



**Hepatic Products & Research  
Services for ADME-Tox &  
Efficacy Evaluations**

# Portfolio of Products & Services to Advance Your Research

ACCELERATE R&D | GAIN REGULATORY APPROVAL | ACHIEVE COMMERCIAL OBJECTIVES

BioIVT is the leading provider of high-quality hepatic products. For over 25 years, we have set the standard for hepatocytes and offer leading brands including TRANSPORTER CERTIFIED™ and LIVERPOOL® human hepatocytes. Our product offerings also include INVITROCYP™ human liver microsomes, animal hepatocytes and microsomes and INVITROGRO™ hepatocyte media. These research tools are used in *in vitro* hepatic modeling to analyze the ADME-Tox properties of New Chemical Entities (NCEs). Our research services team works collaboratively with clients to implement studies and provide technical expertise and guidance to advance drug development programs.



Safety

Interactions

Excretion

Clearance

Toxicity

Absorption

Distribution

Metabolism



## Liver Products & Media

Conduct *in vitro* studies with the highest quality hepatocytes, homogenate, subcellular fractions and related media



## Transporter Products

Determine transporter effects with our assay-ready transporter kits and research services



## Custom Products

Rely on our cell culture services and custom products to support cell culture studies



## Application Kits

Duplicate the experimental conditions we have optimized



## Research Services

Design and implement ADME-Tox research programs

# Your Partner for *In Vitro* Hepatic Research

Target ID  
& Validation

Lead Selection &  
Optimization

Preclinical  
Development

IND

Clinical  
Development

NDA

## Collaborative Research Services

Whether you need our research expertise for a single study or are looking for a partner for comprehensive lead selection through regulatory submission programs, we take a collaborative approach to your project.

### Hepatotoxicity

- Predictive Tox
- Mechanistic Tox
- Cholestatic Hepatotoxicity

### Hepatobiliary Disposition

- Intracellular Concentration
- Biliary Disposition / Clearance
- Biliary Interaction

### Metabolism

- Metabolite ID
- Metabolic Stability

### Drug-Drug Interactions

- CYP ID / Reaction Phenotyping
- CYP Induction
- CYP & Transporter Inhibition

### Transporter Studies

- Single Assay & Multi-Transporter Models
- Regulatory Panels
- DDI Panels
- ADME Panels
- Safety & Efficacy Panels
- Drug Target Panels

## Leading Products to Support Your Programs

### HEPATOPAC® Kits



Hepatocyte micro-patterned cultures for long-term exposure studies

### LIVERPOOL® Hepatocytes



Multi-donor lots of high-quality, cryoplateable and cryosuspension human hepatocytes lots.

### TRANSPORTER CERTIFIED™ Hepatocytes



Human hepatocytes validated to express physiologically relevant transporters

### Cryoplateable Hepatocytes



Highly-characterized human and animal hepatocytes

### Fresh Human & Animal Hepatocytes



Available in suspension or plated formats

### INVITROCYP™ Microsomes



Human liver microsomes

### Animal Subcellular Fractions



Liver microsomes and S9

### INVITROGRO™ Media



Hepatocyte media and supplements

### ACCULIVER™ Kits



Duplicate our experimental conditions for ADME-Tox studies

### TRANSFLEX™ PLATES

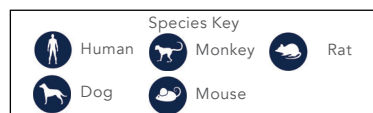


Assay-ready transporter plates using OPTI-EXPRESSION™ Technology

### Custom Products



Human and animal tissue, homogenate, and, subcellular fractions from various species



# Hepatic Disease Modeling



## NAFLD / NASH & Other Fibrotic Disease

- Access hepatocyte lots collected from donors diagnosed with NAFLD / NASH
- Model drugs designed to moderate bile acid homeostasis
- Recapitulate liver tissue architecture and functionality with ORGANDOT®, our 3D co-culture model



## Malaria

- Identify and reserve hepatocyte lots that meet your specifications for malaria model studies



## Hepatitis

- Identify and reserve hepatocyte lots that meet your specifications for HBV model studies
- Provide HEPATOPAC® kits for long-term HBV models

*Our experienced team will design, implement, and interpret study results.*

## IND-Enabling Programs

BioIVT provides comprehensive solutions to develop the strategy, implement studies, and analyze data for all the hepatic investigations required for an IND submission. Submission-ready reports are provided in our template or in our clients' templates.



### IND Study Package

- Reaction Phenotyping (i.e. P450 ID)
- CYP Induction
- CYP Inhibition
- Transporter Substrate Study
- Transporter Inhibition Study

### IND Products

- Human cyroplateable hepatocytes
- TRANSPORTER CERTIFIED Hepatocytes
- INVITROCYP Human Liver Microsomes
- TRANSFLEX Plates for transporter studies
- Transporter Membranes
- LIVERPOOL Human Hepatocytes

# Benefit from Our Team of Hepatic Experts

As part of our commitment to ensuring successful research programs, our staff are available to discuss your study programs and offer insights about the hepatic products, *in vitro* models, and strategies that will help you achieve your research objectives.



The infographic consists of four colored boxes arranged in a 2x2 grid. The top-left box is light green and contains the text '>25 Hepatic Experts'. The top-right box is teal and contains '10+ Proprietary Technologies'. The bottom-left box is dark blue and contains '>30 Recent Peer-reviewed Publications'. The bottom-right box is dark grey and contains a list of specialties. A central white box with a blue border contains the text 'MEET THE EXPERTS' with 'BIOIVT' in a larger font above 'EXPERTS'.

**>25**  
Hepatic Experts

**10+**  
Proprietary Technologies

**MEET THE EXPERTS**

Specialties include:

- Pharmacology
- Toxicology
- Cell & Molecular Biology
- Biochemistry
- Analytical Chemistry

**>30**  
Recent Peer-reviewed Publications

Discover the wealth of knowledge from our experts on a variety of topics.

Visit [BioIVT.com/experts](https://www.bioivt.com/experts) to learn more.

## Innovative Proprietary Technology

Our scientific teams have developed novel methods and technologies to investigate compounds and predict *in vivo* effects. We apply our technologies in collaborative research programs and make them available in product kits.

### B-CLEAR® Technology

Method to quantitate biliary efflux

### C-DILI™ Assay

Whole-cell system to evaluate potential for cholestatic hepatotoxicity

### HEPATOPAC® Technology

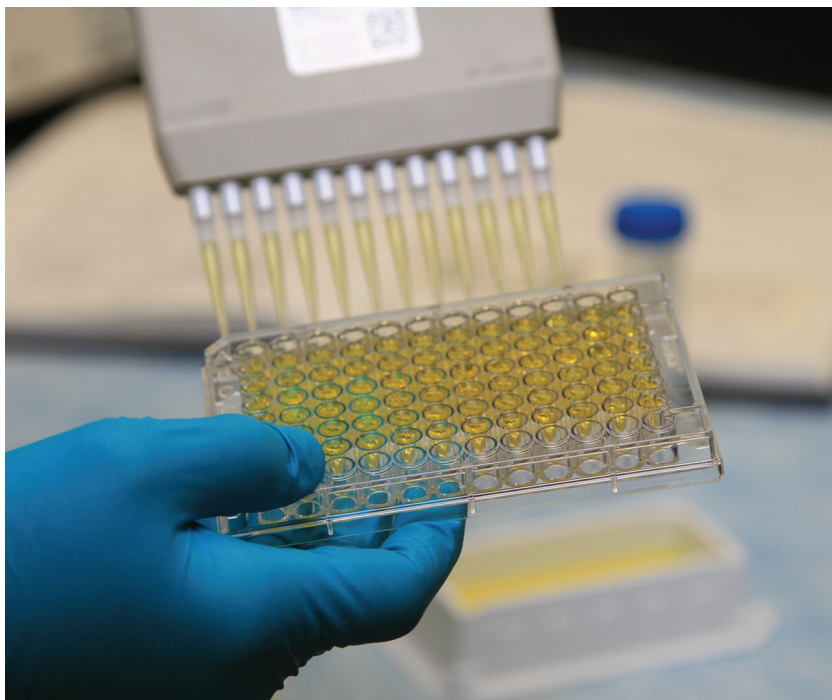
Stable hepatocyte cultures for long-term hepatic studies

### OPTI-EXPRESSION™ Technology

Efficient, transient transfection system to create single transporter assays and multi-transporter models

### ORGANDOT® Platform

3D tissue culture system



Subscribe to our **HepatA!ert™**

Receive notifications when Fresh Hepatocytes are available.

Visit [BioIVT.com/hepatalert](https://www.bioivt.com/hepatalert) to sign up!

# Technology | Products | Services

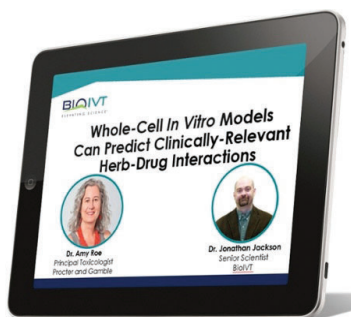
With novel hepatic technologies, an unparalleled product portfolio, and integrated service teams, you can rely on BioIVT for all your hepatic research needs.



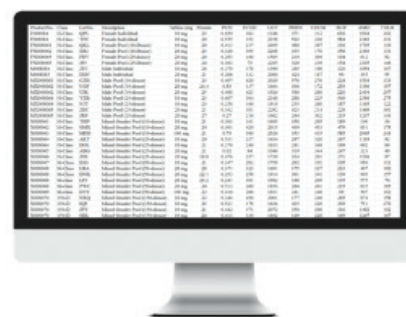
Visit **BioIVT.com** for additional resources including protocols, on-demand webinars, how-to videos and more.



Tutorials



Webinars



Hepatocyte  
Characterization Tables

**BIOIVT**  
ELEVATING SCIENCE™

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