



Quadrant 2™ predictive platform:

Thermo Fisher Scientific's AI/ML-powered platform
for solubility and bioavailability enhancement

Address solubility challenges early—before they impact development timelines.

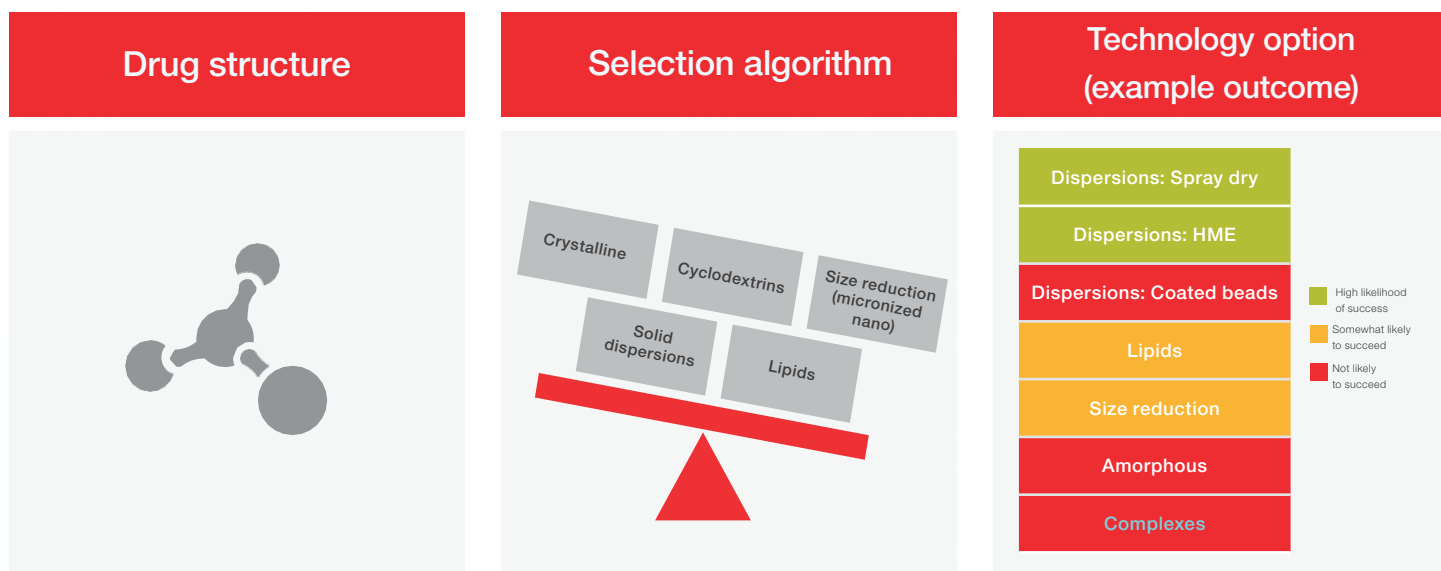
Poor solubility is a major barrier in drug development, affecting approximately 80% of molecules and often limiting bioavailability and efficacy. Traditionally, identifying the right formulation requires extensive trial-and-error screening—a process that can take 14–19 months.

The Quadrant 2 platform transforms this process.

Using advanced AI/ML technology and in silico modeling, the Quadrant 2 platform analyzes your compound's molecular structure alongside your target product profile to predict the most effective solubility enhancement strategy—before lab work begins..

Key advantages:

- **Accelerated development:** Reduces formulation timelines by eliminating trial-and-error experimentation.
- **Cost savings:** Minimizes experimental screening and avoids costly late-stage reformulation.
- **Higher success rates:** Predicts optimal technologies and excipient combinations tailored to your molecule.
- **Risk reduction:** Prevents post-proof-of-concept setbacks that can add up to 12 months and \$500,000–\$600,000 in costs.



Powered by proprietary algorithms combining quantum mechanics, molecular dynamics, QSAR, ADMET, and statistical modeling, the Quadrant 2 platform delivers data-driven insights for smarter, faster formulation decisions.

Ask the expert

How to start solving your low solubility and bioavailability challenges

Following an initial [consultation with](#) one of our scientific experts, we need the following information to get started:



Proven accuracy

Validation studies have shown that the Quadrant 2 technology-selection tool is over 90% accurate, and the Quadrant 2 excipient-selection tool is over 80% accurate.

Proven success

With over 400+ molecules analyzed so far, we've helped 300+ customers improve the solubility of their small molecule drug candidates.



**“ Excellent people.
Excellent system.
Excellent quality.”**

Biopharmaceutical company focused on oncology, US

Ask the expert

Learn more at thermofisher.com/OSD
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