

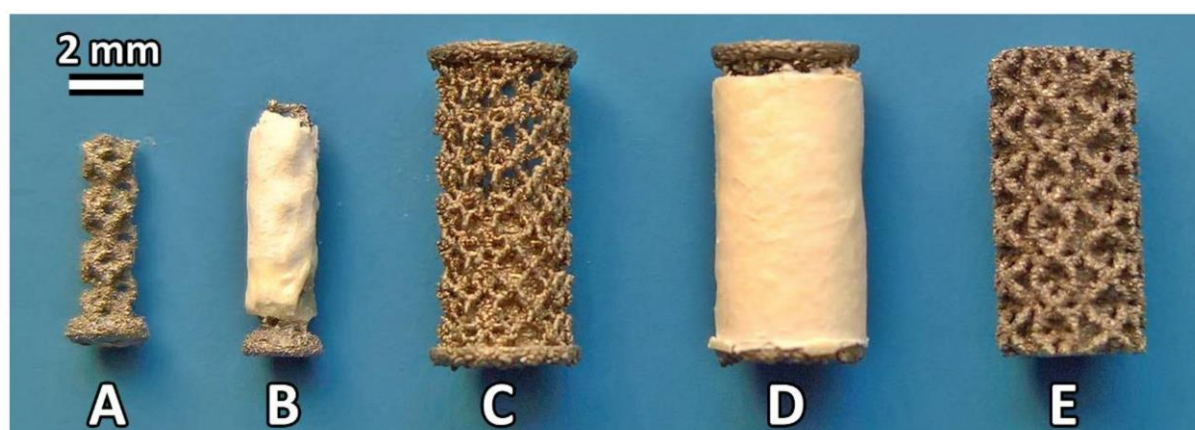
Seznam publikací a výsledků oddělení za rok 2021

List of publications and results in 2021

Vrstvy kolagenu/hydroxyapatitu s obsahem vankomycinu na 3D tištěných titanových implantátech zabraňujících destrukci kostí související s infekcí *S. epidermidis* a posílení osseointegraci

Vancomycin-Loaded Collagen/Hydroxyapatite Layers Electrospun on 3D Printed Titanium Implants Prevent Bone Destruction Associated with *S. epidermidis* Infection and Enhance Osseointegration

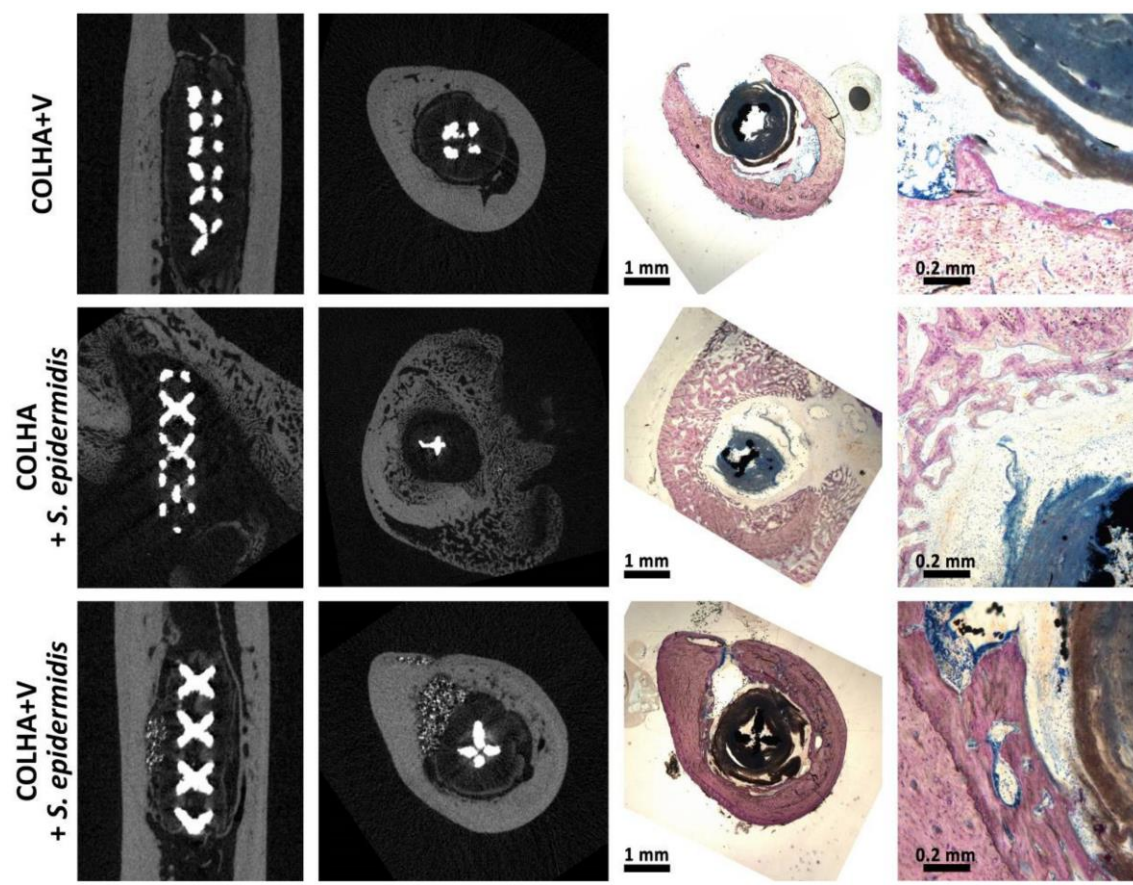
Publikace/Publication: **T. Suchý**, L. Vištejnová, **M. Šupová**, P. Klein, M. Bartoš, Y. Kolinko, T. Blassová, Z. Tonar, M. Pokorný, **Z. Sucharda**, **M. Žaloudková**, **F. Denk**, R. Ballay, Š. Juhás, J. Juhásová, E. Klapková, L. Horný, R. Sedláček, T. Grus, Z. Čejka, Z. Čejka, K. Chudějová, J. Hrabák, Vancomycin-Loaded Collagen/Hydroxyapatite Layers Electrospun on 3D Printed Titanium Implants Prevent Bone Destruction Associated with *S. epidermidis* Infection and Enhance Osseointegration, *Biomedicines*. 9 (2021) 531. doi:10.3390/biomedicines9050531. **IF 6,081, Q1 32/275, JCR 2020**
<https://www.webofscience.com/wos/woscc/full-record/WOS:000653411900001>



Obrázek/Figure:

Snímky titanových implantátů: implantát před (A) a po (B) nanesení vrstvy COLHA+V určené pro použití v experimentu s antimikrobiální aktivitou; implantát před (C) a po (D) nanesení vrstvy COLHA+V určené pro použití v experiment osseointegrace; vytištěný kontrolní vzorek (E).

Representative images of the titanium implants. Ti printed implant before (A) and after (B) the deposition of a COLHA+V layer intended for use in the antimicrobial activity experiment; Ti printed implant before (C) and after (D) the deposition of a COLHA+V layer intended for use in the osseointegration experiment; Ti printed control sample (E).



Obrázek/Figure:

Mikro-CT a histologické snímky identických vzorků v COLHA+V implantáty bez aplikace S. epidermidis (horní linie), implantáty COLHA s S. epidermidis (střední linie) a COLHA+V se skupinami S. epidermidis (spodní linie).

Representative micro-CT and histological images of identical samples in the COLHA+V implants without the application of S. epidermidis (upper line), COLHA implants with S. epidermidis (middle line), and COLHA+V with S. epidermidis (bottom line) groups

Další významné publikace a výstupy, patenty
Further important publications and outputs, patents

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M. Braun, **Š. Rýglová**, **T. Suchý**, Determination of glycosaminoglycans in biological matrices using a simple and sensitive reversed-phase HPLC method with fluorescent detection, J. Chromatogr. B Anal. Technol. Biomed. Life Sci. 1173 (2021). doi:10.1016/j.jchromb.2021.122626. **IF 3,205, Q2 (36/83)**, JCR 2020

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Ruský patent

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https://patents.s3.yandex.net/RU2756164C2_20210928.pdf

Národní patent

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