**Title**

Source data for the publication: A Cell Pre-Wrapping Seeding Technique for Hydrogel-Based Tubular Organ-On-A-Chip

**Description**

This data set contains the source data of the publication: Nie, J., Lou, S., Pollet, A.M.A.O., van Vegchel, M., Bouten, C.V.C. & den Toonder, J.M.J. (2024). A cell pre-wrapping seeding technique for hydrogel-based tubular organ-on-a-chip. Adv. Sci. 2024, 2400970. <https://doi.org/10.1002/advs.202400970>. This paper introduces a novel sugar 3D printing + cell seeding technique to create circular cross-sectioned tubular organ-on-chip models. As a proof of concept, a perfusable renal proximal tubule-on-a-chip is demonstrated with a diameter as small as 50 μm, as well as cellular tubular structures with branches and curvature, and a preliminary vascular-renal tubule interaction model. The data are experimentally obtained with methods described in the publication.

**Format**

Publication: .pdf

Data:.csv

**Funding**

833214

**Organization**

TU Eindhoven, Department of Mechanical Engineering