

# TOXPHACTS

### **VERSION 2.0 RELEASE NOTE**

ToxPHACTS version 2.0 has been released. Besides improvements in target-toxicity associations and chemical structure representation, it offers conformal prediction models for a set of off-targets. Please check the quick guide below and contact office@phenaris.com for a Demo.

### **NEW FEATURES & ENHANCEMENTS**

#### **Target-toxicity associations**

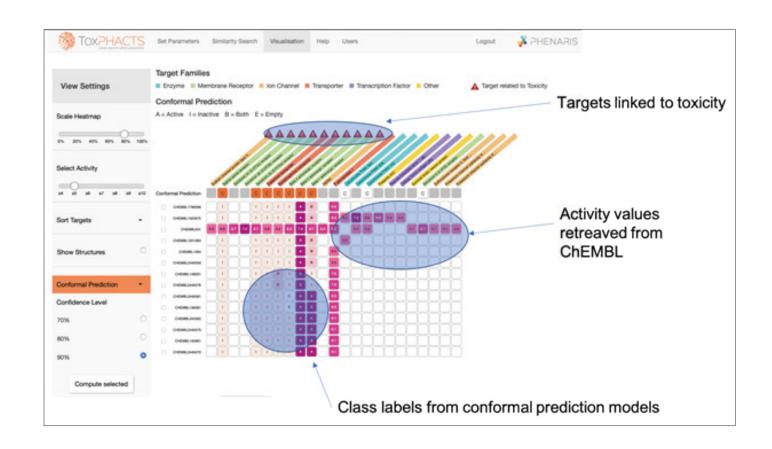
Constantly increased list of proteins associated with adverse drug events

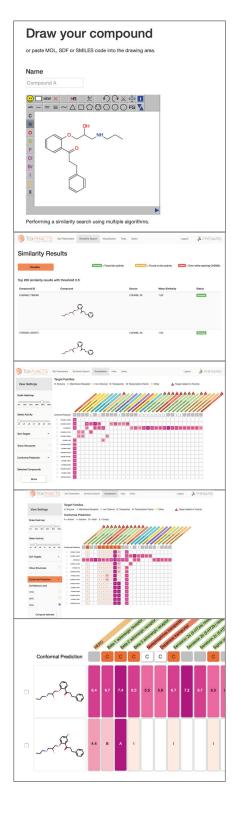
#### New standardized representation of chemical structures

The standardized structure representation using RDKit (Version 2020.03.2) allows fast and simple comparison of structures in order to identify off-target SAR in your hit list

#### Conformal prediction models

This major enhancement allows a fast assessment of all compounds similar to your query structure using robust conformal prediction models





## QUICK GUIDE

#### **Draw your Compound**

Simple and fast drawing of your query structure using the tool from Peter Ertl and Bruno Bienfait.

### STEP 1

### **Similarity Results**

Retrieve similar compounds and their bioactivity data from ChEMBL using a consensus of 5 different similarity algorithms.

### STEP 2

#### **Data Visualization**

Intuitive presentation of all data retrieved as heat map, highlighting target-toxicity annotations.

### STEP 3

#### **Predictions**

Predict compound-target activity classes (active – inactive – both – empty) using conformal prediction models.

### STEP 4

STEP 5

#### Comparison

Standardised chemical structure representation using RDKit (Version 2020.03.2) allows fast and simple comparison of structures in order to identify off-target SAR in your hit list.