

**The
advantages of
RAT MODELS
IN ONCOLOGY**

Swipe 



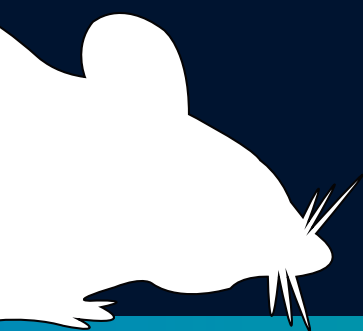
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Larger Size

Rats are generally larger in size compared to mice. This larger size can be advantageous for various aspects of oncology research, including the ability to perform surgical procedures, sample collection, and imaging studies more easily.

Physiological similarities to humans

Rats often share more physiological similarities with humans compared to mice. This includes similarities in organ systems, metabolism, and drug dosing. Therefore, findings from rat models may be more directly translatable to human oncology.



3

Longer Lifespan

Rats typically have a longer lifespan compared to mice. This longer lifespan can be advantageous for studying long-term effects of oncological treatments or for observing the progression of tumors over extended periods.



4

Complex Tumor Biology

Tumors models with rats may better mimic human tumors compared to mice. This includes tumor growth patterns, metastasis, and response to therapy. Therefore, rat models may provide a more accurate representation of certain aspects of human oncology.



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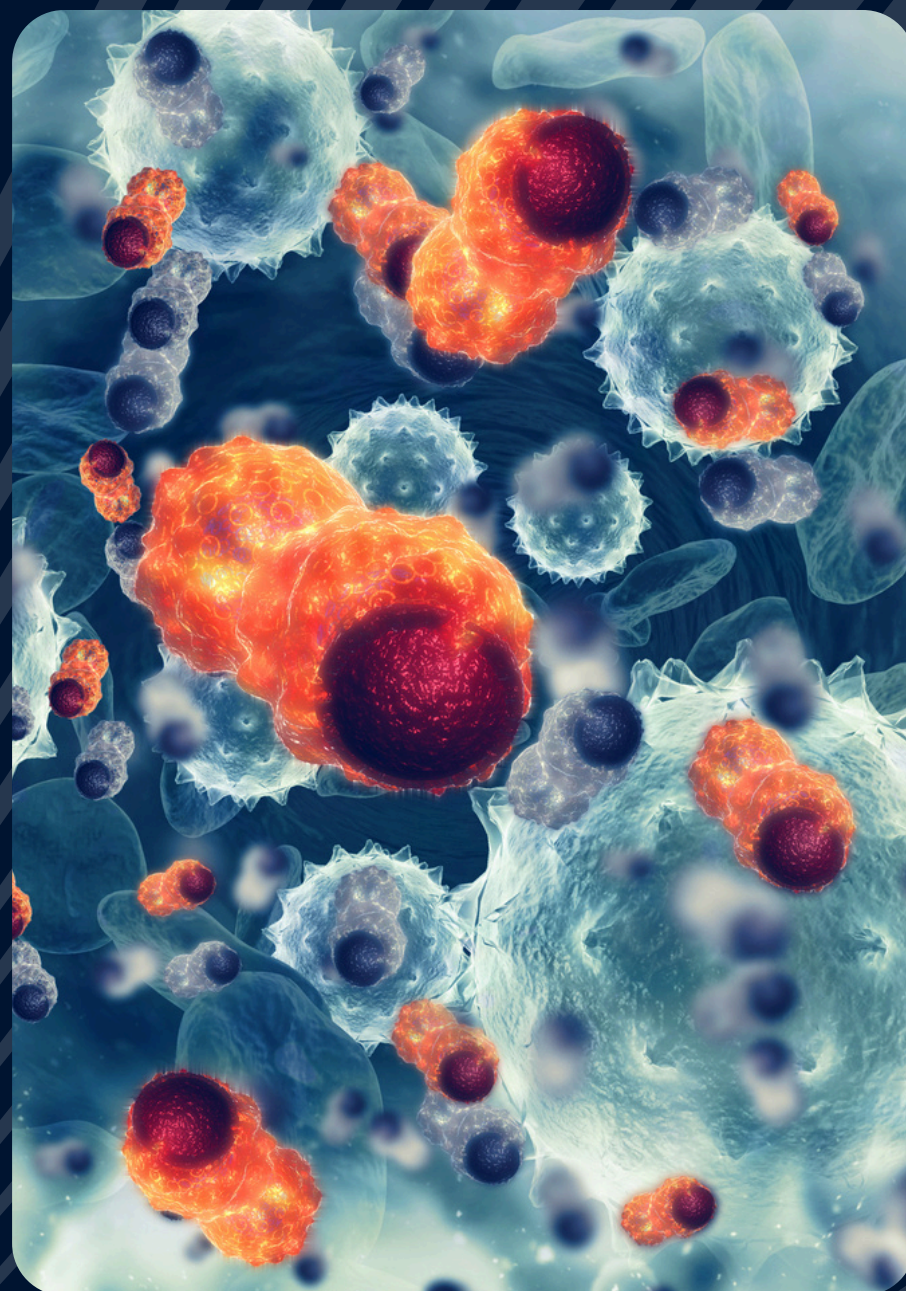
Availability of Transgenic Models

While mice have been the primary focus of genetic engineering for generating transgenic models, there is an increasing availability of transgenic rat models. These models allow for the study of specific genetic mutations or alterations implicated in cancer development and progression.



Of note both rat and mouse models have their own limitations, and the choice between them often depends on the specific research questions, experimental design, and resources available to the researcher.

In support of this choice, OncoDesign Services offer over 30 years of experience in the development and use of cancer models, with a large panel of PDX, CDX, Syngeneic and chemo-induced tumor models



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