

Emulate Contract Research Services

Understand and predict human response for your drug candidates—with expert help

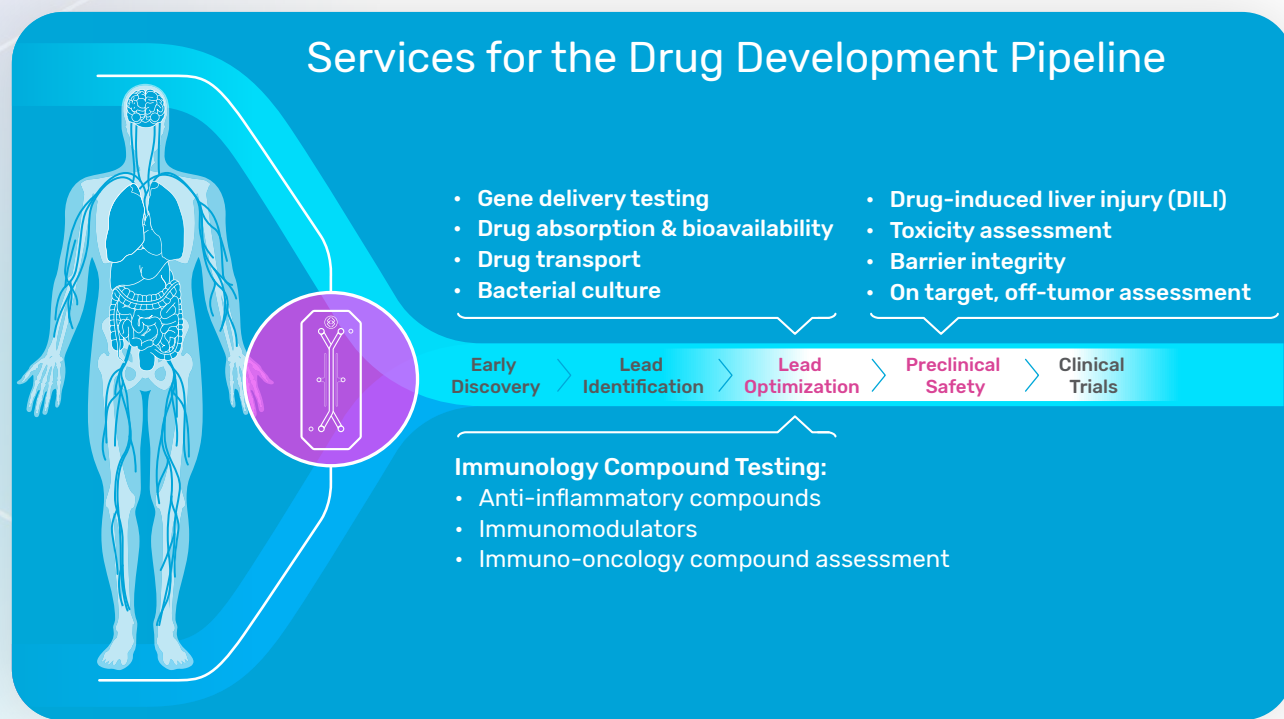


Overview

Species differences between animals and humans are a significant reason why **~90% of drug candidates fail in clinical trials**. Emulate Organ-Chips incorporate human cells in a physiologically relevant microenvironment, creating a more accurate model of human biology. For researchers looking to obtain the benefits of Organ-on-a-Chip technology without committing internal resources to bringing the technology in house, Emulate Contract Research Services offer pharmaceutical companies an easy way to obtain rapid and robust insights into human response and ultimately allow higher-quality drug candidates to advance to clinical trials.

Standard Services

Organ-Chips deliver human-relevant insight during every step of the drug development process and are particularly well suited for studies within lead optimization and preclinical safety phases. Emulate offers a diverse portfolio of Organ-on-a-Chip candidate drug testing services focused on those phases to improve your odds of achieving a successful clinical trial.



If your research needs don't align with one of our standard service offerings, you can team up with our expert scientists to develop custom collaboration projects for your application of interest.

Part of the Human Emulation System®

All Contract Research Service studies are performed using the [Human Emulation System](#), a complete Organ-on-a-Chip platform that includes instruments, consumables, and software, providing the dynamic conditions needed to culture up to 12 Organ-Chips. Multiple systems may be used to increase the number of samples per experiment.



Contract Research Service Specifications

Study Element	Details
Organ-Chip models	Liver-Chip Duodenum Intestine-Chip Colon Intestine-Chip Proximal Tubule Kidney-Chip Alveolus Lung-Chip
Number of compounds tested per study*	Up to 12
Number of concentrations tested per compound*	Up to 4
Maximum length of compound treatment**	7 days
Average time to results	4-6 weeks
Characterization Endpoints**	Image analysis <ul style="list-style-type: none"> • Phase contrast microscopy • Confocal microscopy • Electron microscopy Omics analysis <ul style="list-style-type: none"> • RNAseq • Metabolomics • Proteomics Effluent analysis <ul style="list-style-type: none"> • Barrier function (P_{app}) • Cytokine release • Injury markers

*Includes 3 replicates per treatment condition plus vehicles.

**Custom studies may accommodate longer treatment courses and/or additional endpoints not listed here.

Ordering Information

Contract Research Services pricing is customized to each study design. To learn more or request a quote, please visit emulatebio.com/services