



1. Research services offered (including specialized techniques and expertise)
 - a. Extensive knowledge in performing PK/ PD studies
 - b. Formulation
 - c. Extensive knowledge with simian infectious disease models in Macaques
 - d. Quarantine and acclimation
 - e. Experience with immunodepletion modalities
 - f. Expertise with the MPTP model for Parkinson's disease in cynomolgus macaques
 - g. Expertise with glaucomatous cyno colony
 - h. Expertise with ocular models
 - i. CSF-purged cyno colony
 - j. Colony of naïve and non-naïve cynomolgus macaques
 - k. Ability to house macaques on either a 'wet' or 'dry' system
 - l. Dedicated enrichment/behavioral coordinator
 - m. LPS-challenge model in cynos
 - n. IDEXX Catalyst and Procyte clinical analyzers
 - o. Multi-parameter flow cytometry, including panel design
 - p. ELISA assay development
 - q. MACS-based cell isolation
2. Veterinary and other research support services offered
 - a. Placement of indwelling ports for collection of cerebrospinal fluid
 - b. Biopsy capability including but not limited to:
 - Lymph node
 - Liver
 - Spleen
 - Colon
 - Upper gastrointestinal tract (endoscopic biopsies)
 - Skin
 - Oral mucosa
 - Bone Marrow
 - Vaginal
 - c. 3 Full time veterinarians with primate experience
 - d. 2 Full time veterinary technicians with primate experience
 - e. 6 Full time research technicians with primate experience
 - f. Surgical technician with surgical support
 - g. Xxx Full time animal care staff
 - h. 2 cage washers
 - i. Formulation suite with water bath sonicator, analytical scales, pH meter, biological safety cabinet, fume hood, autoclave, and stir plates. In vitro lab can prepare vehicle formulate support as needed.
3. Specialized facilities (e.g., ABSL-4 laboratories)
 - a. BSL-2

4. Specialized major equipment (e.g., fMRI, confocal microscopy, etc.)
 - a. Two surgical suite
 - b. Endoscopy unit
 - c. Necropsy suite with perfusion capability
5. Unique or unusual resources (e.g., databases, models, etc.)
 - a. Aged colony of cynomolgus macaques with stable glaucoma
 - b. CSF-porting cyno colony
 - c. Behavioral analysis equipment
6. NHP species currently used, species maintained as breeding colonies, and housing capacity
 - a. Rhesus Macaque (*Macaca mulatta*)
 - b. Cynomolgus Macaque (*Macaca fascicularis*)
 - c. Other NHP species as needed
 - d. Housing capacity - 500

1. Compared to current usage, is the usage of certain NHP species anticipated to increase or decrease over the coming 5 years, and if changing, for which species and what factors are thought to be responsible for the expected changes?

Increase. The use of NHPs, particularly cynomolgus monkeys, in evaluation of the pharmacokinetics, pharmacodynamics, efficacy, and safety of novel biologics by the biotech and pharma industry will be a strong driver of the need for Biomere to maintain a colony of naïve animals for testing purposes.

2. Are there significant new capabilities (e.g., technologies or techniques) that are likely to become more important in NHP research in the coming 5 years, or conversely, are there capabilities that are currently in use that are expected to be of diminished importance?

As biomarker development continues and surgical and imaging capabilities become more advanced, the need to perform terminal studies may decrease. Therefore, histopathologic analysis may decline in favor of longitudinal functional analyses.

Development of relevant disease models in the NHP is lacking.

