

Supplementary material

Surface graft polymerization process on chemically stable medical ePTFE for suppressing platelet adhesion and activation

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- Experiment of Fig.S1: Surface modification method was introduced in section 2.2. The surface wettability was measured according to section 2.3 for 0 day at room temperature. The AFM image for topography of ePTFE after 1 min Ar plasma treatment was measured according to section 2.4.

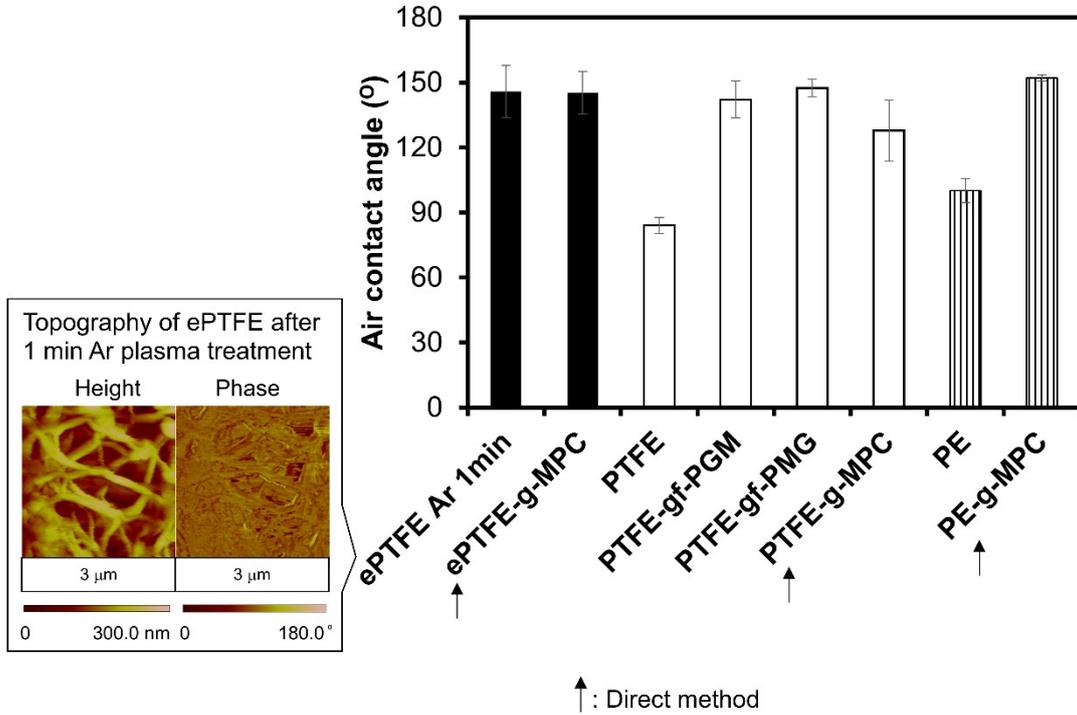


Fig. S1 Surface wettability of ePTFE, PTFE and PE with different grafting methods using a captive air bubble method of static contact angle measurement. AFM image for topography of ePTFE after 1 min Ar plasma treatment.

- Experiment of Fig.S2-S4 was introduced in section 2.5.

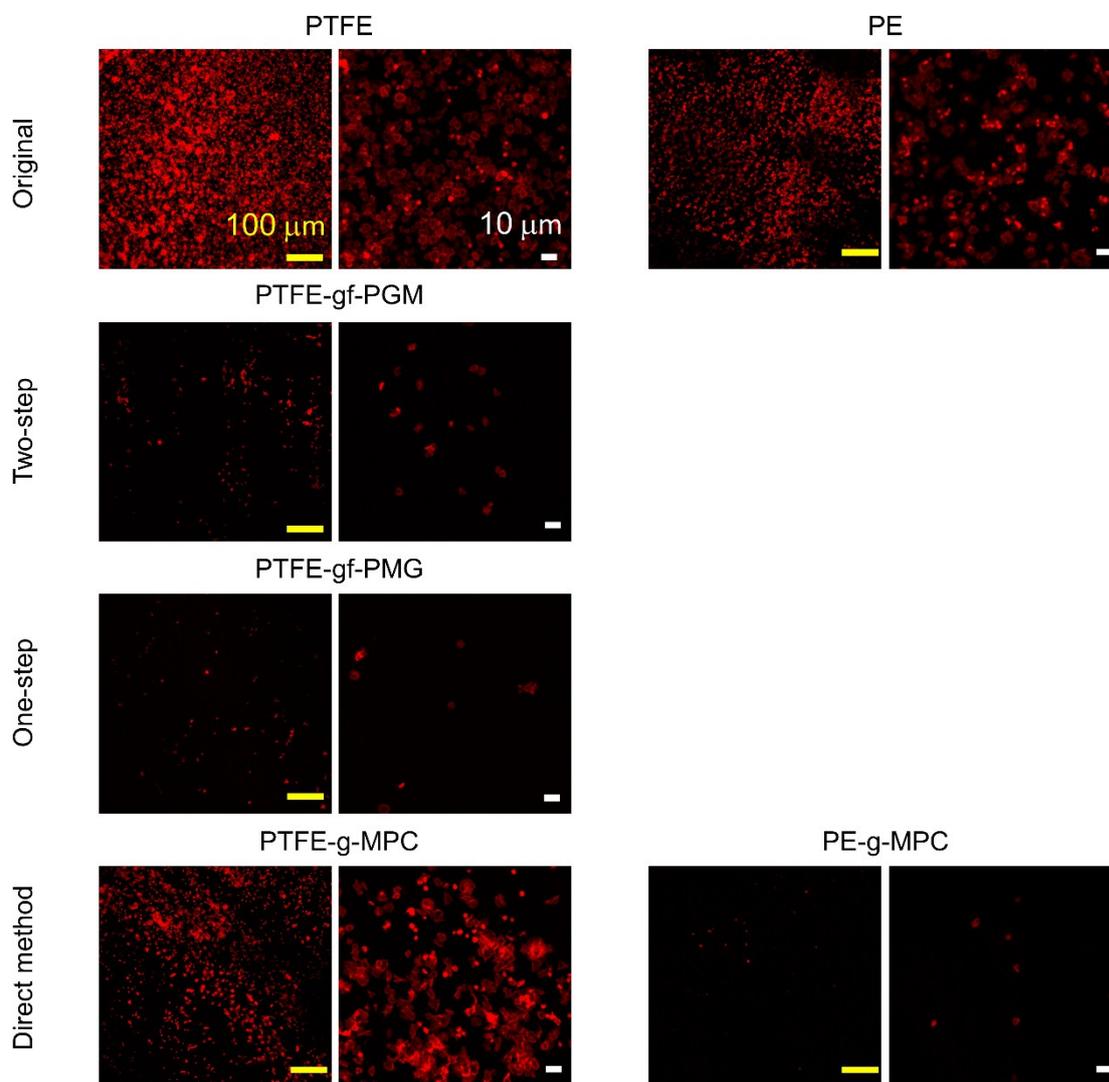


Fig. S2 In vitro platelet adhesion test for 1 h. PTFE and PE films were modified by MPC polymers with GMA linker (two-step and one-step), and without GMA linker (direct) methods. The adherent platelets were observed by CLSM (Red, rhodamine phalloidin).

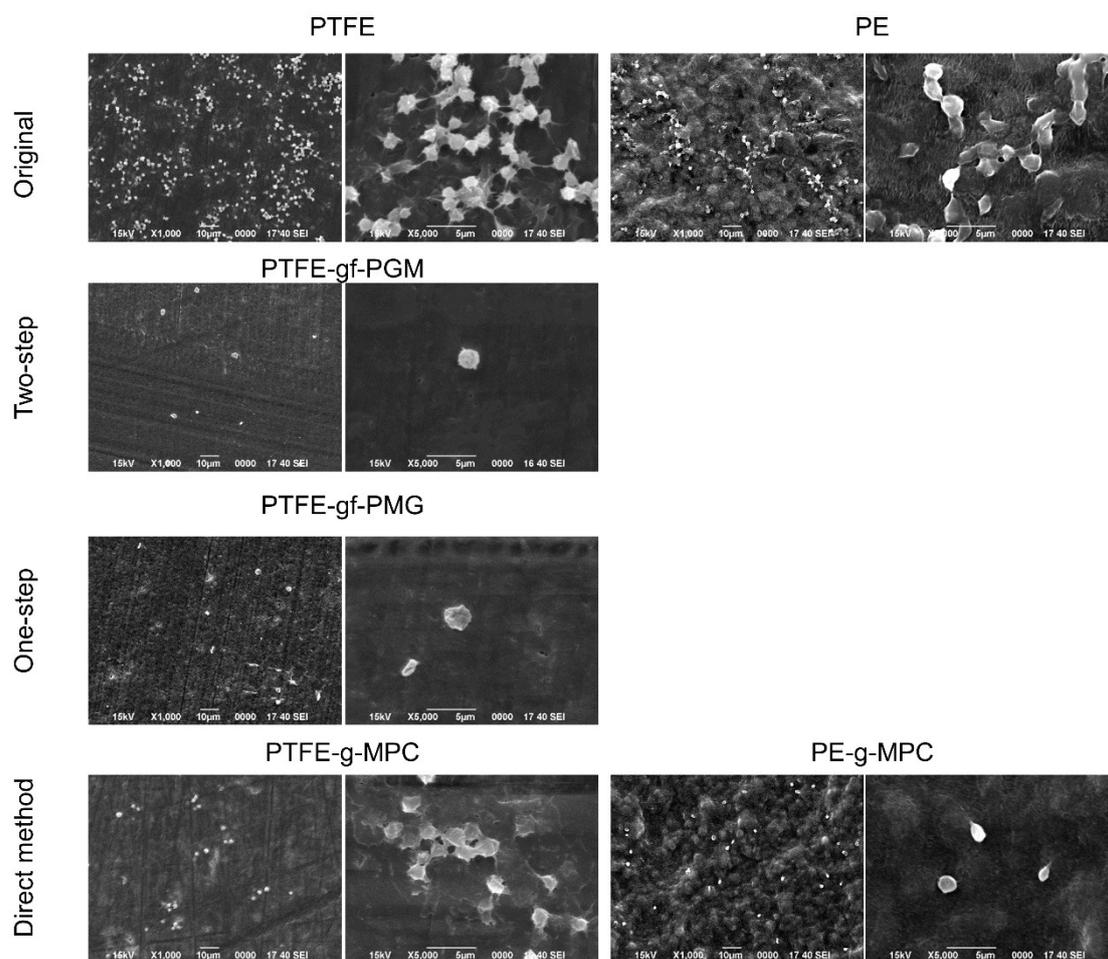


Fig. S3 In vitro platelet adhesion test for 1 h. PTFE and PE films were modified by MPC polymers with GMA linker (two-step and one-step), and without GMA linker (direct) methods. The adherent platelets were observed by SEM.

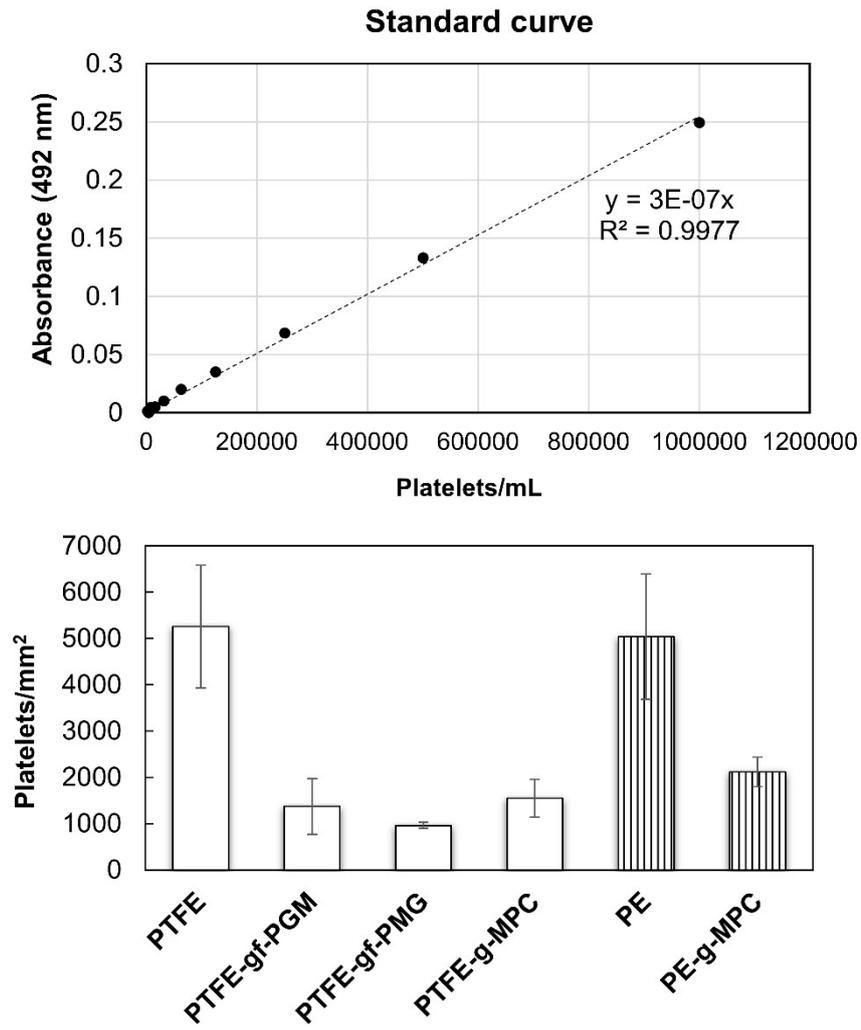


Fig. S4 In vitro platelet adhesion test for 1 h. Standard curve for LDH assay (top). The density of adherent platelets on substrates was analyzed by LDH assay (bottom).

- Experiment of Fig.S5-S6 was introduced in section 2.6.

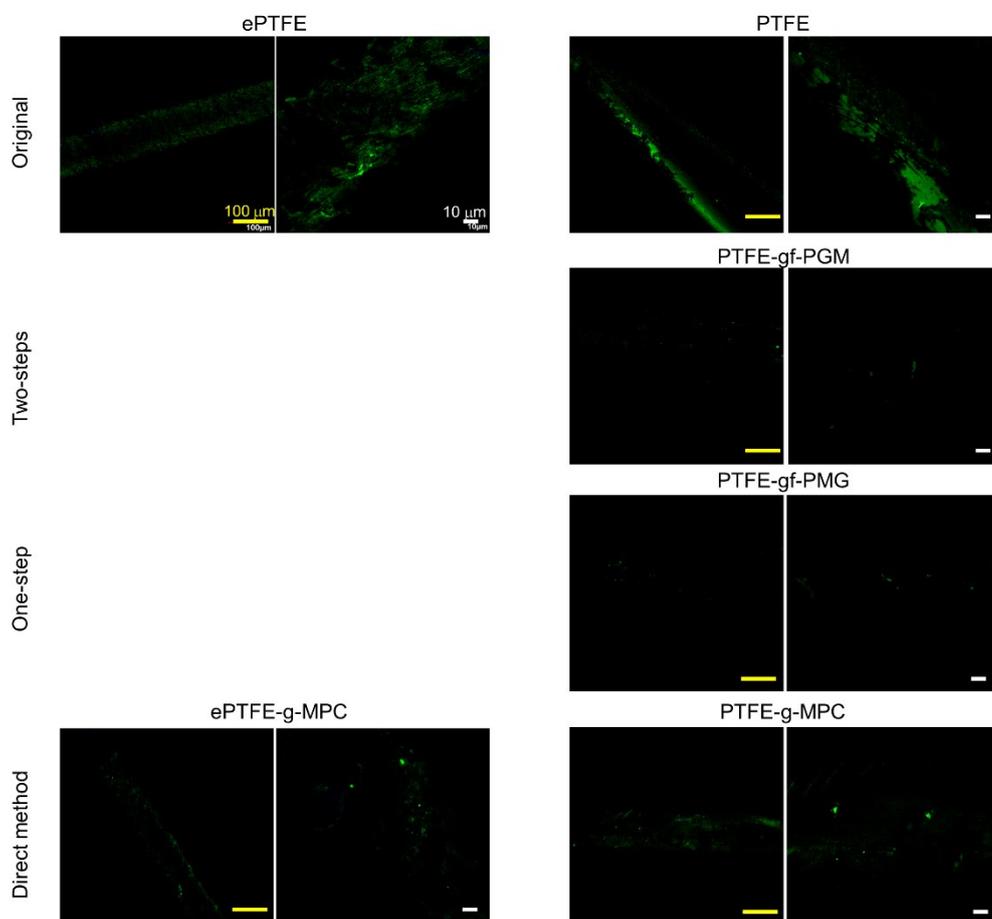


Fig. S5 Porcine blood contact test for 2 h in situ. CLSM fluorescence imaging of platelet adhesion and aggregation (green, CD41 antibody (FITC)) on ePTFE and PTFE sutures.

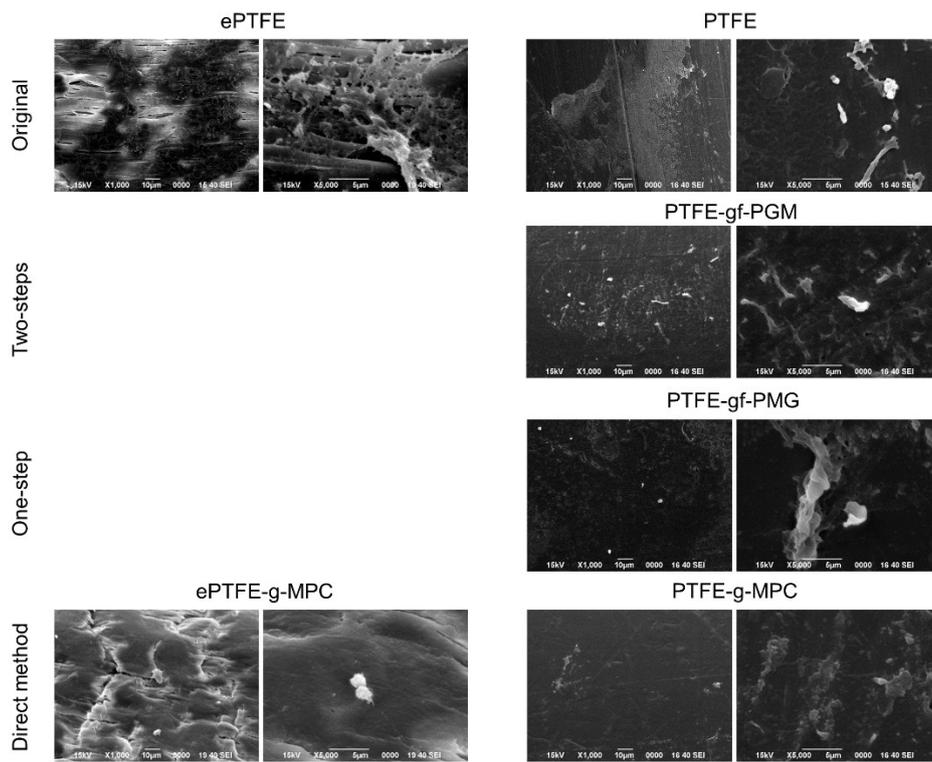


Fig. S6 Porcine blood contact test for 2 h in situ. SEM imaging of blood contacted surfaces on ePTFE and PTFE sutures.