

Table S1. Statistics on the confidence and quality of models included in eRepo-ORP. Columns labeled “All data” report mean values \pm standard deviation and the number of cases for all DrugBank and Orphanet structures as well as PDB→DrugBank and DrugBank→Orphanet alignments, whereas “Pocket matches” correspond to those pairs of DrugBank and Orphanet proteins producing statistically significant pocket alignments.

Dataset	Score ^e	All data		Pocket matches	
		mean \pm std.	# of cases	mean \pm std.	# of cases
DrugBank ^a	GDT-score	0.71 \pm 0.17	348	0.75 \pm 0.15	282
	Pocket conf.	0.87 \pm 0.18		0.87 \pm 0.19	
Orphanet ^b	GDT-score	0.68 \pm 0.15	922	0.69 \pm 0.14	761
	Pocket conf.	0.82 \pm 0.22		0.82 \pm 0.22	
PDB→DrugBank ^c	TM-score	0.65 \pm 0.14	2,012	0.68 \pm 0.18	744
	TC	0.49 \pm 0.27		0.65 \pm 0.30	
DrugBank→Orphanet ^d	TM-score	0.26 \pm 0.08	320,714	0.27 \pm 0.10	18,145
	eMS-score	0.13 \pm 0.20		0.91 \pm 0.11	

^a Structure models generated for DrugBank proteins by eThread with binding sites predicted by eFindSite. ^b Structure models generated for Orphanet proteins by eThread with binding sites predicted by eFindSite. ^c Alignment between DrugBank structures and holo-templates selected from the PDB to position drugs within binding sites. ^d Pairs of DrugBank and Orphanet proteins. ^e GDT-score is estimated by ModelEvaluator, pocket confidence is estimated by eFindSite for the top-ranked drug-binding sites, TM-score measures the global structure similarity, TC is the Tanimoto coefficient reported by kcombu, eMS-score is the pocket similarity reported by eMatchSite.