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## Blood / urine / tissue collection

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### Objectives:

The collection of blood / urine / tissue following compound administration can allow the identification of a mechanism of action performing biochemical and/or histological analysis. Collected samples can also be sent to Pelvipharm's client if needed.

### Summarized methodology:

- **Plasma / blood collection:** blood samples (venous / arterial) are collected either in conscious or anesthetized animals, immediately placed at 4°C and centrifuged to collect plasma samples.
- **Urine collection:** Urine harvesting can be performed using metabolic cages and refrigerated collection rack ([see metabolic cages](#)), or by direct vesical collection.

Care is particularly taken to appropriately store the blood/plasma and urine samples (liquid nitrogen, -80°C, -20°C, 4°C) and to add appropriate preservatives according the future use of these samples.

- **Tissue collections:**

Various tissues can be harvested in freshly euthanized animals:

- central nervous system: brain, spinal cord
- cardiovascular / pulmonary system: heart, vessels, lungs
- urinary system: kidney, bladder, urethra, prostate
- sexual system: corpora cavernosa, seminal vesicle, vagina, clitoris, ...
- other systems: striated muscle, digestive tract, liver, ...

Tissues can be prepared for in vitro, biochemical or histological purposes as follows:

- [dissected at 4°C and mounted in organ bath chambers for reactivity studies \(see in vitro organ baths functional experiments with animal tissues\)](#)
- snap frozen in liquid nitrogen for future homogenization and biochemical determinations ([see spectrophotometric assays and protein expression](#))
- embedded in paraffin or cryopreserving milieu (with or without preliminary fixation) for future histological studies ([see histology](#) and [immunohistology](#))

### Endpoints:

- Organ weighing and volume evaluation
- Sample collection

**NB:** Pelvipharm will gladly study the feasibility of additional sample collection to meet its client's needs.

### Links to applicable therapeutic areas / targeted disorders:

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#### - Sexual pharmacology

- \* ED (Erectile Dysfunction)
- \* Ejaculatory Disorders
- \* FSD (Female Sexual Dysfunction)

#### - Lower urinary tract

- \* BPH (Benign prostatic Hyperplasia)
- \* SUI (Stress Urinary Incontinence)
- \* SCI (Spinal Cord Injury)
- \* NDO (Neurogenic Detrusor Overactivity)
- \* OAB (Overactive Bladder)
- \* IC (Interstitial Cystitis)

#### - Cardiovascular and metabolism pharmacology

- \* Hypertension
- \* Metabolic syndrome
- \* Atherosclerosis
- \* Diabetes Mellitus
- \* Myocardial infarction