Melanoma tumor model: Clone M3
subQperior – syngeneic

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➢ SubQperior mouse tumor models

Imagine a syngeneic model with no tumor ulceration, 100% take rate and homogeneous tumor growth. Not possible?

We have developed our tumor models with an implantation method overcoming all common problems researchers experience with subcutaneous tumor models. The solution is simple: change the injection site from subcutaneous to mammary fat pad and experience an impressive difference: beautiful growth curves with the ease of calipering tumor size. SubQperior = superior to subcutaneous.

We have tested all of our subQperior models with common immune-checkpoint inhibitors and investigated their immune-infiltrate with our all-in-one 17 marker flow cytometry panel. Please inquire to see more data.

➢ Clone M-3 cells (CPQ-518)

Origin:	skin / mouse DBA/2N
Description:	melanoma
Synonym:	Cloudman S91 melanoma

➢ Study example

Comparison of Clone M3 tumor growth characteristic after subcutaneous vs. subQperior implantation shows larger tumor volumes and a longer treatment window for subQperior tumors.

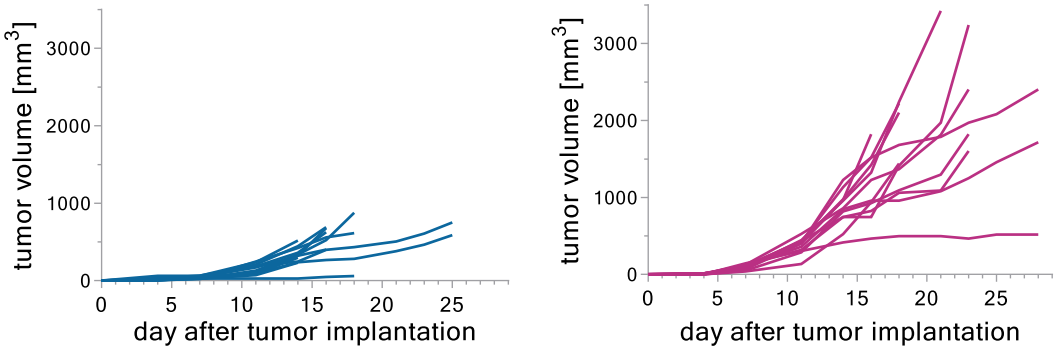

Figure 1: *DBA/2N mice were implanted subcutaneously (left) and into the mammary fat pad (subQperior; right) with Clone M3 cells. Data are displayed as single growth curves.*

➢ Quality assurance

- Routine authentication of tumor cell lines by STR profiling
- Mycoplasma testing of tumor cells by PCR just prior to implantation
- Routine health monitoring of sentinel animals (according to FELASA guide lines)
- Animal work according to the 5R rules (reduce, refine, replace, responsible, remember)

Note: Graphs depicted are derived from study examples. Each study is a biological system of its own and subject to intrinsic variation.

➢ *please turn over* ➢

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➢ Study example – Immune-Checkpoint Inhibitors

Mice bearing Clone M3 cells implanted in the mammary fat pad were treated with anti-mPD-1. Treatment started after randomization when tumor volumes had reached a size of approximately 60 mm^3.

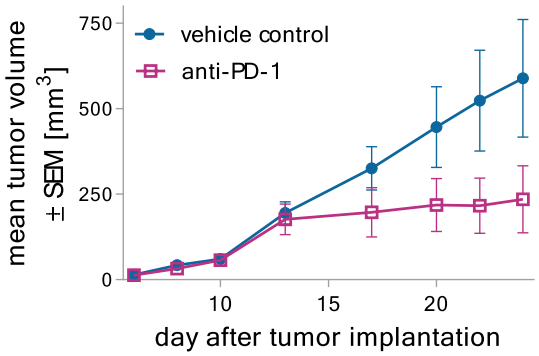

Figure 2: *Clone M3 tumors were treated with anti-mPD-1. Tumor growth was monitored by calipering.*

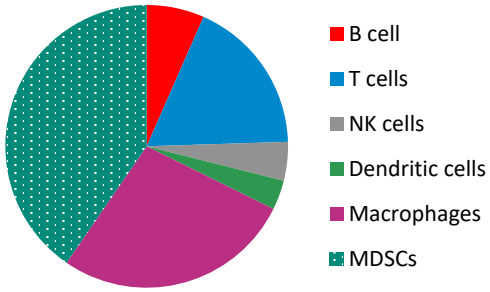

Figure 3: *Flow cytometry analysis of Clone M3 primary tumor tissue showing the relative distribution of the major immune cell populations.*

➢ Immune cell populations infiltrating Clone M3 tumors

At tumor model endpoint, primary tumor tissues were appropriately processed and analyzed by flow cytometry for determination of T cell, B cell, macrophage, NK cell, dendritic cell and myeloid cell populations.

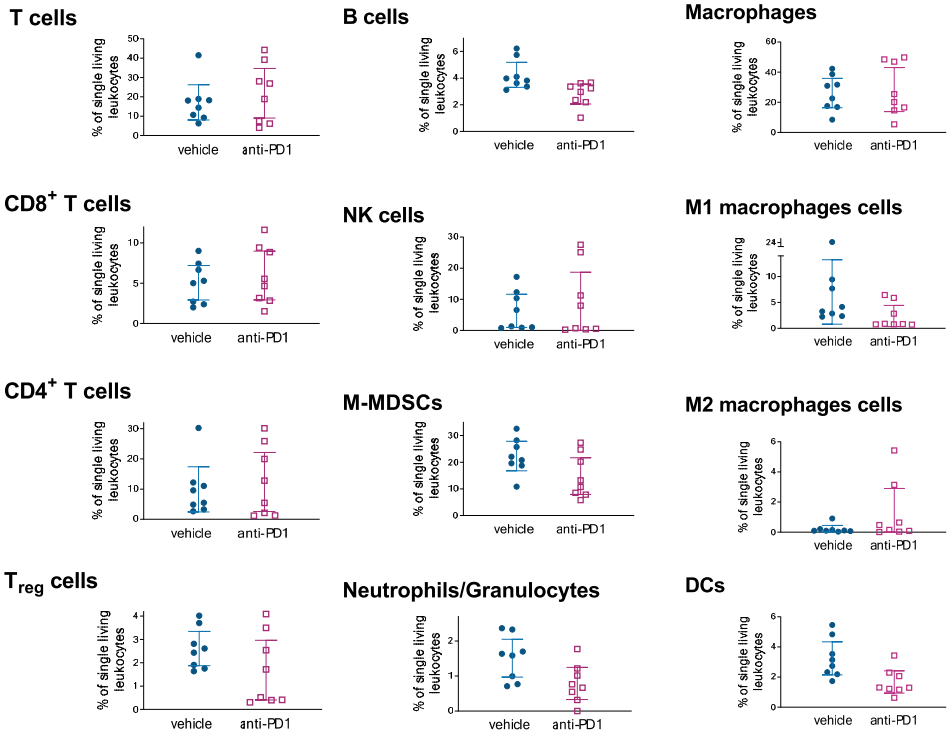

Figure 4: *Flow cytometry analysis of Clone M3 tumor tissue is depicted as percentage of living immune cell tumor infiltrate. For each immune population, data are displayed as mean bar together with their corresponding + 95% CI.*