

AI & INFORMATICS: Drug discovery and development

Industry Survey – Results **DOWNLOAD FULL REPORT**

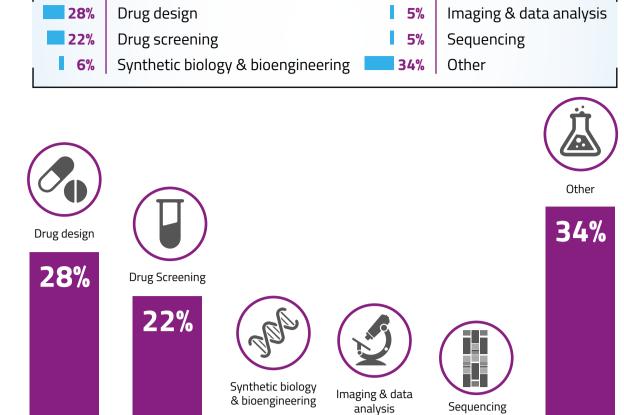
What best describes your research field?

Q1

Q2

Q3

Q4



right now? Cloud-based datasets

What are the most pivotal developments happening in the Al/machine learning field

6%

54% Standardisation Moving from correlation

informatics in R&D? (Select all that apply)

Other (please specify)

What are some of the key limitations holding back Al/machine learning/



to causality

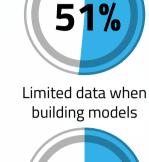
Has cloud computing aided your work?

Big pharma

Q6

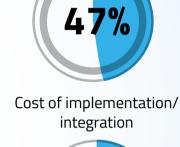
Ensuring collection of

multiple types of data



Lack of infrastructure

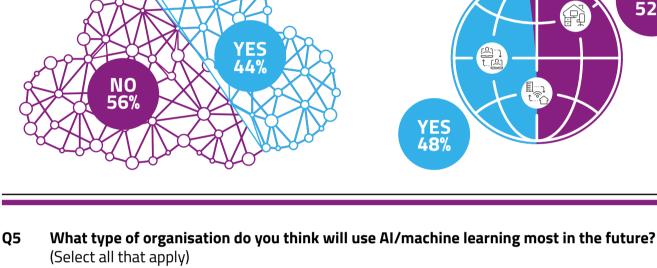
to assess algorithms



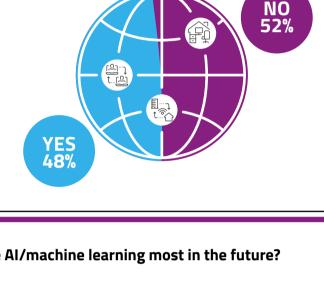
Has automation/informatics enabled you

to continue your research remotely?

Other



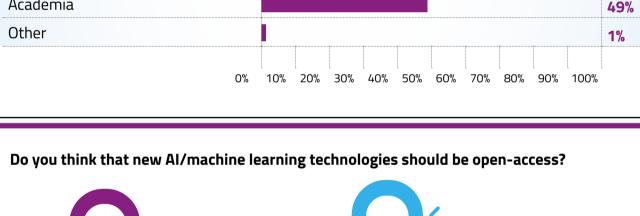
Small and medium-sized enterprises



81%

68%

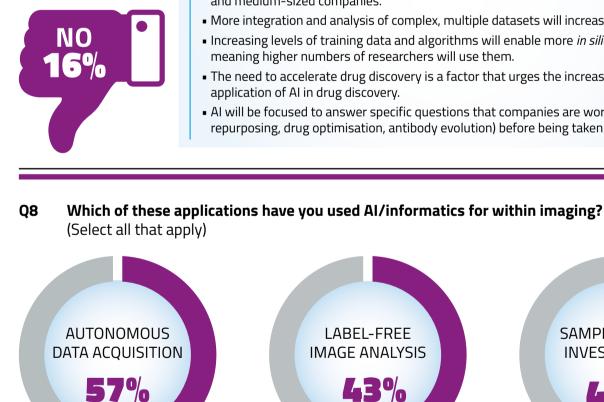
Start-ups **57%** Academia



Q7 Do you think the uptake of AI in your field will increase?

incorporate AI that is user friendly.

and medium-sized companies.



• More integration and analysis of complex, multiple datasets will increase the update of Al. • Increasing levels of training data and algorithms will enable more in silico workflows, meaning higher numbers of researchers will use them.

IF YES, WHY? • Al is recognised as a powerful tool, especially for compound generation and evaluation. It

is particularly useful in compound design, library design and data mining.

As costs decrease and examples of success increase, more standard packages will

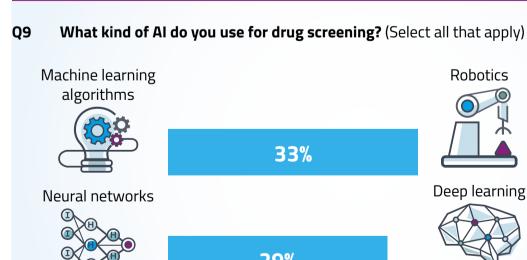
• Al can provide additional information on hits from high-throughput screening with respect to existing public databases and predictions for hit-to-lead stages.

• More companies will see the benefits of AI and it is becoming more affordable for small-

- The need to accelerate drug discovery is a factor that urges the increase of the application of AI in drug discovery. • Al will be focused to answer specific questions that companies are working on (eg,
- repurposing, drug optimisation, antibody evolution) before being taken up more widely.

LABEL-FREE

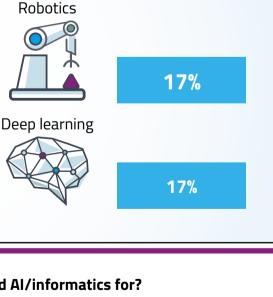
IMAGE ANALYSIS



Which of these drug design ap

(Select all that apply)

33% 29%

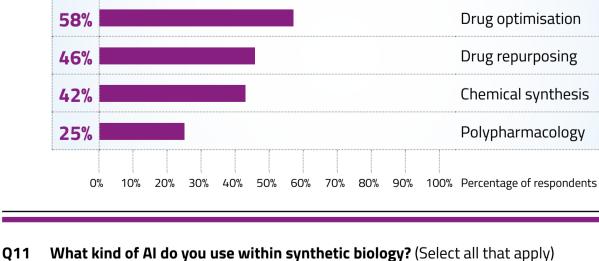


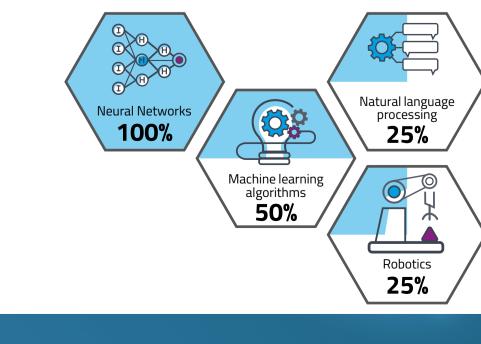
SAMPLE REGION

INVESTIGATION

43%

88% Drug discovery/design **58%** Drug optimisation







Access our FREE exclusive report to find out more and discover how researchers use AI and informatics processes within imaging, drug screening, drug design and synthetic biology.