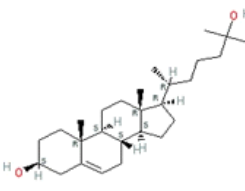
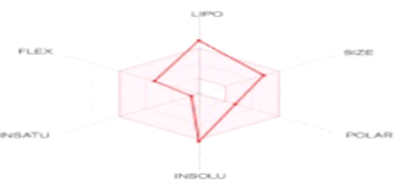
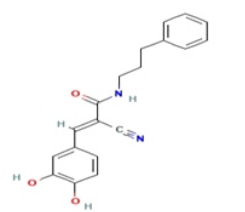
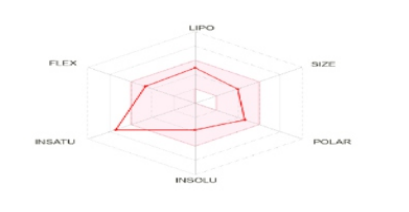
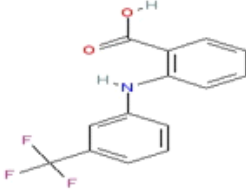
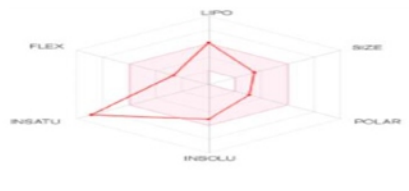
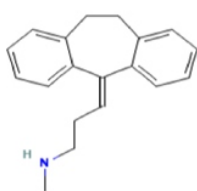
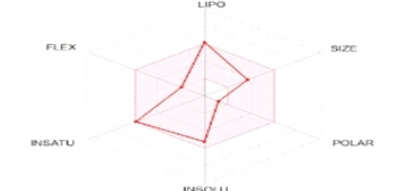
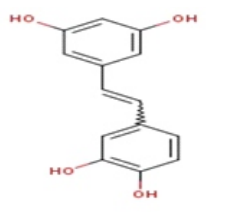
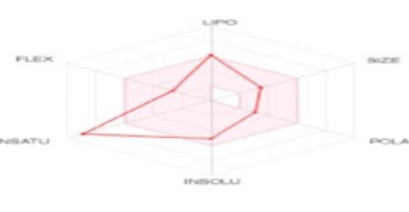
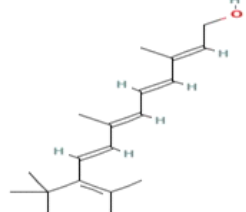
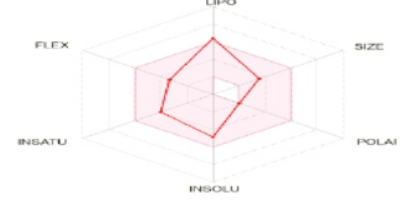
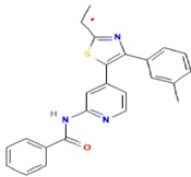
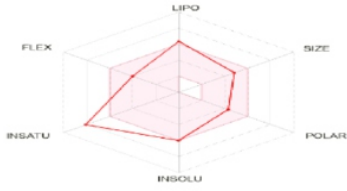
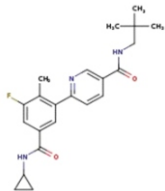


Supplemental Table S1: Bioavailability Radar showing the drug-likeness of the compounds

Compounds	2D-structure	Bioavailability Radar for Druglikeness
25-hydroxycholest erol		
Tyrphostinb46		
Flufenamic acid		
Nortriptyline hydrochloride		
Piceatannol		
Retinol		

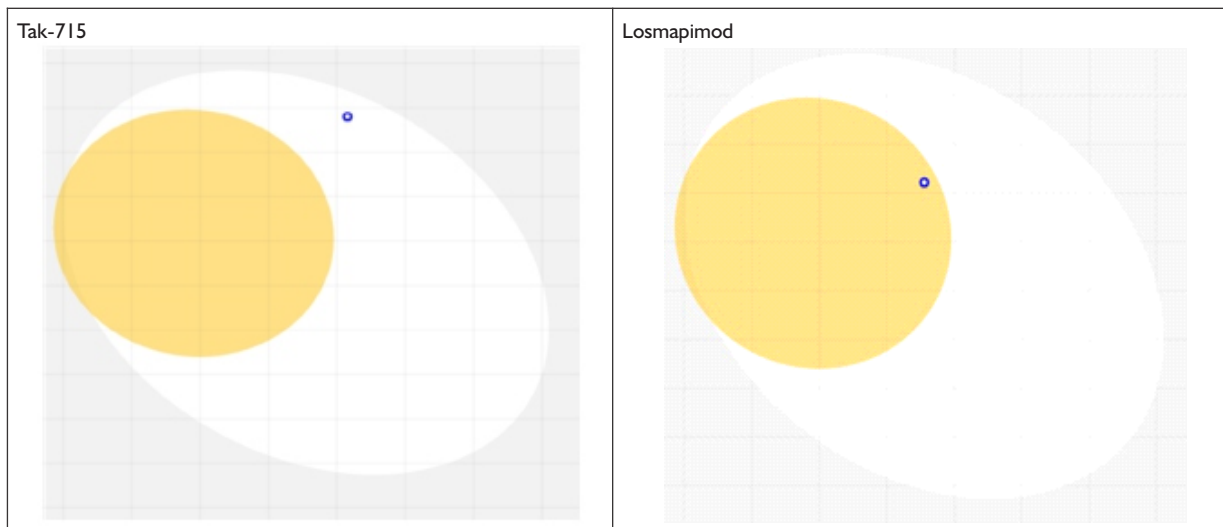
Supplementary Files
Potential therapeutic compounds against hypercholesterolemia: an in-silico analysis

Tak-715		
Losmapimod		

(LIPO = lipophilicity as XLOGP3; SIZE = size as molecular weight; POLAR = polarity as TPSA (topological polar surface area); INSOLU = insolubility in water by Log S scale; INSATU = insaturation as per fraction of carbons in the sp³ hybridization and FLEX = flexibility as per rotatable bonds)

Supplemental Table S2: BOILED-Egg model for ADMET/Drug-likeness of compounds

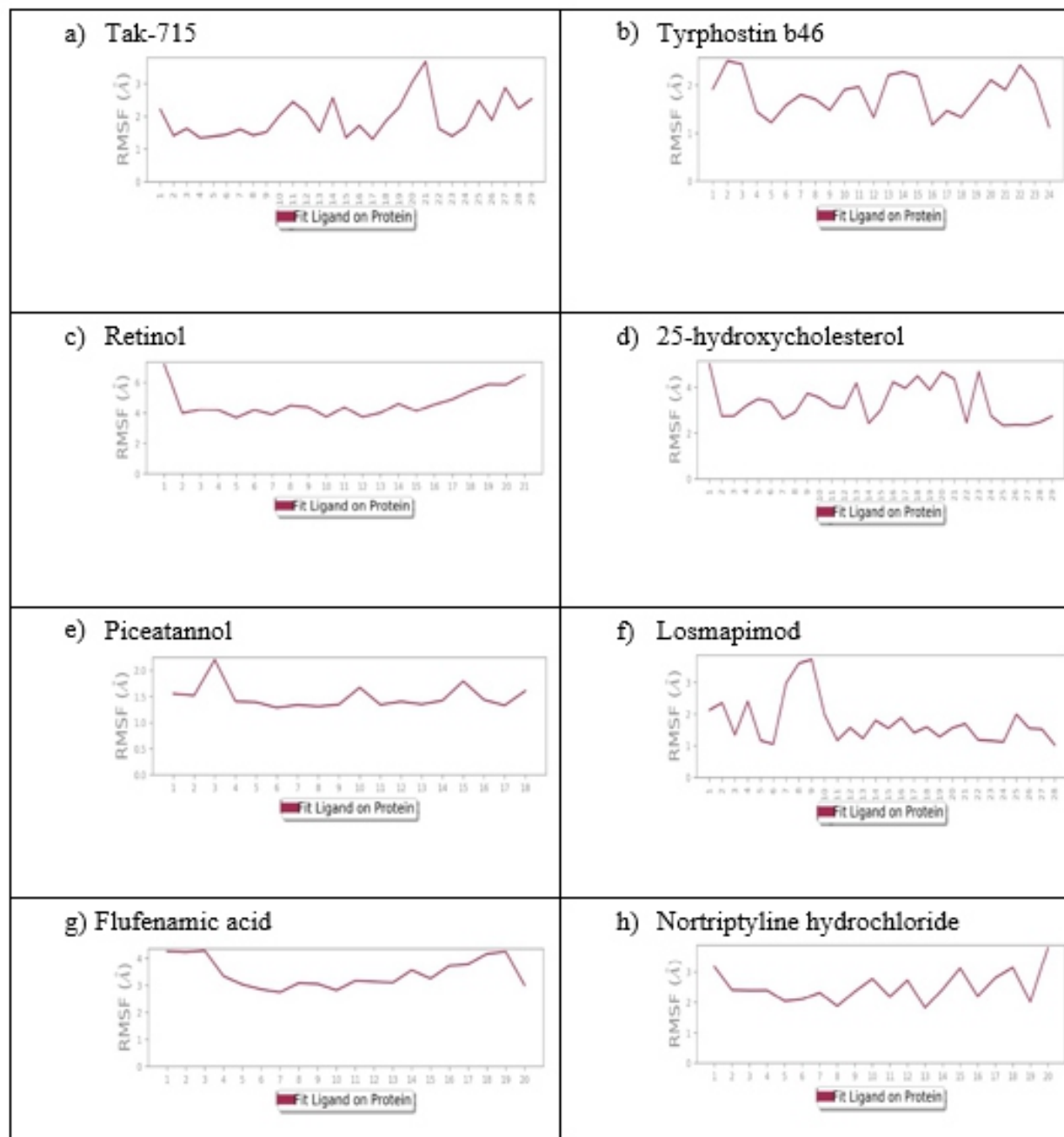
Compound name	Boiled Egg model for ADMET/Druglikeness
25-hydroxycholesterol	Tyrphostinb46
Flufenamic acid	Nortriptyline hydrochloride
Retinol	Piceatannol



The pink area in the radar displays the ideal range for each of the parameters including lipophilicity, molecular weight, polarity, solubility, saturation and flexibility

Supplemental Table S3: Toxicity analysis of compounds

Compound name	Human Ether-a-go-go- related gene inhibition	Carcinogen	Acute oral toxicity
25-hydroxycholesterol	Weak inhibitor	Non-carcinogen	III
Tyrphostinb46	Weak inhibitor	Non-carcinogen	III
Flufenamic acid	Weak inhibitor	Non-carcinogen	II
Nortriptyline hydrochloride	Weak inhibitor	Non-carcinogen	III
Piceatannol	Weak inhibitor	Non-carcinogen	III
Retinol	Weak inhibitor	Non-carcinogen	III
Tak-715	Weak inhibitor	Non-carcinogen	III
Losmapimod	Weak inhibitor	Non-carcinogen	III



Supplemental Figure S1: Root-mean-square fluctuation (RMSF) analysis. **a)** RMSF graph of TAK-715, **b)** Tyrphostin b46, **c)** Retinol, **d)** 25-hydroxycholesterol, **e)** Piceatannol, **f)** Losmapimod, **g)** Flufenamic acid, **h)** Nortriptyline hydrochloride. RMSF shows the flexibility of ligand and protein. High RMSF shows more vigorous ligand-receptor interactions which depicts that the receptor and ligand are moving a lot and have more fluctuations whereas low RMSF indicates that the interactions are less vigorous and the ligand and receptor are tightly bound to each other.