Supplementary Materials

Selenium-functionalized Polycarbonate-polyurethane for Sustained *in situ* Generation of Therapeutic Gas for Blood-contacting Materials

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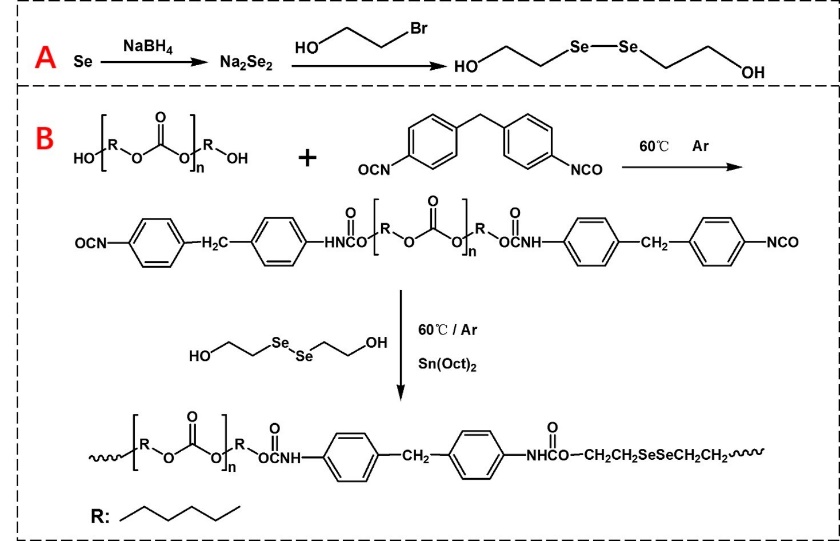


Fig. S1. The synthesis route of (A) BHSe and (B) PCU-SeSe.



Fig. S2. ESI-MS results of BHSe.

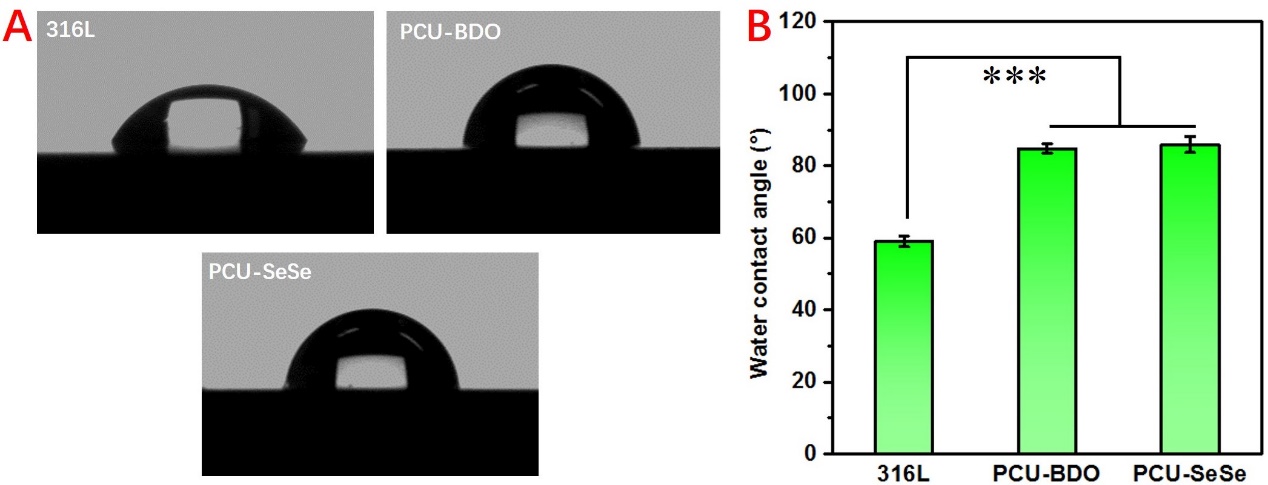


Fig. S3. The photos and statistical results of water contact angles.

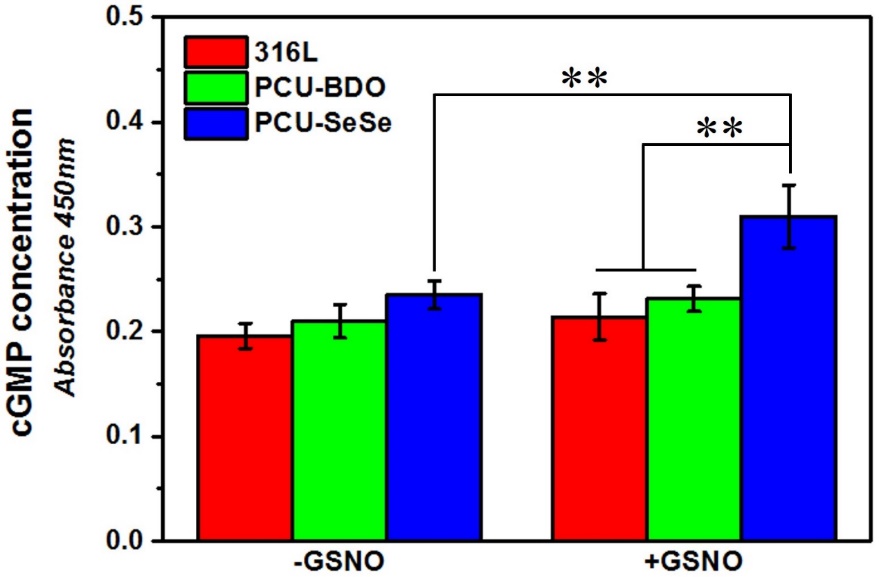


Fig. S4. The expression level of cGMP in SMC of 316L, PCU-BDO and PCU-SeSe samples surface.

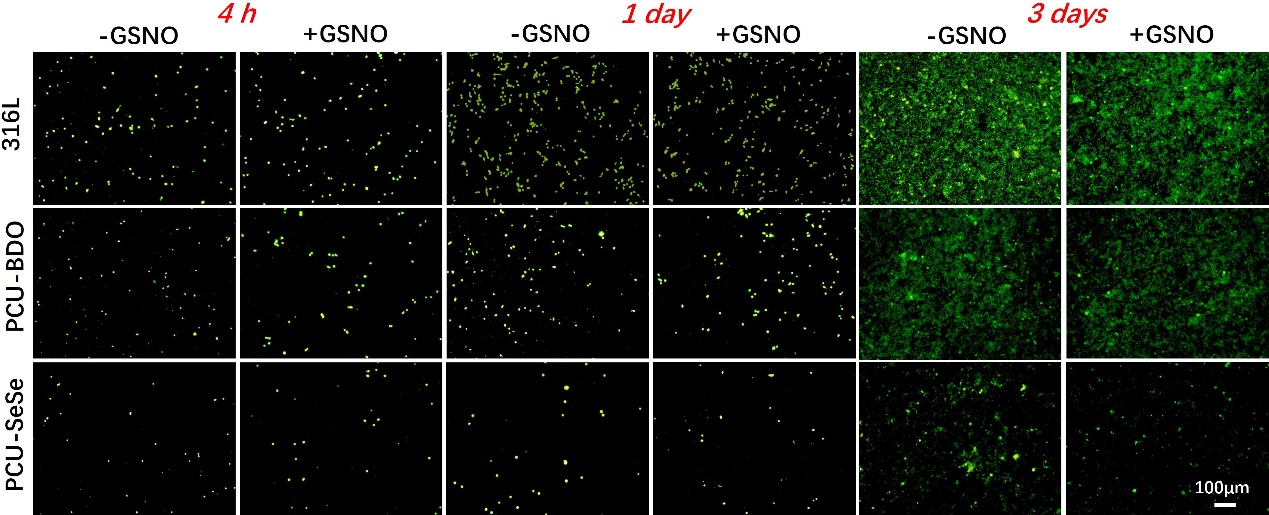


Fig. S5. Cal-AM fluorescence staining of MA on the surface of 316L, PCU-BDO and PCU-SeSe.

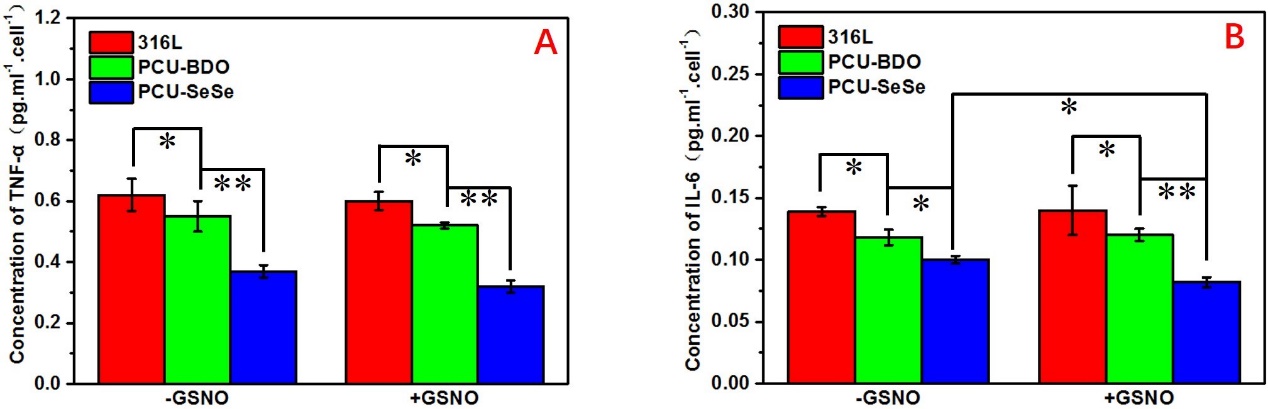


Fig. S6. Quantitative results of (A) TNF-α and (B) IL-6 of MA cultured for 3 days.

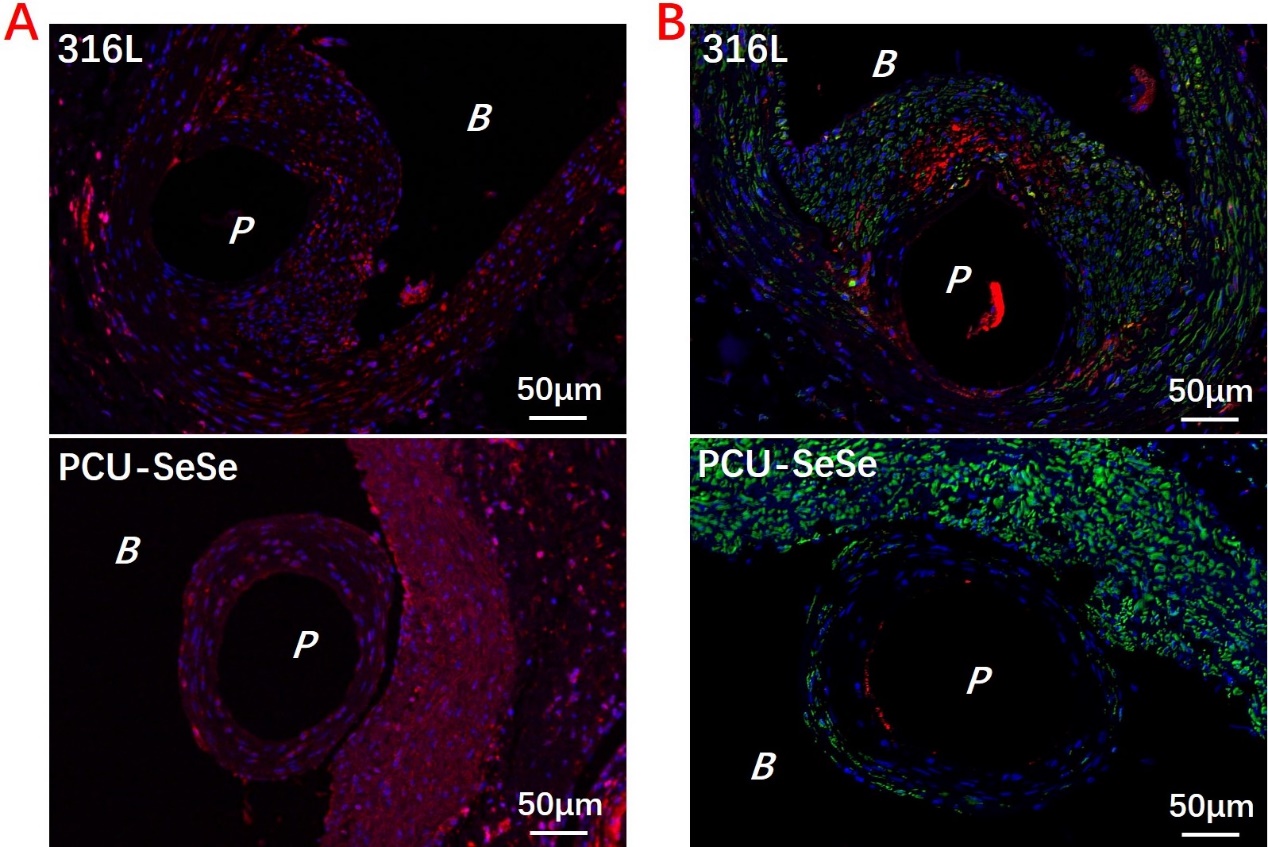


Fig. S7. (A) Immunofluorescence staining of CD 206 in surrounding tissue (red is the positive expression of an anti-inflammatory macrophage phenotype). (B) The results of α-SMA and OPN immunofluorescence double staining of surrounding tissues (red is the positive expression of OPN of synthetic smooth muscle cells, green is the positive expression of α-SMA of contractile smooth muscle cells, *P* is the location of sample implantation, *B* is the location of blood flow).