

Pharmacology-AI

Machine learning for precision medicine, made easy

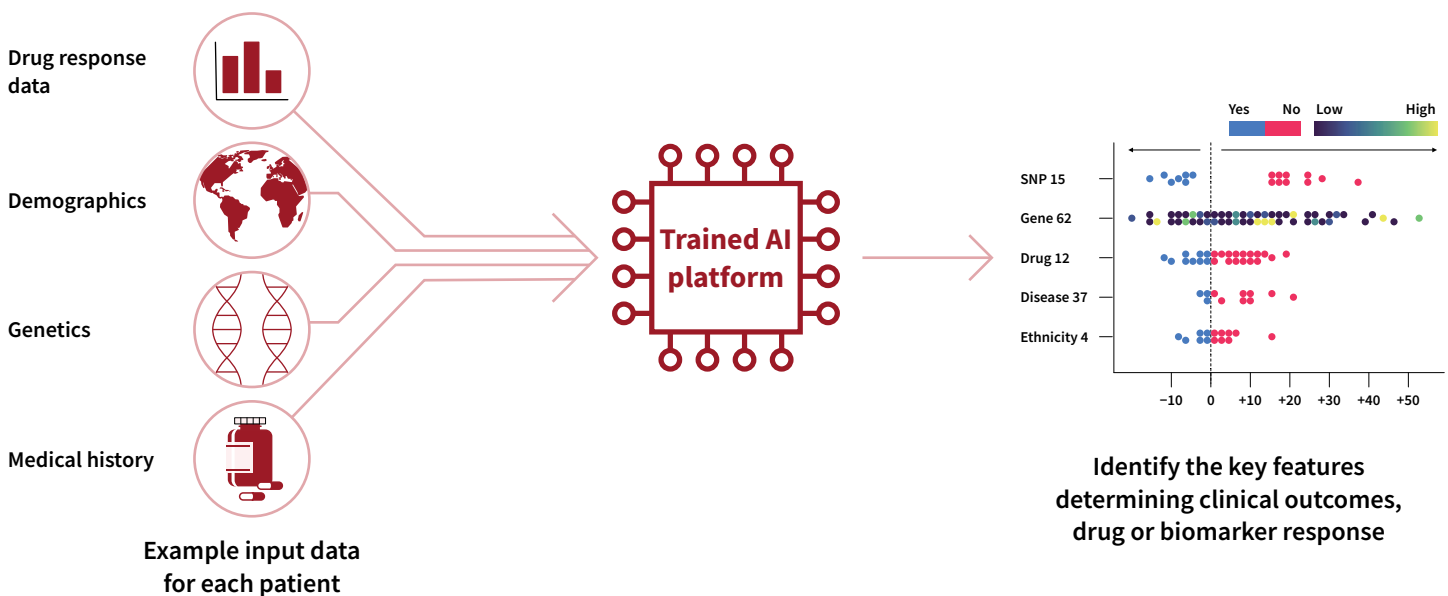
Actionable insights from big data

For precision medicine, “big data” can be used to identify the genetic and clinical factors responsible for patient variation in clinical outcomes, drug response, or biomarker levels.

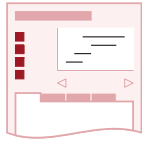
Conventional analysis of these large datasets can, however, be very time-consuming, highly complex and may require high level bioinformatics expertise, leaving you unable to quickly move your precision medicine projects forward.

Pharmacology-AI makes finding actionable insights from your big data quicker and easier. Powered by a unique machine learning platform, developed in collaboration with the Hartree Centre for Digital Innovation, our automated system rapidly identifies the features driving variation in patient outcomes — streamlining the development of effective patient stratification strategies.

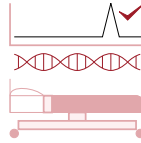
How Pharmacology-AI can work for you



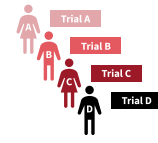
Benefits of Pharmacology-AI



View and download AI analysis outputs in an easily interpretable and interactive format via a secure web portal built in compliance with industry standards.



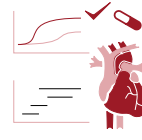
Quickly and easily reveal the multiomic or clinical features driving drug responses, biomarker levels, or other clinical endpoints.



Identify responsive patient populations to design smarter clinical trials.



View quality control results that provide confidence in AI algorithm predictions.



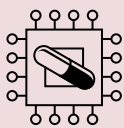
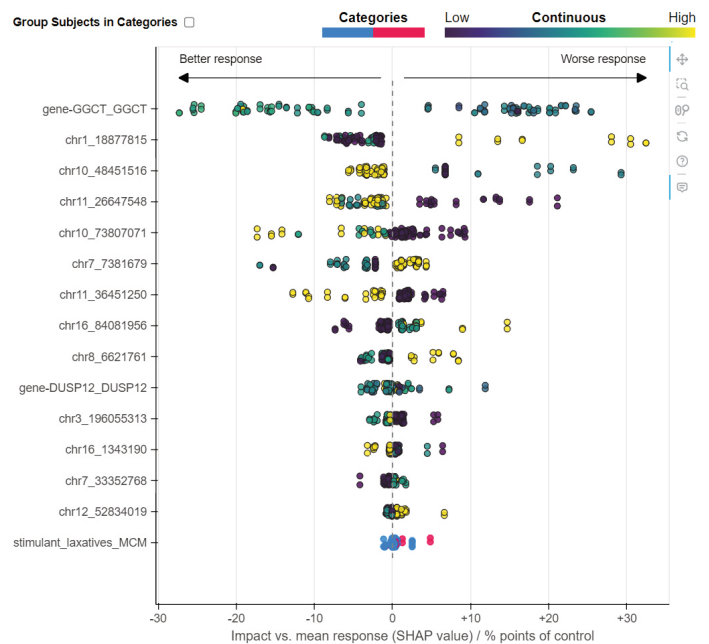
Combine your analysis with preclinical human tissue research to enhance your translational data sets and increase your chances of clinical success.

Example: Identify key features driving variation in IBD

Pharmacology-AI ranks the features that have the greatest impact on the drug/biomarker response and displays them in an interactive report.

To the right is an illustrative example using synthetic data (based on REPROCELL generated real world data) from several IBD patients. The example shows the top 15 ranked features, predicted by the ML algorithm, to affect patient response to drug X. The relative importance of each feature to the drug response is listed from top to bottom.

There is also a “Stratify” analytical tool that allows you to estimate the impact of different patient stratification strategies and a “Predict” tool that allows you to predict the response of previously unseen patients.



Pharmacology-AI
BY REPROCELL

Find out more:
reprocell.com/pharmacology-ai



REPROCELL BRANDS

