

## Supporting Information

# Thiolated Human Serum Albumin Cross-linked Dextran Hydrogel as a Macroscale Delivery System

Yue Gao,<sup>a</sup> Roxanne Kieltyka,<sup>a</sup> Wim Jesse,<sup>a</sup> Ben Norder,<sup>b</sup> Alexander V. Korobko<sup>b</sup> and  
Alexander Kros<sup>\*a</sup>

<sup>a</sup> *Leiden Institute of Chemistry, Leiden University, P.O. Box 9502, 2300 RA Leiden, The Netherlands.*

*Fax: + 31 71527 4397; Tel: + 31 71 527 4234;*

*E-mail: [a.kros@chem.leidenuniv.nl](mailto:a.kros@chem.leidenuniv.nl).*

<sup>b</sup> *Department of Chemical Engineering, TU Delft, Julianalaan 136, 2628 BL Delft, The Netherlands*

**Table S1. Physicochemical properties of applied drugs**

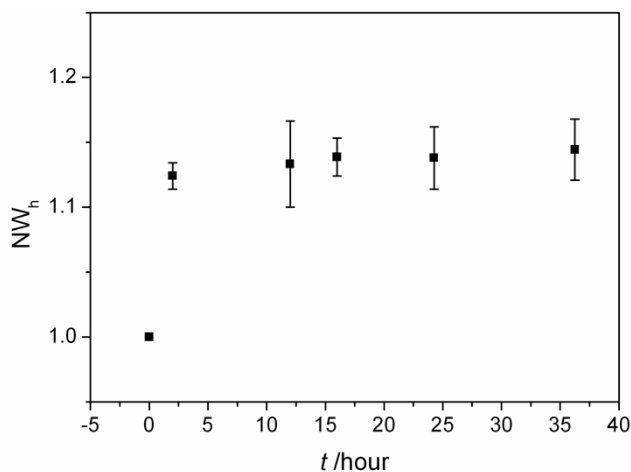
Drugs	M <sub>w</sub>	water solubility (25 °C)	logP
ibuprofen	206.28	21 mg/L [1]	3.97 [2]
paclitaxel	853.91	insoluble	3
dexamethasone	392.46	89 mg/L [1]	1.83 [3]

**Swelling properties of Dex-sHSA hydrogel**

A Dex-sHSA hydrogel sample (4.5 wt%) was immersed in 150 mM phosphate buffered saline (PBS, pH 7.4, 0.02% sodium azide) at 37°C. At predetermined time intervals, the entire buffer weight was weighed and fresh buffer was refilled afterwards. The normalized hydrogel weight ( $NW_h$ ) was calculated by the following equation:

$$NW_h = \frac{W_t}{W_0}$$

Where  $W_t$  is the hydrated mass at time  $t$  and  $W_0$  the initial mass of the hydrogel after gelation.

**Fig S1. Swelling properties of Dex-sHSA hydrogels.**

Reference:

1. S. Yalkowsky and R. Dannenfelser, *College of Pharmacy, University of Arizona, Tucson, AZ*, 1992.
2. K. Takács-Novák, K. J. Box and A. Avdeef, *International Journal of Pharmaceutics*, 1997, 151, 235-248.
3. C. Hansch, A. Leo and D. H. Hoekman, *Exploring QSAR.: Hydrophobic, electronic, and steric constants*, American Chemical Society, 1995.