

# Supplementary material

## Lung Extracellular Matrix Hydrogels-Derived Vesicles Contribute to Epithelial Lung Repair

Anna Ulldemolins <sup>1</sup>, Alicia Jurado <sup>1</sup>, Carolina Herranz-Diez <sup>1</sup>, Núria Gavara <sup>1,2</sup>,  
Jorge Otero <sup>1,2,3</sup>, Ramon Farré <sup>1,3,4</sup> and Isaac Almendros <sup>1,3,4,\*</sup>

<sup>1</sup> Unitat de Biofísica i Bioenginyeria, Facultat de Medicina i Ciències de la Salut, Universitat de Barcelona, 08036 Barcelona, Spain

<sup>2</sup> The Institute for Bioengineering of Catalonia (IBEC), The Barcelona Institute of Science and Technology (BIST), 08028 Barcelona, Spain

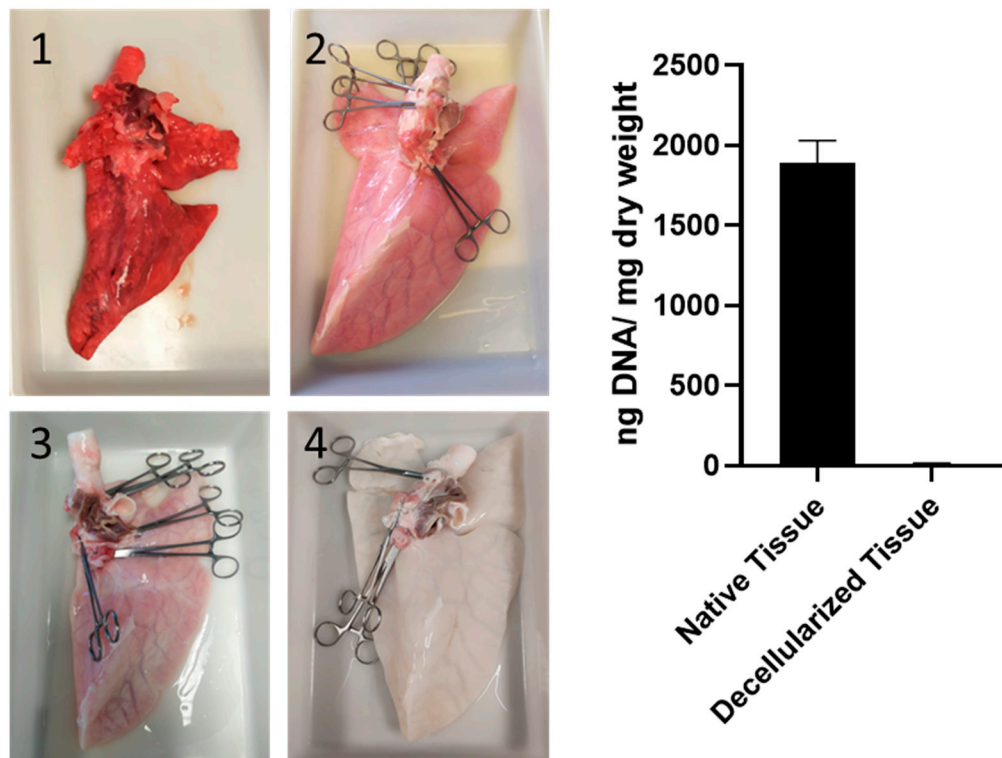
<sup>3</sup> CIBER de Enfermedades Respiratorias, 28029 Madrid, Spain

<sup>4</sup> Institut d'Investigacions Biomèdiques August Pi i Sunyer, 08036 Barcelona, Spain

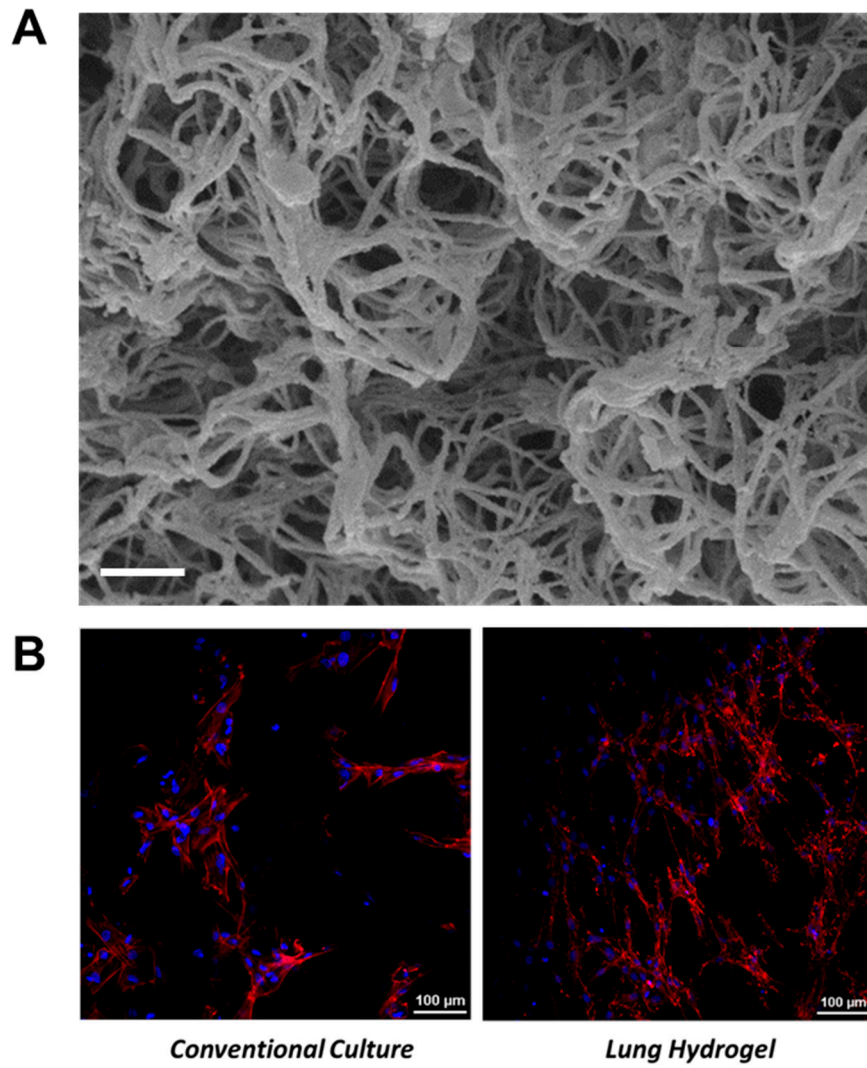
\* Correspondence: isaac.almendros@ub.edu

Condition	Protein amount (µg/ml)
MSCs	6.72 ± 4.02
L-HG	15.43 ± 4.05
L-HG + MSCs	18.13 ± 3.58
L-HG NW	38.84 ± 4.34

**Supplementary Table S1:** Total protein added in each condition.



**Supplementary Figure S1.** Lung Decellularization. Left: Successive images of the porcine right lung through all the decellularization protocol (1: native, 4: decellularized). Right: DNA quantification on the lung tissue.



**Supplementary Figure S2.** (A) Scanning electron microscope (SEM) images of L-HG structure. Scale bar = 1  $\mu\text{m}$ . (B) Cell Distribution and morphology of MSCs on the conventional cell culture and on L-HG. Actin staining (red) and nucleus (blue).