

CRO services for cancer

New anti-cancer drugs are either designed for tumor specific targets or are generated by large-scale drug screening programs. The completion of the Human Genome Project and the ongoing high throughput sequencing of cancer genomes will facilitate the identification of a range of new molecular targets for anti-cancer drug discovery.

Subcutaneous Xenograft Tumor Model is the most common model to determine the in vivo activity of anti-cancer therapeutics. The advantages of human tumor xenograft model are i) to predict the drug responses of a tumor in a human patient and ii) to allow the rapid analysis of human tumor response to a therapeutic regime.

SMC a Tokyo-based biotech company also known as the leading nonclinical CRO for nonalcoholic steatohepatitis-hepatocellular carcinoma, has re-validated Xenograft Tumor Model as an in vivo drug screening system. Our expertise in cancer research is now experienced in Oncology R&D.

Subcutaneous Xenograft Tumor Model

Animal:

- Athymic female nude mice (5- to 7-week-old)

Xenograft inoculation and monitoring:

- Inoculation: subcutaneously into the lower flank of the mice
- Monitor: clinical observation, tumor volume

Treatment:

- Administration option:
 - Routes: PO, IV, IP, SC, IT, IM and Intratumoral
 - Frequency: QD, BID, TID
 - Duration: Adjustable for your needs

Efficacy endpoints:

- Tumor growth rate
- Tumor weight change ratio
- Tumor growth delay
- Tumor growth inhibition
- Survival

Toxicity endpoints:

- Drug related death
- Net animal weight loss

Cell lines:

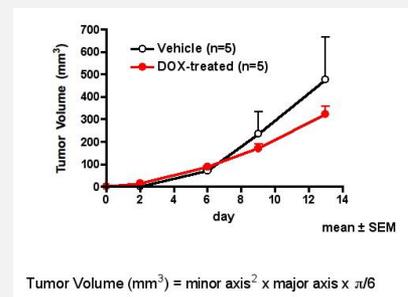
- PANC-1 (human pancreatic cancer)
- HTC-116 (human colon cancer)
- Caco-2 (human colon cancer)
- Hep G2 (human liver cancer)
- Hela (human cervical cancer)
- A549 (human lung cancer)

Macroscopic appearance of the inoculated tumor



Macroscopic appearance of tumor nodule (red circle) with smooth surface and visible vascularization.

Tumor growth rate



Doxorubicin (DOX) treatment showed a tendency of inhibiting the tumor growth ration.



For more information, please contact us below.

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