

Supplemental Materials

Supplemental table 1. Glossary of US FDA expedited review programs and burden of disease metrics and categories

Supplemental table 2. Burden of disease data with corresponding GHE conditions, matched to approved drug first indication ICD-10 codes within the GHE condition

Supplemental table 3. 387 FDA-approved drugs, first indication codes, and expedited status

Supplemental table 4. List of FDA “tropical diseases” for priority review voucher awards, and drugs approved for such conditions, 2010-2019

Supplemental table 5. Mann-Whitney analysis of differences in disease burden between GHE disease states with or without drug approvals 2010-2019

Supplemental table 6. Correlation between US and global metrics for the burden of disease across 122 GHE disease states

Supplemental table 7. Binary logistic regression complete model variables, output, and summaries for all conditions, neoplasm, and non-neoplasm analysis

Supplemental table 8. US and global GHE condition quartile groupings descriptive data

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Supplemental table 1. Glossary of US FDA expedited review programs and burden of disease metrics and categories	
Term	Description
<i>US FDA expedited review programs</i>	
Accelerated	Allowed drugs for serious conditions that filled an unmet medical need to be approved based on a surrogate endpoint. ¹ Implemented 1992.
Breakthrough	Designed to expedite the development and review of drugs which may demonstrate substantial improvement over available therapy. ¹ Implemented 2012.
Fast track	Designed to facilitate the development, and expedite the review of drugs to treat serious conditions and fill an unmet medical need. ¹ Implemented 1997.
Priority Review	Awards sponsors that develop drugs for tropical diseases or rare pediatric diseases or to use as medical countermeasures a priority voucher that can be sold to another drug sponsor to received priority review of their product. Sale of the voucher is expected to offset the cost of developing prioritized products. ² Implemented 2007.
<i>Burden of disease metrics and categories</i>	
Disability-adjusted life year (DALY)	The burden of disease is assessed using the disability-adjusted life year (DALY) calculated as the sum of years of life lost due to premature mortality (YLL) and years of (healthy) life lost due to disability (YLD). One DALY represents the equivalent of one year of full health lost. ³
Years of life lost from premature mortality (YLL)	One YLL represents the loss of one year of life. YLL is calculated from the number of deaths multiplied by a global standard life expectancy at the age at which death occurs. ³
Years of life lost to disability (YLD)	One YLD represents the equivalent of one full year of healthy life lost due to disability or ill-health. The WHO uses prevalence YLD which is calculated as the prevalence of each non-fatal condition multiplied by its disability weight. ³
Global Health Estimates (GHE)	Data provided by the World Health Organization (WHO) on death and disability globally, by region and country, and by age, sex, cause, and year. ⁴
International Classification of Diseases, 10th revision (ICD-10)	The 10th revision of the International Statistical Classification of Diseases and Related Health Problems (ICD), a medical classification list by the WHO. ⁵

Priority review program descriptions abstracted from: <https://www.fda.gov/patients/learn-about-drug-and-device-approvals/fast-track-breakthrough-therapy-accelerated-approval-priority-review>

Supplemental table 2. Burden of disease data with corresponding GHE conditions, matched to approved drug first indication ICD-10 codes within the GHE condition

Study Groupings	WHO Disease/Condition*	GHE Code	Global DALYs 2010 (000's)	Global YLD 2010 (000's)	Global YLL 2010 (000's)	US DALYs 2010 (000's)	US YLD 2010 (000's)	US YLL 2010 (000's)	Quartile (Figure 1), global DALY	Quartile (Figure 1), US DALY	Drug Indication ICD-10 codes	Drugs ^b	Accelerated Approvals	Breakthrough Therapies	Fast Track	Priority Review	Expedited Designations	Av. Expedited Designations	1+ designations	Orphan	Tropical		
Cardiovascular	Ischaemic heart disease	1130	18487.25	5655.77	179016.48	8535.23	266.48	8268.75	4	4	I20-I25	1	0	0	0	0	0	0.00	0	0	0		
Cardiovascular	Stroke	1140	129270.73	11931.43	117339.30	2907.97	768.58	2139.40	4	4	I64	0	0	0	0	0	0	0.00	0	0	0		
Maternal, neonatal, & congenital	Premature birth complications	500	112953.72	7402.84	105550.88	1054.60	308.43	746.16	4	4	P05, P07, P22, P27-P28	1	0	0	1	0	1	1.00	1	0	0		
Infectious and parasitic diseases	Diarrhoeal diseases	110	101541.62	7278.75	94262.87	285.39	83.01	202.38	4	2	A00, A01, A03, A04, A05-A09	0	0	0	0	1	1	2	2.00	1	0	0	
Maternal, neonatal, & congenital	Birth asphyxia and birth trauma	510	76003.31	1367.03	75233.28	145.89	22.92	122.77	4	2	P21-P10-P15	0	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	Tuberculosis	30	57005.03	2801.46	54203.58	17.44	15.73	1.71	4	1	A15-A19, B90	2	1	0	0	2	2	5	2.50	2	2	1	
Maternal, neonatal, & congenital	Neonatal sepsis and infections	520	45841.45	2261.76	43579.68	118.60	52.82	65.78	4	2	P36, P39	0	0	0	0	0	0	0	0.00	0	0	0	
Digestive & genitourinary	Cirrhosis of the liver	1230	42692.90	1410.27	41262.63	1351.02	61.76	1289.25	4	4	K70, K74	1	1	0	0	1	1	3	3.00	1	1	0	
Musculoskeletal	Back and neck pain	1380	42173.38	42115.44	57.52	2587.27	2573.75	13.52	4	4	M54	0	0	0	0	0	0	0	0.00	0	0	0	
Neurological & sense organ	Other hearing loss	1080	41856.38	41856.34	0.04	1813.99	1813.97	0.02	4	4	H91	0	0	0	0	0	0	0	0.00	0	0	0	
Digestive & genitourinary	Kidney diseases	1270	34262.32	7628.91	26633.41	1742.56	654.56	1088.01	4	4	N18	0	0	0	0	0	0	0	0.00	0	0	0	
Others	Iron-deficiency anaemia	580	33770.19	33289.79	480.40	131.93	93.60	38.34	4	2	D50	0	0	0	0	0	0	0	0.00	0	0	0	
Maternal, neonatal, & congenital	Other congenital anomalies	1460	30202.46	7481.65	22720.80	723.95	395.25	328.68	4	3	Q86-9	0	0	0	0	0	0	0	0.00	0	0	0	
Neurological & sense organ	Uncorrected refractive errors	1050	27840.41	0.00	528.72	528.72	0.00	0.00	4	3	H52-7	0	0	0	0	0	0	0	0.00	0	0	0	
Others	Protein-energy malnutrition	550	26338.00	3227.66	23110.84	66.79	21.02	45.77	4	1	E41-E46	0	0	0	0	0	0	0	0.00	0	0	0	
Neurological & sense organ	Alzheimer disease and other dementias	950	25700.04	7332.08	18157.96	2900.12	754.94	2145.17	4	4	G30, F03	0	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	Meningitis	170	24544.95	1581.57	22963.37	49.73	11.81	37.92	4	1	G03	0	0	0	0	0	0	0	0.00	0	0	0	
Mental and substance use	Anxiety disorders	880	24542.20	24542.20	0.00	1711.70	1711.70	0.00	4	4	F41	0	0	0	0	0	0	0	0.00	0	0	0	
Maternal, neonatal, & congenital	Congenital heart anomalies	1440	23584.47	725.83	22858.65	371.47	48.12	323.36	4	3	Q24-9	0	0	0	0	0	0	0	0.00	0	0	0	
Maternal, neonatal, & congenital	Maternal conditions	420	21785.32	910.31	20876.01	45.26	11.23	34.03	3	1	Rest of R, Y and Z	2	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	Childhood-cluster diseases	120	21670.59	144.44	21526.15	5.11	1.24	3.87	3	1	F90, F98.8, F91	0	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Liver cancer	600	21022.49	174.98	20847.51	525.87	6.76	518.11	3	3	C22	2	0	0	0	2	2	4	2.00	2	1	0	
Mental and substance use	Drug use disorders	870	20020.31	13490.21	6530.10	3682.64	2116.93	1565.72	3	4	F11-F16, F18-F19, X41-X42, X44	1	0	0	0	1	1	2	2.00	1	0	0	
Neoplasms	Stomach cancer	640	18981.29	264.83	18716.46	302.92	7.65	295.26	3	3	C16	1	0	0	0	1	1	2	2.00	1	1	0	
Mental and substance use	Alcohol use disorders	860	17845.88	11884.76	5961.12	1131.83	767.18	364.65	3	4	F10	0	0	0	0	0	0	0	0.00	0	0	0	
Maternal, neonatal, & congenital	Other neonatal conditions	530	17361.57	1058.17	16293.40	254.00	16.45	237.55	3	2	P00-P02, P04, P08, P50-P96	1	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Colon and rectum cancers	650	17066.13	495.99	16570.14	1349.99	65.57	1284.42	3	4	C18-C21	2	0	0	0	1	1	2	1.00	2	0	0	
Cardiovascular	Hypertensive heart disease	1120	16355.56	1169.82	15185.74	750.03	72.11	677.92	3	4	I11	0	0	0	0	0	0	0	0.00	0	0	0	
Musculoskeletal	Osteoarthritis	1360	13859.61	13806.09	53.52	913.32	904.87	8.45	3	4	M19-9	0	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	STDs excluding HIV	40	12731.39	3692.78	9038.61	60.86	56.85	4.03	3	1	A64	0	0	0	0	0	0	0	0.00	0	0	0	
Cardiovascular	Cardiomyopathy, myocarditis, endocarditis	1150	11602.05	532.62	11069.43	792.34	53.91	741.45	3	4	I42, I51.4, I38	0	0	0	0	0	0	0	0.00	0	0	0	
Cardiovascular	Rheumatic heart disease	1110	10840.02	1346.02	9493.99	64.25	6.66	57.59	3	1	I05-I09	0	0	0	0	0	0	0	0	0.00	0	0	
Neoplasms	Esophagus cancer	630	10378.27	101.66	10276.62	392.03	4.45	387.58	3	3	C15	0	0	0	0	0	0	0	0.00	0	0	0	
Mental and substance use	Idiopathic intellectual disability	920	96174.91	9557.24	57.67	209.59	184.00	14.58	3	2	F79	0	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Mouth and oropharynx cancers	650	9248.28	201.65	9046.62	254.14	13.89	240.25	3	2	C06, C10	0	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Cervix uteri cancer	710	9078.86	173.79	8905.07	184.52	6.51	178.01	3	2	C53	0	0	0	0	0	0	0	0.00	0	0	0	
Digestive & genitourinary	Paralytic ileus and intestinal obstruction	1242	8767.92	48.04	8719.88	108.44	3.72	104.72	3	2	K56	0	0	0	0	0	0	0	0.00	0	0	0	
Mental and substance use	Autism and Asperger syndrome	900	9435.99	8432.99	0.00	401.83	0.00	401.83	2	3	F84	0	0	0	0	0	0	0	0.00	0	0	0	
Digestive & genitourinary	Peptic ulcer disease	1220	8179.71	1194.48	7125.22	93.05	34.52	58.53	2	2	K21	0	0	0	0	0	0	0	0.00	0	0	0	
Mental and substance use	Bipolar disorder	840	8248.28	8233.16	15.12	472.43	469.29	3.13	2	3	F31	0	0	0	0	0	0	0	0.00	0	0	0	
Endocrine, blood, immune disorders	Sickle cell disorders and trait	812	7965.58	1765.30	6203.28	56.80	24.99	31.81	2	1	D57	2	1	2	1	2	6	3.00	2	2	0		
Neoplasms	Pancreas cancer	670	7426.61	71.94	7354.67	823.92	5.98	814.85	2	4	C25	0	0	0	0	0	0	0	0.00	0	0	0	
Neurological & sense organ	Other vision loss	1070	7352.64	7352.64	0.00	127.60	127.60	0.00	2	2	H30-H35 (minus H35.3), H53-H54	2	0	0	0	1	0	2	3	1.50	2	1	0
Neurological & sense organ	Cataracts	1040	7255.15	7255.05	0.10	54.10	54.10	0.00	2	1	H26	0	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	Encephalitis	180	7121.30	1587.54	5624.76	143.46	6.35	137.11	2	2	G04	0	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Brain and nervous system cancers	751	7152.26	86.13	7066.14	480.29	6.96	473.33	2	3	C69-C72	0	0	0	0	0	0	0	0.00	0	0	0	
Skin & oral	Edentulism	1500	7023.10	7021.86	1.24	471.86	471.52	0.34	2	3	K06, K08.2	0	0	0	0	0	0	0	0.00	0	0	0	
Neurological & sense organ	Non-migraine headache	1000	6903.18	6903.18	0.00	281.29	281.29	0.00	2	2	G43-G09	0	0	0	0	0	0	0	0.00	0	0	0	
Mental and substance use	Childhood behavioural disorders	910	6498.10	6498.10	0.00	266.46	266.46	0.00	2	2	F90-98	0	0	0	0	0	0	0	0.00	0	0	0	
Maternal, neonatal, & congenital	Neural tube defects	1410	6480.85	1583.47	4897.38	95.66	46.55	49.11	2	2	Q07-9	0	0	0	0	0	0	0	0.00	0	0	0	
Respiratory	Upper respiratory infections	400	5824.20	5526.69	297.51	316.58	312.29	4.29	2	3	J00-J06	0	0	0	0	0	0	0	0.00	0	0	0	
Infectious and parasitic diseases	Intestinal nematode infections	320	4820.24	3914.94	915.30	0.00	0.00	0.00	2	1	B62	0	0	0	0	0	0	0	0.00	0	0	0	
Skin & oral	Periodontal disease	1490	4285.99	4284.75	1.24	126.23	125.89	0.34	2	2	K05, K08.1	0	0	0	0	0	0	0	0.00	0	0	0	
Endocrine, blood, immune disorders	Thalassaemias	811	4084.01	3271.81	812.20	48.60	40.29	8.31	2	1	D56	0	0	0	0	0	0	0	0.00	0	0	0	
Neoplasms	Kidney cancer	745	3865.94	97.95	3772.19																		

Supplemental table 3. 387 FDA-approved drugs, first indication codes, and expedited status												
Brand name	Year of Approval	Active Ingredients	First approved indication, FDA	ICD-10 code ^a	ICD-10 codes included in GHE conditions	GHE conditions	GHE code ^b	Expedited Designations ^c	Accelerated Approvals ^d	Breakthrough Therapies ^e	Fast Track ^f	Priority Review ^g
Zinplava	2016	Bezlotoxumab	Infection, Clostridium difficile toxin B	A04.71	A00, A01, A03, A04, A06-A09	Diarrhoeal diseases	110	2	0	0	1	1
Sirturo	2012	Bedaquiline	Tuberculosis	A15.0	A15-A19, B90	Tuberculosis	30	3	1	0	1	1
Pretomanid	2019	Pretomanid	Infection, tuberculosis	A15.0	A15-A19, B90	Tuberculosis	30	2	0	0	1	1
Raxibacumab	2012	Raxibacumab	Pulmonary anthrax	A22.1	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	2	0	0	1	1
Teflaro	2010	Ceftaroline fosamil	Skin and skin-structure	A49.9	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Dificid	2011	Fidaxomicin	infections, community	A49.9	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	2	0	0	1	1
TPOXX	2018	Tecovirimat	Infection, smallpox virus	B03	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	2	0	0	1	1
Viekira Pak	2014	Ombitasvir, paritaprevir, dasabuvir, ritonavir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Mavyret	2017	Glecaprevir, pibrentasvir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Victrelis	2011	Boceprevir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	2	0	0	1	1
Zepatier	2016	Eltasvir, grazoprevir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	2	0	1	0	1
Eplusia	2016	Sofosbuvir plus velpatasvir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Olysio	2013	Simeprevir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	2	0	0	1	1
Harvoni	2014	Ledipasvir plus sofosbuvir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Sovaldi	2013	Sofosbuvir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Vosevi	2017	Sofosbuvir, velpatasvir, voxilaprevir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	3	0	1	1	1
Incyte	2011	Telaprevir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	2	0	0	1	1
Daklinza	2015	Daclatasvir	Infection, hepatitis-C virus	B19.20	B15-B19 (minus B17.8)	Hepatitis	185	2	0	0	1	1
Trogarzo	2018	Ibalizumab	Infection, human immunodeficiency virus	B20	B20-B24	HIV/AIDS	100	3	0	1	1	1
Pifeltro	2018	Doravirine	Infection, HIV-1	B20	B20-B24	HIV/AIDS	100	0	0	0	0	0
Tivicay	2013	Dolutegravir	Infection, HIV	B20	B20-B24	HIV/AIDS	100	2	0	0	1	1
Genvoya	2015	Etravirine, cobicistat, emtricitabine, tenofovir	Infection, HIV	B20	B20-B24	HIV/AIDS	100	1	0	0	1	0
Biktarvy	2018	Bictegravir, emtricitabine, tenofovir alafenamide	Infection, human immunodeficiency virus	B20	B20-B24	HIV/AIDS	100	1	0	0	0	1
Edurant	2011	Rilpivirine	Infection, human immunodeficiency virus type 1	B20	B20-B24	HIV/AIDS	100	0	0	0	0	0
Prevymis	2017	Letemovir	Infection, cytomegalovirus	B25.9	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	3	0	1	1	1
Cresemba	2015	Isavuconazonium	Fungal infections	B35	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	1	0	0	0	1
Keydin	2014	Tavaborole	Onychomycosis	B35.1	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Jublia	2014	Efinaconazole	Onychomycosis	B35.1	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Luzu	2013	Luliconazole	Interdigital tinea pedis, tinea cruris, and tinea corporis caused by the organisms Trichophyton rubrum and Epidermophyton floccosum	B35.4A	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Krintafel	2018	Tafenoquine	Infection, malaria	B50.9	B50-B54, P37.3, P37.4, B57, B55, B73	Parasitic and vector diseases	210	2	0	1	0	1
Impavido	2014	Miltefosine	Infection, leishmaniasis	B55.9	B50-B54, P37.3, P37.4, B57, B55, B73	Parasitic and vector diseases	210	2	0	0	1	1
Benznidazole	2017	Benznidazole	Chagas disease (Trypanosoma cruzi)	B57	B50-B54, P37.3, P37.4, B57, B55, B73	Parasitic and vector diseases	210	2	1	0	0	1
Egaten	2019	Triplabenzazole	Fascioliasis	B66.3	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	2	0	0	1	1
Maxidectin	2018	Moxidectin	Infection, onchocerciasis	B73.1	B50-B54, P37.3, P37.4, B57, B55, B73	Parasitic and vector diseases	210	1	0	0	0	1
Natroba	2011	Spinosad	Head lice	B85.0	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Orbactive	2014	Oritavancin	Gram-positive infection	B96.89	B66.0, B66.1, B66.3, B66.4, B85-B89 (minus B86), A05, A20-A28, A31 (minus A31.1), A32, A38, A40-A49, A65, A67-A70, A74-A79, A80-A81, A87-A89, A92 (minus A92.0, A92.4), A93-A94, B00-B04, B06-B09, B17.8, B25-B33 (minus B33.8), B34 (minus B34.2), B35-B42, B44, B46, B48-B49, B58-B60, B64, B66 (minus B66.0, B66.1, B66.3, B66.4), B70-B71, B74.3-B74.9, B75, B82-B83, B91-B99 (minus B94.1), G14, R57.2, R59	Other infectious diseases	370	0	0	0	0	0
Vitrakvi	2018	Larotrectinib	Cancer, agnostic	C	C17, C26-C31, C37-C41, C46-C49, C51, C52, C57-C60, C63, C68, C69, C74-C80, C97, C53	Other malignant neoplasms	780	3	1	1	1	0
Rozlytrek	2019	Entrectinib	Cancer, agnostic	C	C17, C26-C31, C37-C41, C46-C49, C51, C52, C57-C60, C63, C68, C69, C74-C80, C97, C53	Other malignant neoplasms	780	3	1	1	0	1
Cyramza	2014	Ramucirumab	Cancer, stomach	C15	C16	Stomach cancer	640	2	0	0	1	1
Zaltrap	2012	Ziv-aflibercept	Cancer, colorectal	C19	C18-C21	Colon and rectum cancers	650	1	0	0	0	1
Lonsurf	2015	Tipiracil plus trifluridine	Cancer, colorectal	C19	C18-C21	Colon and rectum cancers	650	1	0	0	1	0
Yervoy	2011	Ipilimumab	Cancer, liver	C22	C22	Liver cancer	660	2	0	0	1	1
Sivarsna	2012	Regorafenib	Cancer, hepatocellular carcinoma	C22	C22	Liver cancer	660	2	0	0	1	1
Zykadia	2014	Ceritinib	Cancer, lung, non-small cell	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	3	1	1	0	1
Alecensa	2015	Alectinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	3	1	1	0	1
Alunbrig	2017	Brigatinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	3	1	1	0	1
Vizimpro	2018	Dacomitinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	1	0	0	0	1
Targisso	2015	Osimeirtinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	4	1	1	1	1
Glivec	2013	Imatinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	2	0	0	1	1
Lorbrana	2018	Lorlatinib	Cancer, non-small cell lung carcinoma	C34.90	C33-C34	Trachea, bronchus, lung cancers	680	3	1	1	0	1
Xalkori	2011	Crizotinib	Cancer, lung	C34.92	C33-C34	Trachea, bronchus, lung cancers	680	3	1	0	1	1
Mektovi	2018	Bimimetinib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	0	0	0	0	0
Braftvo	2018	Encorafenib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	0	0	0	0	0
Opdivo	2014	Nivolumab	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	4	1	1	1	1
Keytruda	2014	Pembrolizumab	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	3	1	1	0	1
Cotelic	2015	Cobimetinib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	2	0	0	1	1
Zelboraf	2011	Vemurafenib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	2	0	0	1	1
Mekinist	2013	Trametinib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	1	0	0	1	0
Tafinlar	2013	Dabrafenib	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	1	0	0	1	0
Imlygic	2015	Talimogene laherparepvec	Cancer, melanoma	C43.9	C43-C44	Melanoma and other skin cancers	690	1	0	0	1	0
Portrazza	2015	Nectinumab	Cancer, squamous non-small cell lung carcinoma	C44.321	D00-D09, D37-D49	Other neoplasms	790	1	0	0	1	0
Erivedge	2012	Vismodegib	Cancer, basal cell carcinoma	C44.91	C43-C44	Melanoma and other skin cancers	690	1	0	0	0	0
Odomzo	2015	Sonidegib	Cancer, basal cell carcinoma	C44.91	C43-C44	Melanoma and other skin cancers	690	0	0	0	0	0
Yondelis	2015	Trabectedin	Cancer, liposarcoma, leiomyosarcoma	C49.9	C17, C26-C31, C37-C41, C46-C49, C51, C52, C57-C60, C63, C68, C69, C74-C80, C97, C53	Other malignant neoplasms	780	1	0	0	0	1
Lartruvo	2016	Olaratumab	Cancer, soft tissue sarcoma	C49.9	C17, C26-C31, C37-C41, C46-C49, C51, C52, C57-C60, C63, C68, C69, C74-C80, C97, C53	Other malignant neoplasms	780	4	1	1	1	1
Bavencio	2017	Avelumab	Cancer, Merkel cell carcinoma	C49.9	D00-D09, D							

Zelula	2017	Niraparib	Cancer, ovarian	C56	C56	Ovary cancer	730	3	0	1	1	1
Lynparza	2014	Olaparib	Cancer, ovarian	C56	C56	Ovary cancer	730	2	1	0	0	1
Zylig	2011	Abiraterone	Cancer, prostate	C61	C61	Prostate cancer	740	1	0	0	0	1
Xofigo	2013	Radium Ra 223 dichloride	Cancer, prostate	C61	C61	Prostate cancer	740	2	0	0	1	1
Nubeqa	2019	Darolutamide	Cancer, prostate	C61	C61	Prostate cancer	740	2	0	0	1	1
Erlada	2018	Apalutamide	Cancer, prostate	C61	C61	Prostate cancer	740	2	0	0	1	1
Provenge	2010	Sipuleucel-T	Cancer, prostate	C61	C61	Prostate cancer	740	0	0	0	0	0
Xtandi	2012	Enzalutamide	Cancer, prostate	C61	C61	Prostate cancer	740	2	0	0	1	1
Jevlana	2010	Cabazitaxel	Cancer, prostate	C61	C61	Prostate cancer	740	2	0	0	1	1
Inlyta	2012	Axitinib	Cancer, renal	C65.9	C64-C66	Kidney cancer	745	1	0	0	1	0
Imfinzi	2017	Durvalumab	Cancer, bladder	C67	C67	Bladder cancer	750	3	1	1	0	1
Padcev	2019	Enfortumab vedotin-EJFV	Cancer, bladder	C67	C67	Bladder cancer	750	3	1	1	1	0
Balversa	2019	Erdafitinib	Cancer, bladder	C67	C67	Bladder cancer	750	3	1	1	0	1
Tecentriq	2016	Atezolizumab	Cancer, urothelial carcinoma	C67.9	C67	Bladder cancer	750	3	1	1	0	1
Caprelsa	2011	Vandetanib	Cancer, thyroid	C73	C73	Thyroid cancer	754	2	0	0	1	1
Cometriq	2012	Cabozantinib	Cancer, thyroid	C73	C73	Thyroid cancer	754	2	0	0	1	1
Lenvima	2015	Lenvatinib	Cancer, thyroid	C73	C73	Thyroid cancer	754	1	0	0	0	1
Unituxin	2015	Dimutuximab	Cancer, neuroblastoma	C74.90	C17, C26-C31, C37-C41, C46-C49, C51, C52, C57-C60, C63, C68, C69, C74-C80, C97, C53	Other malignant neoplasms	760	1	0	0	0	1
Imbruvica	2013	Ibrutinib	Cancer, mantle cell lymphoma	C83.17	C81-C90, C96	Lymphomas, multiple myeloma	760	4	1	1	1	1
Calquence	2017	Acalabrutinib	Cancer, mantle cell lymphoma	C83.17	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	1	0	1
Brukina	2019	Zanubrutinib	Cancer, mantle cell lymphoma	C83.17	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	1	0	1
Beleodaq	2014	Belinostat	Cancer, lymphoma, T-cell, peripheral	C84.40	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	0	1	1
Poteligo	2018	Mogamulizumab	Cancer, cutaneous T-cell lymphoma	C84.40	C81-C90, C96	Lymphomas, multiple myeloma	760	2	0	1	0	1
Adcetris	2011	Brentuximab vedotin	Cancer, lymphoma	C85	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	0	1	1
Aicopa	2017	Copanlisib dihydrochloride	Cancer, Non-Hodgkin's lymphoma	C85.90	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	0	1	1
Elzonis	2018	Tagraxofusp	Cancer, blastic plasmacytoid dendritic cell	C86	C81-C90, C96	Lymphomas, multiple myeloma	760	2	0	1	0	1
Darzalex	2015	Daratumumab	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	4	1	1	1	1
Xpovio	2019	Selinexor	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	3	1	0	1	1
Pomalyst	2013	Pomalidomide	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	2	1	0	1	0
Empliciti	2015	Eltuzumab	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	2	0	1	0	1
Kyprolis	2012	Carfilzomib	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	2	0	1	0	1
Farydak	2015	Panobinostat	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	2	1	0	0	1
Ninlaro	2015	Ixazomib	Cancer, myeloma	C90	C81-C90, C96	Lymphomas, multiple myeloma	760	1	0	0	0	1
Erwinaze	2011	Asparaginase Erwinia chrysanthemi	Cancer, acute lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	2	0	0	1	1
Kymriah	2017	Tisagenlecleucel	Cancer, acute lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	1	0	1	0	0
Posivy	2019	Potuzumab vedotin-PIIQC	Cancer, B-cell lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	3	1	1	0	1
Blincyto	2014	Binatumomab	Cancer, B-cell lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	3	1	1	0	1
Besponsa	2017	Inotuzumab ozogamicin	Cancer, B-cell lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	2	0	1	0	1
Yescarta	2017	Axicabtagene ciloleucel	Cancer, B-cell lymphoblastic leukemia	C91	C91-C95	Leukaemia	770	1	0	1	0	0
Zydelig	2014	Idecalcesumab	Cancer, leukaemia, chronic lymphocytic	C91.10	C91-C95	Leukaemia	770	4	1	1	1	1
Venclexta	2016	Venetoclax	Cancer, leukaemia, chronic lymphocytic	C91.10	C91-C95	Leukaemia	770	3	1	1	0	1
Gazyva	2013	Obinutuzumab	Cancer, lymphocytic leukemia	C91.10	C91-C95	Leukaemia	770	2	0	1	0	1
Lumoxiti	2018	Moxetumomab pasudotox	Cancer, hairy cell leukemia (HCL)	C91.41	C91-C95	Leukaemia	770	2	0	0	1	1
Asparlas	2018	Calaspargase pegol	Cancer, acute myelogenous leukemia	C92	C91-C95	Leukaemia	770	0	0	0	0	0
Rydapt	2017	Midostaurin	Cancer, acute myeloid leukemia	C92	C91-C95	Leukaemia	770	3	0	1	1	1
Tibsovo	2018	Ivosidenib	Cancer, acute myeloid leukemia	C92	C91-C95	Leukaemia	770	2	0	0	1	1
Idhifa	2017	Enasidenib mesylate	Cancer, acute myeloid leukemia	C92	C91-C95	Leukaemia	770	2	0	0	1	1
Xospata	2018	Gilteritinib	Cancer, acute myeloid leukemia	C92	C91-C95	Leukaemia	770	2	0	0	1	1
Daurismo	2018	Glasdegib	Cancer, acute myeloid leukemia	C92	C91-C95	Leukaemia	770	1	0	0	0	1
Bosulif	2012	Bosutinib	Cancer, chronic myeloid leukemia	C92	C91-C95	Leukaemia	770	0	0	0	0	0
Capiktra	2015	Duvellinib	Cancer, chronic myeloid leukemia	C92	C91-C95	Leukaemia	770	3	1	0	1	1
Ichvas	2012	Ponatinib	Cancer, chronic myeloid leukemia	C92	C91-C95	Leukaemia	770	3	1	0	1	1
Synribo	2012	Omacetaxine mepesuccinate	Cancer, chronic myeloid leukemia	C92	C91-C95	Leukaemia	770	2	1	0	0	1
Sylvant	2014	Siltuximab	Castleman's disease	D47.22	D00-D09, D37-D51	Other neoplasms	790	1	0	0	0	1
Turalio	2019	Pexidartinib hydrochloride	Cancer, Tenosynovial giant cell tumour	D48.1	D00-D09, D37-D51	Other neoplasms	790	2	0	1	0	1
Fariptox	2011	Deleriprone	Thalassemia syndrome	D56.9	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	1	0	1	0
Oxbrva	2019	Voxelator	Anaemia, sickle cell	D57	D57	Sickle cell disorders and trait	812	4	1	1	1	1
Adakveo	2019	Crizanlizumab-TMCA	Anaemia, sickle cell	D57	D57	Sickle cell disorders and trait	812	2	0	1	0	1
Reblozyl	2019	Luspatercept-AAMT	Anaemia	D58.9	D55, D58-D59	Other haemoglobinopathies and haemolytic anaemias	813	2	0	0	1	1
Omontys	2012	Peginesatide	Anaemia, renal disease-induced	D59.0	D55, D58-D59	Other haemoglobinopathies and haemolytic anaemias	813	0	0	0	0	0
Ultomiris	2018	Ravulizumab	Paroxysmal nocturnal hemoglobinuria (PNH)	D59.5	D55, D58-D59	Other haemoglobinopathies and haemolytic anaemias	813	0	0	0	0	0
Vonvendi	2015	von Willebrand factor (Recombinant)	Von Willebrand Disease (VWD)	D68.0	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Tretten	2013	Coagulation Factor XIII A Subunit (Recombinant)	Congenital Factor XIII deficiency	D68.2	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Rebinyln	2017	Nonacog beta pegol	Hemophilia B	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Idelvon	2016	Albuteononacog alfa	Hemophilia B	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Alprolix	2014	Eftrenonacog alfa	Hemophilia B	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Ribubis	2013	Coagulation Factor IX (Recombinant)	Hemophilia B	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Eloctate	2014	Efmorotocog alfa	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Hemlibra	2017	Emicizumab	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	1	0	1
Obizur	2014	Susoctocog alfa	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Ixinity	2015	Recombinant Coagulation factor IX Antihemophilic Factor (Recombinant), PEGylated	Hemophilia B	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Adynovate	2015	Recombinant Coagulation factor IX Antihemophilic Factor (Recombinant), PEGylated	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Afstyla	2016	Lonococog alfa	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Kovaltry	2016	Recombinant Antihemophilic Factor VIII (Human)	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Jivi	2018	Damoctocog alfa pegol	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Esperoct	2019	Antihemophilic Factor (recombinant), GlycoPEGylated-exel	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Novoeight	2013	Turoctocog alfa	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Nuwiq	2015	Simococog alfa	Hemophilia A	D68.311	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Tavalisse	2018	Foslamatinib	Thrombocytopenic purpura	D69.3	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Doptelet	2018	Avatrombopag	Thrombocytopenia, chronic liver disease	D69.3	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	1	0	0	0	1
Multipleta	2018	Lusutrombopag	Thrombocytopenia, chronic liver disease	D69.3	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Andexxa	2018	Coagulation Factor Xa (recombinant), inactivated	Haemorrhage; Thrombosis	D69.9	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	1	1	0	1
Jakafi	2011	Ruxolitinib	Myelofibrosis	D75.81	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Inrelic	2019	Fedratinib hydrochloride	Myelofibrosis	D75.81	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	1	0	0	0	1
Gamifant	2018	Emapalumab	Hemophagocytic lymphohistiocytosis	D76.1	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	1	0	1
Revcovi	2018	Elapegademase	Adenosine deaminase severe combined immune deficiency (ADA-SCID)	D81.31	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Hycvia	2014	human immunoglobulin G (IVIg)	Primary immunodeficiency (PI)	D84.9	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Ruconest	2014	Conestat alfa	Angioedema, hereditary	D84.1	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Firazyr	2011	Icatibant	Angioedema, hereditary	D84.1	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Parsabiv	2017	Etelcalcetide	Hyperthyroidism, chronic kidney disease	E05.90	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Tarzsem	2014	Albiglutide	Diabetes, type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Adlyxin	2016	Lixisenatide	Diabetes, type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Nesina	2013	Alogliptin	Diabetes, type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Farxiga	2014	Dapagliflozin	Diabetes, Type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Trulicity	2014	Dulaglutide	Diabetes, Type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Jardiance	2014	Empagliflozin	Diabetes, type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Trandianta	2011	Linagliptin	Diabetes, type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Invokana	2013	Canagliflozin	Diabetes, Type 2	E11.8	E11 (minus E11.2)	Diabetes mellitus	800	0	0	0	0	0
Steglatro	2017	Ertugliflozin	Diabetes, type 2	E11.8	E11 (minus E11							

Vimzim	2014	Eltosulfase alfa	Mucopolysaccharidosis IV	E76.3	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Juxtapid	2012	Lomitapide	Hypercholesterolemia	E78.00	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Repatha	2015	Evolocumab	Hypercholesterolemia	E78.00	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Kynamro	2013	Mipomersen	Hypercholesterolemia	E78.00	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Praluent	2015	Alicumab	Hypercholesterolemia	E78.00	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Vascepa	2012	Ethyl eicosapentaenoic acid	Hypertriglyceridemia	E78.1	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Zurampic	2015	Lesinurad	Hyperuricemia	E79.0	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Xuriden	2015	Uridine triacetate	Hereditary orotic aciduria	E79.1	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	1	0	1
Scenesse	2019	Afamanelonide	Erythropoietic protoporphyria	E80.0	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Givaaari	2019	Givosiran sodium	Porphyria	E80.20	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	1	0	1
Crysvia	2018	Burosumab	Rickets, x-linked hypophosphatemia	E83.32	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Strensiq	2015	Asfotase alfa	Hypophosphatasia	E83.39	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Natpara	2015	Parathyroid hormone	Hypocalcemia	E83.51	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Trikafta	2019	Elexacaftor, ivacaftor, tezacaftor	Cystic fibrosis	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Orkambi	2015	Ivacaftor plus lumacaftor	Cystic fibrosis	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Symdeko	2018	Tezacaftor and ivacaftor	Cystic fibrosis	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Kalydeco	2012	Ivacaftor	Cystic fibrosis	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Myalept	2014	Metreleptin	Diabetes, Lipodystrophy	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Veltaasa	2015	Patromer	Hyperkalemia	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Lokelma	2018	Sodium zirconium cyclosilicate	Hyperkalemia	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Egrifra	2010	Tesamorelin	Lipodystrophy, HIV	E84.19	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	0	0	0	0	0
Onpattro	2018	Patisiran	Amyloidosis	E85.2	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Vyndaqel	2019	Tafamidis meglumine	Amyloidosis	E85.2	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	3	0	1	1	1
Tegsedi	2018	Inotersen	Amyloidosis	E85.2	D60-D64 (minus D64.9), D65-D89, E03-E07, E15-E34, E65-E88, R63	Other endocrine, blood and immune disorders	814	2	0	0	1	1
Lucemyra	2018	Lofexidine	Addiction, narcotic/opiate	F11.10	F11-F16, F18-F19, X41-X42, X44	Drug use disorders	870	2	0	0	1	1
Aristada	2015	Aripiprazole lauroxil	Schizophrenia	F20.9	F20-F29	Schizophrenia	850	0	0	0	0	0
Caplyta	2015	Lumateperone	Schizophrenia	F20.9	F20-F29	Schizophrenia	850	1	0	0	1	0
Laluda	2010	Lurasidone	Schizophrenia	F20.9	F20-F29	Schizophrenia	850	0	0	0	0	0
Rexuli	2015	Brexiprazole	Schizophrenia, Major depressive disorder	F20.9	F20-F29	Schizophrenia	850	0	0	0	0	0
Vraylar	2015	Cariprazine	Schizophrenia, Bipolar disorder	F20.9	F20-F29	Schizophrenia	850	0	0	0	0	0
Trintellix	2013	Vortioxetine	Depression, major depressive disorder	F33.1	F32-F33, F34.1	Depressive disorders	830	0	0	0	0	0
Vibryd	2011	Vilazodone	Depression, major depressive disorder	F33.1	F32-F33, F34.1	Depressive disorders	830	0	0	0	0	0
Fetzima	2013	levomilnacipran	Depression, major depressive disorder	F33.1	F32-F33, F34.1	Depressive disorders	830	0	0	0	0	0
Addyi	2015	Flibanserin	Hypoactive sexual desire disorder, women	F52.0	F04-F09, F17, F34-F39 (minus F34.1), F45-F48, F51-F69, F80-F83, F88-F89, F93-F99, R40-R46	Other mental and behavioural disorders	930	0	0	0	0	0
Vyleesi	2019	Bremelanotide	Hypoactive sexual desire disorder, women	F52.0	F04-F09, F17, F34-F39 (minus F34.1), F45-F48, F51-F69, F80-F83, F88-F89, F93-F99, R40-R46	Other mental and behavioural disorders	930	0	0	0	0	0
Zulresso	2019	Brexanolone	Depression: postpartum	F53.0	F04-F09, F17, F34-F39 (minus F34.1), F45-F48, F51-F69, F80-F83, F88-F89, F93-F99, R40-R46	Other mental and behavioural disorders	930	2	0	1	0	1
Austedo	2017	Deutetrabenazine	Huntington's Disease	G10	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	0	0	0	0	0
Radicava	2017	Edaravone	Sclerosis, amyotrophic lateral	G12.21	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	0	0	0	0	0
Zoigenasma	2019	onasemnogene abecaprovce-xioi	Spinal Muscular Atrophy	G12.9	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	3	0	1	1	1
Spinraza	2016	Nusinersen	Spinal muscular dystrophy	G12.9	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	2	0	0	1	1
Nourianz	2019	Istradefylline	Parkinson's disease	G20	G20-G21	Parkinson disease	960	0	0	0	0	0
Xadago	2017	Safinamide	Parkinson's disease	G20	G20-G21	Parkinson disease	960	0	0	0	0	0
Nuplazid	2016	Pimavanserin	Parkinson's disease, psychosis	G20	G20-G21	Parkinson disease	960	2	0	1	0	1
Ingrezza	2017	Valbenazine tosylate	Tardive dyskinesia	G24.01	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	3	0	1	1	1
Xeomin	2010	IncobotulinumtoxinA	Cervical dystonia, Blepharospasm	G24.3	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	0	0	0	0	0
Horizant	2011	Gabapentin enacarbil	restless leg syndrome	G25.81	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R46	Other neurological conditions	1010	0	0	0	0	0
Ampyra	2010	Dalfampridine	Multiple sclerosis	G35	G35	Multiple sclerosis	980	1	0	0	0	0
Aurobio	2012	Teriflumonide	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Ocrevus	2017	Ocrelizumab	Multiple sclerosis	G35	G35	Multiple sclerosis	980	3	0	1	1	1
Zinbrya	2016	Daclizumab	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Vumerty	2013	diroxime fumarate	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Tecfidera	2013	Dimethyl fumarate	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Mayzent	2019	Siponimod	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Plegridy	2014	Peginterferon beta-1A	Multiple sclerosis	G35	G35	Multiple sclerosis	980	0	0	0	0	0
Gilenya	2010	Fingolimod	Multiple sclerosis	G35	G35	Multiple sclerosis	980	2	0	0	1	1
Onfi	2011	Clobazam	Seizures, Lennox-Gastaut syndrome	G40.813	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Epidiolex	2018	cannabidiol	Dravet syndrome	G40.833	G40-G41, R56	Epilepsy	970	2	0	0	1	1
Diacomit	2018	Stiripentol	Dravet syndrome	G40.833	G40-G41, R56	Epilepsy	970	1	0	0	0	0
Xcopri	2019	Cenobamete	Epilepsy	G40.909	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Briavact	2016	Briaracetam	Seizures, epilepsy	G40.909	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Fycompa	2012	Perampanel	Seizures, epilepsy	G40.909	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Aptiom	2013	Eslicarbazepine acetate	Seizures	G40.909	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Potiga	2011	Ezogabine	Seizures	G40.909	G40-G41, R56	Epilepsy	970	0	0	0	0	0
Aimovig	2018	Erenumab	Migraine prophylaxis	G43.709	G43	Migraine	990	0	0	0	0	0
Apoyn	2018	Erenumab	Migraine prophylaxis	G43.709	G43	Migraine	990	1	0	0	0	1
Emgality	2018	Galcacnezumab	Migraine	G43.909	G43	Migraine	990	0	0	0	0	0
Reyvow	2019	Lasmiditan succinate	Migraine	G43.909	G43	Migraine	990	0	0	0	0	0
Ubrovly	2019	Ubrogepant	Migraine	G43.909	G43	Migraine	990	0	0	0	0	0
Hettioz	2014	Tasimelteon	Non-24-hour sleep-wake disorder	G47	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	1	0	0	0	1
Belsomra	2014	Suvorexant	Insomnia	G47.00	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	0	0	0	0	0
Dayvigo	2019	Lemborexant	Insomnia	G47.00	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	0	0	0	0	0
Wakix	2019	Pitolisant hydrochloride	Narcolepsy	G47.419	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	2	0	0	1	1
Exondys 51	2016	Eteplirsen	Duchenne muscular dystrophy	G71.01	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	3	1	0	1	1
Vyndys 53	2019	godolisren	Duchenne muscular dystrophy	G71.01	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	3	1	0	1	1
Emflaza	2017	Deflazacort	Duchenne muscular dystrophy	G71.01	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	2	0	0	1	1
Firdapse	2018	Amifampridine	Myasthenic syndrome	G73.3	G06-G12, G23-G25, G36-G37, G45-G98 (minus G72.1), R25.1, R47	Other neurological conditions	1010	2	0	1	0	1
Xiidra	2016	Lifitegrast	Dry eye disease (DED)	H04.12	H00-H21, H27, H43-H47, H55-H61, H68-H83, H92-H93	Other sense organ disorders	1090	1	0	0	0	1
Lastacaft	2010	Alcaftadine	Itching, allergic conjunctivitis	H10.11	H00-H21, H27, H43-H47, H55-H61, H68-H83, H92-H93	Other sense organ disorders	1090	0	0	0	0	0
Oxervate	2018	Cenegeim	Keratitis, neurotrophic	H16.231	H00-H21, H27, H43-H47, H55-H61, H68-H83, H92-H93	Other sense organ disorders	1090	3	0	1	1	1
Jetrea	2012	Ocriplasmim	Other vision loss	H35.00	H30-H35 (minus H35.3), H53-H54	Other vision loss	1070	1	0	0	0	1
Eylea	2011	Aflibercept	Macular degeneration, wet	H35.32	H35.3	Macular degeneration	1060	1	0	0	0	1
Beovu	2019	Brolucizumab-DBI	Macular degeneration, wet	H35.32	H35.3	Macular degeneration	1060	0	0	0	0	0
Luxtarma	2017	Voretigene neparovec	Retinal Dystrophy	H35.5	H30-H35 (minus H35.3), H53-H54	Other vision loss	1070	2	0	1	0	1
Zioptan	2012	Tafuprost	Glaucoma	H40.11	H40	Glaucoma	1030	0	0	0	0	0
Rhoprosta	2017	Netarsudil	Glaucoma	H40.11	H40							

Glassia	2010	Alpha-1-proteinase inhibitor	Emphysema	J43.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Breo Ellipta	2013	Fluticasone, vilanterol	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Anoro Ellipta	2013	Umeclidinium, vilanterol	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Tudorza Pressair	2012	Acclidinium bromide	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Daliresp	2011	Roflumilast	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Arcepta neohaler	2011	Indacaterol	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Striverdi Respimat	2014	Olodaterol	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Yupeli	2018	Revefenacin	Chronic obstructive pulmonary disease (COPD)	J44.9	J40-J44	Chronic obstructive pulmonary disease	1180	0	0	0	0	0	0
Fasenra	2017	Benralizumab	Asthma	J45	J45-J46	Asthma	1190	0	0	0	0	0	0
Nucala	2015	Mepolizumab	Asthma	J45	J45-J46	Asthma	1190	0	0	0	0	0	0
Cinqair	2016	Reslizumab	Asthma, eosinophilic	J82.83	J45-J46	Asthma	1190	0	0	0	0	0	0
Esbniet	2014	Pirfenidone	Fibrosis, pulmonary	J84.112	J30-J39, J47-J98, R05, R06, R49	Other respiratory diseases	1200	3	0	1	1	1	1
Clev	2014	Nintedanib	Fibrosis, pulmonary	J84.112	J30-J39, J47-J98, R05, R06, R49	Other respiratory diseases	1200	3	0	1	1	1	1
Sunosi	2019	Solriamfetol	Apnoea	J98	J30-J39, J47-J98, R05, R06, R49	Other respiratory diseases	1200	0	0	0	0	0	0
Entyvio	2014	Vedolizumab	Colitis, ulcerative	K51.90	K50-K52, K58.0	Inflammatory bowel disease	1244	2	0	0	1	1	1
Viberzi	2015	Eluxadoline	Irritable bowel syndrome, diarrhoea	K58.0	K50-K52, K58.0	Inflammatory bowel disease	1244	2	0	0	1	1	1
Trulance	2017	Plecanatide	Irritable bowel syndrome, constipation	K58.1	K50-K52, K58.0	Inflammatory bowel disease	1244	0	0	0	0	0	0
Linzess	2012	Linaclotide	Irritable bowel syndrome, constipation-predominant	K58.1	K50-K52, K58.0	Inflammatory bowel disease	1244	0	0	0	0	0	0
Ibsrela	2019	Tenapanor	Irritable bowel syndrome, constipation-predominant	K58.1	K50-K52, K58.0	Inflammatory bowel disease	1244	0	0	0	0	0	0
Prepopik	2012	Picosulfate	Laxative, Surgery Adjunct	K59.0	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Motegrity	2018	Prucalopride	Constipation, chronic	K59.04	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Movantik	2014	Naloxegol	Constipation, opioid-induced	K59.09	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Symproic	2017	Naldemedine	Constipation, opioid-induced	K59.09	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Ocalvia	2016	Obeticholic acid	Primary biliary cholangitis, adults	K74.3	K70, K74	Cirrhosis of the liver	1230	3	1	0	1	1	1
Deffileo	2016	DeFibrotide sodium	Veno-occlusive hepatic disease	K83	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	1	1	1
Cholibam	2015	Cholic acid	Bile synthesis disorders	K83	K80-K83	Gallbladder and biliary diseases	1246	1	0	0	0	0	1
Gattexo	2012	Teduglutide	Short bowel syndrome	K91.2	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Sivextro	2014	Tedizolid	Acute bacterial skin and skin structure infection (ABSSSI)	L00-L08	L00-L08, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2)	Skin diseases	1330	1	0	0	0	0	1
Baxdela	2017	Delafloxacin	Acute bacterial skin and skin structure infection (ABSSSI)	L00-L08	L00-L08, L40-L45, L80-L99, R20, R21, R22, R23, L00-L08, L00-L08	Skin diseases	1330	2	0	0	0	1	1
Xepi	2017	Ozenoxacin	Impetigo	L01.00A	L00-L08, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2), M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Skin diseases	1330	0	0	0	0	0	0
Dalvance	2014	Dalbavancin	Skin infection	L08.9	L00-L08, L80-L99, R20, R21, R22, R23, L00-L08, L00-L08, E11 (minus E11.2)	Skin diseases	1330	2	0	0	0	1	1
Eucrisa	2016	Crisaborole	Eczema, atopic	L20.9	L20-L30, L40-L45, L00-L08, L40-L45, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Dupixent	2017	Dupilumab	Eczema, atopic	L20.9	L20-L30, L00-L08, L40-L45, L40-L45, E11 (minus E11.2)	Skin diseases	1330	2	0	1	0	0	1
Otezla	2014	Apremilast	Arthritis, psoriatic	L40.54	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	0	0	0	0	0	0
Skyrizi	2019	risankizumab-rzaa	Psoriasis	L40.9	L40-L45, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Cosentyx	2015	Secukinumab	Psoriasis	L40.9	L40-L45, L80-L99, R20, R21, R22, R23, L80-L99, R20, R21, R22, R23, L40-L45, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Siliq	2017	Brodalumab	Psoriasis	L40.9	L40-L45, L00-L08, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Taltz	2016	Ixekizumab	Psoriasis	L40.9	L40-L45, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Ilumya	2018	Tildrakizumab	Psoriasis	L40.9	L40-L45, L00-L08, L40-L45, L40-L45, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Tremfya	2017	Guselkumab	Psoriasis	L40.9	L40-L45, E11 (minus E11.2), E11 (minus E11.2), E11 (minus E11.2), M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Skin diseases	1330	0	0	0	0	0	0
Seysara	2018	Sarecycline	Acne	L70.9	L00-L08, L40-L45, L00-L08, E11 (minus E11.2), E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Aklief	2019	Trifarotene	Acne	L70.9	L10-L14, L20-L30, L40-L45, L80-L99, R20, R21, R22, R23, L40-L45, L80-L99, R20, R21, R22, R23, L40-L45, L40-L45, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Kybella	2015	Deoxycholic acid	Submental fat, double chin	L98.7	L80-L99, R20, R21, R22, R23, L40-L45, L40-L45, L00-L08, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Jejuveau	2019	PrabotulinumtoxinA-XVFS	Glabellar lines	L98.8	L80-L99, R20, R21, R22, R23, L40-L45, L40-L45, L00-L08, E11 (minus E11.2)	Skin diseases	1330	0	0	0	0	0	0
Olumiant	2018	Baricitinib	Arthritis, rheumatoid	M05.9	M05-M06	Rheumatoid arthritis	1350	0	0	0	0	0	0
Rinvoq	2019	Upadacitinib	Arthritis, rheumatoid	M05.9	M05-M06	Rheumatoid arthritis	1350	0	0	0	0	0	0
Actemra	2010	Tocilizumab	Arthritis, rheumatoid	M05.9	M05-M06	Rheumatoid arthritis	1350	0	0	0	0	0	0
Kezara	2017	Sarilumab	Arthritis, rheumatoid	M05.9	M05-M06	Rheumatoid arthritis	1350	0	0	0	0	0	0
Kejelzan	2012	Tofacitinib	Arthritis, rheumatoid	M05.9	M05-M06	Rheumatoid arthritis	1350	0	0	0	0	0	0
Krystelxa	2010	Pegloticase	Gout	M10.9	M10	Gout	1370	0	0	0	0	0	0
Cablivi	2019	caplacizumab-yhdp	Thrombocytopenic purpura, thrombotic	M31.1	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	2	0	0	0	1	1
Benlysta	2011	Belimumab	Lupus	M32.9	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	2	0	0	0	1	1
Xiaflex	2010	Collagenase clostridium histolyticum	Dupuytren's Contracture	M72.0	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	0	0	0	0	0	0
Tymlos	2017	Abaloparitin	Osteoporosis	M81.0	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	0	0	0	0	0	0
Prolia	2010	Denosumab	Osteoporosis, postmenopausal	M81.0	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	0	0	0	0	0	0
Evently	2019	Romosozumab	Osteoporosis, postmenopausal	M81.0	M00, M02, M08, M11-M13, M20-M43, M60-M99, R25.2, R26, R27	Other musculoskeletal disorders	1390	0	0	0	0	0	0
Fetroja	2019	Cefiderocol sulfate tosylate	Complicated urinary tract infections (cUTI)	N39.0A	N25-N39, N41-N45, N47-N51, R30, R32, R34, R35, R39	Other urinary diseases	1300	2	0	0	0	1	1
Zemdiri	2018	Piagamycin	Complicated urinary tract infections (cUTI)	N39.0A	N25-N39, N41-N45, N47-N51, R30, R32, R34, R35, R39	Other urinary diseases	1300	1	0	0	0	0	1
Vabomere	2017	Meropenem; vaborbactam	Complicated urinary tract infections (cUTI)	N39.0A	N25-N39, N41-N45, N47-N51, R30, R32, R34, R35, R39	Other urinary diseases	1300	2	0	0	0	1	1
Recarbrio	2019	Cilastatin sodium, imipenem, relebactam	Complicated urinary tract infections (cUTI)	N39.0A	N25-N39, N41-N45, N47-N51, R30, R32, R34, R35, R39	Other urinary diseases	1300	2	0	0	0	1	1
Stendra	2012	Avanafil	Erectile dysfunction	N52.9	N25-N39, N41-N45, N47-N51, R30, R32, R34, R35, R39	Other urinary diseases	1300	0	0	0	0	0	0
Soiasec	2017	Sacnidazole	Bacterial vaginosis	N77.1	N60-N64, N75-N76, N80-N96, N99	Gynecological diseases	1320	2	0	0	0	1	1
Orilissa	2018	Elagolix sodium	Endometriosis	N80.9	N60-N64, N75-N76, N80-N96, N99	Gynecological diseases	1320	1	0	0	0	0	1
Natazia	2010	Oestradiol valerate, dienogest	Menorrhagia	N92.0	N60-N64, N75-N76, N80-N96, N99	Gynecological diseases	1320	0	0	0	0	0	0
Osphena	2013	Ospemifene	Dyspareunia	N94.10	N60-N64, N75-N76, N80-N96, N99	Gynecological diseases	1320	0	0	0	0	0	0
Surfavin	2012	Lucinactant	Respiratory distress syndrome, infant	P22.0	P05, P07, P22, P27-P28	Preterm birth complications	500	1	0	0	0	1	0
Neutroval	2012	Tbo-Figrastim	Neutropenia, cancer-therapy	P61.5	P00-P02, P04, P08, P50-P96	Other neonatal conditions	530	0	0	0	0	0	0
Edarbi	2011	Azilsartan	Hypertension	R03.0	I00, I26-I28, I34-I37, I44-I51, I70-I99, R00, R03, R570, R571, R58, R60, Z95	Other circulatory diseases	1160	0	0	0	0	0	0
Akynzeo	2014	Netupitant, palonosetron	Nausea and vomiting, radio/chemotherapy-induced	R11.2	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Akynzeo IV	2018	Palonosetron, fosnetupitant	Nausea and vomiting, radio/chemotherapy-induced	R11.2	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Varubi	2015	Rolapitant	Nausea and vomiting, radio/chemotherapy-induced	R11.2	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Zerbaxa	2014	Ceftolozane plus tazobactam	Complicated Intra-abdominal Infections, used in combination with metronidazole, Complicated Urinary Tract Infections, including Pyelonephritis	R19	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	0	1	1
Avycaz	2015	Avibactam plus ceftazidime	Complicated Intra-abdominal Infections, Complicated Urinary Tract Infections	R19	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	0	1	1
Xerava	2018	Eravacycline	Intra-abdominal infections	R19.00	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	0	1	1
Aemcolo	2018	Rifaximin	Diarrhea, unspecified	R19.7	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	0	1	1
Fulyzq	2012	Crofelemer	Diarrhoea, unspecified	R19.7	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	2	0	0	0	1	1
Myrbetriq	2012	Mirabegron	Incontinence, urinary	R39.81	K20-K22, K28, K30-K31, K38, K40-K46, K55, K57, K58.9, K59-K66, K71-K73, K75-K76, K90-K92, R11, R12, R13, R15, R18, R19	Other digestive diseases	1250	0	0	0	0	0	0
Giapreza	2017	Angiotensin II, LFPC-501	Hypotension, sepsis	R65.21	I00, I26-I28, I34-I37, I44-I51, I70-I99, R00, R03, R570, R571, R58, R60, Z95	Other circulatory diseases	1160	1	0	0	0	0	1
Praxbind	2015	Idarucizumab	Anticoagulant reversal, Surgery Adjunct, hemorrhage	T45.51	T36-T50, T66-T78, T80-T88, Rest of R, Y and Z	Poisonings	1540	3	1	0	1	0	1
Picato	2012	Ingenol mebutate	Anticoagulant reversal, Surgery Adjunct, hemorrhage	T45.51	T36-T50, T66-T78, T80-T88, Rest of R, Y and Z	Poisonings	1540						

Supplemental table 4. List of FDA "tropical diseases" for priority review voucher awards and drugs approved for such conditions 2010-2019

FDA Tropical Disease	Approved Drugs, 2010-2019	Accelerated Approval	Breakthrough Therapy	Fast Track	Priority Review
Tuberculosis	Sirturo (Bedaquiline), Pretomanid	Yes (Sirturo)	No	Yes (Both)	Yes (Both)
Malaria	Krintafel (Tafenoquine)	No	Yes	No	Yes
Blinding trachoma					
Buruli ulcer					
Cholera					
Dengue					
Dracunculiasis (guinea-worm disease)					
Fascioliasis	Egaten (Triclabendazole)	No	No	Yes	Yes
Human African trypanosomiasis					
Leishmaniasis	Impavido (Miltefosine)	No	No	Yes	Yes
Leprosy					
Lymphatic filariasis					
Onchocerciasis	Moxidectin	No	No	No	Yes
Schistosomiasis					
Soil transmitted helminthiasis					
Yaws					
Filovirus diseases					
Zika virus					
Chagas disease	Benznidazole	Yes	No	No	Yes
Neurocysticercosis					
Chikungunya virus disease					
Lassa fever					
Rabies					
Cryptococcal meningitis					
Brucellosis					
Opisthorchiasis					
Paragonimiasis					

List of diseases and conditions recognized by the FDA as "tropical diseases" under Section 534(a)(3) of the FD&C Act, authorizing the award of priority review vouchers to sponsors of approved tropical disease product applications, and FDA-approved drugs 2010-2019 for tropical diseases. List of FDA neglected tropical diseases as of May 3rd 2023, sourced from <https://www.fda.gov/about-fda/center-drug-evaluation-and-research-cder/tropical-disease-priority-review-voucher-program#:~:text=The%20Federal%20Food%2C%20Drug%2C%20and,applications%20that%20meet%20certain%20criteria>.

Supplemental table 5. Mann-Whitney analysis of differences in disease burden between GHE disease states with or without drug approvals 2010–2019

Burden metric	Approved Drug	All GHE disease states					Non-neoplasm GHE disease states				
		N	Median ('000s)	Mean Rank	Mann-Whitney U	Asymp. Sig. (2-tailed)	N	Median ('000s)	Mean Rank	Mann-Whitney U	Asymp. Sig. (2-tailed)
Global DALYs	No	63	7212	54.8	1436	0.030	53	7255	43.7	883	0.040
	Yes	59	11197	68.7			44	13503	55.4		
Global YLD	No	63	1741	60.2	1777	0.676	53	3127	46.7	1044	0.377
	Yes	59	1341	62.9			44	3950	51.8		
Global YLL	No	63	1129	52.7	1304	0.004	53	812	43.0	846	0.020
	Yes	59	6203	70.9			44	6196	56.3		
US DALYs	No	63	143	50.9	1193	0.001	53	132	41.4	761	0.003
	Yes	59	523	72.8			44	513	58.2		
US YLD	No	63	47	57.1	1583	0.158	53	57	45.0	955	0.126
	Yes	59	70	66.2			44	124	53.8		
US YLL	No	63	15	50.2	1144	<0.001	53	8	40.7	724	0.001
	Yes	59	287	73.6			44	114	59.0		

Significance is inferred with a Bonferroni correction of 8, such that a calculated p value of 0.0065 is equivalent to a threshold of 0.05.

Supplemental table 6. Correlation between US and global metrics for the burden of disease across 122 GHE disease states						
R (p-value)	Global DALYs	Global YLD	Global YLL	US DALYs	US YLD	US YLL
Global DALYs	-	0.267 (p=0.003)	0.957 (p<0.001)	0.615 (p<0.001)	0.221 (p=0.014)	0.613 (p<0.001)
Global YLD		-	-0.024 (p=0.789)	0.411 (p<0.001)	0.859 (p<0.001)	0.002 (p=0.982)
Global YLL			-	0.514 (p<0.001)	-0.03 (p=0.742)	0.636 (p<0.001)
US DALYs				-	0.563 (p<0.001)	0.881 (p<0.001)
US YLD					-	0.104 (p=0.254)
US YLL						-

Correlation coefficients (R) calculated using data for 122 disease states corresponding to GHE codes (WHO 2018). Significance assessed with d.f.=120 and a p<0.05 threshold is equivalent to R>0.178. Correlations coefficients between US and global DALYs, YLD, and YLL are shown in bold italics. Correlation coefficients with Global YLD or US YLD are shown in shaded cells.

Supplemental table 7. Binary logistic regression complete model variables, output, and summaries for all conditions, neoplasm, and non-neoplasm analysis

Condition_grouping		Variable (log burden)	Variables in the Equation						Odds Ratio		Model Summary			Hosmer and Lemeshow Test			Concatenated
			B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		-2 Log likelihood	Cox & Snell R	Nagelkerke R Square	Chi-square	df	Sig.	
								Lower	Upper								
ALL	1+ designation	US DALYs	-0.643	0.230	7.789	1.000	0.005	0.526	0.335	0.826	513.283a	0.021	0.029	10.951	7.000	0.141	(OR=.53, 95% C.I. .33 to .83)
ALL		Constant	2.158	0.865	10.538	1.000	0.001	8.654									
ALL	Accelerated	US DALYs	0.157	0.324	0.236	1.000	0.627	1.170	0.620	2.207	292.988a	0.001	0.001	36.885	8.000	0.000	(OR=1.17, 95% C.I. .62 to 2.21)
ALL		Constant	-2.367	0.934	6.427	1.000	0.011	0.094									
ALL	Breakthrough	US DALYs	-0.334	0.265	1.589	1.000	0.207	0.716	0.426	1.203	359.110a	0.005	0.007	6.437	8.000	0.598	(OR=.72, 95% C.I. .43 to 1.2)
ALL		Constant	-0.274	0.745	0.135	1.000	0.714	0.781									
ALL	Fast track	US DALYs	-0.514	0.220	5.485	1.000	0.019	0.598	0.389	0.920	499.333a	0.014	0.020	13.141	7.000	0.069	(OR=.6, 95% C.I. .39 to .92)
ALL		Constant	0.898	0.623	2.080	1.000	0.149	2.454									
ALL	Priority	US DALYs	-0.626	0.224	7.786	1.000	0.005	0.535	0.344	0.830	522.574a	0.021	0.028	9.952	7.000	0.191	(OR=.53, 95% C.I. .34 to .83)
ALL		Constant	1.895	0.645	8.636	1.000	0.003	6.650									
ALL	1+ designation	US YLD	-1.415	0.189	55.866	1.000	0.000	0.243	0.168	0.352	450.798a	0.168	0.227	17.140	7.000	0.017	(OR=.24, 95% C.I. .17 to .35)
ALL		Constant	3.332	0.425	61.477	1.000	0.000	27.996									
ALL	Accelerated	US YLD	-1.120	0.239	21.985	1.000	0.000	0.326	0.204	0.521	268.776a	0.062	0.116	48.608	7.000	0.000	(OR=.33, 95% C.I. .2 to .52)
ALL		Constant	0.167	0.433	0.148	1.000	0.701	1.181									
ALL	Breakthrough	US YLD	-0.976	0.207	22.173	1.000	0.000	0.377	0.251	0.566	336.025a	0.071	0.108	19.317	8.000	0.013	(OR=.38, 95% C.I. .25 to .57)
ALL		Constant	0.666	0.399	2.786	1.000	0.095	1.947									
ALL	Fast track	US YLD	-0.895	0.167	28.665	1.000	0.000	0.409	0.295	0.567	473.091a	0.080	0.109	9.863	7.000	0.196	(OR=.41, 95% C.I. .29 to .57)
ALL		Constant	1.252	0.346	13.096	1.000	0.000	3.498									
ALL	Priority	US YLD	-1.269	0.180	49.866	1.000	0.000	0.281	0.198	0.400	469.842a	0.147	0.196	9.284	7.000	0.233	(OR=.28, 95% C.I. .2 to .4)
ALL		Constant	2.767	0.394	49.417	1.000	0.000	15.915									
ALL	1+ designation	US YLL	0.243	0.164	2.181	1.000	0.140	1.274	0.924	1.758	489.911a	0.006	0.008	23.732	8.000	0.003	(OR=1.27, 95% C.I. .92 to 1.76)
ALL		Constant	-0.227	0.433	0.275	1.000	0.600	0.797									
ALL	Accelerated	US YLL	1.104	0.333	11.000	1.000	0.001	3.016	1.571	5.792	270.327a	0.037	0.069	22.510	8.000	0.004	(OR=3.02, 95% C.I. 1.57 to 5.79)
ALL		Constant	-4.883	0.954	26.182	1.000	0.000	0.008									
ALL	Breakthrough	US YLL	0.256	0.226	1.283	1.000	0.257	1.292	0.829	2.012	345.538a	0.004	0.006	11.558	8.000	0.172	(OR=1.29, 95% C.I. .83 to 2.01)
ALL		Constant	-1.838	0.609	9.112	1.000	0.003	0.159									
ALL	Fast track	US YLL	0.039	0.167	0.055	1.000	0.815	1.040	0.750	1.441	486.902a	0.000	0.000	17.208	8.000	0.028	(OR=1.04, 95% C.I. .75 to 1.44)
ALL		Constant	-0.563	0.442	1.623	1.000	0.203	0.569									
ALL	Priority	US YLL	0.186	0.163	1.314	1.000	0.252	1.205	0.876	1.657	502.041a	0.004	0.005	13.729	8.000	0.089	(OR=1.2, 95% C.I. .88 to 1.66)
ALL		Constant	-0.309	0.431	0.514	1.000	0.474	0.735									
ALL	1+ designation	Global DALYs	-0.396	0.230	2.958	1.000	0.085	0.673	0.428	1.057	521.837a	0.008	0.010	28.095	7.000	0.000	(OR=.67, 95% C.I. .43 to 1.06)
ALL		Constant	1.962	0.944	4.314	1.000	0.038	7.110									
ALL	Accelerated	Global DALYs	-0.061	0.336	0.033	1.000	0.856	0.941	0.487	1.819	294.011a	0.000	0.000	51.365	7.000	0.000	(OR=.94, 95% C.I. .49 to 1.82)
ALL		Constant	-1.684	1.371	1.509	1.000	0.219	0.186									
ALL	Breakthrough	Global DALYs	-0.322	0.292	1.213	1.000	0.271	0.725	0.409	1.285	363.431a	0.004	0.005	31.538	7.000	0.000	(OR=.72, 95% C.I. .41 to 1.29)
ALL		Constant	0.099	1.182	0.007	1.000	0.933	1.104									
ALL	Fast track	Global DALYs	-0.197	0.233	0.714	1.000	0.398	0.821	0.521	1.296	508.033a	0.002	0.003	12.975	7.000	0.073	(OR=.82, 95% C.I. .52 to 1.3)
ALL		Constant	0.252	0.949	0.071	1.000	0.790	1.287									
ALL	Priority	Global DALYs	-0.427	0.228	3.514	1.000	0.061	0.652	0.417	1.020	531.037a	0.009	0.012	24.469	7.000	0.001	(OR=.65, 95% C.I. .42 to 1.02)
ALL		Constant	1.877	0.933	4.046	1.000	0.044	6.536									
ALL	1+ designation	Global YLD	-1.536	0.188	66.580	1.000	0.000	0.215	0.149	0.311	437.797a	0.201	0.271	15.223	8.000	0.055	(OR=.22, 95% C.I. .15 to .31)
ALL		Constant	5.470	0.651	70.541	1.000	0.000	237.363									
ALL	Accelerated	Global YLD	-1.796	0.285	39.589	1.000	0.000	0.166	0.095	0.290	239.471a	0.132	0.247	9.854	8.000	0.275	(OR=.17, 95% C.I. .09 to .29)
ALL		Constant	3.350	0.782	18.363	1.000	0.000	28.491									
ALL	Breakthrough	Global YLD	-1.063	0.200	28.213	1.000	0.000	0.346	0.233	0.511	332.986a	0.090	0.136	6.072	7.000	0.531	(OR=.35, 95% C.I. .23 to .51)
ALL		Constant	2.090	0.609	11.786	1.000	0.001	8.083									
ALL	Fast track	Global YLD	-0.724	0.154	22.047	1.000	0.000	0.485	0.358	0.656	485.423a	0.058	0.080	13.387	8.000	0.099	(OR=.48, 95% C.I. .36 to .66)
ALL		Constant	1.781	0.501	12.651	1.000	0.000	5.938									
ALL	Priority	Global YLD	-1.254	0.170	54.472	1.000	0.000	0.285	0.205	0.398	469.291a	0.155	0.207	10.619	8.000	0.224	(OR=.29, 95% C.I. .2 to .4)
ALL		Constant	4.265	0.575	54.953	1.000	0.000	71.155									
ALL	1+ designation	Global YLL	0.406	0.136	8.959	1.000	0.003	1.501	1.150	1.958	498.985a	0.026	0.035	21.931	8.000	0.005	(OR=1.5, 95% C.I. 1.15 to 1.96)
ALL		Constant	-1.149	0.518	4.918	1.000	0.027	0.317									
ALL	Accelerated	Global YLL	0.687	0.270	6.456	1.000	0.011	1.987	1.170	3.375	282.950a	0.021	0.039	32.767	8.000	0.000	(OR=1.99, 95% C.I. 1.17 to 3.38)
ALL		Constant	-4.562	1.088	17.576	1.000	0.000	0.010									
ALL	Breakthrough	Global YLL	0.341	0.195	3.081	1.000	0.079	1.407	0.961	2.060	351.516a	0.011	0.016	23.136	8.000	0.003	(OR=1.41, 95% C.I. .96 to 2.06)
ALL		Constant	-2.495	0.761	10.752	1.000	0.001	0.083									
ALL	Fast track	Global YLL	0.351	0.149	5.500	1.000	0.019	1.420	1.059	1.903	492.235a	0.017	0.023	11.775	8.000	0.162	(OR=1.42, 95% C.I. 1.06 to 1.9)
ALL		Constant	-1.823	0.580	9.868	1.000	0.002	0.161									
ALL	Priority	Global YLL	0.336	0.134	6.325	1.000	0.012	1.399	1.077	1.818	512.285a	0.018	0.024	19.808	8.000	0.011	(OR=1.4, 95% C.I. 1.08 to 1.82)
ALL		Constant	-1.109	0.513	4.677	1.000	0.031	0.330									

Condition_grouping		Variable (log burden)	Variables in the Equation						Odds Ratio		Model Summary			Hosmer and Lemeshow Test			Concatenated
			B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		-2 Log likelihood	Cox & Snell R	Nagelkerke R Square	Chi-square	df	Sig.	
								Lower	Upper								
NEOPLASM	1+ designation	US DALYs	0.711	1.006	0.499	1.000	0.480	2.036	0.283	14.626	49.783a	0.005	0.013	9.259	7.000	0.235	(OR=2.04, 95% C.I. .28 to 14.63)
NEOPLASM		Constant	0.574	2.783	0.043	1.000	0.836	1.776									
NEOPLASM	Accelerated	US DALYs	1.597	0.633	6.357	1.000	0.012	4.936	1.427	17.078	122.172a	0.076	0.104	19.402	7.000	0.007	(OR=4.94, 95% C.I. 1.43 to 17.08)
NEOPLASM		Constant	-4.990	1.823	7.492	1.000	0.006	0.007									
NEOPLASM	Breakthrough	US DALYs	0.959	0.595	2.597	1.000	0.107	2.609	0.813	8.376	116.851a	0.032	0.043	10.390	7.000	0.168	(OR=2.61, 95% C.I. .81 to 8.38)
NEOPLASM		Constant	-2.934	1.707	2.955	1.000	0.086	0.053									
NEOPLASM	Fast track	US DALYs	-0.528	0.527	1.001	1.000	0.317	0.590	0.210	1.658	133.180a	0.011	0.014	4.879	6.000	0.559	(OR=.59, 95% C.I. .21 to 1.66)
NEOPLASM		Constant	1.389	1.503	0.853	1.000	0.356	4.011									
NEOPLASM	Priority	US DALYs	0.724	0.701	1.068	1.000	0.301	2.064	0.522	8.151	88.936a	0.011	0.019	88.936a	0.011	0.019	(OR=2.06, 95% C.I. .52 to 8.15)
NEOPLASM		Constant	-0.476	1.954	0.059	1.000	0.807	0.621									
NEOPLASM	1+ designation	US YLD	-0.514	1.045	0.242	1.000	0.623	0.598	0.077	4.637	50.051a	0.002	0.006	7.065	6.000	0.315	(OR=.6, 95% C.I. .08 to 4.64)
NEOPLASM		Constant	3.371	1.737	3.766	1.000	0.052	29.094									
NEOPLASM	Accelerated	US YLD	0.063	0.579	0.012	1.000	0.914	1.065	0.342	3.312	129.876a	0.000					

NEOPLASM	Priority	Global YLL	1.312	0.690	3.618	1.000	0.057	3.714	0.961	14.358	86.159a	0.039	0.065	3.064	6.000	0.801	(OR=3.71, 95% C.I. .96 to 14.36)
NEOPLASM	Constant		-3.531	2.640	1.789	1.000	0.181	0.029									

Condition_grouping		Variable (log)	Variables in the Equation							Odds Ratio				Model Summary			Hosmer and Lemeshow Test			Concatenated
			B	S.E.	Wald	df	Sig.	Exp(B)	95% C.I. for EXP(B)		-2 Log likelihood	Cox & Snell R	Nagelkerke R Square	Chi-square	df	Sig.				
									Lower	Upper										
NON-NEOPLASM	1+ designation	US DALYs	-0.822	0.251	10.701	1.000	0.001	0.440	0.269	0.719	384.944a	0.040	0.053	20.940	7.000	0.004	(OR=44, 95% C.I. .27 to .72)			
NON-NEOPLASM	Constant		2.182	0.720	9.193	1.000	0.002	8.861												
NON-NEOPLASM	Accelerated	US DALYs	-1.102	0.470	5.490	1.000	0.019	0.332	0.132	0.835	88.476a	0.017	0.060	11.256	7.000	0.128	(OR=.33, 95% C.I. .13 to .84)			
NON-NEOPLASM	Constant		-0.293	1.209	0.059	1.000	0.809	0.746												
NON-NEOPLASM	Breakthrough	US DALYs	-0.899	0.317	8.028	1.000	0.005	0.407	0.219	0.758	204.308a	0.031	0.054	14.827	7.000	0.038	(OR=.41, 95% C.I. .22 to .76)			
NON-NEOPLASM	Constant		0.744	0.860	0.748	1.000	0.387	2.104												
NON-NEOPLASM	Fast track	US DALYs	-0.533	0.243	4.811	1.000	0.028	0.587	0.365	0.945	359.576a	0.017	0.023	16.282	7.000	0.023	(OR=.59, 95% C.I. .36 to .94)			
NON-NEOPLASM	Constant		0.785	0.686	1.308	1.000	0.253	2.192												
NON-NEOPLASM	Priority	US DALYs	-0.879	0.252	12.147	1.000	0.000	0.415	0.253	0.681	379.282a	0.045	0.061	18.420	7.000	0.010	(OR=.42, 95% C.I. .25 to .68)			
NON-NEOPLASM	Constant		2.194	0.719	9.314	1.000	0.002	8.974												
NON-NEOPLASM	1+ designation	US YLD	-0.981	0.195	25.321	1.000	0.000	0.375	0.256	0.549	367.039a	0.098	0.131	7.007	7.000	0.428	(OR=.37, 95% C.I. .26 to .55)			
NON-NEOPLASM	Constant		2.055	0.455	20.440	1.000	0.000	7.805												
NON-NEOPLASM	Accelerated	US YLD	-0.905	0.389	5.422	1.000	0.020	0.405	0.189	0.867	88.122a	0.018	0.065	6.922	7.000	0.437	(OR=.4, 95% C.I. .19 to .87)			
NON-NEOPLASM	Constant		-1.412	0.751	3.531	1.000	0.060	0.244												
NON-NEOPLASM	Breakthrough	US YLD	-0.828	0.244	11.477	1.000	0.001	0.437	0.271	0.706	200.422a	0.046	0.080	13.788	7.000	0.055	(OR=.44, 95% C.I. .27 to .71)			
NON-NEOPLASM	Constant		0.004	0.506	0.000	1.000	0.993	1.004												
NON-NEOPLASM	Fast track	US YLD	-0.950	0.194	24.016	1.000	0.000	0.387	0.264	0.565	337.528a	0.089	0.124	5.963	7.000	0.544	(OR=.39, 95% C.I. .26 to .57)			
NON-NEOPLASM	Constant		1.355	0.432	9.830	1.000	0.002	3.879												
NON-NEOPLASM	Priority	US YLD	-0.985	0.194	25.728	1.000	0.000	0.374	0.255	0.547	362.675a	0.099	0.133	5.751	7.000	0.569	(OR=.37, 95% C.I. .26 to .55)			
NON-NEOPLASM	Constant		1.907	0.448	18.141	1.000	0.000	6.730												
NON-NEOPLASM	1+ designation	US YLL	-0.055	0.176	0.097	1.000	0.755	0.947	0.671	1.336	370.892a	0.000	0.000	11.060	6.000	0.087	(OR=.95, 95% C.I. .67 to 1.34)			
NON-NEOPLASM	Constant		0.047	0.454	0.011	1.000	0.918	1.048												
NON-NEOPLASM	Accelerated	US YLL	0.135	0.486	0.077	1.000	0.782	1.144	0.441	2.967	85.311a	0.000	0.001	4.623	7.000	0.706	(OR=1.14, 95% C.I. .44 to 2.97)			
NON-NEOPLASM	Constant		-3.589	1.279	7.878	1.000	0.005	0.028												
NON-NEOPLASM	Breakthrough	US YLL	-0.268	0.259	1.065	1.000	0.302	0.765	0.460	1.272	198.544a	0.004	0.008	16.015	6.000	0.014	(OR=.77, 95% C.I. .46 to 1.27)			
NON-NEOPLASM	Constant		-1.029	0.651	2.500	1.000	0.114	0.357												
NON-NEOPLASM	Fast track	US YLL	0.030	0.184	0.028	1.000	0.871	1.030	0.718	1.478	348.467a	0.000	0.000	10.623	7.000	0.156	(OR=1.03, 95% C.I. .72 to 1.48)			
NON-NEOPLASM	Constant		-0.674	0.476	2.000	1.000	0.157	0.510												
NON-NEOPLASM	Priority	US YLL	-0.097	0.176	0.304	1.000	0.582	0.907	0.642	1.282	367.393a	0.001	0.002	8.654	6.000	0.194	(OR=.91, 95% C.I. .64 to 1.28)			
NON-NEOPLASM	Constant		0.002	0.455	0.000	1.000	0.997	1.002												
NON-NEOPLASM	1+ designation	Global DALYs	-0.287	0.257	1.241	1.000	0.265	0.751	0.454	1.243	399.892a	0.004	0.006	19.410	8.000	0.013	(OR=.75, 95% C.I. .45 to 1.24)			
NON-NEOPLASM	Constant		1.063	1.060	1.006	1.000	0.316	2.895												
NON-NEOPLASM	Accelerated	Global DALYs	-0.636	0.652	0.951	1.000	0.330	0.530	0.148	1.901	92.626a	0.003	0.012	6.469	8.000	0.595	(OR=.53, 95% C.I. .15 to 1.9)			
NON-NEOPLASM	Constant		-0.669	2.607	0.066	1.000	0.797	0.512												
NON-NEOPLASM	Breakthrough	Global DALYs	-0.690	0.390	3.127	1.000	0.077	0.502	0.233	1.078	213.324a	0.013	0.022	30.372	7.000	0.000	(OR=.5, 95% C.I. .23 to 1.08)			
NON-NEOPLASM	Constant		1.097	1.567	0.490	1.000	0.484	2.994												
NON-NEOPLASM	Fast track	Global DALYs	-0.039	0.271	0.020	1.000	0.887	0.962	0.566	1.636	368.227a	0.000	0.000	23.293	8.000	0.003	(OR=.96, 95% C.I. .57 to 1.64)			
NON-NEOPLASM	Constant		-0.546	1.116	0.239	1.000	0.625	0.580												
NON-NEOPLASM	Priority	Global DALYs	-0.500	0.263	3.627	1.000	0.057	0.606	0.363	1.015	393.835a	0.013	0.017	19.026	8.000	0.015	(OR=.61, 95% C.I. .36 to 1.01)			
NON-NEOPLASM	Constant		1.796	1.079	2.770	1.000	0.096	6.025												
NON-NEOPLASM	1+ designation	Global YLD	-1.155	0.240	23.123	1.000	0.000	0.315	0.197	0.505	375.093a	0.086	0.115	11.739	7.000	0.109	(OR=.32, 95% C.I. .2 to .5)			
NON-NEOPLASM	Constant		3.995	0.863	21.431	1.000	0.000	54.303												
NON-NEOPLASM	Accelerated	Global YLD	-1.204	0.541	4.944	1.000	0.026	0.300	0.104	0.867	88.568a	0.017	0.062	9.515	7.000	0.218	(OR=.3, 95% C.I. .1 to .87)			
NON-NEOPLASM	Constant		0.839	1.764	0.226	1.000	0.634	2.314												
NON-NEOPLASM	Breakthrough	Global YLD	-0.972	0.319	9.271	1.000	0.002	0.378	0.202	0.707	206.921a	0.038	0.065	16.768	7.000	0.019	(OR=.38, 95% C.I. .2 to .71)			
NON-NEOPLASM	Constant		1.654	1.082	2.336	1.000	0.126	5.227												
NON-NEOPLASM	Fast track	Global YLD	-1.041	0.242	18.511	1.000	0.000	0.353	0.220	0.567	348.228a	0.067	0.093	9.694	7.000	0.207	(OR=.35, 95% C.I. .22 to .57)			
NON-NEOPLASM	Constant		2.953	0.850	12.067	1.000	0.001	19.173												
NON-NEOPLASM	Priority	Global YLD	-1.147	0.240	22.906	1.000	0.000	0.318	0.199	0.508	371.881a	0.085	0.114	8.873	7.000	0.262	(OR=.32, 95% C.I. .2 to .51)			
NON-NEOPLASM	Constant		3.815	0.856	19.854	1.000	0.000	45.384												
NON-NEOPLASM	1+ designation	Global YLL	0.258	0.139	3.451	1.000	0.063	1.295	0.986	1.700	382.279a	0.013	0.018	14.558	7.000	0.042	(OR=1.29, 95% C.I. .99 to 1.7)			
NON-NEOPLASM	Constant		-1.059	0.529	4.008	1.000	0.045	0.347												
NON-NEOPLASM	Accelerated	Global YLL	0.267	0.411	0.421	1.000	0.516	1.306	0.583	2.924	92.210a	0.002	0.006	10.383	7.000	0.168	(OR=1.31, 95% C.I. .58 to 2.92)			
NON-NEOPLASM	Constant		-4.197	1.610	6.797	1.000	0.009	0.015												
NON-NEOPLASM	Breakthrough	Global YLL	0.106	0.208	0.261	1.000	0.609	1.112	0.740	1.672	206.396a	0.001	0.002	19.770	6.000	0.003	(OR=1.11, 95% C.I. .74 to 1.67)			
NON-NEOPLASM	Constant		-2.099	0.793	7.003	1.000	0.008	0.123												
NON-NEOPLASM	Fast track	Global YLL	0.400	0.168	5.662	1.000	0.017	1.491	1.073	2.073	352.484a	0.024	0.033	16.298	7.000	0.023	(OR=1.49, 95% C.I. 1.07 to 2.07)			
NON-NEOPLASM	Constant		-2.136	0.650	10.815	1.000	0.001	0.118												
NON-NEOPLASM	Priority	Global YLL	0.182	0.137	1.768	1.000	0.184	1.200	0.917	1.569	380.528a	0.007	0.009	12.910	7.000	0.074	(OR=1.2, 95% C.I. .92 to 1.57)			
NON-NEOPLASM	Constant		-0.923	0.521	3.137	1.000	0.077	0.397												

Supplemental table 8. US and global GHE condition quartile groupings descriptive data

	Burden measure	Range	Indications	Drugs	%Drugs	Drugs per Indication	Accelerated Approvals	Breakthrough Therapies	Fast Track	Priority Review	Expedited Designations	Expedited Designations per Drug	Orphan	Expedited Designations plus Orphan	Av. Expedited Designations plus Orphan per drug
US DALYs 2010 (000's)															
First Quartile	79.12	0 - 79	31	32	8.3%	1.03	3	10	17	24	54	1.69	13	67	2.09
Median	294.15	79 - 294	30	28	7.2%	0.93	1	3	9	14	27	0.96	6	33	1.18
Third Quartile	749.27	294 - 749	30	115	29.7%	3.83	19	30	42	66	157	1.37	55	212	1.84
Maximum	8535.23	749 - 8535	31	212	54.8%	6.84	26	35	74	103	238	1.12	93	331	1.56
US YLD 2010 (000's)															
First Quartile	13.70	0 - 14	31	31	8.0%	1.00	4	10	20	27	61	1.97	16	77	2.48
Median	53.54	14 - 54	30	102	26.4%	3.40	36	37	43	73	189	1.85	70	259	2.54
Third Quartile	286.38	54 - 286	30	149	38.5%	4.97	8	27	61	79	175	1.17	68	243	1.63
Maximum	2644.03	286 - 2644	31	105	27.1%	3.39	1	4	18	28	51	0.49	13	64	0.61
US YLL 2010 (000's)															
First Quartile	4.30	0 - 4	31	27	7.0%	0.87	0	3	2	10	15	0.56	3	18	0.67
Median	66.99	4 - 67	30	42	10.9%	1.40	3	10	20	25	58	1.38	13	71	1.69
Third Quartile	368.07	67 - 368	30	81	20.9%	2.70	10	14	23	35	82	1.01	26	108	1.33
Maximum	8268.75	368 - 8269	31	237	61.2%	7.65	36	51	97	137	321	1.35	125	446	1.88
Global DALYs 2010 (000's)															
First Quartile	3645.06	0 - 3645	31	45	11.6%	1.45	6	8	13	21	48	1.07	17	65	1.44
Median	8601.96	3645 - 8602	30	65	16.8%	2.17	7	21	34	46	108	1.66	26	134	2.06
Third Quartile	23134.68	8602 - 23135	30	191	49.4%	6.37	26	41	70	103	240	1.26	99	339	1.77
Maximum	184872.25	23135 - 184872	31	86	22.2%	2.77	10	8	25	37	80	0.93	25	105	1.22
Global YLD 2010 (000's)															
First Quartile	269.39	0 - 269	31	70	18.1%	2.26	30	29	32	55	146	2.09	59	205	2.93
Median	1585.51	269 - 1586	30	84	21.7%	2.80	10	22	39	56	127	1.51	20	147	1.75
Third Quartile	7272.83	1586 - 7273	30	138	35.7%	4.60	7	22	53	66	148	1.07	74	222	1.61
Maximum	42115.44	7273 - 42115	31	95	24.5%	3.06	2	5	18	30	55	0.58	14	69	0.73
Global YLL 2010 (000's)															
First Quartile	298.35	0 - 298	31	28	7.2%	0.90	0	3	2	8	13	0.46	3	16	0.57
Median	4102.63	298 - 4103	30	72	18.6%	2.40	6	9	19	28	62	0.86	18	80	1.11
Third Quartile	16016.49	4103 - 16016	30	183	47.3%	6.10	28	49	84	112	273	1.49	112	385	2.10
Maximum	179016.48	16016 - 179016	31	104	26.9%	3.35	15	17	37	59	128	1.23	34	162	1.56

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