

DRUG-TO-TARGET AND OFF-TARGET DISCOVERY

Drug-to-target discovery is the characterization of the target profile of a chemical compound. Acquiring knowledge of a compound's target profile has become an essential step in drug discovery.

Why is drug-to-target useful?

A good understanding of your compound's target and off-target profile is essential to:

- nechanistic potential
- Predict adverse events before entering clinical trials
- 🗦 Understand clinical observations, as unexpected side effects

What does Anaxomics offer?

Anaxomics has developed an integrative approach for new target discovery that combines the latest advances in systems biology with structure-based techniques. Our combined approach allows biopharma companies to fully understand the **target profile of the compounds** under development or already in the market.

Molecular modelling ...

Anaxomics state-of-the-art chemical modelling approaches to identify potential targets and off-targets of a compound.

Chemocentric approach

- 1. Identify structures chemically similar to my compound
- 2. Find the targets of these similar structures
- 3. These targets will also likely be my targets

Targetcentric approach

- 1. Identify known targets of my compound
- Find what other proteins are similar to my known targets
- 3. Similar proteins will likely be my targets

Docking approach

- 1. Use chemo- and targetcentric approaches to identify potential targets
- 2. Conduct docking tests with my compound and these proteins
- 3. Proteins that interact with my compound will likely be targets

... meets systems biology

Anaxomics employs Therapeutic Performance Mapping System (TPMS), a proprietary technology based on systems biology, to filter and rank the results from the techniques listed above.

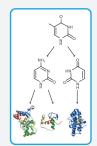
TPMS collects the available scientific knowledge and integrates it into mathematical models to calculate the probability of each of the predicted targets and off-targets causing the observed evidences.

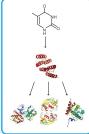


- Bibliographic - Interactions reported research in public DB

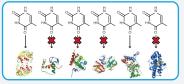
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Chemocentric Targetcentric



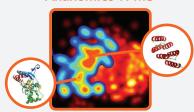


Docking



Filter

Anaxomics TPMS



TPMS filtered final candidates

What do you get with this service?

Anaxomics provides its clients with comprehensive reports that evaluate the target profile of the drugs under study.

The delivered document contains a list of potential targets ranked by predictive value as per TPMS calculations. *In silico* results are manually reviewed by a team of experts who filter and enrich them in accordance with up-to-date scientific knowledge.



To whom is this service addressed?

We at Anaxomics are glad to offer our services to interested clients and, more specifically, to:



Academic researchers



Biotechnology companies



Clinical researchers



Pharmaceutical companies



Nutraceutical industry

Why Anaxomics?

The Anaxomics team is composed of highly-qualified experts in clinical research, computational science and systems biology. Anaxomics is a client-focused company, with a strong emphasis on quality and innovative approaches to solve bottlenecks in drug discovery and clinical development.

How can you contract the service?

- Fee-for-service
- 🕏 Subcontracts through grants
- 🕏 Scientific collaboration through R&D grants/consortiums

Our experience is our best asset

We have offered services to a wide array of leading biotech and pharmaceutical companies. Additionally, we regularly collaborate with prestigious international research institutions in public-private partnerships. Anaxomics currently participates in eight research consortiums under the EU 7th Framework Program, and has also been involved in FIS, CDTI, CANADEKA and other publicly funded research programmes.

Anaxomics has also been finalist for the 2011 Red Herring Top 100 Innovative European Company Award and 4th place worldwide in IMPROVER challenge 2012









Contact us: We are pleased to answer your questions and queries.

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