

ONCOLOGY

Metastasis tumor model

Spread of melanoma can be cutaneous, to distant lymph nodes or to visceral organs such as the lung (18-36%). Patients with advanced melanoma have a poor prognosis, with 1-year survival rates as low as 33%¹. In this model C57BL/6 mice were treated intravenously with B16F10-Nex2 tumors cells (0.5×10^5 or 1×10^5) and evaluated after 18 days and lung metastasis were assessed.

Species: C57BL/6

Number of animals/group: At least 8 animals/group of both sexes

Route of administration: upon request

Treatment mode: upon request

Target organ: upon request

Main Read-outs: Body weight, lung metastasis quantification, images of tumors and survival rate.

Facultative read-outs: Histopathology, immunohistochemistry, RT-PCR analysis of biomarker messenger RNA, hematology and others.

Validation Data

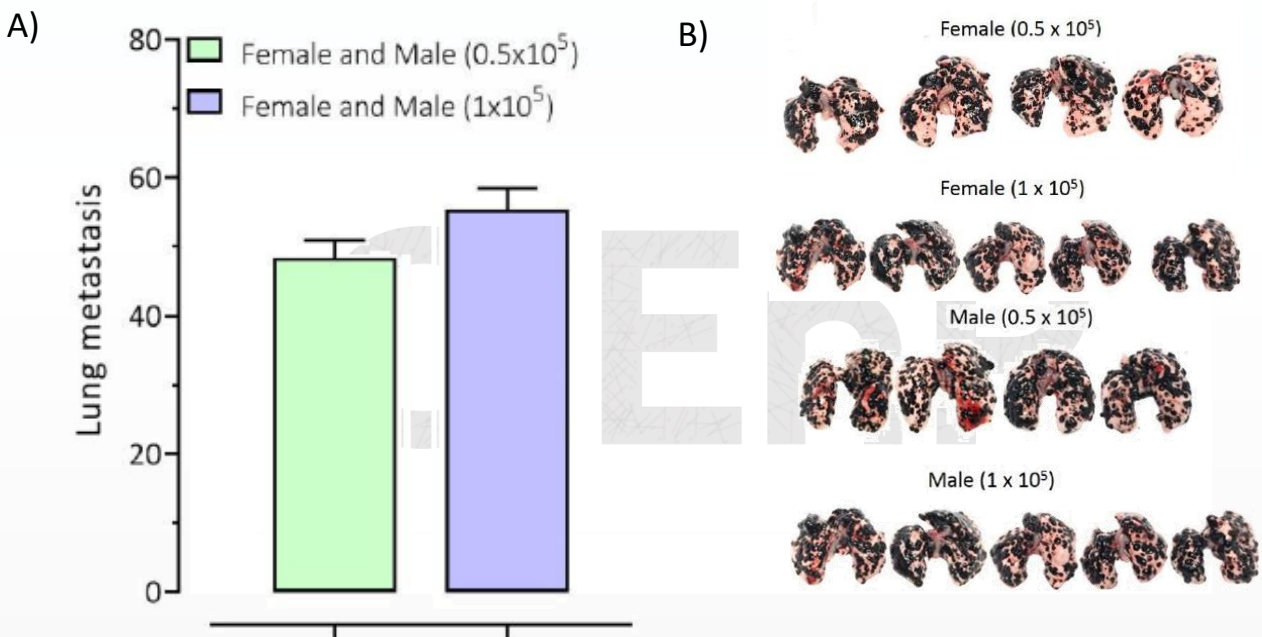


Figure: B16F10-Nex2 experimental metastasis in the lung. Mice were injected with B16F10-Nex2 cells (0.5×10^5 or 1×10^5) via tail vein. A, Lungs were resected on day 18 after the i.v. injection and metastatic nodules were quantified. B, Representative pictures of pulmonary metastatic nodules 8-10 animals per group. Data are expressed as mean \pm standard error of mean.

To avoid bias and to allow reproducibility all in vivo experiments follow the ARRIVE guidances². Mouse colony from Charles River Laboratories is bred and maintained in SPF conditions. The project includes study plan and final report. Raw data are inspected by quality assurance unity. The experimental procedures was previously approved by the CIEnP Committee on the Ethical Use of Animals.

References:

¹Balch CM, Gershenwald JE, Soong SJ, Thompson JF, Atkins MB, Byrd DR, et al. Final version of 2009 AJCC melanoma staging and classification. J Clin Oncol. 2009;27(36):6199-06.

²Kilkenny C, Browne WJ, Cuthill IC, Emerson M, Altman DG. Animal research: reporting in vivo experiments: The ARRIVE guidelines. PLoS Biol. 8 (6): e1000412, 2010.