



**Supplementary Figure 1.** MPO levels in Aseptic Failure and PJI patients separated by site of arthroplasty. Patients with hip arthroplasty experienced higher levels of synovial fluid MPO than those undergoing knee arthroplasty (P=0.008).

**Supplementary Table 1.** Pre-operative clinical variables of a subgroup of patients (n=37) included in the study, divided by site of arthroplasty.

	Aseptic Failure (n=22)		PJI (n=15)	
	Hip Arthroplasty (n=6; median (IQR))	Knee Arthroplasty (n=16)	Hip Arthroplasty (n=4)	Knee Arthroplasty (n=11)
<b>Operative time (minutes)</b>	120 (83-160)	90 (80-120)	62 (51-103)	75 (73-80)
<b>Number of operators</b>	3 (2-4)	3 (2-4)	3 (3-4)	3 (2-3)
<b>White blood cells (cells/ <math>\mu</math>l)</b>	4495 (3530-6795)	6240 (5700-7840) <sup>a</sup>	7170 (6275-9825)	7490 (6520-9470)
<b>Neutrophils (cells/<math>\mu</math>l)</b>	2640 (2460-3407)	3850 (3610-5605) <sup>b</sup>	4720 (4100-7030)	4615 (4070-4955)
<b>CRP (mg/L)</b>	6.45 (1.12-10.7)	2.3 (0.67-6.0)	1.4 (0.95-30.3)	2.5 (0.95-14.2)
<b>Synovial fluid MPO (U/mL)</b>	349 (67-9375)	9.2 (0.5-112.2) <sup>b</sup>	12822 (3477-15561)	11570 (164-14907)

<sup>a</sup> P<0.05 vs. Hip arthroplasty

<sup>b</sup> P<0.01 vs. Hip arthroplasty

CRP, C-reactive protein