

## Supplementary Data

### Retarded release of small-molecule drugs from phase-separated dextran hydrogels through host-guest complexation

Ki Hyun Bae<sup>1</sup>, Shengyong Ng<sup>1</sup>, Li Li<sup>1</sup> and Motoichi Kurisawa<sup>1,2,\*</sup>

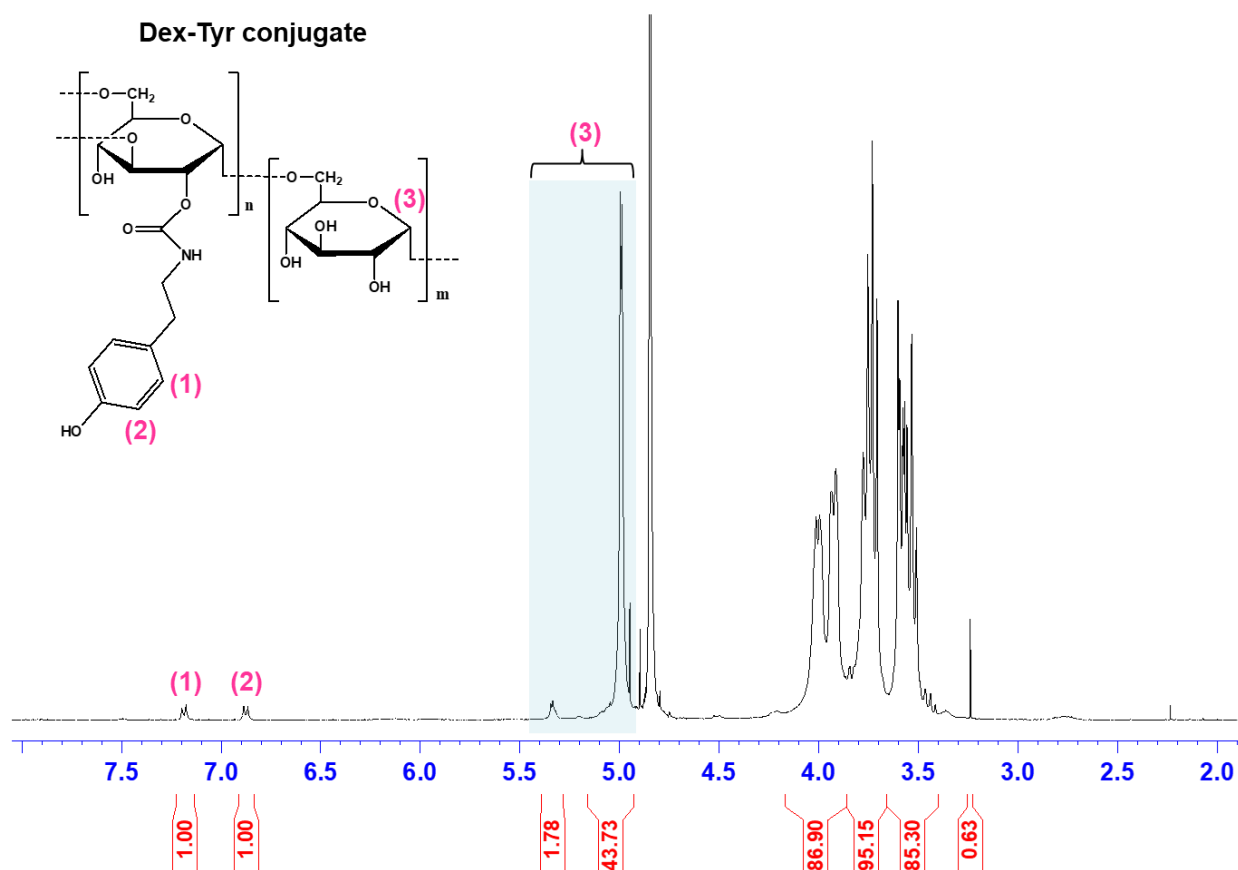
<sup>1</sup> Institute of Bioengineering and Bioimaging (IBB), Agency for Science, Technology and Research (A\*STAR), Singapore; E-mail: khbae@ibb.a-star.edu.sg (K.H.B.); syng@ibb.a-star.edu.sg (S.N.); daewonl@outlook.com (L.L.)

<sup>2</sup> School of Materials Science, Japan Advanced Institute of Science and Technology, Nomi, Japan

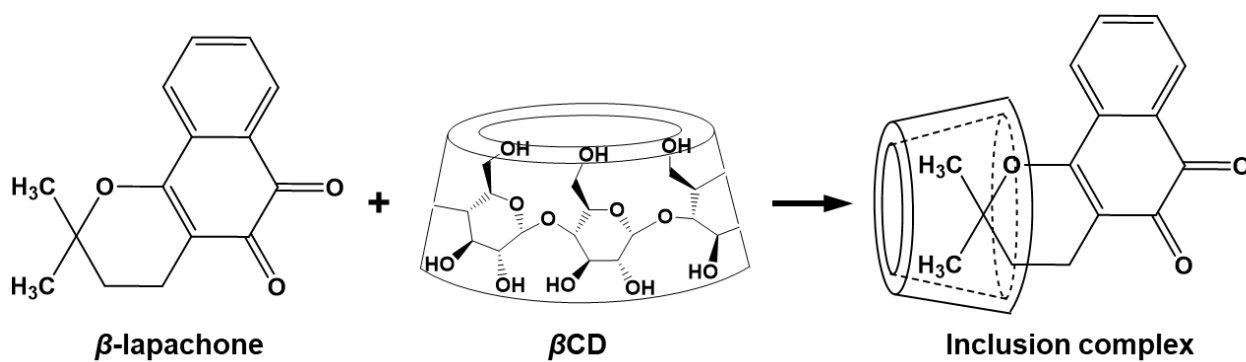
\* Corresponding author; E-mail: kurisawa@jaist.ac.jp.



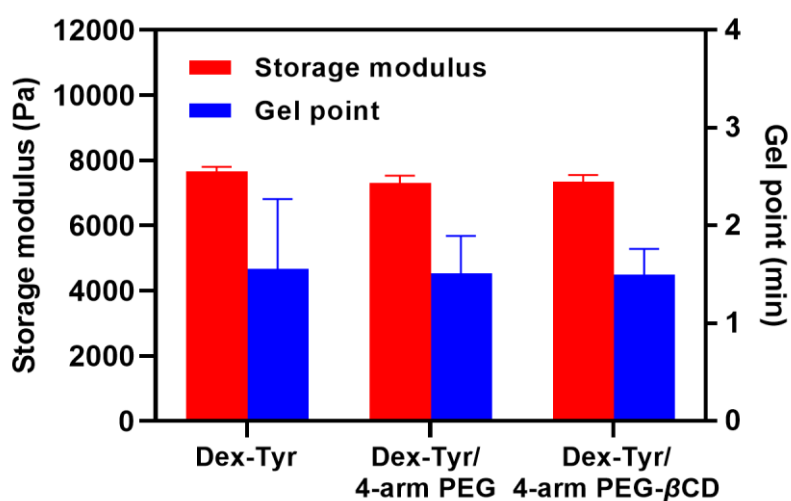
Copyright©2023 by the authors. Published by ELS Publishing. This work is licensed under a Creative Commons Attribution 4.0 International License, which permits unrestricted use, distribution, and reproduction in any medium provided the original work is properly cited.



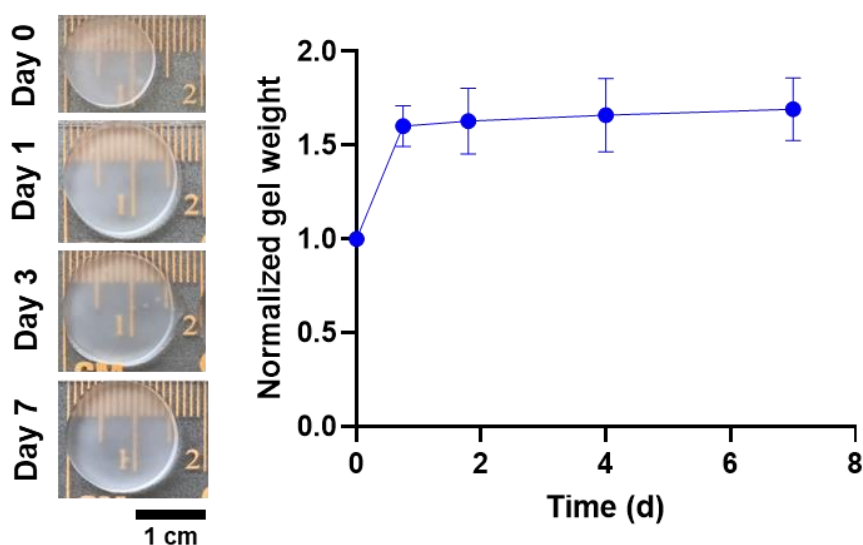
**Figure S1.**  $^1\text{H}$  NMR spectrum of Dex-Tyr conjugate dissolved in  $\text{D}_2\text{O}$ .



**Figure S2.** Schematic for the formation of 1:1 inclusion complexes between  $\beta$ -lapachone and  $\beta$ -CD.



**Figure S3.** Comparison of the storage modulus and gel point of Dex-Tyr, Dex-Tyr/4-arm PEG and Dex-Tyr/4-arm PEG-βCD hydrogels tested for drug release study. Mean  $\pm$  SD ( $n = 3$ ).



**Figure S4.** The photographs (left) and normalized gel weight (right) of Dex-Tyr/4-arm PEG-βCD hydrogels incubated for 7 days in PBS solution (pH 7.4) at 37 °C. Mean  $\pm$  SD ( $n = 3$ ).