Model Name
Syngeneic, Melanoma, Metastasis B16-F0

Item Number
578850

Introduction
The B16-F0 murine melanoma lung colonization model is used to evaluate therapeutic efficacy of investigational antineoplastic agent(s) in immune competent mice of the same background.

Procedure Summary
Groups of eight (8), specific-pathogen-free (SPF) female C57BL/6 mice bred in an animal isolator (IVC racks) under SPF conditions at 22 ± 2°C are used. Viable murine melanoma B16-F0 (ATCC CRL-6322) cells are implanted intravenously into the tail vein of experimental mice. Dose administrations are initiated 24 hours after cell inoculation. Body weights are measured and recorded twice weekly over the course of the study period. Study will continue for 21 days. The lungs are excised and fixed on the final day of the study. Tumor nodules on the lung surface are counted under a dissecting microscope.

Suggested Testing
R refers to the diameter of a metastatic tumor nodule are scored as follows:

- a = the number of nodules with \( R < 1 \) mm,
- b = the number of nodules with \( 1 \) mm \( < R < 2 \) mm,
- c = the number of nodules with \( R > 2 \) mm

The index of metastasis is calculated according to the following formula:
The total score = \( a + b + c \).

Endpoint Parameters
Study will continue for 21 days.

Study Parameters
The student’s t test is used to determine significant difference between test substance treated and vehicle control groups.

Reference Compound(s)
Mitomycin, 1 mg/kg, IP, biwk x 3; Mitomycin, 2 mg/kg, IP, biwk x 3

Literature

Modified Protocols
We will readily accommodate client-specified alterations.

Laboratory
These assays are performed at our AAALAC accredited laboratory in Taipei.
Animal Welfare
All aspects of this work is performed in general accordance with the Guide for the Care and Use of laboratory animals (National Academy Press, Washington, DC, 2011). The study protocol was approved by the Pharmacology Discovery Services IACUC and is performed with the oversight of veterinarians to assure the humane treatment of laboratory animals.

Therapeutic Response Data

Last modified May 2, 2018