APPLICATION NOTES

Product: HuSu-TRANS-TT

PROGENITOR CELLULAR PLATFORM – A TOOL TO HUMANIZE XENOGRAFTS

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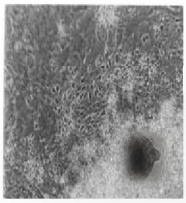
Product Description:

TRAN-TT is an *invitro* patients sourced platform model composed of tumor tissue fragments, cells. Each vial contains primary cellular tumor tissue specific heterogeneous components. Each unit is tested negative for Mycoplasma, Bacteria, Yeast and Fungi like contaminants

A platform with processed sterile injectable tumor tissue derivatives to develop patient derived xenograft (pdx) models

Available in frozen condition and can be stored at -80^{0}C till use.

TRANS-TT Morphology under the microscope:



Explant with cells

20.39 (mm3) 1st week	23.77 (mm3) 2nd week	25.48 (mm3) 3rd week	27.56 (mm3) 4th week	Implanted TRANS-TT volume growth recorded	32.67 (mm3) 5th week	54.66 (mm3) 6th week	45.92 (mm3) 7th week

Recommended for:

Developing Patient-derived xenografts (PDX) as pre-clinical models of cancer where the tissue or cells from a patient's tumor are implanted into an immunodeficient or humanized mouse to simulate human tumor environment allowing for natural cancer progression

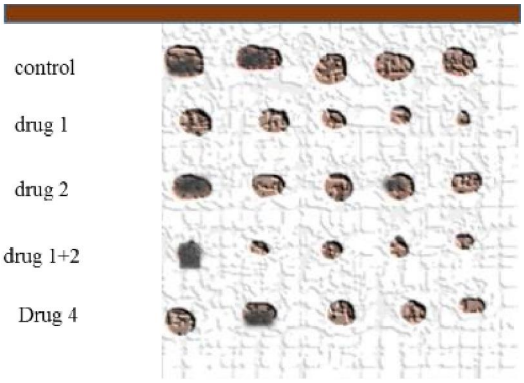
Measurable end points:

TRANS-TT utilized pre-clinical research models can act as pre-clinical drug screens, facilitate the identification of potential biomarkers of drug response and resistance, and to measure evolutionary processes in cancer in response to treatment

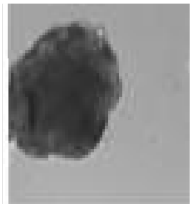
Advantages with TRANS-TT as a tool to generate PDX models:

- Ready to use
- Can be preserved till use
- Can be sourced in batches
- Sterile to handle
- Is further amenable for any characterization
- Viability is retained
- Heterogeneity is retained

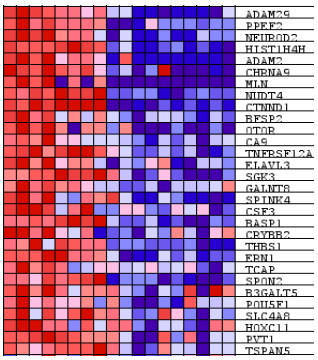
- Devoid of fatty or necrotic remnants
- Suitable to be used as explants for humanizing
- Eligible for ectopic implantation & sub-cutaneous route of administration
- Excised pdx can be further handled invitro for drug sensitivity assays



TRANS-TT pdx invitro culture



48 hr cultured-Heat Map



Requirements to apply TRANS-TT:

Immunodeficient mice, Suitable infrastructure to handle

Related to humanizing pre-clinical research models in drug discovery and development.

Tissues were collected using consent forms and protocols approved by Institutional Ethics Board

Use Cases:

Cryofrozen; Eligible for Primary Cancer Cells harvest; to develop patient derived xenografts (PDX)

What is PDX?

Tumor tissue that has been sourced (biopsy or surgically removed) from a cancer patient and implanted into mice for research purposes. Cancer drugs, chemical libraries, Investigational New Drug Candidates can be tested on xenografts to evaluate the efficiency before they are trialed in clinics as part of the drug discovery and development in Oncology.

Patient-derived Xenografts generated from human tumor, combined with whole genome expression, gene copy number, and sequencing analyses support the development of novel therapies for gynecologic malignancies. We have surgically excised (to be discarded) sterile, processed human tumor tissues repository for primary cells and PDX generation.