

Accepted Manuscript

Hierarchical structured and programmed vehicles deliver drugs locally to inflamed sites of intestine

Wei Li, Yunzhan Li, Zehua Liu, Nattha Kerdsakundee, Ming Zhang, Feng Zhang, Xueyan Liu, Tomás Bauleth-Ramos, Wenhua Lian, Ermei Mäkilä, Marianna Kemell, Yaping Ding, Bruno Sarmiento, Ruedeeekorn Wiwattanapatpee, Jarno Salonen, Hongbo Zhang, Jouni T. Hirvonen, Dongfei Liu, Xianming Deng, Hélder A. Santos



PII: S0142-9612(18)30661-6

DOI: [10.1016/j.biomaterials.2018.09.024](https://doi.org/10.1016/j.biomaterials.2018.09.024)

Reference: JBMT 18895

To appear in: *Biomaterials*

Received Date: 12 August 2018

Revised Date: 13 September 2018

Accepted Date: 16 September 2018

Please cite this article as: Li W, Li Y, Liu Z, Kerdsakundee N, Zhang M, Zhang F, Liu X, Bauleth-Ramos Tomá, Lian W, Mäkilä E, Kemell M, Ding Y, Sarmiento B, Wiwattanapatpee R, Salonen J, Zhang H, Hirvonen JT, Liu D, Deng X, Santos HéA, Hierarchical structured and programmed vehicles deliver drugs locally to inflamed sites of intestine, *Biomaterials* (2018), doi: <https://doi.org/10.1016/j.biomaterials.2018.09.024>.

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.

Hierarchical structured and programmed vehicles deliver drugs locally to inflamed sites of intestine

Wei Li,^{a1} Yunzhan Li,^{b1} Zehua Liu,^{a1} Nattha Kerdsakundee,^{ac} Ming Zhang,^b Feng Zhang,^a Xueyan Liu,^b Tomás Bauleth-Ramos,^{ade} Wenhua Lian,^b Ermei Mäkilä,^f Marianna Kemell,^g Yaping Ding,^a Bruno Sarmiento,^{ad} Ruedeekorn Wiwattanapatapee,^c Jarno Salonen,^f Hongbo Zhang,^h Jouni T. Hirvonen,^a Dongfei Liu,^{*ai} Xianming Deng,^{*b} and Hélder A. Santos^{*ai}

^a Drug Research Program, Division of Pharmaceutical Chemistry and Technology, Faculty of Pharmacy, University of Helsinki, Helsinki 00014, Finland.

^b State Key Laboratory of Cellular Stress Biology & Innovation Center for Cell Signaling Network and State-Province Joint Engineering Laboratory of Targeted Drugs from Natural Products and School of Life Sciences, Xiamen University, Xiamen 361102, Fujian, China.

^c Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, Prince of Songkla University, 90110 Hat Yai, Thailand

^d Instituto de Investigação e Inovação em Saúde (I3S), Instituto de Engenharia Biomédica (INEB), University of Porto, Rua Alfredo Allen, 208, 4200-135 Porto, Portugal

^e Instituto Ciências Biomédicas Abel Salazar (ICBAS), University of Porto, Rua Jorge Viterbo 228, 4150-180 Porto, Portugal

^f Laboratory of Industrial Physics, Department of Physics, University of Turku, Turku 20014, Finland

^g Department of Chemistry, Faculty of Science, University of Helsinki, FI-00014 Helsinki, Finland

^h Department of Pharmaceutical Sciences Laboratory & Turku Center for Biotechnology, Åbo Akademi University, Turku 20520, Finland

ⁱ Helsinki Institute of Life Science (HiLIFE), University of Helsinki, Helsinki 00014, Finland

Corresponding authors: dongfei.liu@helsinki.fi (D. Liu), xmdeng@xmu.edu.cn (X. Deng), helder.santos@helsinki.fi (H. A. Santos)

¹ These authors contributed equally to this work.

Download English Version:

<https://daneshyari.com/en/article/11028462>

Download Persian Version:

<https://daneshyari.com/article/11028462>

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