

Fast-track the *in vivo* screening of your immunotherapy compounds using CrownBio's large-scale screening platform of syngeneic models

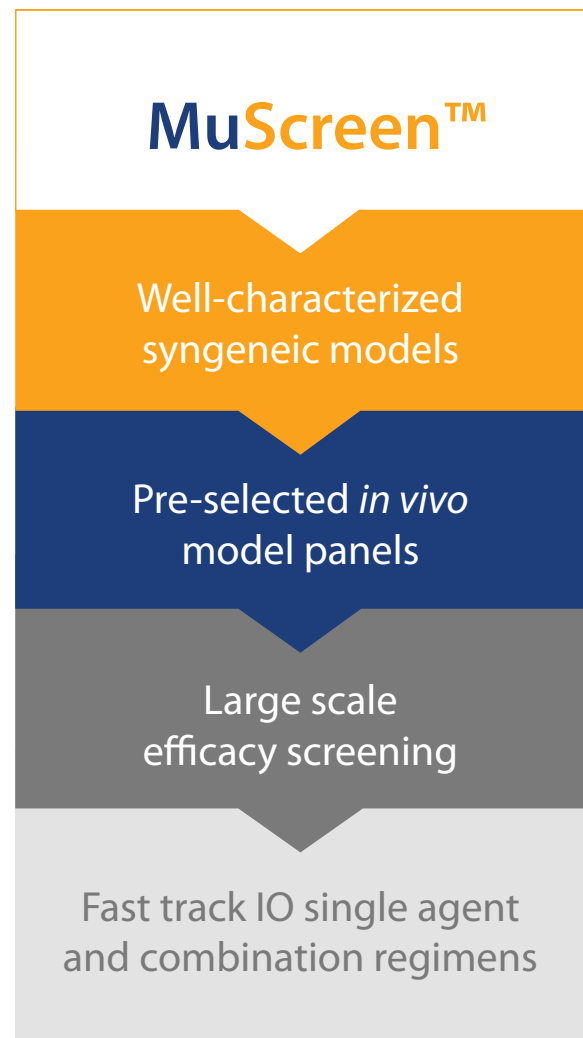
Discover the benefits of running a **MuScreen** to accelerate your single agent or combination regimen immunotherapy development programs.

For standard oncology agents such as chemotherapies, an *in vitro* screen can quickly and inexpensively identify cells and models for further study. However, for therapeutics targeting the complex host immune system *in vitro* assays often fail, and *in vivo* studies are usually cost prohibitive.

CrownBio has developed **MuScreen**, a cost-effective *in vivo* screening platform to fast-track preclinical immunotherapy development.

Choose **MuScreen**:

- To utilize well-characterized syngeneic models.
- To quickly identify responder models or markers saving time, and improving efficiency.
- For large scale staggered screening to reduce assay variability.
- Benefit from CrownBio covering the cost of the vehicle group for all models.



MuScreen Key Facts

MuScreen is the only large-scale, *in vivo* screening platform to fast-track single agent and combination immunotherapeutics:

- Built upon our collection of validated and well-characterized syngeneic models, and leveraging detailed model checkpoint inhibitor benchmarking data, as well as RNAseq and optional FACS/IHC analysis information.
- Comprising of predesignated syngeneic panels across a range of cancer types.
- Evaluate TGI with the Syngeneic Efficacy Screening Panel of 12 or 20 models.
- Models run on a large scale, preset schedule, with shared vehicle and common groups to improve efficiency, reproducibility, and cost-effectiveness.

Preclinical Immunotherapy Screening Challenges

Immunotherapy represents the most promising new cancer treatment approach since the first development of chemotherapies in the late 1940s. However, advances in the field have inevitably uncovered subsequent challenges and barriers to further development including the need to rapidly establish optimal approaches for preclinical immunotherapy evaluation.

Immuno-oncology needs to target the complex host immune system and *in vitro* screens fail to meet this need, while standard *in vivo* screens tend to be cost prohibitive. Instead, a large-scale, parallel, *in vivo* screening platform of syngeneic models enables cost effective preclinical immunotherapy research, for both single agents and combination therapies.

Screen for IO Compound Efficacy

Our Syngeneic Efficacy Screening Panel is run following a preset schedule with our fixed panels of 12 or 20 models, and a shared vehicle group. **Figure 1** shows an overview of the study design for this panel. The main endpoint is TGI (with optional FACS and IHC) and frozen or fixed tumors are available on request.

CrownBio's Unique MuScreen Platform to Fast-Track Immunotherapeutic Development

Panels of our syngeneic models are now utilized within **MuScreen**, the only large-scale, staggered, *in vivo* screening platform for cancer immunotherapeutics. **MuScreen** can be used to rapidly focus immuno-oncology research efforts such as screening for efficacy, evaluating combination therapies, and qualifying drug resistance.

The unique platform is designed to fast-track the *in vivo* screening of immunotherapy compounds either as single agents or combination regimens. **MuScreen** leverages detailed profiling data on our syngeneic models, including efficacy benchmarking with anti-PD-1, PD-L1, and CTLA-4 antibodies, RNAseq data, and FACS/IHC analysis at a terminal endpoint, which aids in the discovery of biomarkers to predict response.

Figure 1: Syngeneic Efficacy Screening Panel Study Design

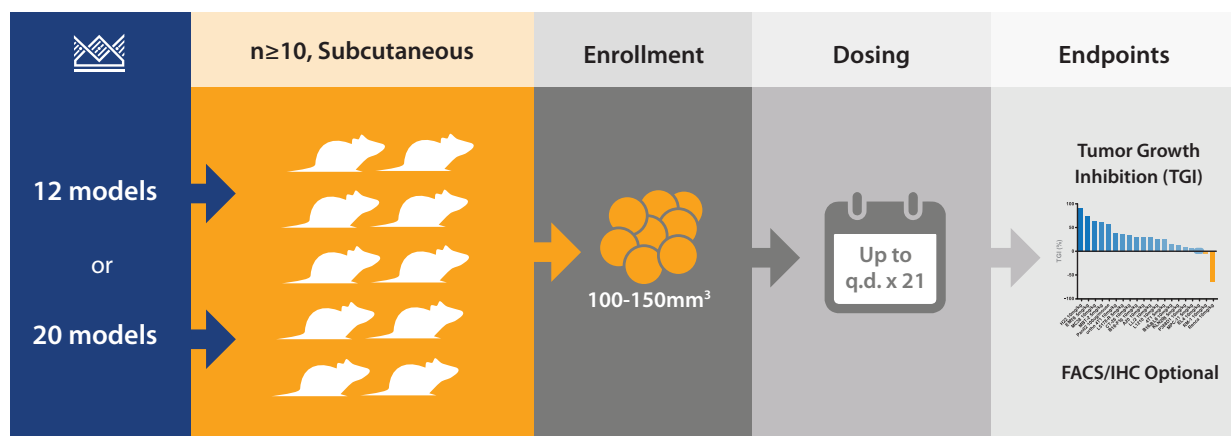


Table 1: Syngeneic Models Available for MuScreen (Models in the 12 model panel are shown in blue)

Cancer Type	Model	Mouse Strain	Immune Cell Profiling	RNAseq
Bladder	MBT-2	C3H/He	Yes	Yes
Breast	4T1	BALB/c	Yes	Yes
	EMT6	BALB/c	Yes	Yes
	JC	BALB/c	Yes	Ongoing
Colorectal	Colon26	BALB/c	Yes	Ongoing
	CT-26	BALB/c	Yes	Yes
Fibrosarcoma	WEHI-164	BALB/c	Ongoing	Ongoing
Kidney	Renca	BALB/c	Yes	Yes
Leukemia	C1498	C57BL/6	Yes	Ongoing
Liver	H22*	BALB/c	Yes	Yes
	Hepa 1-6	C57BL/6	Yes	Ongoing
Lung	LL/2	C57BL/6	Yes	Yes
Lymphoma	A20	BALB/c	Yes	Yes
	EL4	C57BL/6	Yes	Yes
Melanoma*	B16-BL6	C57BL/6	Yes	Yes
	B16-F10	C57BL/6	Yes	Yes
Myeloma	MPC-11	BALB/c	Yes	Yes
Pancreatic	Pan02	C57BL/6	Yes	Yes
Plasmacytoma	J558	BALB/c	Ongoing	Ongoing
Prostate	RM-1	C57BL/6	Yes	Yes


* These lines are not applicable for FACS



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