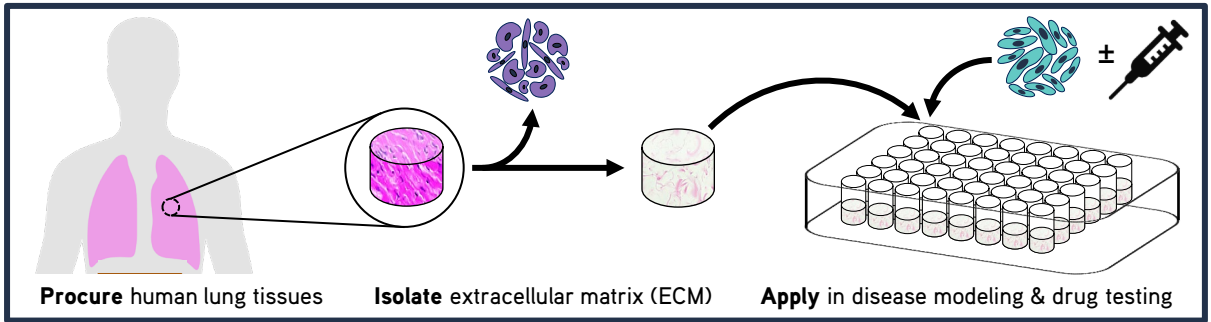


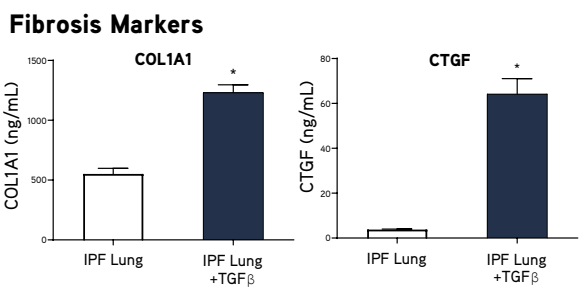


IN MATRICO® Lung Fibrosis Assay

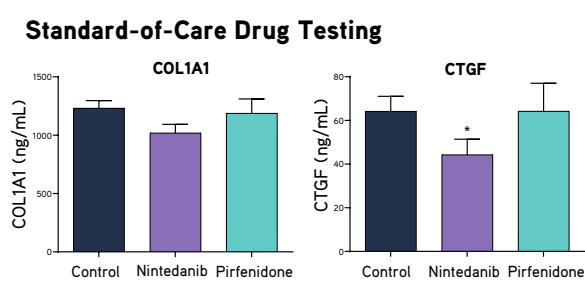
The IN MATRICO® Lung Fibrosis Platform is a physiologically-relevant, high-fidelity, cell-based 3D assay comprised of primary human lung fibroblasts in primary human idiopathic pulmonary fibrosis (IPF) extracellular matrix (ECM). IN MATRICO® Lung Fibrosis Platform enables drug candidates to be evaluated in a disease-relevant environment leading to more accurate and predictive results.



IN MATRICO® Assay Description	
Assay Plate	TissueSpec® ECM Scaffolds
Cell Type	Human Lung Fibroblasts (Primary)
ECM Type	Human IPF ECM (Primary)
Analysis Method	ELISA
Markers	COL1A1, CTGF, COL3A1, IL-11, TIMP-1
Replicates	3
Test Concentrations	4 (e.g., 0, 100, 500, 1000 nM)
Controls	Nintedanib, Vehicle
Data Delivery	Protein Concentration in Supernatants
Alternate Readouts	Gene Expression, Cell Viability



Human COL1A1 and CTGF protein levels in IN MATRICO® supernatants. Primary human lung fibroblasts were seeded in IPF ECMs ± TGFβ (5 ng/mL) and maintained in culture for 72 hours for supernatant collection (*p<0.05).



Human COL1A1 and CTGF protein levels in response to Nintedanib and Pirfenidone. Primary human lung fibroblasts were seeded in IPF ECMs plus TGFβ (5 ng/mL) and treated with Nintedanib (1 μM) or Pirfenidone (1 mM). Supernatants were collected after 72 hours (*p<0.05).

Assay Features	IN MATRICO®	Standard*
Physiological Relevance	High	Low
Reproducibility	High	High
IPF Microenvironment	Yes	No
Cell-Matrix Interactions	Yes	No
Three Dimensional (3D)	Yes	No

*2D plastic plate (no ECM)

For partnering opportunities, contact us at info@xylyxbio.com. Our services team will work closely with you to leverage our IN MATRICO® Lung Fibrosis Platform to meet your research needs.