
1. PURPOSE

This Standard Operating Procedure (SOP) describes the health monitoring program for macaques.

2. RESPONSIBILITY

Veterinarian, veterinary care staff.

3. MATERIALS

- 3.1. Anesthetics
- 3.2. Old Mammalian Tuberculin
- 3.3. Blood collection materials
- 3.4. Fecal collection containers

4. PROCEDURES

- 4.1. Monitor populations that are housed for more than 8 weeks.
- 4.2. Every 6 months:
 - 4.2.1. General physical examination:
 - 4.2.1.1. Anesthetize animals as per Non-Human Primate Anesthesia SOP
 - 4.2.1.2. Record body weight.
 - 4.2.1.3. Perform a complete physical examination.
 - 4.2.1.4. Perform an Animal Welfare Assessment.
 - 4.2.1.5. Examine the animal for oral or genital lesions (e.g. vesicles, ulcerations, etc.) and any clinical evidence of viral shedding.
 - 4.2.1.6. Trim the nails.
 - 4.2.1.7. Allow animal to fully recover.
 - 4.2.2. Tuberculin skin testing:
 - 4.2.2.1. Inject 0.1 ml of Old Mammalian Tuberculin intradermally in the upper eyelid, as close to the edge as possible.
 - 4.2.2.2. Reaction will be read evaluated at 24h, 48h, and 72h.
 - 4.2.2.3. The description of the reaction or corresponding reaction grade (as per table below) must be entered into the animal's record.

REACTION GRADE	DESCRIPTION OF CHANGES
0	No reaction
1	Bruise – extravasation of blood in the eyelid associated with the injection of tuberculin.
2	Varying degrees of erythema of the palpebrum with minimal swelling.
3	Moderate swelling with or without erythema.
4	Obvious swelling of the palpebrum with drooping and varying degrees of erythema.
5	Marked swelling with necrosis and eyelid closure or partially closed.

- 4.2.2.4. Grades 0, 1 and 2 are considered negative; grade 3 is suspect; grades 4 and 5 are considered positive.
- 4.2.2.5. Upon reading, all grade 3, 4, and 5 must be signaled immediately to a veterinarian.
- 4.2.2.6. After 72 hours, any clinical signs, including grade 1 and 2, must be reported to a veterinarian.
- 4.2.2.7. Retest any suspected cases as determined by the veterinarian.
 - 4.2.2.7.1. Anesthetize animals as per NHP Anesthesia SOP.
 - 4.2.2.7.2. Carefully shave a small section of the abdomen. Inject 0.05 ml of Old Mammalian Tuberculin intradermally. Ideally, use a different lot from the one used in the first testing.
 - 4.2.2.7.3. Allow animal to fully recover.
 - 4.2.2.7.4. Reaction will be evaluated at 24h, 48h, and 72h.
 - 4.2.2.7.5. The description of the reaction or corresponding reaction grade (as per table below) must be entered into the animal's record.

REACTION GRADE	DESCRIPTION OF CHANGES
0	No reaction
1	Moderate swelling. Height of induration 3-5 mm
2	Moderate swelling. Height of induration 5-10 mm
3	Obvious swelling. Height of induration >10 mm

- 4.2.2.7.6. Grades 0 and 1 are considered negative; grade 2 is suspect; grade 3 is considered positive.
- 4.2.2.7.7. Upon reading, all grade 2 and 3 must be signaled immediately to a veterinarian.
- 4.2.2.7.8. 72 hours, any clinical signs, including grade 2, must be reported to a veterinarian.
- 4.2.2.8. Consider other diagnostic tests to confirm any suspected cases.
- 4.2.3. Fecal samples:
 - 4.2.3.1. Collect fresh feces from cage trays for parasitology.
 - 4.2.3.2. Collect fresh feces in Cary-Blair transport medium for culture.
- 4.2.4. Blood collection, if required:
 - 4.2.4.1. Take 2 mL of blood from the femoral vein: 0.5 mL in EDTA for hematology.
- 4.2.5. Conduct Herpes B testing as per Macaque Herpes B Testing SOP.
- 4.3. Health status reports:
 - 4.3.1. The facility veterinarian reviews all health monitoring reports.

SOP REVISION HISTORY

DATE	NEW VERSION										
2018.01.11	<p>3.1. Ketamine 3.2. Old Mammalian Tuberculin 3.3. Blood collection materials 3.4. Fecal collection containers 3.5. Dry swabs, cotton-tip or synthetic tip 3.6. Amies swabs 3.7. Zip-top biohazard specimen bags 3.8. Styrofoam shipping box and cardboard box</p>										
2018.01.11	4.2.5.2. Take 2 mL of blood from the femoral vein: 0.5 mL in EDTA for hematology and 1.5 mL in SST tube for serology.										
2018.01.11	<p>5.1.3 Conduct Herpes B testing as per Macaque Herpes B Testing SOP. * All sections containing procedures and annex related to sample collection for Herpes B testing can now be found in SOP 630 – Macaque Herpes B Testing.</p>										
2023.08.29	<p>2. RESPONSIBILITY Veterinarian, veterinary care staff.</p>										
2023.08.29	3.1. Ketamine Anesthetics										
2023.08.29	4.2. Every 6 months, under ketamine (10 mg/kg IM) anesthesia:										
2023.08.29	<p>4.2.1. General physical examination: 4.2.1.1. Anesthetize animals as per Non-Human Primate Anesthesia SOP 4.2.1.2. Record body weight. 4.2.1.3. Perform a complete physical examination. 4.2.1.4. Examine the animal for oral or genital lesions (e.g. vesicles, ulcerations, etc.) and any clinical evidence of viral shedding. 4.2.1.5. Trim the nails. 4.2.1.6. Allow animal to fully recover in crate before returning to housing enclosure.</p>										
2023.08.29	<p>4.2.2. Tuberculosis Tuberculin skin testing: 4.2.2.1. Inject 0.1 ml of Old Mammalian Tuberculin intradermally in the upper eyelid, near as close to the edge as possible. 4.2.2.2. Reaction will be read evaluated at 24h, 48h, and 72h.</p>										
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2023.08.29	4.2.1.6. Allow animal to fully recover in crate before returning to housing enclosure.										
2023.08.29	4.2.2.7.3. Allow animal to fully recover in crate before returning to housing enclosure.										
2023.08.29	4.2.3. Inject ivermectin 0.2mg/kg subcutaneously.										
2023.08.29	4.2.3.1. Collect fresh feces from cage trays for parasitology (floatation).										
2023.09.01	4.2.1.4. Perform an Animal Welfare Assessment.										