TABLE E-1 Summary of Prior Studies Examining the Values of Serum and Synovial Diagnostic Thresholds for Predicting Periprosthetic Joint Infection

Thresholds for Predicting Periprosthetic Joint Infection								
						Synovial Fluid		
						WBC		
			Hip	ESR	CRP	Count	Percentage of	Management of Patients
		No. of	or	Cutoff*	Cutoff*	Cutoff*	Polymorphonuclear	with Inflammatory
Authors	Year	Infections	Knee	(mm/hr)	(mg/L)	(WBC/µL)	Cells Cutoff (%)	Conditions
Spangehl et al. ¹¹	1999	35	Hip	30	10	1100	80	Study population included twenty-three patients with connective tissue disorders; these were not analyzed independently from patients with noninflammatory conditions
Kersey et al. 12	2000	79	Knee	NA	NA	2000	50	Higher rate of false positives observed in patients with rheumatoid arthritis (40% for WBC, 50% for differential) compared with osteoarthritis (6.8% for WBC, 0% for differential) at the selected cutoffs
Mason et al. 13	2003	36	Knee	NA	NA	2500	60	Study population included four patients with rheumatoid arthritis; no conclusions could be drawn based on small sample size
Trampuz et al. 14	2004	34	Knee	NA	NA	1700	65	Excluded
Della Valle et al. ¹⁵	2007	41	Knee	30	10	3000	65	Excluded
Greidanus et al. ¹⁶	2007	45	Knee	22.5	13.5	NA	NA	Excluded
Ghanem et al. ¹⁷	2008	161	Knee	30	10	1100	64	Excluded
Schinsky et al. ¹⁸	2008	55	Hip	30	10	3000	80	Excluded

^{*}NA = not applicable