

Figure S1. NMR hydrogen spectra of Ace-DEX. The successful reaction of DEX with 2-ethoxypropene was confirmed by ^1H NMR spectroscopy. In the spectrum, the signal at $\delta = 4.9$ ppm is assigned to the anomeric proton on the DEX pyranose ring. The multiplet in the range of $\delta = 3.42$ - 3.92 ppm corresponds to the protons on the main chain and the $-\text{CH}_2-$ groups of the side chains. Characteristically, signals appearing at $\delta = 1.0$ - 1.5 ppm are attributed to the $-\text{CH}_3$ and $-\text{CH}_2-$ protons from the attached ethoxy functional group. Furthermore, the peak at $\delta = 4.7$ ppm belongs to the residual signal of the deuterated solvent D_2O , while the peaks at $\delta = 2.5$ ppm and $\delta = 3.32$ ppm are characteristic of the solvent d_6 -DMSO.

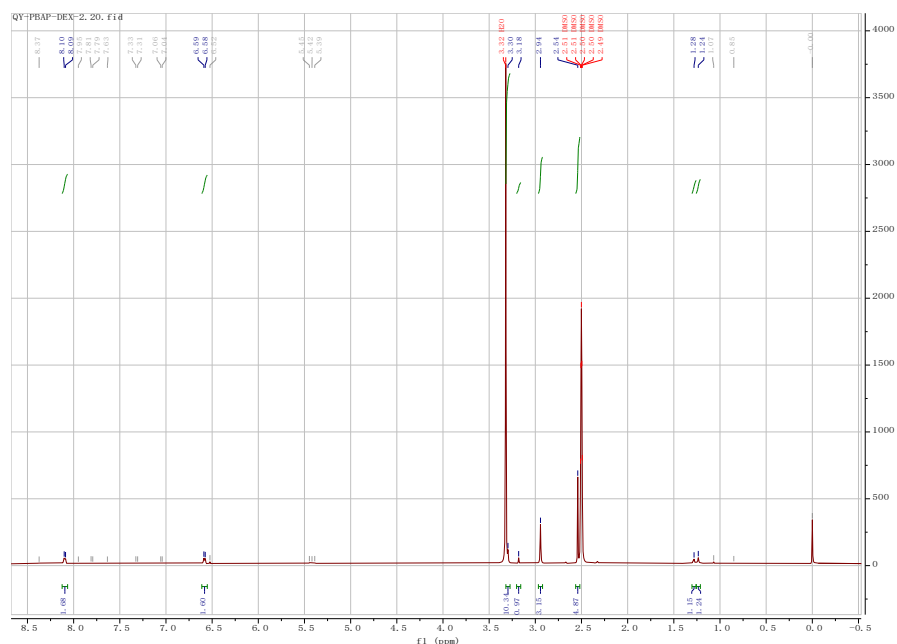


Figure S2. NMR hydrogen spectra of PBAP-DEX. The ^1H NMR spectrum was assigned as follows: the signal at $\delta = 1.0\text{--}1.5$ ppm corresponds to the $-\text{CH}_3$ protons of PBAP; the peak at $\delta = 2.50$ ppm is characteristic of the solvent DMSO; the resonance at $\delta = 2.94$ ppm is attributed to the $-\text{CH}_2-$ protons on the main chain; the signal at $\delta = 3.32$ ppm arises from water (H_2O); the peak at $\delta = 6.59$ ppm is assigned to the $-\text{OH}$ proton on the main chain; and the signal at $\delta = 8.10$ ppm belongs to the aromatic protons of the PBAP benzene ring.

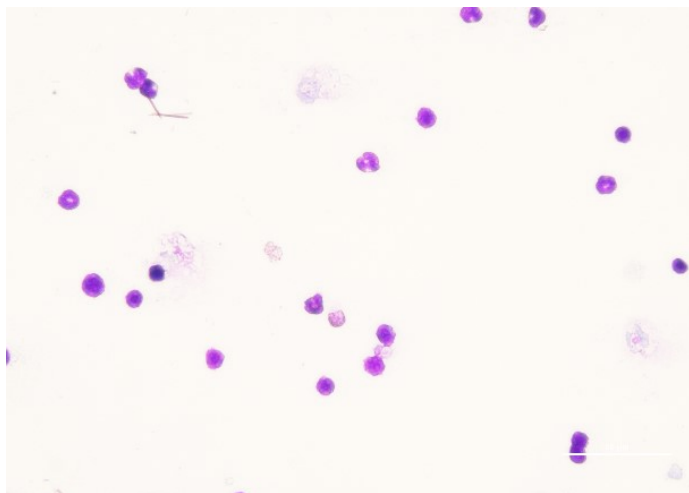


Figure S3. The morphology of neutrophils was observed by Giemsa staining. Scale bar: 50 μm .