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# INTRATHECAL PORTS FOR DRUG ADMINISTRATION AND/OR CEREBROSPINAL FLUID (CSF) COLLECTION IN NON-HUMAN PRIMATES (NHP)

## OVERVIEW

Intrathecal administration (IT) is a route of administration for drugs via an injection into the spinal canal, or into the subarachnoid space so that it reaches the cerebrospinal fluid (CSF). Traditionally, the IT route of administration has been used to bypass the blood brain barrier (BBB).

Drugs may be administered by standard routes (IV, Oral) with CSF collection to assess CNS drug exposure and biomarker levels.

## NHP MODEL

The anatomy and physiology of CNS models are comparable to a human.

## CATHETERIZATION OF THE SPINAL IT SPACE

CSF catheters are implanted surgically via lumbar hemi-laminectomy with catheter tip targeted for level of the cisterna magna. Access port is located on the back for ease of use.

## INTRATHECAL (IT) INFUSION OF THERAPEUTIC AGENTS (TA)

IT lumbar dosing is utilized when:

- The TA cannot cross BBB and standard routes of drug therapy are not feasible
- TA must be delivered directly to the CNS to achieve efficacious doses

## CSF COLLECTION

- Chronic ports allow for serial sampling of CSF in conscious NHP
- A properly working CSF port virtually eliminates contamination of CSF with red blood cells

## OUR SUCCESS RATE

- The Biomere colony allows for CSF ported models to be placed on study with 100% patency rate
- >95% success rate on sample collection
- Facility colony models have been patent for 2 years and counting

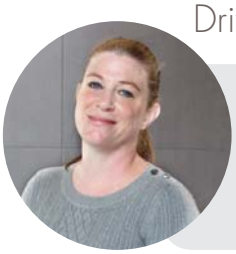
## BIOMERE EXPERTISE

In addition to chronic porting, our expertise includes experience with direct stick to the lumbar and cisternal intrathecal space for a variety of both IT dosing and CSF collection study.



# IT'S PERSONAL.

Driven to expedite your journey.



**"The ability to serially sample CSF in conscious NHPs is crucial for PK/PD characterization of drug candidates targeting the brain. This method allows for minimally-invasive determination of drug concentration at target site (CSF) in a time-dependent manner from the same animal."**

**- Leslie J., Scientist II**