

Supplementary Material II: Breakdown of the benchmark dataset **S** using the 100 side effects

Tag	Side effect	Number of drugs
C_1	Nausea	703
C_2	Headache	663
C_3	Vomiting	652
C_4	Rash	604
C_5	Dizziness	588
C_6	Diarrhea	582
C_7	Pruritus	561
C_8	Urticaria	490
C_9	Fever	480
C_{10}	Edema	461
C_{11}	Abdominal pain	448
C_{12}	Somnolence	447
C_{13}	Pain	431
C_{14}	Constipation	431
C_{15}	Dyspnea	409
C_{16}	Anorexia	409
C_{17}	Insomnia	409
C_{18}	Thrombocytopenia	403
C_{19}	Paresthesia	393

C ₂₀	Fatigue	385
C ₂₁	Hypotension	378
C ₂₂	Dyspepsia	360
C ₂₃	Tachycardia	363
C ₂₄	Hypersensitivity	361
C ₂₅	Confusion	363
C ₂₆	Leukopenia	360
C ₂₇	Dry mouth	354
C ₂₈	Cough	341
C ₂₉	Asthenia	347
C ₃₀	Arthralgia	344
C ₃₁	Vertigo	337
C ₃₂	Myalgia	331
C ₃₃	Anxiety	334
C ₃₄	Syncope	328
C ₃₅	Hypertension	325
C ₃₆	Anemia	326
C ₃₇	Chest pain	322
C ₃₈	Infection	299
C ₃₉	Palpitations	302
C ₄₀	Alopecia	308
C ₄₁	Malaise	301

C ₄₂	Allergic reaction	302
C ₄₃	Back pain	292
C ₄₄	Tremor	296
C ₄₅	Nervousness	288
C ₄₆	Hemorrhage	282
C ₄₇	Arrhythmia	284
C ₄₈	Tinnitus	276
C ₄₉	Anaphylaxis	273
C ₅₀	Blurred vision	276
C ₅₁	Flatulence	268
C ₅₂	Flushing	266
C ₅₃	Pharyngitis	259
C ₅₄	Angioedema	262
C ₅₅	Jaundice	260
C ₅₆	Rhinitis	257
C ₅₇	Erythema	252
C ₅₈	Agitation	256
C ₅₉	Hepatitis	241
C ₆₀	Sweating	243
C ₆₁	Influenza	236
C ₆₂	Seizures	241
C ₆₃	Sinusitis	225

C ₆₄	Hallucinations	232
C ₆₅	Bradycardia	225
C ₆₆	Hematuria	220
C ₆₇	Conjunctivitis	221
C ₆₈	Agranulocytosis	228
C ₆₉	Weakness	227
C ₇₀	Chills	219
C ₇₁	Peripheral edema	208
C ₇₂	Epistaxis	216
C ₇₃	Photosensitivity	211
C ₇₄	Hyperglycemia	204
C ₇₅	Pneumonia	201
C ₇₆	Myocardial infarction	199
C ₇₇	Pancreatitis	199
C ₇₈	Neutropenia	199
C ₇₉	Weight gain	204
C ₈₀	Stomatitis	194
C ₈₁	Stevens - Johnson syndrome	196
C ₈₂	Impotence	195
C ₈₃	Eosinophilia	196
C ₈₄	Urinary tract infection	186
C ₈₅	Purpura	192

C ₈₆	Increased sweating	184
C ₈₇	Dysuria	181
C ₈₈	Bronchitis	184
C ₈₉	Dermatitis	188
C ₉₀	Angina pectoris	181
C ₉₁	Asthma	180
C ₉₂	Urinary frequency	178
C ₉₃	Upper respiratory tract infection	176
C ₉₄	Ataxia	182
C ₉₅	Dysphagia	177
C ₉₆	Convulsions	179
C ₉₇	Weight loss	173
C ₉₈	Erythema multiforme	175
C ₉₉	Gastritis	170
C ₁₀₀	Abnormal vision	166
Total	----	30,114