Supplementary material

Drug-likeness of linear pentamidine analogues and their impact on hERG K^+ channel – correlation with structural features

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Table S1 Probability of metabolism by human uridine 5'-diphosphate-glucuronosyltransferases (UGT) for **1** – **9**.

Table S2 Values of CDOCKER interaction energy for pentamidine derivatives (**4**, **5** and **6**).

Figure S1. Predicted intermolecular interactions by CDOCKER for compounds **4**, **5** and **6**.

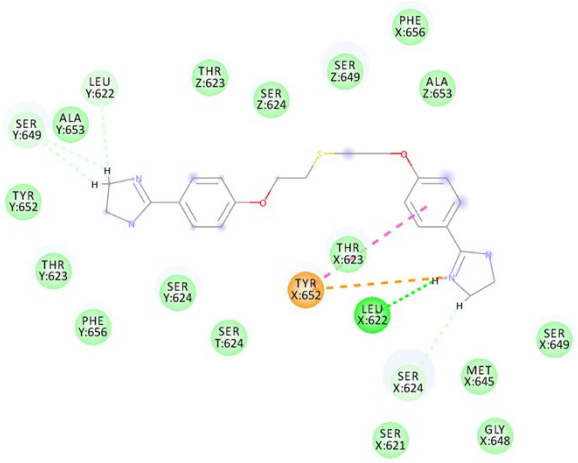
Table S1

Compound	UGT								
	1A1	1A3	1A4	1A6	1A8	1A9	1A10	2B7	2B15
1	Yes	No	Yes	No	No	Yes	No	Yes	No
2	Yes	Yes	Yes	No	No	Yes	No	Yes	No
3	Yes	Yes	Yes	No	No	No	No	Yes	No
4	Yes	Yes	Yes	No	No	Yes	No	Yes	No
5	Yes	Yes	Yes	No	No	No	No	Yes	No
6	Yes	Yes	Yes	No	No	No	No	No	No
7	No	No	No	No	No	Yes	No	Yes	No
8	No	No	No	No	Yes	No	No	No	No
9	No	No	No	No	No	Yes	No	No	No

Table S2

Pose number	CDOCKER interaction energy (kcal/mol)		
	4	**5**	**6**
1	-48,9474	-59,0164	-55,1398
2	-49,6748	-52,6177	-56,6219
3	-43,7155	-55,7457	-53,9279
4	-46,4077	-57,0773	-54,1317
5	-41,6959	-52,8375	-49,0274
6	-44,5029	-52,7724	-55,2444
7	-42,2372	-47,7179	-49,6112
8	-42,2035	-52,9497	-48,2851
9	-41,7638	-48,8009	-50,2068
10	-42,6056	-52,007	-45,8554

4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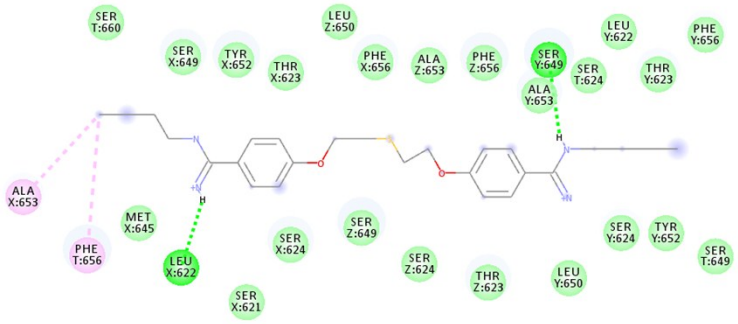
SER Z:649
THR Z:623
SER Z:624
ALA Z:653
LEU Y:622
SER Y:649
ALA Y:653
TYR Y:652
THR X:623
THR Y:623
TYR X:652
SER Y:624
LEU X:622
PHE Y:656
SER T:624
SER X:649
SER X:624
MET X:645
SER X:621
GLY X:648

5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LEU Z:650
LEU Y:622
PHE Y:656
SER X:649
TYR X:652
THR X:623
PHE X:656
ALA Z:653
PHE Z:656
SER Y:649
SER T:624
THR Y:623
ALA Y:653
ALA X:653
MET X:645
PHE T:656
LEU X:622
SER X:624
SER Z:649
SER Z:624
THR Z:623
LEU Y:650
SER X:621
SER Y:624
TYR Y:652
SER T:649

6

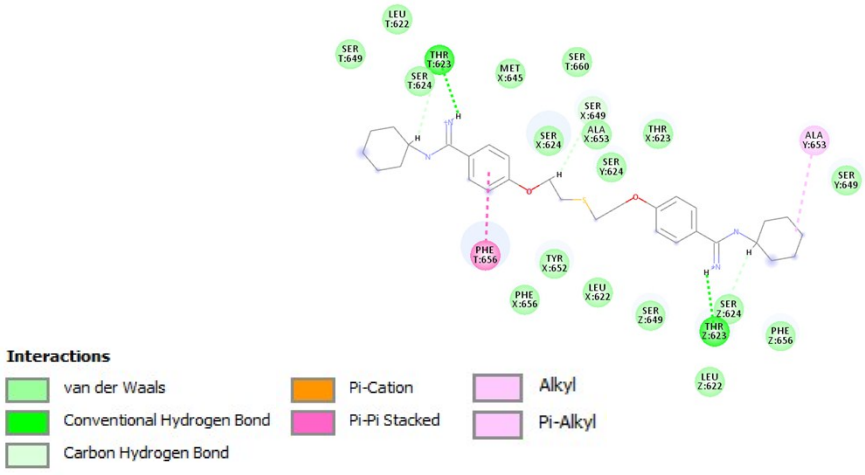
LEU T:622
SER Y:649
THR T:623
SER T:624
MET X:645
SER T:660
SER X:649
ALA X:653
SER X:624
THR X:623
ALA Y:653
SER Y:624
SER Y:649
PHE T:656
TYR X:652
LEU X:622
PHE X:656
SER Z:649
SER Z:624
THR Z:623
PHE Z:656
LEU Z:622
Interactions
van der Waals
Conventional Hydrogen Bond
Carbon Hydrogen Bond
Pi-Cation
Pi-Pi Stacked
Alkyl
Pi-Alkyl

Fig. S1.