

Accepted Manuscript

Human stem cell based corneal tissue mimicking structures using laser-assisted 3D bioprinting and functional bioinks

Anni Sorkio, Lothar Koch, Laura Koivusalo, Andrea Deiwick, Susanna Miettinen, Boris Chichkov, Heli Skottman



PII: S0142-9612(18)30289-8

DOI: [10.1016/j.biomaterials.2018.04.034](https://doi.org/10.1016/j.biomaterials.2018.04.034)

Reference: JBMT 18620

To appear in: *Biomaterials*

Received Date: 21 December 2017

Revised Date: 11 April 2018

Accepted Date: 14 April 2018

Please cite this article as: Sorkio A, Koch L, Koivusalo L, Deiwick A, Miettinen S, Chichkov B, Skottman H, Human stem cell based corneal tissue mimicking structures using laser-assisted 3D bioprinting and functional bioinks, *Biomaterials* (2018), doi: 10.1016/j.biomaterials.2018.04.034.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Human stem cell based corneal tissue mimicking structures using laser-assisted 3D bioprinting and functional bioinks.

Anni Sorkio^{1,2}, Lothar Koch², Laura Koivusalo¹, Andrea Deiwick², Susanna Miettinen¹, Boris Chichkov^{2,3†}, Heli Skottman^{1†*}.

¹ BioMediTech Institute and Faculty of Medicine and Life Sciences, University of Tampere, Arvo Ylpön katu 34, FI-33520 Tampere, Finland

² Laser Zentrum Hannover e.V., Hollerithallee 8, 30419 Hannover, Germany

³Institute for Quantum Optics, Leibniz Universität Hannover, Welfengarten 1, 30167 Hannover, Germany

†Authors contributed equally

*Corresponding author: Heli Skottman, PhD, Associate Professor, Leader of the Eye group, BioMediTech Institute and Faculty of Medicine and Life Sciences, University of Tampere, Arvo Ylpön katu 34, FI-33520 Tampere, Finland. P: +358 503969645; email: heli.skottman@uta.fi

Keywords: 3D bioprinting, laser-assisted bioprinting, cornea, human pluripotent stem cells, limbal epithelial stem cells, adipose stem cells, human collagen I, recombinant human laminin

Download English Version:

<https://daneshyari.com/en/article/6484491>

Download Persian Version:

<https://daneshyari.com/article/6484491>

[Daneshyari.com](https://daneshyari.com)