

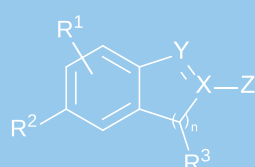
BIOVIA Small Molecule Therapeutics Design

Accelerate Drug Discovery with AI
and Physics-based Modeling

The Drug Discovery Bottleneck



5 years
average time spent in
discovery



Up to **4,000**
compounds
synthesized to find one
viable candidate



90% of **candidates**
fail in phase 1 clinical trials

The Challenge

Lead optimization is a multi-criteria
process that takes trial-and-error

Target properties are often
incompatible and competing

Lab experiments take years and
are expensive

Collaborative Platform

Multiple teams can work
together effectively



End-to-end Workflows

Fully integrated solutions in a
single environment



Open Architecture

Ability to leverage both
in-house and 3rd party models



**What
is
needed?**

Advanced Science

Ability to combine mature
physics-based models with
AI and machine learning



Cloud Computing

Agile environment with fast
deployment and virtually
unlimited compute power



Lab Integration

Data integrity, traceability
and consistency throughout
the discovery lifecycle



BIOVIA's
complete solution
for **Small Molecule
Therapeutics
Design** can make a
difference



Increase the number and diversity of
virtual molecules



Perform fewer experiments with
higher quality compounds



Accelerate experimental turn-around
and shorten the discovery phase



Increase success rate of compounds
in preclinical testing



Address potential liabilities during
the design phase

“

*What BIOVIA is offering is a mature,
cloud-based system for enhancing the
power of drug design teams.*

Senior Director in R&D, US Top Biopharma

”

The Value



Up to 60% reduction
in lead optimization time



Up to 50% reduction
in number of compounds
to synthesize



**Up to 70% success
rates**
in experimental testing



\$8M - \$12M
savings per
optimized lead

LEARN MORE

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