

➤ SubQperior mouse tumor models

Imagine syngeneic models with almost no tumor ulceration, nearly 100% take rate, and homogeneous tumor growth.

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: get beautiful growth curves and with the ease of caliper measuring tumor size. SubQperior = superior to subcutaneous.

➤ Tumor cell line MC38-CEA (CPQ-449)

Origin: colon / mouse
Description: colon adenocarcinoma
Modification: expressing human CEA = carcinoembryonic antigen suited for investigation of tumor specific T cell response

➤ Study example

Comparison of MC38-CEA tumor growth characteristic after subcutaneous vs. subQperior implantation shows more homogenous growth and larger tumor volumes after subQperior implantation.

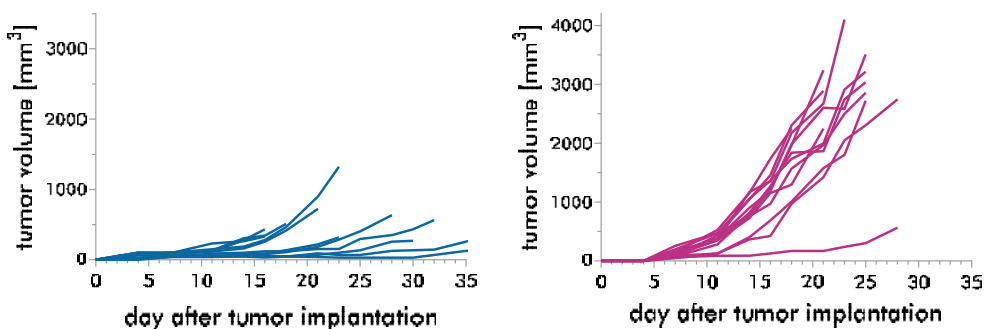


Figure 1: C57BL/6N mice were implanted subcutaneously (left) and into the mammary fat pad (subQperior; right) with MC38-CEA cells. Data are displayed as single growth curves.

➤ 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.

➤ Study example – Immune Checkpoint Inhibitors

Mice bearing MC38-CEA ells implanted in the mammary fat pad were treated with anti-mPD-1 and anti-mCTLA-4. Treatment started after randomization when tumor volumes had reached a size of approximately 58 mm³.

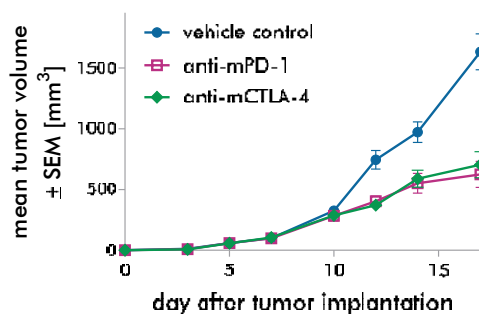


Figure 2: MC38-CEA tumors were treated with anti-mPD-1 and anti-mCTLA-4. Tumor growth was monitored by calipering.

➤ Immune cell populations infiltrating MC38-CEA tumors

Please inquire.