

Supplemental Table 1. Definition of adverse events**ICD-9-CM CodeEvents**

Pulmonary^a	
416	Chronic pulmonary heart disease
466	Acute bronchitis and bronchiolitis
480	Viral pneumonia
481	Pneumococcal pneumonia [Streptococcus pneumoniae pneumonia]
482	Other bacterial pneumonia
483	Pneumonia due to other specified organism
484	Pneumonia in infectious diseases classified elsewhere
485	Bronchopneumonia, organism unspecified
486	Pneumonia, organism unspecified
487	Influenza
491.8	Other chronic bronchitis
495.9	Unspecified allergic alveolitis and pneumonitis
511.9	Unspecified pleural effusion
514	Pulmonary congestion and hypostasis
515	Postinflammatory pulmonary fibrosis
516	Other alveolar and parietoalveolar pneumonopathy
518	Other diseases of lung
519.11	Acute bronchospasm
770.3	Pulmonary hemorrhage
785.6	Enlargement of lymph nodes
786.05	Shortness of breath
786.9	Other symptoms involving respiratory system and chest
Renal^{b,c}	
585	Chronic kidney disease (CKD)
588	Disorders resulting from impaired renal function
584	Acute renal failure
583	Nephritis and nephropathy, not specified as acute or chronic
582	Chronic glomerulonephritis
581	Nephrotic syndrome
580	Acute glomerulonephritis
403	Hypertensive chronic kidney disease
586	Renal failure, unspecified
Hematologic^{d,e}	
204	Lymphoid leukemia
205	Lymphoid leukemia
206	Monocytic leukemia
207	Other specified leukemia
208	Leukemia of unspecified cell type
280	Iron deficiency anemias
281	Other deficiency anemias
283	Acquired hemolytic anemias
284	Aplastic anemia and other bone marrow failure syndromes
285	Other and unspecified anemias

287.3	Primary thrombocytopenia
287.4	Secondary thrombocytopenia
287.5	Thrombocytopenia, unspecified
288	Diseases of white blood cells

Gastrointestinal^f

530.1	Esophagitis
531	Gastric ulcer
532	Duodenal ulcer
533	Peptic ulcer, site unspecified
534	Gastrojejunal ulcer
535	Gastritis and duodenitis
536	Disorders of function of stomach
537	Other disorders of stomach and duodenum
553.3	Diaphragmatic hernia
578.9	Hemorrhage of gastrointestinal tract, unspecified

Hepatic^{g,h}

570	Acute and subacute necrosis of liver
571	Chronic liver disease and cirrhosis
572	Liver abscess and sequelae of chronic liver disease
573	Other disorders of liver
576.2	Obstruction of bile duct
782.4	Jaundice, unspecified, not of newborn

^aO'Brien JA, Caro JJ: Hospitalization for pertussis: profiles and case costs by age. *BMC Infect Dis* 2005;5:57.

^bKern EF, Maney M, Miller DR, Tseng CL, Tiwari A, Rajan M, et al: Failure of ICD-9-CM codes to identify patients with comorbid chronic kidney disease in diabetes. *Health Serv Res* 2006;41:564–580.

^cWaikar SS, Wald R, Chertow GM, Curhan GC, Winkelmayer WC, Liangos O, et al: Validity of International Classification of Diseases, Ninth Revision, Clinical Modification Codes for acute renal failure. *J Am Soc Nephrol* 2006;17:1688–1694.

^dNichol KL, Margolis KL, Wuorenma J, Von Sternberg T: The efficacy and cost effectiveness of vaccination against influenza among elderly persons living in the community. *N Engl J Med* 1994;331:778–784.

^eCromie N, Lee C, Struthers AD: Anaemia in chronic heart failure: what is its frequency in the UK and its underlying causes? *Heart* 2002;87:377–378.

^fSloane PD, MacFarquhar JK, Sickbert-Bennett E, Mitchell CM, Akers R, Weber DJ, et al: Syndromic surveillance for emerging infections in office practice using billing data. *Ann Fam Med* 2006;4:351–358.

^gPrior MJ, Cooper K, Cummins P, Bowen D: Acetaminophen availability increases in Canada with no increase in the incidence of reports of inpatient hospitalizations with acetaminophen overdose and acute liver toxicity. *Am J Ther* 2004;11:443–452.

^hStraif K, Weiland S, Werner B, Wienke A, Keil U: Elevated mortality from nonalcohol-related chronic liver disease among female rubber workers: is it associated with exposure to nitrosamines? *Am J Ind Med* 1999;35:264–271. *ICD-9-CM*, International Classification of Diseases, Ninth Revision, Clinical Modification.

Supplemental Table 2. Number of patients using drugs with potential interactions with CYC and MTX

Drug with potential interaction with CYC or MTX	Number of patients (%)
CYC	
Allopurinol	30 (3.1)
Amiodarone	4 (0.4)
Carbamazepine	2 (0.2)
Cimetidine	3 (0.3)
Clarithromycin	23 (2.4)
Colchicine	14 (1.4)
Danazol	1 (0.1)
Diclofenac	29 (3.0)
Digoxin	23 (2.4)
Diltiazem	43 (4.5)
Erythromycin	49 (5.1)
Fluconazole	80 (8.3)
Gentamicin	5 (0.5)
HIV	1 (0.1)
Itraconazole	5 (0.5)
Ketoconazole	33 (3.4)
Lovastatin	19 (2.0)
Methotrexate	16 (1.7)
Methylprednisolone	39 (4.0)
Metoclopramide	9 (0.9)
Naproxen	40 (4.1)
NSAIDs	282 (29.2)
Phenobarbital	3 (0.3)
Phenytoin	1 (0.1)
Potassium-sparing diuretics	62 (6.4)
Prednisolone	54 (5.6)
Ranitidine	27 (2.8)
Rifabutin	1 (0.1)
Rifampin	2 (0.2)
Sulindac	8 (0.8)
Tacrolimus	61 (6.3)
Ticlopidine	1 (0.1)
Tobramycin	84 (8.7)
Trimethoprim	70 (7.2)
Vancomycin	1 (0.1)
Verapamil	30 (3.1)
MTX	
Acitretin	120 (3.3)
Adapalene	1 (0.0)
Azathioprine	17 (0.5)
Bexarotene	1 (0.0)
Cyclosporine	12 (0.3)
Isotretinoin	7 (0.2)
NSAIDs	2,114 (58.0)

Penicillins	351 (9.6)
Phenytoin	13 (0.4)
Salicylates	22 (0.6)
Sulfonamides	1,369 (37.6)
Tazarotene	74 (2.0)
Tetracycline	137 (3.8)
Theophylline	17 (0.5)
Tretinoin	15 (0.4)
Trimethoprim	58 (1.6)

CYC, cyclosporine; *HIV*, human immunodeficiency virus; *MTX*, methotrexate; *NSAIDs*, nonsteroidal anti-inflammatory drugs.