## Biodegradable dextran vesicles for effective Hemoglobin

## Encapsulation

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## **Content:**

Fig. S1 The GPC curve of the dextran-g-PLA, dextran-g-PLA1 (a), dextran-g-PLA2 (b), dextran-g-PLA3 (c) and dextran-g-PLA4(d).

Fig. S2 The stability of nanoparticles according to time.

Fig. S3 TEM images of HbVs (dextran-g-PLA3) and size distribution determined by DLS.

Fig. S4 SDS-PAGE.

Fig. S5 Hb leakage profile of HbVs suspended in PBS (0.2M, pH 7.4).

Fig. S6 The morphology changes according to time of the RBC in microscopy.



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Fig. S2 The stability of nanoparticles according to time.



Fig. S3 TEM images of HbVs (a) and size distribution determined by DLS(b). The material is dextran-g-PLA3 and the scale bar stands for 500nm.



Fig. S4 The image of SDS-PAGE. HbV1+Triton (a), HbV1 (b), Hb (c), HbV2 (d) and HbV2+Triton (e). HbV1(dextran-g-PLA3) ,HbV2(dextran-g-PLA4).



Fig. S5 Hb leakage profile of HbVs suspended in PBS (0.2M, pH 7.4).



Fig. S6. The morphology changes of the RBC in microscopy with different time. The scale bar stands for 10µm.

## Note:

The stability experiment was carried out by ZS Nano90 instrument equipped with a He-Ne laser at a scattering angle of 90°.