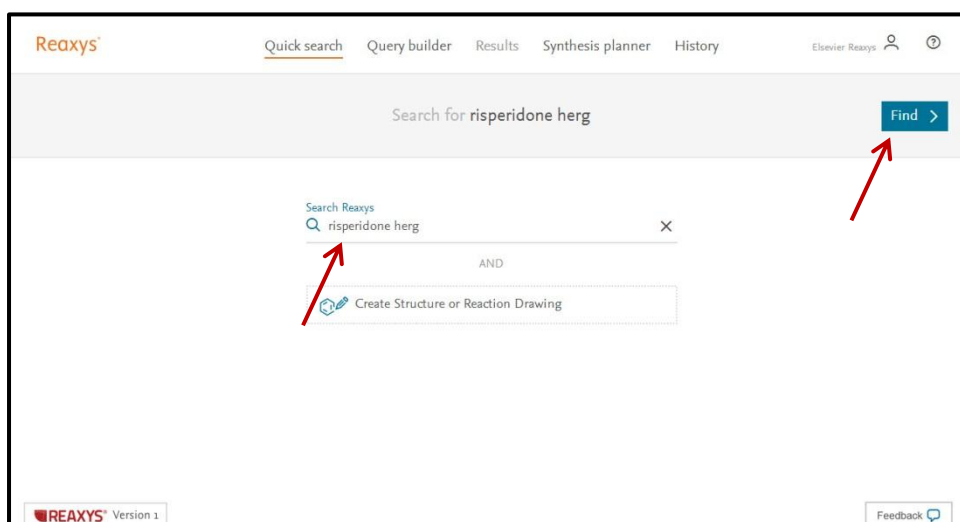# Is my Compound of Interest Acting on hERG Channel?

Risperidone (trade name Risperdal, and generics) is an atypical antipsychotic drug which is mainly used to treat schizophrenia (including adolescent schizophrenia), schizoaffective disorder, the mixed and manic states associated with bipolar disorder, and irritability in people with autism.

Adverse effects of risperidone include significant weight gain and metabolic problems such as type 2 diabetes mellitus, as well as tardive dyskinesia and neuroleptic malignant syndrome. Risperidone and other antipsychotics also increase the risk of death in patients with dementia. Risperidone prolongs the QT interval (hERG related).
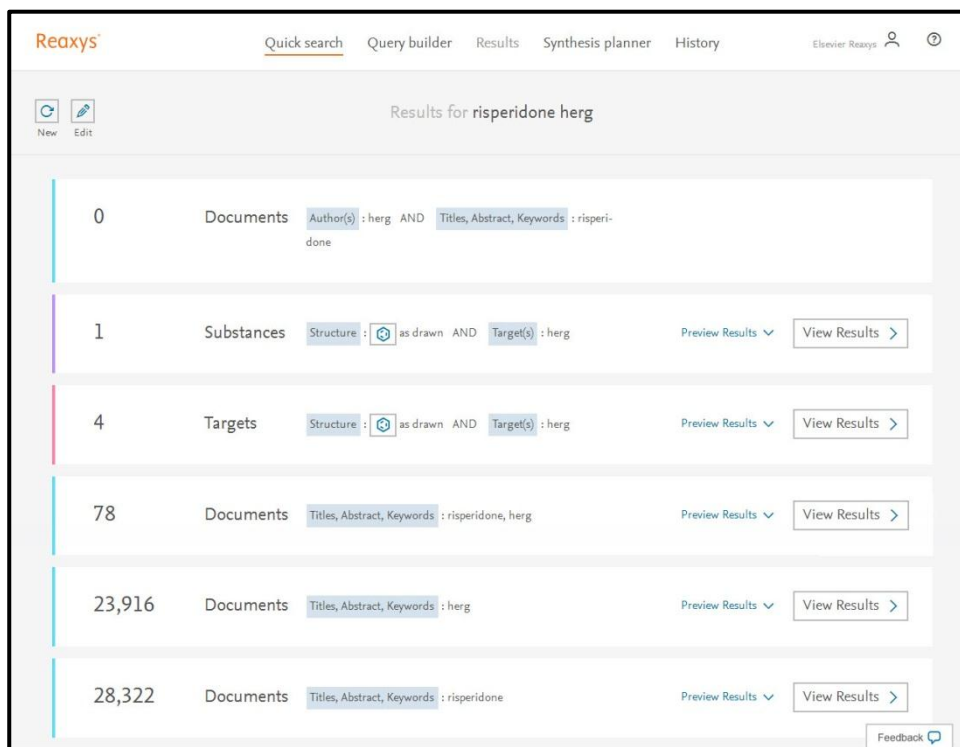
❖ Search using Quick search

1. On the Reaxys home page click the *Search Reaxys* field and type *risperidone herg*
   a. Click *Find* (or press *Enter* on your keyboard)
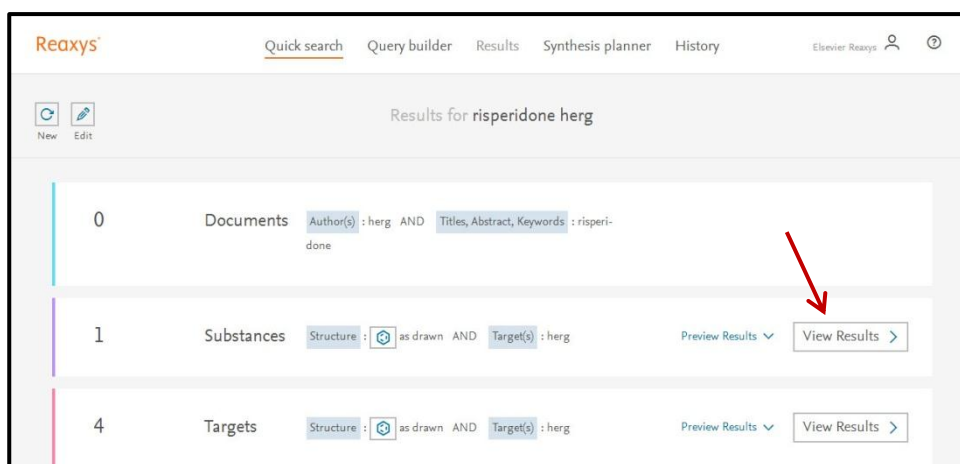
The Results Preview is displayed.

- In this case, Reaxys presents a Results Preview showing different variations of the entered query to provide you with options, which you may not have thought of at query formulation time.
- Quick search recognizes the abbreviated term *hERG* as a target by using the target taxonomy (main terms as well as synonyms are searched) and *Risperidone* is recognized as a Substance to retrieve substances tested on the corresponding target.

2. Click **View Results** for the *Substances* set to retrieve hERG results for Risperidone.

The Substances Results Page is displayed showing Risperidone.

3. Click **Bioactivity (Hit Data)** for Risperidone to view the Bioactivities.

The Bioactivity Categories are displayed:

4. Click a category, such as ***In vitro: Efficacy*** to display the corresponding bioactivities affinity on hERG (Potassium voltage gated channel subfamily H Member 2).
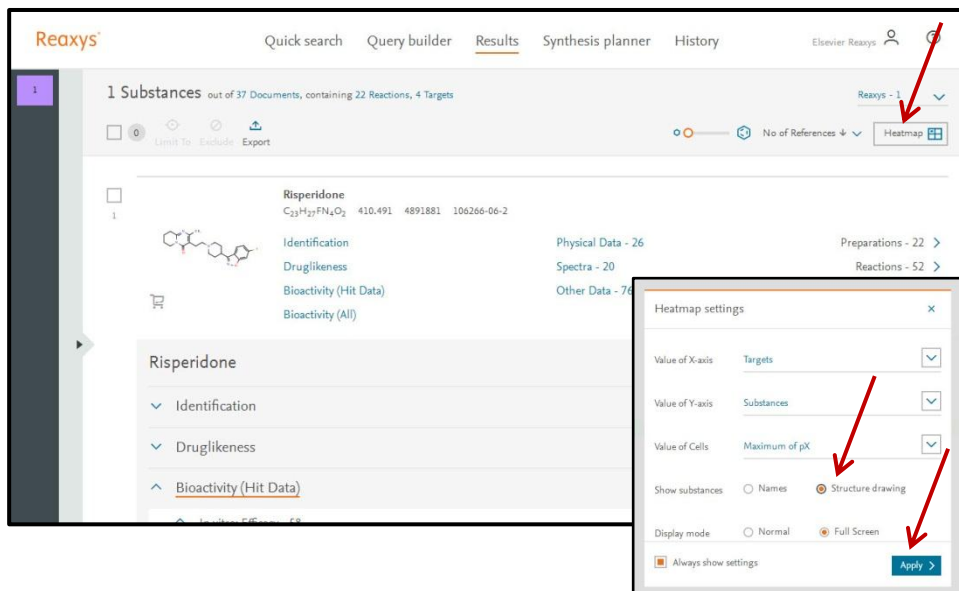

The results are displayed in table view when the results are quantitative (shown below) and in a text view when qualitative.

❖ View the Heatmap

1. Scroll to the top and click *Heatmap*.
   a. Review the Settings, turn on *Structure drawing* and click *Apply*.

The Heatmap view of Risperidone Bioactivities on hERG is displayed.
   b. Hover over **Potassium voltage-gated channel subfamily E member 1** to display the *Target complex details*.