

APPENDIX A

Chronic Rhinosinusitis and Mucins: Search Strategies

All searches were conducted on either August 8 or August 9, 2017. Searches were customized for each database to include appropriate keywords and controlled vocabulary terms related to the concepts of mucins and chronic rhinosinusitis. Conference proceedings listed in Web of Science, Embase, and Scopus were searched, as were the trial registries CENTRAL and ClinicalTrials.gov in order to retrieve otherwise unpublished data, though ultimately it was felt that none of these provided enough data for meaningful extraction. Reference lists of relevant systematic review articles on our topic were also searched.

PubMed

Search	Query	Items found
#30	Search (((("Chronic Disease"[Mesh]) OR chronic*[Text Word]) OR persist*[Text Word])) AND (((((((("Sinusitis"[Mesh]) OR "Rhinitis"[Mesh]) OR sinusitis[Text Word]) OR rhinosinusitis[Text Word]) OR rhino-sinusitis[Text Word]) OR nasosinusitis[Text Word]) OR naso-sinusitis[Text Word]) OR ethmoiditis[Text Word]) OR pansinusitis[Text Word]) OR pansinusitis[Text Word]) OR sphenoiditis[Text Word])) AND (("Mucins"[Mesh]) OR mucin*[text]) OR "mucus glycoprotein*" [text])	204
#29	Search (("Mucins"[Mesh]) OR mucin*[text]) OR "mucus glycoprotein*" [text]	52133
#28	Search "mucus glycoprotein*" [text] Sort by: PublicationDate	327
#27	Search mucin*[text] Sort by: PublicationDate	47615
#26	Search "Mucins"[Mesh] Sort by: PublicationDate	23092
#24	Search (((("Chronic Disease"[Mesh]) OR chronic*[Text Word]) OR persist*[Text Word])) AND (((((((("Sinusitis"[Mesh]) OR "Rhinitis"[Mesh]) OR sinusitis[Text Word]) OR rhinosinusitis[Text Word]) OR rhino-sinusitis[Text Word]) OR nasosinusitis[Text Word]) OR naso-sinusitis[Text Word]) OR ethmoiditis[Text Word]) OR pansinusitis[Text Word]) OR pansinusitis[Text Word]) OR sphenoiditis[Text Word])	14603
#23	Search (((((((("Sinusitis"[Mesh]) OR "Rhinitis"[Mesh]) OR sinusitis[Text Word]) OR rhinosinusitis[Text Word]) OR rhino-sinusitis[Text Word]) OR nasosinusitis[Text Word]) OR naso-sinusitis[Text Word]) OR ethmoiditis[Text Word]) OR pansinusitis[Text Word]) OR pansinusitis[Text Word]) OR sphenoiditis[Text Word]	50594
#22	Search sphenoiditis[Text Word]	97

#21	Search pan-sinusitis[Text Word]	22
#20	Search pansinusitis[Text Word]	295
#19	Search ethmoiditis[Text Word]	177
#18	Search naso-sinusitis[Text Word]	7
#17	Search nasosinusitis[Text Word]	33
#16	Search rhino-sinusitis[Text Word]	139
#15	Search rhinosinusitis[Text Word]	6782
#14	Search sinusitis[Text Word]	23862
#13	Search (("Chronic Disease"[Mesh]) OR chronic*[Text Word]) OR persist*[Text Word]	154031 6
#12	Search persist*[Text Word]	403060
#11	Search chronic*[Text Word]	119056 0
#10	Search "Chronic Disease"[Mesh] Sort by: PublicationDate	242357
#7	Search "Paranasal Sinus Diseases"[Mesh:NoExp] Sort by: PublicationDate	4970
#5	Search "Rhinitis"[Mesh] Sort by: PublicationDate	30650
#3	Search "Sinusitis"[Mesh] Sort by: PublicationDate	18518

Ovid MEDLINE*

#	Searches	Results
16	11 and 15	205
15	12 or 13 or 14	48031
14	(mucus adj2 glycoprotein*).tw.	620
13	mucin*.tw.	35456
12	exp Mucins/	24043
11	9 or 10	12501
10	((chronic* or persist*) adj3 (sinusitis or rhinosinusitis or nasosinusitis or ethmoiditis or pansinusitis or sphenoiditis or rhino-sinusitis or naso-sinusitis or pan-sinusitis)).tw.	8798

9	7 and 8	10380
8	1 or 2 or 3	30228
7	4 or 5 or 6	1458455
6	persist*.tw.	406309
5	chronic*.tw.	1039605
4	Chronic Disease/	250175
3	"Paranasal Sinus Diseases"/	5172
2	Rhinitis/	11416
1	exp Sinusitis/	19410

*10 references within OvidMEDLINE were exact duplicates and were eliminated before export

Cochrane Library (including CENTRAL)

ID	Search	Hits
#1	MeSH descriptor: [Sinusitis] explode all trees	881
#2	MeSH descriptor: [Rhinitis] explode all trees	3485
#3	MeSH descriptor: [Paranasal Sinus Diseases] explode all trees	954
#4	(sinusitis or rhinosinusitis or nasosinusitis or ethmoiditis or pansinusitis or sphenoiditis or rhinosinusitis or naso-sinusitis):ti,ab,kw	2657
#5	#1 or #2 or #3 or #4	5787
#6	MeSH descriptor: [Chronic Disease] explode all trees	12455
#7	(chronic* or persist*):ti,ab,kw	109266
#8	#6 or #7	109266
#9	#5 near/3 #8	955
#10	MeSH descriptor: [Mucins] explode all trees	258
#11	mucin*:ti,ab,kw	652
#12	mucus near/2 glycoprotein*	10

#13	#10 or #11 or #12	785
#14	#9 and #13	1

Embase

No.	Query	Results
#5	((('sinusitis'/exp OR 'rhinitis'/exp OR sinusitis:ti,ab,kw OR rhinosinusitis:ti,ab,kw OR nasosinusitis:ti,ab,kw OR ethmoiditis:ti,ab,kw OR pansinusitis:ti,ab,kw OR sphenoiditis:ti,ab,kw OR 'rhino sinusitis':ti,ab,kw OR 'naso sinusitis':ti,ab,kw OR 'pan sinusitis':ti,ab,kw) AND ('chronic disease'/exp OR chronic*:ti,ab,kw OR persist*:ti,ab,kw)) AND ('mucin'/exp OR mucin*:ti,ab,kw OR ((mucus NEAR/2 glycoprotein*):ti,ab,kw))	290
#4	'mucin'/exp OR mucin*:ti,ab,kw OR ((mucus NEAR/2 glycoprotein*):ti,ab,kw)	51843
#3	('sinusitis'/exp OR 'rhinitis'/exp OR sinusitis:ti,ab,kw OR rhinosinusitis:ti,ab,kw OR nasosinusitis:ti,ab,kw OR ethmoiditis:ti,ab,kw OR pansinusitis:ti,ab,kw OR sphenoiditis:ti,ab,kw OR 'rhino sinusitis':ti,ab,kw OR 'naso sinusitis':ti,ab,kw OR 'pan sinusitis':ti,ab,kw) AND ('chronic disease'/exp OR chronic*:ti,ab,kw OR persist*:ti,ab,kw)	26933
#2	'chronic disease'/exp OR chronic*:ti,ab,kw OR persist*:ti,ab,kw	2010169
#1	'sinusitis'/exp OR 'rhinitis'/exp OR sinusitis:ti,ab,kw OR rhinosinusitis:ti,ab,kw OR nasosinusitis:ti,ab,kw OR ethmoiditis:ti,ab,kw OR pansinusitis:ti,ab,kw OR sphenoiditis:ti,ab,kw OR 'rhino sinusitis':ti,ab,kw OR 'naso sinusitis':ti,ab,kw OR 'pan sinusitis':ti,ab,kw	117750

Scopus

(TITLE-ABS-KEY (((chronic* OR persist*) W/3 (sinusitis OR rhinosinusitis OR nasosinusitis OR ethmoiditis OR pansinusitis OR sphenoiditis OR rhino-sinusitis' OR

naso-sinusitis)))) AND ((TITLE-ABS-KEY (mucin*)) OR (TITLE-ABS-KEY ("mucus glycoprotein")))

Web of Science

Set	Results	
#5	190	#4 AND #1 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, CCR-EXPANDED, IC Timespan=All years</i>
#4	38,453	#3 OR #2 <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, CCR-EXPANDED, IC Timespan=All years</i>
#3	1,058	TS=(mucus NEAR/2 glycoprotein*) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, CCR-EXPANDED, IC Timespan=All years</i>
#2	37,914	TS=mucin* <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, CCR-EXPANDED, IC Timespan=All years</i>
#1	<u>8,343</u>	TS=((chronic* OR persist*) NEAR/3 (sinusitis OR rhinosinusitis OR nasosinusitis OR ethmoiditis OR pansinusitis OR sphenoiditis OR rhino-sinusitis OR naso-sinusitis OR pan-sinusitis)) <i>Indexes=SCI-EXPANDED, SSCI, A&HCI, CPCI-S, CPCI-SSH, BKCI-S, BKCI-SSH, CCR-EXPANDED, IC Timespan=All years</i>

ClinicalTrials.gov

Rhinitis OR sinusitis AND mucin