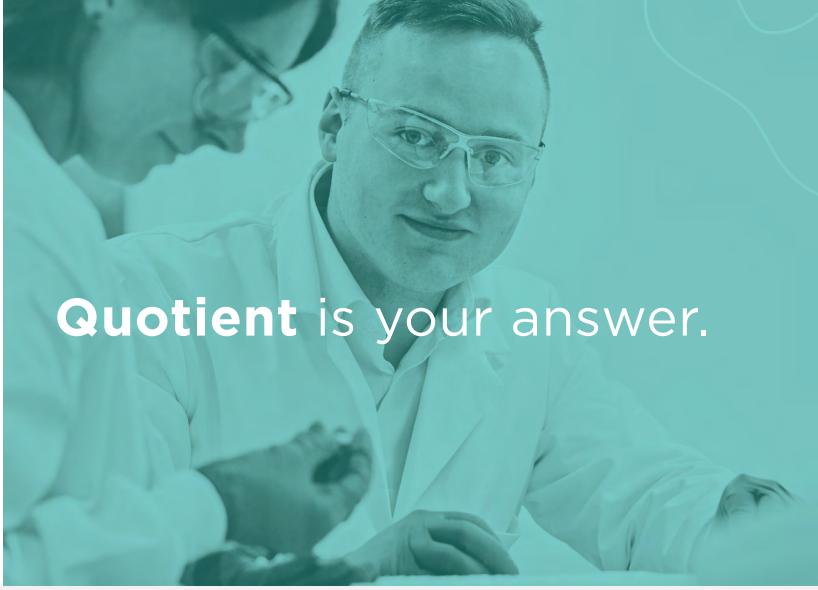
How do I innovate my drug development?



Translational Pharmaceutics® at Quotient Is Your Answer

The search for answers in drug development can consume your resources and stall the momentum of your program. Accelerating the speed of science isn't just Quotient's ideal, it's our reality — delivered through best-in-class service, quality and expertise.

Quotient helps you achieve your drug development goals: The precise formulation. The streamlined manufacturing process. The quick pivot to clinical data. The faster transition through clinical development.

Quotient Sciences' Translational Pharmaceutics platform innovates the way you design and implement your drug development program. It offers you integrated formulation development, real-time adaptive GMP manufacturing and clinical research capabilities proven to reduce drug development costs and shorten timelines.

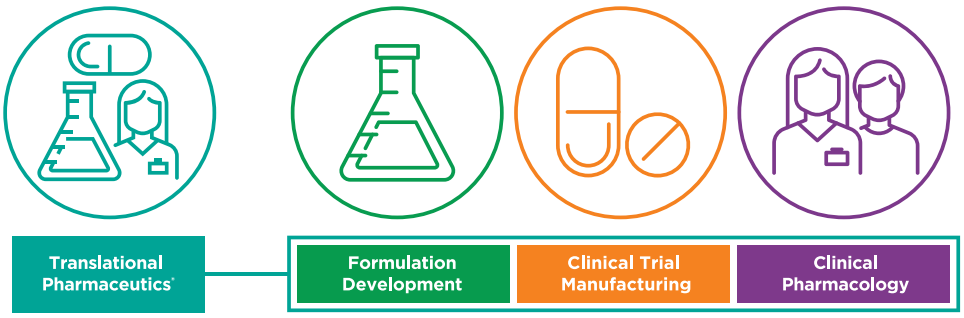
Translational Pharmaceutics transforms the traditional approach of outsourcing development work to contract development and manufacturing organizations (CDMOs) and contract research organizations (CROs) — simplifying and streamlining your outsourcing and program management.

How do I partner with Quotient?

Our team works with you to design a customized solution to accelerate both your simple and complex early drug development programs. We deliver expert medical and scientific assessments of your objectives and offer interpretation of your data.

Quotient supports you with flexible, adaptive solutions addressing critical questions in your drug development process:

- How do I accelerate my molecule to proof-of-concept?
- How do I optimize and validate my formulation?



What can Quotient's Translational Pharmaceutics do for me?

- Reduce your costs by $500,000
- Shorten your timelines by six months
- Conserve 85% of your drug substance
- Facilitate real-time decision making based on emerging clinical data
- Deliver flexibility to adjust formulation compositions within your study
- Streamline vendor management

Quotient Sciences
Assess. Adapt. Accelerate.

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With Translational Pharmaceutics, our scientists help you overcome the drug delivery challenges presented by your molecule for all dosage forms and routes of delivery.

Dosage forms

- Oral solid dose (tablets, capsules, multiparticulates)
- Parenterals (solutions)
- Inhalation (DPIs, MDIs, nebulizers)
- Non-sterile liquids (solutions, suspensions)
- Semi-solids (creams, oil, gels, ointments)

Routes of delivery

- Oral
- Parenteral (subcutaneous, intravenous)
- Inhaled (pulmonary, nasal)
- Topical

Using our Translational Pharmaceutics approach, you can streamline your management of outsourced partners. Your program will be led by a single project manager who will manage an integrated cross-functional project team focused on delivering all the components of traditional CDMO and CRO services — allowing you to capture multiple efficiencies.

When you need to quickly identify your opportunity and design the best quality solution, **Quotient is your answer.**

First-in-human to proof-of-concept

To identify molecules with the greatest chance of success, the transition of your molecule from candidate selection to proof-of-concept (POC) needs to be fast and cost-effective. Our Translational Pharmaceutics approach transitions your drug molecule into clinical development through to POC quickly.

We enable first-in-human (FIH) studies through the integration of:

- Formulation development, real-time adaptive GMP manufacturing and clinical research
- Multiple assessments within a single clinical protocol (e.g., single dose, multiple dose, food effect, gender effect, POC)

Drug product optimization

Most new drugs emerging from the industry pipeline have suboptimal properties and require formulation optimization to achieve their full potential. Our platform enables formulations to be designed, manufactured and optimized rapidly based on clinical data.

By integrating formulation development and real-time adaptive GMP manufacturing with clinical research, we accelerate the screening and optimization of formulations — for both new chemical entities and life cycle management of existing drugs. Our unique inclusion of a design space in initial regulatory submissions and clinical protocols gives you complete flexibility to optimize quantitative formulation composition based on clinical data.

Our team works with you to design a customized program to deliver your objectives in the most timely and cost-efficient way. We have completed more than 125 formulation optimization programs, involving the clinical evaluation of more than 400 formulations.

We support you through:

- Evaluation and selection of solubilization technologies
- Optimization of modified release systems
- Improvement of taste, palatability and acceptability
- Changing routes of delivery
- Development of combination products
- Understanding quality by design of product and process variables