

Supp Table 5 Top drug-phenotype pairs according to the hypergeometric index, based on the OMIM dataset using the protein-target based methodology, only including ChEMBL drugs with drug names found by literature comention  
Drug: ChEMBL database ID, Hyl: hypergeometric index.

HPO	HPO name	Drug	Drug Name	Phase	Hyl
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL557	DETROTHYRONINE	0	7.20
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL2035874	EPROTIROME	3	7.20
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL549748	TETRAC	0	6.72
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL41632	TIRATRICOL	2	6.72
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL1624	LEVOTHYROXINE	4	6.42
HP:0002930	Impaired sensitivity to thyroid hormone	CHEMBL1544	LIOTHYRONINE	4	6.42
HP:0002069	Bilateral tonic-clonic seizure	CHEMBL3809595	NA	0	6.25
HP:0100723	Gastrointestinal stroma tumor	CHEMBL1642	IMATINIB MESYLATE	4	5.95
HP:0004319	Decreased circulating aldosterone level	CHEMBL934	METYRAPONE	4	5.75
HP:0012166	Skin-picking	CHEMBL41	FLUOXETINE	4	5.55
HP:0100697	Neurofibrosarcoma	CHEMBL507361	MIRDAMETINIB	2	5.42
HP:0005506	Chronic myelogenous leukemia	CHEMBL1289926	AXITINIB	4	5.31
HP:0002069	Bilateral tonic-clonic seizure	CHEMBL507974	TETRODOTOXIN	3	5.28
HP:0004319	Decreased circulating aldosterone level	CHEMBL9298	FADROZOLE	0	5.28
HP:0000079	Abnormality of the urinary system	CHEMBL1560	CAPTOPRIL	4	5.28
HP:0000726	Dementia	CHEMBL116955	CONGO RED	0	5.18
HP:0005506	Chronic myelogenous leukemia	CHEMBL206834	BAFETINIB	2	5.18
HP:0100723	Gastrointestinal stroma tumor	CHEMBL276711	SEMAXANIB	3	5.10
HP:0030078	Lung adenocarcinoma	CHEMBL2347958	NA	0	5.07
HP:0003076	Glycosuria	CHEMBL3039507	SOTAGLIFLOZIN	4	5.02