



Cancer cell line tumor xenograft models

UROSPHERE AND FLASH THERAPEUTICS* COMBINE THEIRS SKILLS TO PROPOSE A UNIQUE ONCOLOGY PLATFORM BASED ON NON-INVASIVE SMALL ANIMAL OPTICAL IMAGING AND INDUCIBLE GENETIC APPROACHES. OUR PLATFORM PROVIDES OPPORTUNITY TO EVALUATE ANTICANCER DRUG EFFICACY AND/OR TO VALIDATE CANCER GENES OR DRUG TARGET.

In vivo imaging for tumor growth and metastasis monitoring

- Fluorescence (FLI) and bioluminescence (BLI) are rapid, sensitive and low cost imaging technologies that enable real-time, non-invasive monitoring of tumor growth, metastases development and test item response over time.
- Imaging data correlate to standard external caliper measurements of tumor volume but they permit earlier detection of tumor growth and more accurate quantification with less variability.
- BLI allows non invasive monitoring of deep-tissue primary tumor (prostate, bladder, colon ...).
- FLI allows fast detection with high spatial resolution of tumor (subcutaneous only) or metastase (lymph node; LN or distant organs). Endpoint FLI-guided exploration can be performed to precisely identify malignant tissue margins including the smallest disseminated lesion.

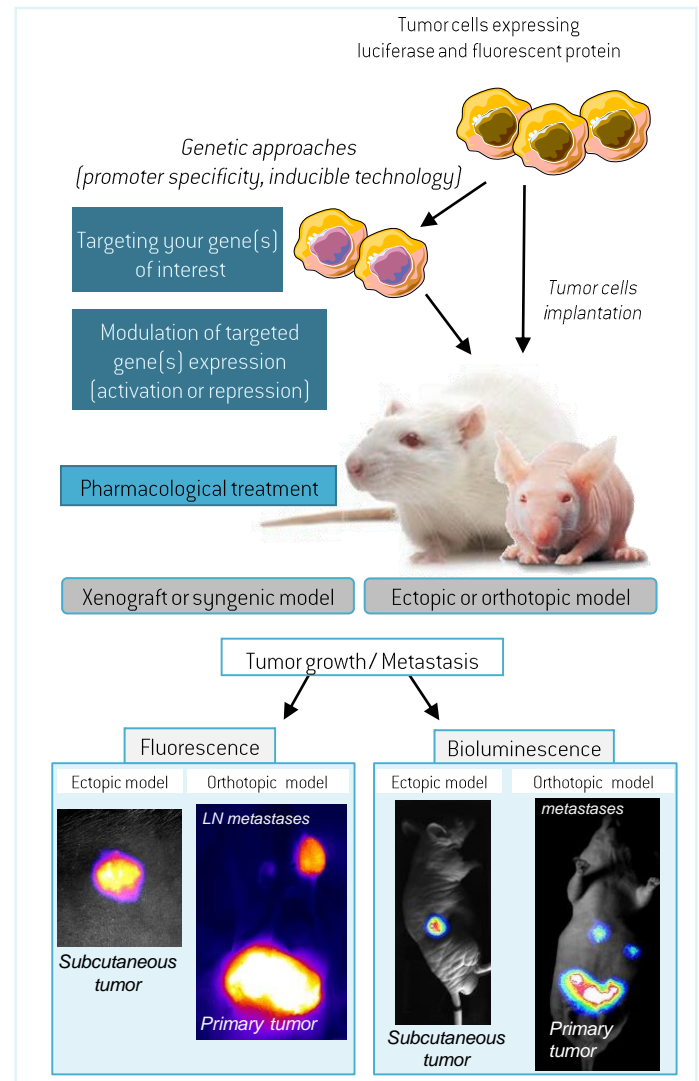
Genetic approaches for cancer genes / drug target validation and pharmacological treatment

- One or several candidate genes can be inductively silenced, deleted or overexpressed. Effects of altering these genes is studied over time *in vivo*.
- Gene activation/silencing can be initiated in a desired schedule (before or after tumor establishment) and discontinued or paused at precise time point if needed.
- For evaluation of pharmacological treatment, large choice of administration routes [i.v., i.p., s.c., p.o. ...] is available in preventive or curative regimen.

Parameters evaluated and key benefits

- Tumor growth: volume (mm³), area (mm²), FLI or BLI intensity (AU)
- Tested item efficacy: tumor growth delay or inhibition, survival increase, metastases dissemination decrease
- FLI-guided resection of primary tumor or metastases for histological, molecular or bio-markers analysis
- Selection of models adapted to your focus and personalization of the study design
- Fully optimized methods and techniques for superior cost-to-performance ratio
- On-time project delivery with high quality final report

* Flash Therapeutics (formerly Vectalys) is a new gene therapy company developing gene and cell-based therapies by leveraging its proprietary lentiviral platform and bioproduction technologies.



Cancer Models at Urosphere

Organ	Cells	Host	Injection site	
Kidney	Renca	BALB/c mice	OT	SC
Bladder	AY27	Fisher rats	OT	SC
Prostate	PC-3	Nude mice	OT	SC
Prostate	LNCAP	Nude mice		SC
Colon	HT29	Nude mice	OT	SC
Colon	HCT116	Nude mice	OT	SC
Colon	SW480	Nude mice	OT	SC
Colon	SW620	Nude mice	OT	SC
Breast	MCF7	Nude mice		SC
Breast	MDA-MB2	Nude mice		SC