



# High-Throughput ADME Screening Services

Capabilities that accelerate preclinical studies

In vitro ADME screening during the lead optimization stage of drug discovery positively impacts drug candidate selection with an enhanced probability of success in clinical trials. Since most new drug candidates fail during preclinical and clinical development, and the late stage of the drug development cycle can be a lengthy and costly process, any means of identifying drug candidates with optimized ADME and pharmacokinetics properties in the discovery stage will have a significant impact on the drug discovery process overall.

Q² Solutions' highly automated laboratory partners with small, mid and large pharmaceutical customers around the world to perform large scale ADME screening assays using in-house or client-customized protocols. Our rapid turnaround time enables parallel optimization of the ADME properties of your chemical platform, alongside your potency and selectivity targets, thereby enabling you to make important decisions about your potential candidates.

Partner with us for your preclinical ADME screening needs to realize:



## Increased Speed

Establishment of high-throughput ADME assays allows for the prioritization of your drug candidates by their ADME properties in parallel with optimization of their efficacy at early discovery phases. This approach improves the overall quality of your drug candidates and the probability of their success, thereby shortening the drug discovery and development process.



## Reduced Cost and Development Cycle Times

We generate in vitro screening data that customers can use in their in-silico models. This combination of in vitro screening and in-silico alternatives helps customers generate ADME data that can lead to a reduction in animal studies, and a more efficient and potentially less expensive study.



## Optimized Discovery Cycle Time

By ensuring that only the most promising candidates are progressed through to clinical trials, the drug discovery pipeline can become more streamlined and efficient once clinical trials begin. Optimizing drug leads early on reduces the cost and time of progressing unsuccessful compounds through to the later stages of development.



## Detailed Dose Levels

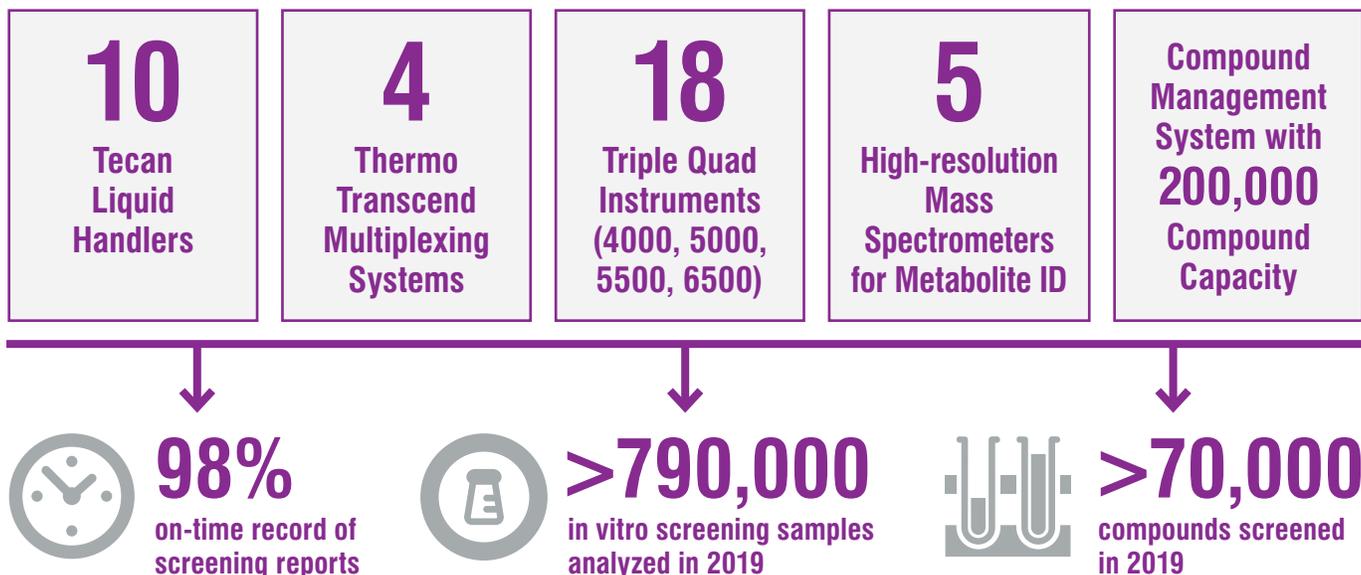
Pharmacokinetic (PK) parameters are extrapolated from measurement of drug concentration in the plasma, blood, or other biological matrices over a selected time period. This provides information that can guide your future animal and clinical studies for the selection of the dose levels and frequency of administration.

Our experienced scientists routinely conduct industry-standard in vitro ADME assays and continuously develop novel in vitro assays to address current metabolism issues and the evolving needs of our customers.

	2019		
Tier I Screening Suite:	Assay Requests	Average TAT (days)	Samples Analyzed
Solubility: Turbidimetric	>7,600	<2	>91,000
Permeability: MDCK Bidirectional	>5,600	<4	>96,000
Microsome Stability: Single Time Point	>18,000	<3	>103,000
Microsome Stability: Intrinsic Clearance	>3,900	<4	>27,000
Intrinsic Clearance Hepatocytes	>8,500	<4	>129,000
P450 Inhibition: Reversible Single Point	>8,200	<2	>16,000
P450 Inhibition: Reversible IC <sub>50</sub>	>700	<7	>6,100
Blood to Plasma Ratio	>950	<12	>73,000
Protein Binding (Plasma, Tissue, Microsome)	>12,000	<4	>202,000

The initiation of early ADME screening dramatically decreases the proportion of compounds failing in clinical trials. Our preclinical ADME screening services help customers eliminate weak drug candidates prior to clinical development, thereby helping them to focus their resources on potential drug candidates so that the right drugs get to the right patients faster and more efficiently.

Capacity and on-time delivery is critical to this process:



### Contact us

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To learn more about our preclinical ADME screening services, call us today or visit us at [www.Q2LabSolutions.com/ADME](http://www.Q2LabSolutions.com/ADME).

