

### Our Services at a glance...

- **hERG inhibition assay (Ikr)**

ICH S7B core battery test  
HEK293 or CHO cell lines  
hERG screens available

- **Ionic Current Inhibition**

On cardiomyocytes  
Na, K, Cl, Ca currents available  
Human tissues available

- **Action Potential Kinetics Analysis (APD)**

Purkinje fibers  
Papillary muscles  
Ventricular strips  
Cardiomyocytes  
Human tissues available

- **Cardiac & Vascular Muscle Tension Measurement**

Papillary muscles  
Atrial or ventr. trabeculae  
Aortic & vascular tissues  
Human tissues available

- **Transmural Dispersion of Repolarization (TDR)**

Three-point measurement  
on ventricular wall  
Human tissues available  
*Most predictive pre-clinical model for pro-arrhythmicity*

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## Safer Medicines for life...

Through In-vitro Cardiovascular Safety Pharmacology

### Our mission

IPST Therapeutique is a specialty Contract Research Organization, which dedicates its expertise and technology to promote the cardiac safety of new drugs at an early stage of their development by using validated and highly predictive models.

While being a pioneer in the implementation of applied in-vitro methods on animal and human tissues, IPST's strongest commitment is to stay ahead of regulatory expectations by leveraging the most promising and innovative scientific discoveries that offer true benefits in their predictive value in humans.

We strongly believe our holistic assessment of cardio-vascular safety pharmacology successfully contributes to the faster development of safer medicines, leading to substantial economy of human and material resources for all.

### Company profile & history

IPST was founded in 1999 in response to the rising concerns from the international community about the safety of existing drugs and new chemical entities. From these early days, our scientists have been developing methods for the assessment of the arrhythmogenic potential of drugs through the use of applied electrophysiological techniques on in-vitro cell and tissue models. Located in state-of-the-art facilities, IPST is in a strategic position to meet the growing and challenging needs of safety pharmacology.

Historically, IPST first started its contract research activities by conducting hERG and other ion channel inhibition assays on freshly dispersed cardiomyocytes from rabbit, dog and guinea pig. In response to requests from investigators who wanted to explore a broader range of cardiovascular functions, our service offer expanded to action potential duration analysis, cardiac muscle tension measurement and excitation-contraction coupling assays. All of these assays have been rigorously validated, are fully GLP-compliant and have been designed to fulfill the FDA's, Health Canada's, and the European Union's requirements, while addressing the concerns and suggestions of the ICH S7A & S7B guidelines.

In its quest for better and more predictive models, IPST obtained a privileged access to fresh human hearts that are now being used on a regular basis. Finally, our most recent innovation is the new Transmural Dispersion of Repolarization (TDR) assay, which allows the immediate and unequivocal confirmation of the pro-arrhythmogenicity of a compound. When performed on human hearts, the TDR assay qualifies the relevance of pre-clinical cardio-vascular data and contextualizes the compound's cardiovascular profile prior to phase one clinical trials.

IPST Therapeutique guarantees accurate, consistent results - on time and on budget. And no matter how complex and wide-ranging your study may be, you will be able to rely on our outstanding and personalized service to support your efforts.