

## **SUPPLEMENTAL MATERIALS**

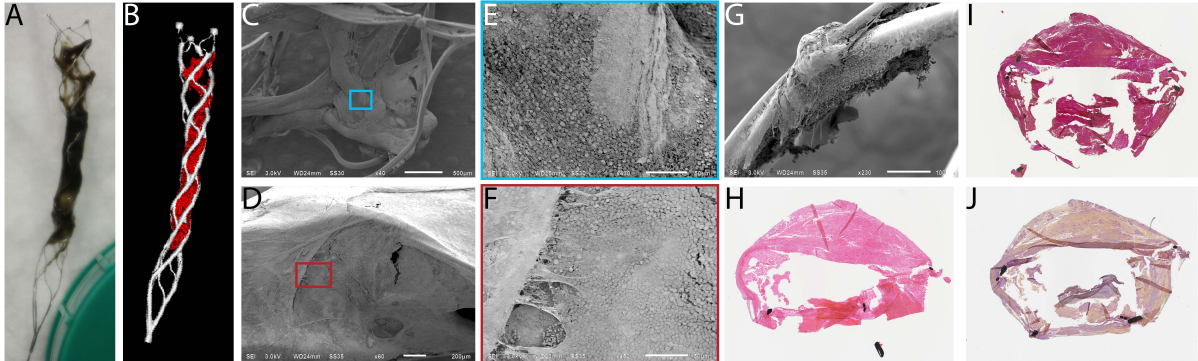
**Table S1: Surface vs interaction using SEM.** Adhesive interaction was more frequently observed at interaction sites with a dense surface (38 of 58), as compared to adhesive interaction at interaction sites with a porous filamentous surface (6 of 21) ( $p=0.011$ ).

	<b>Dense</b>	<b>Porous Filamentous</b>	<b>Total</b>
<b>Adhesive</b>	38	6	44
<b>Mechanical</b>	20	15	35
<b>Total</b>	58	21	79

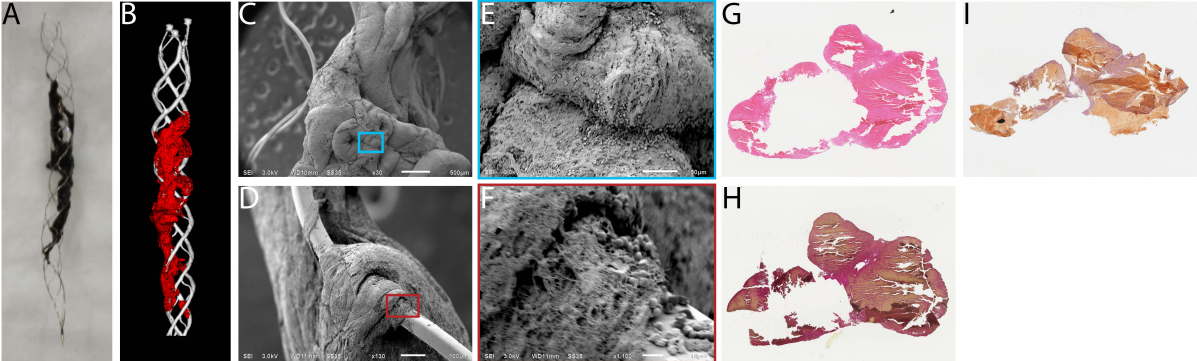
**Table S2: Thrombus Characteristics.** The presence of Zahn lines, cholesterol crystals, nuclear fragmentation is given per thrombus and determines thrombus age. In our study most thrombi were classified as lytic according to the criteria by Rittersma et al<sup>1</sup>.

Thrombus	Thrombus content histology				
	Erythrocyte content (%)	Nuclear fragmentation	NETs	Zahn lines	Cholesterol crystals
1	55	-	+	-	-
2	88	+	-	-	-
3	93	+	+	-	-
4	87	+	+	-	-
5	95	+	+	-	-
6	73	+	-	+	-
7	47	+	+	+	-

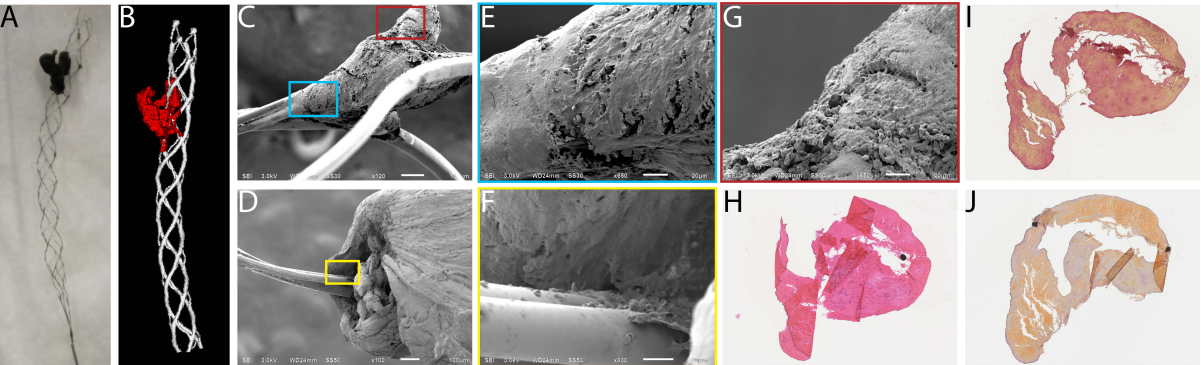
**Figure S1:** Stent 1. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Both mechanical (C, D) and adhesive interactions (G) are observed using SEM at a magnification factor of 40, 60 and 230 respectively. E and F, magnifications of the small blue and red box in (C and D) revealing both porous filamentous and dense surfaces, at a magnification factor of 430 and 450, respectively. Histological staining using HE (H), RF (I) and Okajima (J) show thrombus containing both fibrin and erythrocyte rich areas. Fibrin is pink in (H), red in (I) and purple in (J).



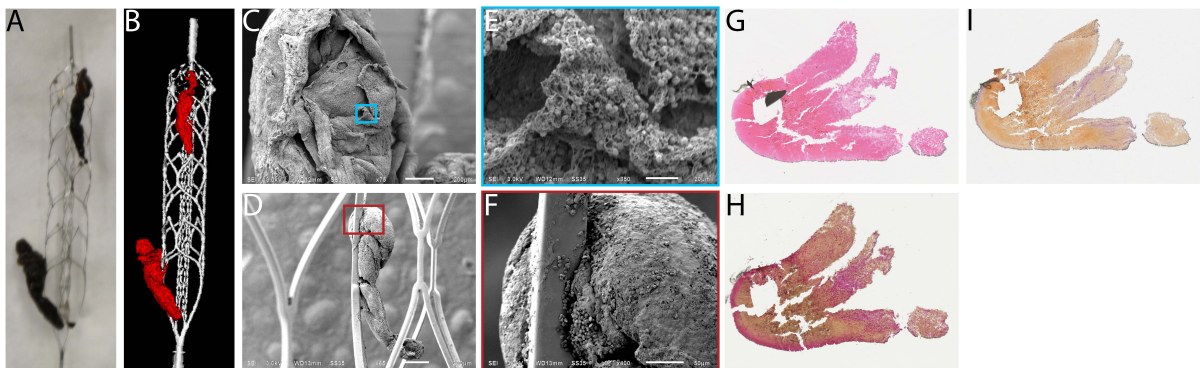
**Figure S2:** Stent 2. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Predominantly mechanical interaction is observed using SEM (C, D), at a magnification factor of 30 and 130, respectively. E and F, magnifications of the small blue and red box in (C and D), revealing that the thrombus surface is mainly dense (E) but spots of porous filamentous surface were also observed (F), at a magnification factor of 370 and 1100, respectively. Histological staining using HE (G), RF (H) and Okajima (I) shows thrombus containing mostly erythrocytes. Fibrin is pink in (G), red in (H) and purple in (I).



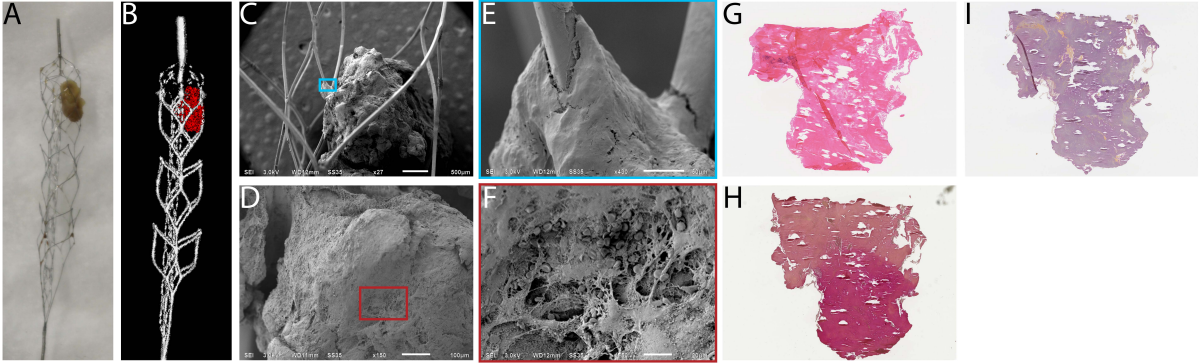
**Figure S3:** Stent 3. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Both Adhesive (C) and mechanical interactions (D) are observed using SEM, at a magnification factor of 120 and 100, respectively. E, F and G, magnifications of the small blue, yellow and red box in (C and D), revealing that the thrombus surface is mainly dense (E, F, G), at a magnification factor of 650, 800 and 650, respectively. Histological staining using HE (H), RF (I) and Okajima (J) show thrombus containing mostly erythrocytes. Fibrin is pink in (H), red in (I) and purple in (J).



**Figure S4:** Stent 4. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Both mechanical (C) and adhesive interactions (D) are observed using SEM, at a magnification factor of 75 and 65, respectively. E and F, magnifications of the small blue and red box in (C and D), revealing that the thrombus surface is mainly porous filamentous (E, F), at a magnification factor of 850 and 400, respectively. Histological staining using HE (G), RF (H) and Okajima (I) show thrombus containing mostly erythrocytes. Fibrin is pink in (G), red in (H) and purple in (I).

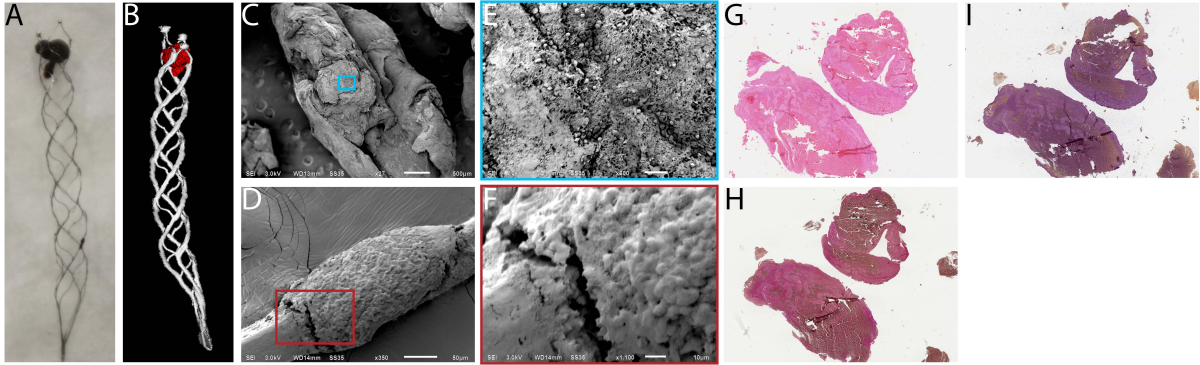


**Figure S5:** Stent 5. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Predominantly adhesive interaction is observed using SEM (C, E), at a magnification factor of 27 and 430, respectively. E and F, magnifications of the small blue and red box in (C and D), revealing that the thrombus surface is mainly dense (D and E) but spots of porous filamentous surface were also observed (F), at a magnification factor of 150, 430 and 750, respectively. Histological staining using HE (G), RF (H) and Okajima (I) show thrombus containing mostly fibrin in these shown sections. Fibrin is pink in (G), red in (H) and purple in (I).

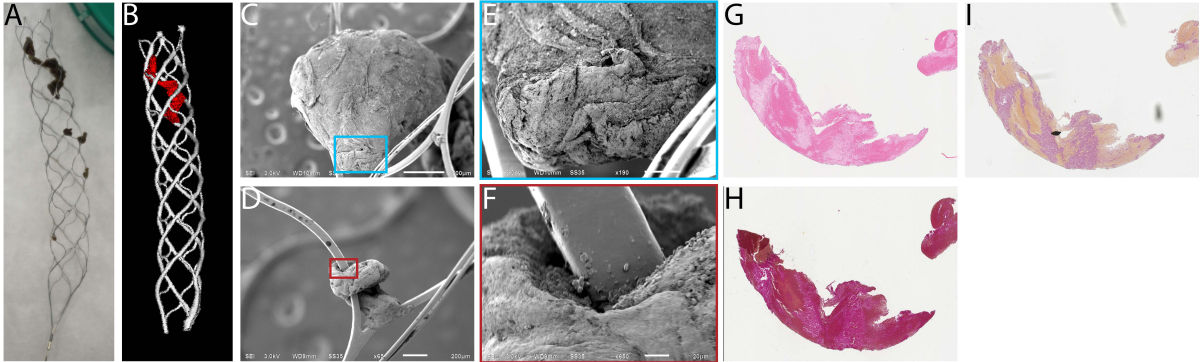




**Figure S6:** Stent 6. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Predominantly adhesive interaction is observed using SEM (C, D), at a magnification factor of 27 and 350, respectively. E and F, magnifications of the small blue and red box in (C and D), revealing that the thrombus surface is mainly dense (F) but spots of porous filamentous surface were also observed (E), at a magnification factor of 1100 and 600, respectively. Histological staining using HE (G), RF (H) and Okajima (I) show thrombus containing both fibrin and erythrocyte rich areas. Fibrin is pink in (G), red in (H) and purple in (I).



**Figure S7:** Stent 7. Thrombus entrapped in stent photographed (A) and visualized using micro-CT (B). Predominantly mechanical interaction is observed using SEM (C, D), at a magnification factor of 43 and 65, respectively. E and F, magnifications of the small blue and red box in (C and D), reveal both porous filamentous (E) and dense surfaces (F), at a magnification factor of 190 and 650, respectively. Histological staining using HE (G), RF (H) and Okajima (I) show thrombus containing both fibrin and erythrocyte rich areas. Fibrin is pink in (G), red in (H) and purple in (I).



## Reference

1. Rittersma SZ, van der Wal AC, Koch KT, Piek JJ, Henriques JP, Mulder KJ, Ploegmakers JP, Meesterman M, de Winter RJ. Plaque instability frequently occurs days or weeks before occlusive coronary thrombosis: a pathological thrombectomy study in primary percutaneous coronary intervention. *Circulation*. 2005;111:1160–1165.