Article

Human Serum Albumin grafted by monomeric and polymeric β-cyclodextrin as drug delivery system for Levofloxacin with improved pharmacological properties

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**Supplementary**

**Table 1S.** Temperature dependence of the Stern-Volmer quenching constants for the LV-HSA’s systems.

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| --- | --- | --- | --- |
|  | Temperature, K | *K*sv, M−1 | kq |
| HSA+LV [30] | 298 | (7.5 ± 0.6) × 104 | (13 ± 1) × 1012 |
| 302 | (5.8 ± 0.4) × 104 | (10.5 ± 0.7) × 1012 |
| 306 | (4.9 ± 0.2) × 104 | (8.6 ± 0.4) × 1012 |
| 310 | (3.4 ± 0.2) × 104 | (5.9 ± 0.3) × 1012 |
| HSA+(LV+HPCD) [30] | 298 | (5.8 ± 0.5) × 104 | (10.1 ± 0.9) × 1012 |
| 302 | (4.9 ± 0.4) × 104 | (8.6 ± 0.8) × 1012 |
| 306 | (4.5 ± 0.2) × 104 | (8.0 ± 0.4) × 1012 |
| 310 | (3.2 ± 0.1) × 104 | (5.6 ± 0.2) × 1012 |
| HSA+(LV+HPolS) | 310 | (1.1 ± 0.3) × 105 | (19 ± 0.2) × 1012 |
| (HSA+HPCD)conj+LV | 298 | (3.5 ± 0.3) × 104 | (6.2 ± 0.9) × 1012 |
| 302 | (3.0 ± 0.2) × 104 | (5.2 ± 0.3) × 1012 |
| 306 | (2.6 ± 0.1) × 104 | (4.6 ± 0.2) × 1012 |
| 310 | (2.4 ± 0.1) × 104 | (4.3 ± 0.2) × 1012 |
| (HSA+HPolS)conj+LV | 298 | (3.5 ± 0.1) × 104 | (6.04 ± 0.08) × 1012 |
| 302 | (2.92 ± 0.04) × 104 | (5.11 ± 0.05) × 1012 |
| 306 | (2.72 ± 0.07) × 104 | (4.76 ± 0.09) × 1012 |
| 310 | (2.5 ± 0.1) × 104 | (4.44 ± 0.1) × 1012 |

**Table 2S.** Energy transfer parameters for the interactions of the drugs with human serum albumin (25 °C, PBS, pH 7.4).

|  |  |  |
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| **Parameter** | **HSA+LV** | **HSA+(LV+HPCD)** |
| $J×10^{16}$, M−1cm3 | 2.82 | 3.35 |
| *R*0, nm | 1.36 | 1.40 |
| *r*, nm | 1.63 | 1.82 |
| *EFRET* | 0.2 | 0.16 |