

## APPLICATION NOTES

### Product: TRANSCHYMAL-UC

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

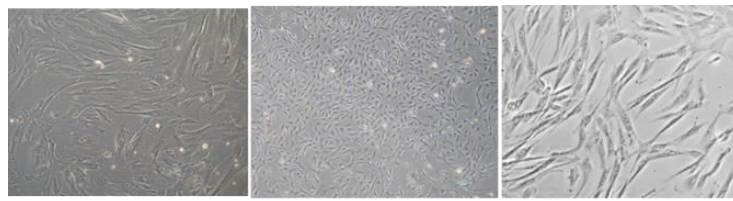
Authors: L Krishna (PhD), R Indarapu PhD, S Dravida PhD

#### Product Description:

TRANSCHYMAL™ 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

## **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

