

# **APPLICATION NOTES**

# **Product: TRANSCHYMAL-UC**

# HUMAN PROGENITOR CELLULAR PLATFORM – A TOOL TO HUMANIZE 3D BIOPRINTS & IMPLANTS

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#### **Product Description:**

TRANSCHYMAL<sup>™</sup> is an *invitro* human sourced progenitor cell based platform composed of undifferentiated cells with self-renewing capabilities. Each unit is negative for HIV-1, HBV, HCV, Mycoplasma, Bacteria, Yeast and Fungi.

Available in frozen condition. Ready to use with customized yield per vial.

Phenotypically identifiable TRANSCHYMAL platform:



Transchymal-UC Transchymal-AD Transchymal-DP

Source: Umbilical cord tissue; each lot originates from a single bio discard. Each vial contains cells that can differentiate into cell phenotypes invitro including Adipocytes, Osteocytes and Chondrocytes upon induction in a controlled fashion.

# **Biocompatibility:**

Material	Tested to be biocompatible, supporting proliferation of
Collagen	Transchymal-UC, Transchymal-DP, Transchymal-AD
Matrigel	Transchymal-UC, Transchymal-DP, Transchymal-AD
Hyaluronic acid (HLA)	Transchymal-UC, Transchymal-DP
Laminin	Transchymal-UC
Fibrin	Transchymal-UC, Transchymal-DP, Transchymal-AD
Poly-lactic acid (PLA)	Transchymal-UC, Transchymal-DP
Poly-glycolic acid (PGA)	Transchymal-UC, Transchymal-DP, Transchymal-AD
Human Amniotic Membrane (HAM)	Transchymal-UC, Transchymal-DP, Transchymal-AD
Titanium	Transchymal-UC, Transchymal-DP
Zirconium	Transchymal-UC, Transchymal-DP
Titanium alloy	Transchymal-UC
	Material   Collagen   Matrigel   Hyaluronic acid (HLA)   Laminin   Fibrin   Poly-lactic acid (PLA)   Poly-glycolic acid (PGA)   Human Amniotic Membrane (HAM)   Titanium   Zirconium   Titanium alloy



## **Recommendation:**

For 3D organ (bone & cartilage, wound) models

Advantages: Ready to use; No culturing procedure involved to use; No further expansion or passage to use; Read outs can be at cellular, molecular and protein levels mimicking human physiological milieu in the scaffold used

**Benefits:** Best suited as the invitro platform available in abundance, amicable to be modelled to perform exploratory preclinical assays at large scale

### TRANSCHYMAL for:

Screening, Invitro tests on 3D model-Pre-clinical research models, Toxicity testing screens

