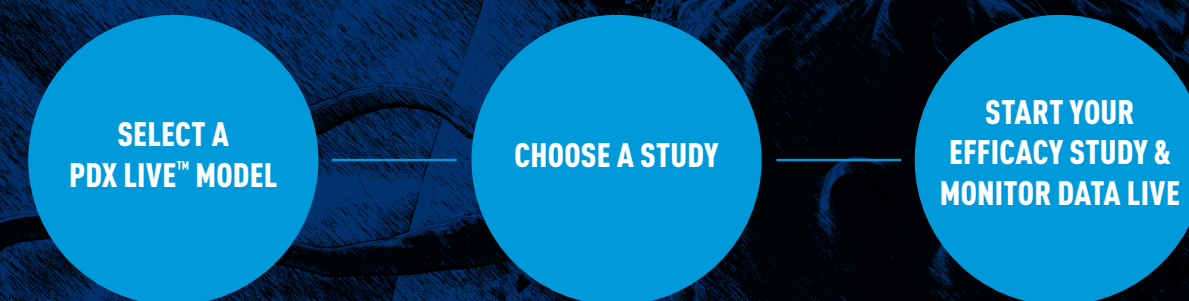


* When compared to hu-CD34-NSG™

PDX LIVE™

EFFICACY STUDIES ON DEMAND



FAST-TRACK YOUR EFFICACY TESTING PROJECTS

PDX-engrafted mice are a fast and cost-effective platform to simulate trials, evaluate multiple drugs alone or in combination, and produce predictive data.

NSG™ strains engrafted with patient-derived tumors (PDX) offer improved retention of tumor heterogeneity and architecture, providing a platform for compound efficacy testing that is more reflective of patient response.

TYPE	MODEL ID	TUMOR MARKERS
BLADDER	TM00015	PIK3CA H1047R
	TM00020	TP53 E336*; KDR Q472H; PTEN T321fs
BREAST	TM00089	TNBC ER-/PR-/HER2-; BRCA1 V757fs
	TM00090	TNBC ER-/PR-/HER2-
	TM00096	TNBC ER-/PR-/HER2-
	TM00098	TNBC ER-/PR-/HER2-
	TM00284	ER+/PR+/HER2-
	TM00386	ER+/PR+/HER2-
COLON	TM00179	BRAF V600E/PIK3CA G1049R
LUNG	TM00302	KRAS G12D/KDR Q472H/TP53 R158L
	TM00784	EGFR L858R
OVARY	TM00335	CA125 & MUC16 mRNA elevated
	TM00916	ER+/PR+
PROSTATE	J000079754	Castration-resistant
	TM00298	TP53 R273C/PTEN R233*/PTEN L265fs, AR+
SKIN	TM00702	BRAF V600V
	TM01149	BRAF V600V
BREAST	TM00095**	ER-, PR-, HER2+
LUNG	TM00199**	EGFR L858R
	TM00206**	ELM4-ALK fusion

Our searchable PDX database:
[tumor.informatics.jax.org/
mtbwi/pdxSearch.do](http://tumor.informatics.jax.org/mtbwi/pdxSearch.do)

** Cohorts from these PDX models have slower growth rates and will take longer to expand and run on study.

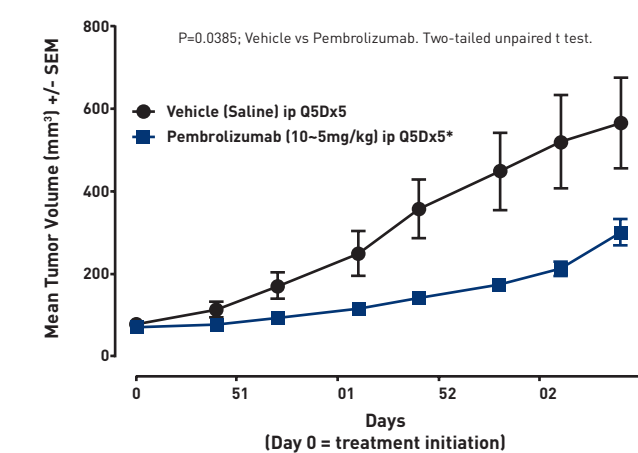
ONCO-HU™ MODELS

THE NEXT GENERATION OF CANCER MODELING

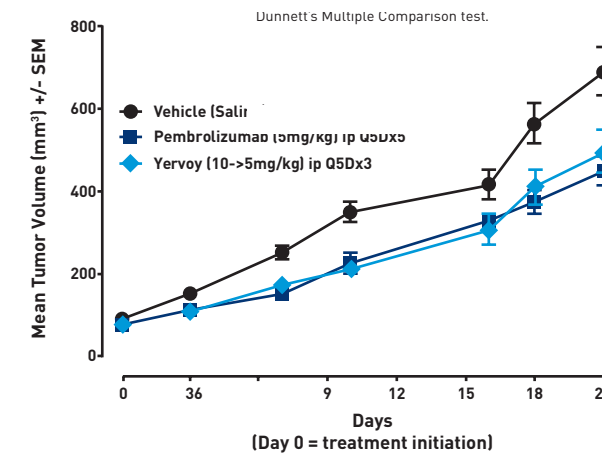
Onco-Hu™ models are a robust immuno-oncology platform for efficacy testing of novel immunotherapies targeting T cells and myeloid cells to help destroy cancers *in vivo*.

The Onco-Hu™ platform is based on NSG™ and NSG™-SGM3 mice, dually engrafted with human CD34+ hematopoietic stem cells (HSC) and clinically relevant PDX Live™ low passage tumors.

Mean Tumor Volume of TM00098 Breast Tumor (ER-/PR-/HER2-) in Onco-Hu™ Mouse



Mean Tumor Volume of TM00302 Lung Tumor (KRAS G12D) in Onco-Hu™ Mouse



Onco-Hu™ models engrafted with PDX Live™ clinically relevant breast or lung tumors allow the evaluation of the efficacy of immunomodulators –alone or in combination therapies– to treat cancer.

jax.org/onco-hu

FOR MORE INFORMATION CONTACT TECHNICAL INFORMATION SERVICES OR YOUR REGIONAL REPRESENTATIVE

Find your regional rep. Visit: jax.org/regional-reps

JAX® Mice, Clinical & Research Services

The Jackson Laboratory
Bar Harbor, Maine | Farmington, Conn. | Sacramento, Calif.

Technical Information Services

micetech@jax.org
1-800-422-6423 (US, Canada & Puerto Rico)
1-207-288-5845 (from any location)



Leading the search
for tomorrow's cures

LT0017 2016 US_03

THE NEXT FRONTIER IN DISEASE MODELING

JAX® offers humanized NSG™ and NSG™-based strains with additional manipulations of the host (including the NSG™-SGM3 strain that expresses the human cytokines IL-3, GM-CSF, and SCF) for an enhanced ability to recapitulate specific functions of human disease *in vivo*. These humanized NSG™ strains have superior T cell-dependent immune responses and myeloid engraftment.

These highly immunodeficient mouse models, only available from The Jackson Laboratory, provide the unmatched ability to model normal and malignant tissues and cells notoriously difficult to engraft and study in other mouse strains, including:

- Hematopoietic stem cells
- Patient-derived xenografts (PDX)

PDX-engrafted NSG™ mice from our *In Vivo* Pharmacology Services are early passage to maintain tumor structure fidelity and cellular heterogeneity that is seen in the patient. These models serve as a clinically relevant platform for validation of compounds and investigations into cancer pathology, including immuno-oncology.

Which model is best for your research?

JAX® humanized NSG™ and NSG™-SGM3 mice generate functional human immune systems with different capabilities.

Empowering Clinically Relevant Modeling Using NSG™ Strains

Whether you are investigating the interactions between host immune cells and pathogens, tumors and immune cells, or require an oncological platform to test your therapeutic compounds, NSG™ strains have revolutionized how infectious disease and cancer research is conducted. By supporting the engraftment of human immune cells and tumors, NSG™ strains have transformed the approach taken by the biomedical community to understand human diseases.

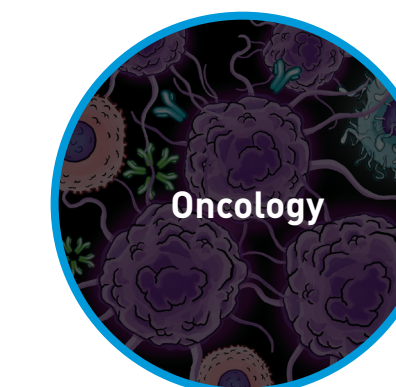
RESEARCH FIELDS



Infectious
Disease

Humanized NSG™ strains have transformed infectious disease research through more accurate modeling of many human-specific pathogens, allowing for the preclinical validation of treatment strategies.

OPEN



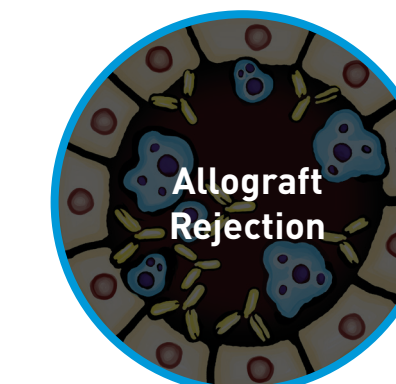
Oncology

Do you need a functional
immune system?

No

Yes

OPEN



Allograft
Rejection

Functional and mature immune cell populations represented in humanized NSG™ strains have enabled the investigation of complex mechanisms involved in graft rejection.

OPEN