Blood Collection Guidelines for Nonhuman Primates

Blood will only be collected from nonhuman primates (NHP) as described in an approved Animal Study Proposal (ASP) or for clinical sampling as determined by the veterinarian. The following is general guidance on standard blood collection volumes and recovery periods. Any blood collected from an animal will be documented in the animal's medical record and will include:

- Date
- Weight of animal
- Amount of blood collected

Macaques have a blood volume of approximately 60 ml/kg[1]. During a 2-week period up to 10% of this volume may be taken with a 2-week recovery period, or, up to 20% may be taken with a 4-week recovery period (see table 1).

Blood volume will vary depending on the type of primate. For blood volumes of other primates, please see the references listed in the at the end of this document.

Table 1: Blood Sampling Volumes and Recovery Periods for macaques

Blood volume removed (%)	Blood Volume Removed (mL/kg)	Approximate Recovery Period (Weeks)
10%	6	2
20%	12	4

Example:

For a 5 kg macaque: Up to 60 mLs of blood could be removed at one or multiple points during a 2 week period, but no additional blood should be taken during the subsequent 4 weeks. However, if up to 30 mLs of blood is taken during a 2-week period, an additional volume of up to 30 mLs could be taken during the subsequent 2 week period.

Replacement fluid therapy may be instituted by the veterinary staff if not contraindicated. Normal biological variability of blood volumes exists therefore these values are considered a guide only and if an animal starts to become anemic the veterinarian, in consult with the investigator, may reduce the proposed collection volume.

References

1. **Diehl KH, Hull R, Morton D, Pfister R, Rabemampianina Y, Smith D, Vidal JM, van de Vorstenbosch C, European Federation of Pharmaceutical Industries A, European Centre for the Validation of Alternative M.** 2001. A good practice guide to the administration of substances and removal of blood, including routes and volumes. Journal of applied toxicology : JAT **21:**15-23.