

# AI-Enabled QSP Modeling Software

## Democratizing and scaling quantitative systems pharmacology (QSP) modeling

Certara IQ is an AI-enabled quantitative systems pharmacology (QSP) modeling software designed to make modeling more accessible, scalable, and reliable across drug development pipelines. By combining AI-enhanced workflows, pre-built model libraries, and cloud-based simulation capabilities, Certara IQ empowers teams to fast-track discoveries, improve decision-making, and enhance clinical outcomes.

100+

Certara IQ has supported 100+ projects and regulatory filings across global agencies.

### The challenge

QSP modeling has demonstrated significant impact in drug development, but its broader adoption is limited by solutions that are resource-intensive, error-prone, and difficult to scale. Existing solutions often lack intuitive interfaces, reusable model libraries, and workflows that are regulatory-ready.

### The solution: Certara IQ

Certara IQ brings together the expertise of the world's largest QSP consulting team and combines it with cutting-edge AI capabilities, high-performance computing, and optimized simulation engines to deliver a QSP modeling tool that makes QSP modeling accessible and scalable.

Design

Analyze

Explore

### Key capabilities

- **Pre-validated model libraries** – Choose from an expanding set of validated QSP models.
- **AI-enhanced interface** – Validate and interpret models faster with intuitive, AI-driven tools.
- **Cloud computing power** – Run large-scale simulations in minutes.
- **Declarative programming** – Replace complex coding with reusable, simple, and readable statements.
- **Integrated workflows** – Automate analysis and generate regulatory-ready reports.
- **Collaboration tools** – Share, compare, and co-develop models seamlessly.

## QSP platform models

Certara IQ provides software models across diverse therapeutic areas to accelerate drug development:



**Immuno-oncology simulator** – Optimize combinations, dose regimens, and biomarkers.



**IBD QSP model** – Predict disease activity scores with mechanistic models.



**Immunogenicity simulator** – Predict incidence and PK/PD impact.



**Vaccine simulator** – Optimize dosing strategies.



**Neuroscience models** – Support discovery in Alzheimer's, Parkinson's, and more

## Pharmacology model packs

Certara IQ offers pre-build, pre-validated models designed for rapid use:



**Antibody-drug conjugates (ADC)**



**Avidity pharmacologies**



**Biotherapeutics (mono- & bispecific)**



**Cell engagers**



**Gene therapies**



**Protein degraders**

## Benefits of adopting Certara IQ

### Democratized QSP modeling

- Leverage web-based apps and validated libraries to share models and results.

### Scalable for speed & volume

- Run complex scenarios quickly across projects and portfolios.

### Regulatory compliance

- Proven workflows, templates, and traceability.

### AI-driven data integrity

- Enhanced reliability, transparency, and stakeholder confidence.

## Licensing & availability

Certara IQ offers flexible and scalable licensing options suitable for organizations of any size.

Request a demo or contact us for more information.

See Certara IQ in action

## About Certara

Certara accelerates medicines using proprietary biosimulation software, technology and services to transform traditional drug discovery and development. Its clients include more than 2,400 biopharmaceutical companies, academic institutions and regulatory agencies across 70 countries.

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