyl-3-(piperidin-1-yl)propan-1-one Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                         |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| LGC      | <a href="#">MM0237.03</a> | 100mg              | 886-06-6                                                    |
| USP      | 1687017                   | 20mg               | M.W. 253.7677<br>C <sub>14</sub> H <sub>19</sub> N O . Cl H |



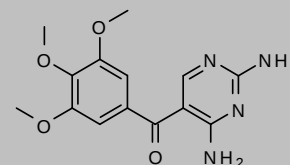
### Trimethoprim Related Compound A (4-Amino-5-(3,4,5-trimethoxybenzyl)pyrimidin-2-ol)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0093.03</a> | 100mg              | 60729-91-1                                                                     |
| USP      | 1692516                   | 25mg               | M.W. 291.3025<br>C <sub>14</sub> H <sub>17</sub> N <sub>3</sub> O <sub>4</sub> |



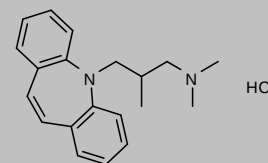
### Trimethoprim Related Compound B ((2,4-Diaminopyrimidin-5-yl)-(3,4,5-trimethoxyphenyl) methanone)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0093.01</a> | 100mg              | 30806-86-1                                                                     |
| USP      | 1692527                   | 25mg               | M.W. 304.3012<br>C <sub>14</sub> H <sub>16</sub> N <sub>4</sub> O <sub>4</sub> |



### Trimipramine Related Compound A ((2RS)-3-(5H-Dibenzo[b,f]azepin-5-yl)-N,N,2-trimethylpropan-1-amine Hydrochloride)

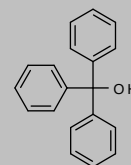
| Producer | Code                      | Quantity / Comment | CAS                                                                    |
|----------|---------------------------|--------------------|------------------------------------------------------------------------|
| LGC      | <a href="#">MM0240.05</a> | 50mg               | 1159-80-4                                                              |
| USP      | 1692710                   | 25mg, as free base | M.W. 328.8789<br>C <sub>20</sub> H <sub>24</sub> N <sub>2</sub> . Cl H |



## LGC impurities according to USP declaration system

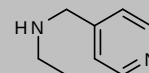
### Triphenylmethanol

|          |                           |                    |                                   |
|----------|---------------------------|--------------------|-----------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 76-84-6                       |
| LGC      | <a href="#">MM0173.04</a> | 100mg              | M.W. 260.3297                     |
| USP      | 1695343                   | 50mg               | C <sub>19</sub> H <sub>16</sub> O |



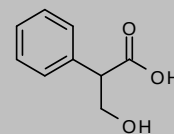
### Tropicamide Related Compound A (N-(Pyridin-4-ylmethyl)ethanamine)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 33403-97-3                                |
| LGC      | <a href="#">MM0601.01</a> | 100mg              | M.W. 136.1943                                 |
| USP      | 1699016                   | 100mg              | C <sub>8</sub> H <sub>12</sub> N <sub>2</sub> |



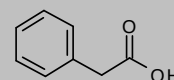
### Tropicamide Related Compound C ((2R)-3-Hydroxy-2-phenylpropanoic Acid; Tropic Acid)

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 552-63-6                                  |
| LGC      | <a href="#">MM0601.03</a> | 100mg              | M.W. 166.1739                                 |
| USP      | 1699038                   | 25mg               | C <sub>9</sub> H <sub>10</sub> O <sub>3</sub> |



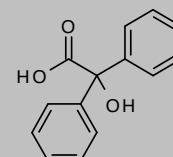
### Tropicamide Related Compound D (Phenylacetic Acid)

|          |                           |                    |                                              |
|----------|---------------------------|--------------------|----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 103-82-2                                 |
| LGC      | <a href="#">MM0160.03</a> | 100mg              | M.W. 136.1479                                |
| USP      | 1699049                   | 15mg               | C <sub>8</sub> H <sub>8</sub> O <sub>2</sub> |



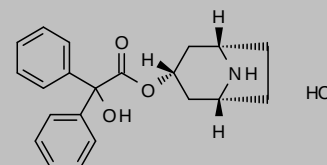
### Tropium Chloride Related Compound A (Benzilic Acid)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 76-93-7                                    |
| LGC      | <a href="#">MM0783.09</a> | 100mg              | M.W. 228.2433                                  |
| USP      | 1699311                   | 20mg               | C <sub>14</sub> H <sub>12</sub> O <sub>3</sub> |



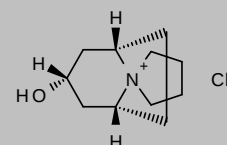
### Tropium Chloride Related Compound B ((1R,3r,5S)-8-Azabicyclo[3.2.1]oct-3-yl Hydroxydiphenylacetate Hydrochloride)

|          |                           |                    |                                                         |
|----------|---------------------------|--------------------|---------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 63516-30-3                                          |
| LGC      | <a href="#">MM1266.04</a> | 100mg              | M.W. 373.8732                                           |
| USP      | 1699322                   | 20mg               | C <sub>21</sub> H <sub>23</sub> N O <sub>3</sub> · Cl H |



### Tropium Chloride Related Compound C ((1R,3r,5S)-3-Hydroxyspiro[8-azoniabicyclo[3.2.1]octane-8,1'-pyrrolidinium] Chloride)

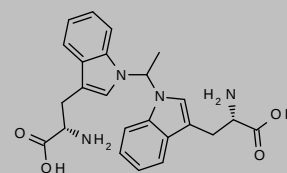
|          |                           |                    |                                          |
|----------|---------------------------|--------------------|------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 3464-71-9                            |
| LGC      | <a href="#">MM1266.03</a> | 100mg              | M.W. 217.7356                            |
| USP      | 1699333                   | 20mg               | C <sub>11</sub> H <sub>20</sub> N O · Cl |



## LGC impurities according to USP declaration system

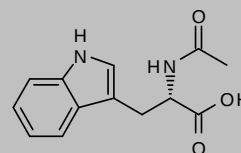
### Tryptophan Related Compound A (3,3'-[Ethylidenebis(1H-indole-1,3-diyl)]bis[(2S)-2-aminopropanoic] Acid; 1,1'-Ethylidenebistryptophan)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0172.09</a> | 100mg              | 132685-02-0                                                                    |
| USP      | 1700512                   | 15mg               | M.W. 434.4876<br>C <sub>24</sub> H <sub>26</sub> N <sub>4</sub> O <sub>4</sub> |



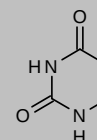
### Tryptophan Related Compound B (N-Acetyltryptophan)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0172.13</a> | 100mg              | 1218-34-4                                                                      |
| USP      | 1700523                   | 25mg               | M.W. 246.2619<br>C <sub>13</sub> H <sub>14</sub> N <sub>2</sub> O <sub>3</sub> |



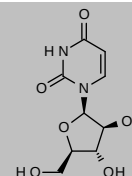
### Uracil (Pyrimidine-2,4(1H,3H)-dione)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0593.03</a> | 100mg              | 66-22-8                                                                      |
| USP      | 1705753                   | 15mg               | M.W. 112.0868<br>C <sub>4</sub> H <sub>4</sub> N <sub>2</sub> O <sub>2</sub> |



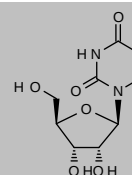
### Uracil Arabinoside (1-β-D-Arabinofuranosylpyrimidine-2,4(1H,3H)-dione)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1117.03</a> | 100mg              | 3083-77-0                                                                     |
| USP      | 1705800                   | 50mg               | M.W. 244.2014<br>C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>6</sub> |



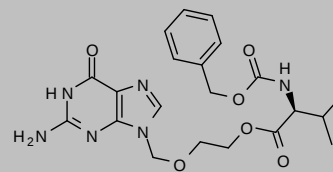
### Uridine (1-β-D-Ribofuranosylpyrimidine-2,4(1H,3H)-dione)

| Producer | Code                      | Quantity / Comment | CAS                                                                           |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0784.02</a> | 100mg              | 58-96-8                                                                       |
| USP      | 1707114                   | 30mg               | M.W. 244.2014<br>C <sub>9</sub> H <sub>12</sub> N <sub>2</sub> O <sub>6</sub> |



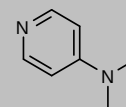
### Valacyclovir Related Compound E (2-[(2-Amino-6-oxo-1,6-dihydro-9H-purin-9-yl)methoxy]ethyl N-[(benzyloxy)carbonyl]-L-valinate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0619.05</a> | 100mg              | 124832-31-1                                                                    |
| USP      | 1707872                   | 25mg               | M.W. 458.4677<br>C <sub>21</sub> H <sub>26</sub> N <sub>6</sub> O <sub>6</sub> |



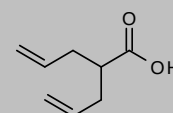
### Valacyclovir Related Compound G (N,N-Dimethylpyridin-4-amine)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0619.07</a> | 100mg              | 1122-58-3                                                      |
| USP      | 1707894                   | 50mg               | M.W. 122.1677<br>C <sub>7</sub> H <sub>10</sub> N <sub>2</sub> |



### Valproic Acid Related Compound A (Diallylacetic Acid)

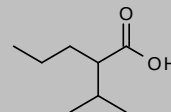
| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0751.17</a> | 100mg              | 99-67-2                                                        |
| USP      | 1708729                   | 0.25ml             | M.W. 140.1797<br>C <sub>8</sub> H <sub>12</sub> O <sub>2</sub> |



## LGC impurities according to USP declaration system

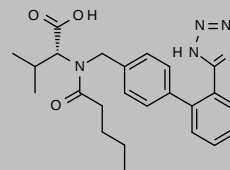
### Valproic Acid Related Compound B ((2R)-2-(1-Methylethyl)pentanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                            |
|----------|---------------------------|--------------------|----------------------------------------------------------------|
| LGC      | <a href="#">MM0751.03</a> | 100mg              | 62391-99-5                                                     |
| USP      | 1708718                   | 50mg               | M.W. 144.2114<br>C <sub>8</sub> H <sub>16</sub> O <sub>2</sub> |



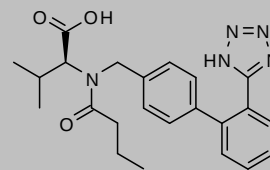
### Valsartan Related Compound A ((2R)-3-Methyl-2-[pentanoyl[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]amino]butanoic Acid; Valsartan (R)-Enantiomer)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0487.02</a> | 50mg               | 137862-87-4                                                                    |
| USP      | 1708773                   | 10mg               | M.W. 435.5188<br>C <sub>24</sub> H <sub>29</sub> N <sub>5</sub> O <sub>3</sub> |



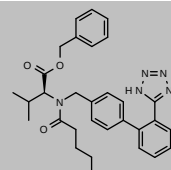
### Valsartan Related Compound B ((2S)-2-[Butanoyl[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]amino]-3-methylbutanoic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0487.04</a> | 50mg               | 952652-79-8                                                                    |
| USP      | 1708784                   | 10mg               | M.W. 421.4922<br>C <sub>23</sub> H <sub>27</sub> N <sub>5</sub> O <sub>3</sub> |



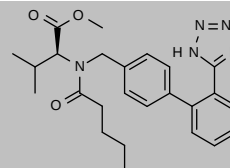
### Valsartan Related Compound C (Benzyl (2S)-3-Methyl-2-[pentanoyl[[2'-(1H-tetrazol-5-yl)biphenyl-4-yl]methyl]amino]butanoate)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0487.03</a> | 50mg               | 137863-20-8                                                                    |
| USP      | 1708795                   | 10mg               | M.W. 525.6413<br>C <sub>31</sub> H <sub>35</sub> N <sub>5</sub> O <sub>3</sub> |



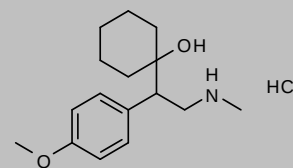
### Valsartan Related Compound E (Valsartan Methyl Ester)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0487.01</a> | 50mg               | 137863-17-3                                                                    |
| USP      | 1708810                   | 15mg               | M.W. 449.5453<br>C <sub>25</sub> H <sub>31</sub> N <sub>5</sub> O <sub>3</sub> |



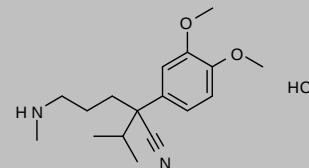
### Venlafaxine Related Compound A (1-[(1R)-1-(4-Methoxyphenyl)-2-(methylamino)ethyl]cyclohexanol Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                      |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------|
| LGC      | <a href="#">MM0393.04</a> | 100mg              | 93413-90-2                                                               |
| USP      | 1711279                   | 10mg               | M.W. 299.8361<br>C <sub>16</sub> H <sub>25</sub> N O <sub>2</sub> · Cl H |



### Verapamil Related Compound A ((2R)-2-(3,4-Dimethoxyphenyl)-5-(methylamino)-2-(1-methylethyl)pentanenitrile Hydrochloride)

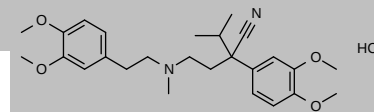
| Producer | Code                      | Quantity / Comment | CAS                                                                                   |
|----------|---------------------------|--------------------|---------------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0022.10</a> | 100mg              | 67775-97-7                                                                            |
| USP      | 1711304                   | 50mg               | M.W. 326.8615<br>C <sub>17</sub> H <sub>26</sub> N <sub>2</sub> O <sub>2</sub> · Cl H |



## LGC impurities according to USP declaration system

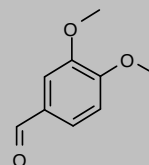
### Verapamil Related Compound B ((2RS)-2-(3,4-Dimethoxyphenyl)-2-[2-[[2-(3,4-dimethoxy-phenyl)ethyl](methyl)amino]ethyl]-3-methyl-butanenitrile Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                              |
|----------|---------------------------|--------------------|--------------------------------------------------|
| LGC      | <a href="#">MM0022.12</a> | 50mg               | 1794-55-4                                        |
| USP      | 1711406                   | 50mg               | M.W. 477.036<br>$C_{26}H_{36}N_2O_4 \cdot Cl\ H$ |



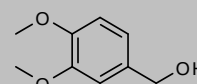
### Verapamil Related Compound E (3,4-Dimethoxybenzaldehyde)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0022.04</a> | 100mg              | 120-14-9                        |
| USP      | 1711439                   | 50mg               | M.W. 166.1739<br>$C_9H_{10}O_3$ |



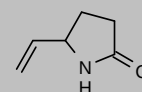
### Verapamil Related Compound F ((3,4-Dimethoxyphenyl)methanol)

| Producer | Code                      | Quantity / Comment | CAS                             |
|----------|---------------------------|--------------------|---------------------------------|
| LGC      | <a href="#">MM0022.05</a> | 100mg              | 93-03-8                         |
| USP      | 1711440                   | 150mg              | M.W. 168.1898<br>$C_9H_{12}O_3$ |



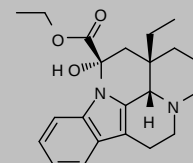
### Vigabatrin Related Compound A ((5RS)-5-Ethenylpyrrolidin-2-one)

| Producer | Code                      | Quantity / Comment | CAS                         |
|----------|---------------------------|--------------------|-----------------------------|
| LGC      | <a href="#">MM1621.01</a> | 100mg              | 7529-16-0                   |
| USP      | 1712012                   | 50mg               | M.W. 111.1418<br>$C_6H_9NO$ |



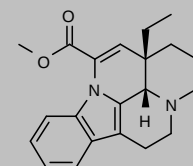
### Vinpocetine Related Compound A (Ethyl (12S,13aS,13bS)-13a-Ethyl-12-hydroxy-2,3,5,6,12,13,13a,13b-octahydro-1H-indolo[3,2,1-de]pyrido[3,2,1-ij][1,5]naphthyridine-12-carboxylate; Ethyl Vincamine)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0406.02</a> | 100mg              | 40163-56-2                            |
| USP      | 1714619                   | 30mg               | M.W. 368.4693<br>$C_{22}H_{28}N_2O_3$ |



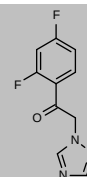
### Vinpocetine Related Compound B (Methyl (13aS,13bS)-13a-Ethyl-2,3,5,6,13a,13b-hexahydro-1H-indolo[3,2,1-de]pyrido[3,2,1-ij][1,5]naphthyridine-12-carboxylate; Apovincamine)

| Producer | Code                      | Quantity / Comment | CAS                                   |
|----------|---------------------------|--------------------|---------------------------------------|
| LGC      | <a href="#">MM0406.01</a> | 100mg              | 4880-92-6                             |
| USP      | 1714620                   | 30mg               | M.W. 336.4275<br>$C_{21}H_{24}N_2O_2$ |



### Voriconazole Related Compound C (1-(2,4-Difluorophenyl)-2-(1H-1,2,4-triazol-1-yl)ethanone)

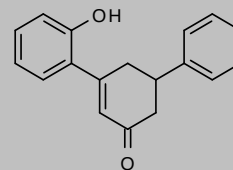
| Producer | Code                      | Quantity / Comment | CAS                                 |
|----------|---------------------------|--------------------|-------------------------------------|
| LGC      | <a href="#">MM1094.04</a> | 100mg              | 86404-63-9                          |
| USP      | 1718039                   | 10mg               | M.W. 223.1789<br>$C_{10}H_7F_2N_3O$ |



## LGC impurities according to USP declaration system

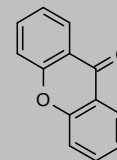
### Warfarin Related Compound A ((5RS)-3-(2-Hydroxyphenyl)-5-phenylcyclohex-2-enone)

|          |                           |                    |                                                |
|----------|---------------------------|--------------------|------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 15156-56-6                                 |
| LGC      | <a href="#">MM0732.01</a> | 100mg              | M.W. 264.3184                                  |
| USP      | 1719102                   | 50mg               | C <sub>18</sub> H <sub>16</sub> O <sub>2</sub> |



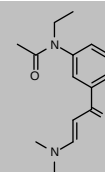
### Xanthone

|          |                           |                    |                                               |
|----------|---------------------------|--------------------|-----------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 90-47-1                                   |
| LGC      | <a href="#">MM1450.02</a> | 100mg              | M.W. 196.2014                                 |
| USP      | 1720203                   | 100mg              | C <sub>13</sub> H <sub>8</sub> O <sub>2</sub> |



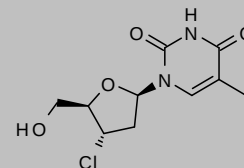
### Zaleplon Related Compound A (N-[3-[3-(Dimethylamino)-1-oxo-2-propenyl]phenyl]-N-ethylacetamide)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 96605-66-2                                                |
| LGC      | <a href="#">MM1322.02</a> | 100mg              | M.W. 260.3315                                                 |
| USP      | 1724361                   | 15mg               | C <sub>15</sub> H <sub>20</sub> N <sub>2</sub> O <sub>2</sub> |



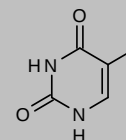
### Zidovudine Related Compound B (1-(3-Chloro-2,3-dideoxy-β-D-erythro-pentofuranosyl)-5-methylpyrimidine-2,4(1H,3H)-dione)

|          |                           |                    |                                                                  |
|----------|---------------------------|--------------------|------------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 25526-94-7                                                   |
| LGC      | <a href="#">MM0173.02</a> | 100mg              | M.W. 260.6742                                                    |
| USP      | 1724521                   | 25mg               | C <sub>10</sub> H <sub>13</sub> Cl N <sub>2</sub> O <sub>4</sub> |



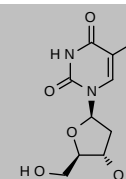
### Zidovudine Related Compound C (5-Methylpyrimidine-2,4(1H,3H)-dione; Thymine)

|          |                           |                    |                                                             |
|----------|---------------------------|--------------------|-------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 65-71-4                                                 |
| LGC      | <a href="#">MM0534.01</a> | 100mg              | M.W. 126.1133                                               |
| USP      | 1724532                   | 100mg              | C <sub>5</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub> |



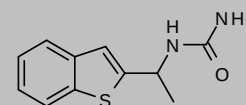
### Zidovudine Related Compound D (1-(2-Deoxy-β-D-erythro-pentofuranosyl)-5-methylpyrimidine-2,4(1H,3H)-dione; Thymidine)

|          |                           |                    |                                                               |
|----------|---------------------------|--------------------|---------------------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 50-89-5                                                   |
| LGC      | <a href="#">MM0534.03</a> | 100mg              | M.W. 242.2286                                                 |
| USP      | 1724543                   | 50mg               | C <sub>10</sub> H <sub>14</sub> N <sub>2</sub> O <sub>5</sub> |



### Zileuton Related Compound A (N-(1-Benzo-[b]thien-2-ylethyl)urea)

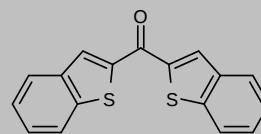
|          |                           |                    |                                                    |
|----------|---------------------------|--------------------|----------------------------------------------------|
| Producer | Code                      | Quantity / Comment | CAS 171370-49-3                                    |
| LGC      | <a href="#">MM1297.01</a> | 50mg               | M.W. 220.2908                                      |
| USP      | 1724667                   | 50mg               | C <sub>11</sub> H <sub>12</sub> N <sub>2</sub> O S |



## LGC impurities according to USP declaration system

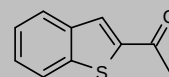
### Zileuton Related Compound B (2-(Benzo[b]thien-2-yl)benzo[b]thiophene)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM1297.02</a> | 50mg               | 97978-07-9                                                        |
| USP      | 1724678                   | 50mg               | M.W. 294.3907<br>C <sub>17</sub> H <sub>10</sub> O S <sub>2</sub> |



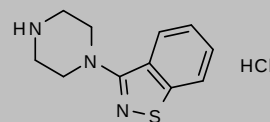
### Zileuton Related Compound C (1-Benzo-[b]thien-2-ylethanone)

| Producer | Code                      | Quantity / Comment | CAS                                                 |
|----------|---------------------------|--------------------|-----------------------------------------------------|
| LGC      | <a href="#">MM1297.03</a> | 100mg              | 22720-75-8                                          |
| USP      | 1724689                   | 50mg               | M.W. 176.2349<br>C <sub>10</sub> H <sub>8</sub> O S |



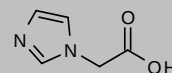
### Ziprasidone Related Compound A (3-Piperazin-1-yl-1,2-benzisothiazole Hydrochloride)

| Producer | Code                      | Quantity / Comment | CAS                                                                     |
|----------|---------------------------|--------------------|-------------------------------------------------------------------------|
| LGC      | <a href="#">MM1273.06</a> | 100mg              | 87691-88-1                                                              |
| USP      | 1724419                   | 10mg               | M.W. 255.767<br>C <sub>11</sub> H <sub>13</sub> N <sub>3</sub> S . Cl H |



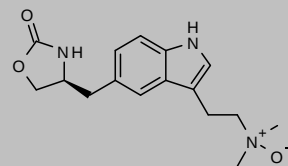
### Zoledronic Acid Related Compound A (2-(1H-Imidazol-1-yl)acetic Acid)

| Producer | Code                      | Quantity / Comment | CAS                                                                          |
|----------|---------------------------|--------------------|------------------------------------------------------------------------------|
| LGC      | <a href="#">MM1453.01</a> | 100mg              | 22884-10-2                                                                   |
| USP      | 1724838                   | 30mg               | M.W. 126.1133<br>C <sub>5</sub> H <sub>6</sub> N <sub>2</sub> O <sub>2</sub> |



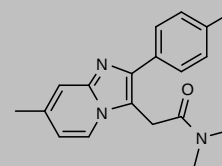
### Zolmitriptan Related Compound E (Zolmitriptan N-Oxide)

| Producer | Code                      | Quantity / Comment | CAS                                                                            |
|----------|---------------------------|--------------------|--------------------------------------------------------------------------------|
| LGC      | <a href="#">MM0298.05</a> | 100mg              | 251451-30-6                                                                    |
| USP      | 1727064                   | 25mg               | M.W. 303.3562<br>C <sub>16</sub> H <sub>21</sub> N <sub>3</sub> O <sub>3</sub> |



### Zolpidem Related Compound A (N,N-Dimethyl-2-[7-methyl-2-(4-methylphenyl)imidazo[1,2-a]pyridin-3-yl]acetamide)

| Producer | Code                      | Quantity / Comment | CAS                                                               |
|----------|---------------------------|--------------------|-------------------------------------------------------------------|
| LGC      | <a href="#">MM0333.01</a> | 100mg              | n/a                                                               |
| USP      | 1724918                   | 15mg               | M.W. 307.3895<br>C <sub>19</sub> H <sub>21</sub> N <sub>3</sub> O |



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