

TABLE E-1 Pathology Studies

Table 1. Clinical and Financial Outcomes of Total Hip and Knee Arthroplasty								
Study	No. of Patients	Discrepant Cases		Discordant Cases			Total Cost of Pathology Charges (Yr) (\$)	Procedure and Tissue Analyzed†
		No. (%)	Cost per Case (\$)	No. (%)	Diagnosis*	Cost per Case (\$)		
Arthroscopy								
Current study	3797	27 (0.7)	13,771	1 (0.026)	Incorrectly suspected RA	371,810	371,810 (2012)	Knee arthroscopy
McClain et al. ¹⁸ (2008)	2144	0		0			160,543 (2005)	Shoulder arthroscopy
Kirkley et al. ¹⁹ (1998)	1036	38 (3.7)	58,536	1 (0.1)	PVNS	234,147	234,147 (1998)	Knee arthroscopy
Arthroplasty								
Kocher et al. ²⁵ (2000)	1234	28 (2.3)	4383	1 (0.1)	Granulomatous inflammation	122,728	122,728 (1998)	Primary TJA: 471 THA and 763 TKA
Lawrence et al. ⁷ (1999)	1388	13 (0.9)		0			141,164 (1998)	Primary TJA: 562 THA and 826 TKA
Meding et al. ⁸ (2000)	951	27 (2.8)		0			Est. range 57,136 to 269,133 (1998)	Primary TJA: 313 THA and 638 TKA
Pagnano et al. ⁹ (1998)	2289	10 (0.4)		0				2289 primary TKA
Raab et al. ⁶ (1998)	168	15 (8.9)	668.64	1 (0.6)	Incorrectly identified osteomyelitis	10,698.24	10,698 (1996)	Primary TJA: 79 THA and 89 TKA
Campbell et al. ²⁴ (1997)	715	6 (0.8)		0			Est. range 110,100 to 143,000 (1996)	Primary TJA: 283 THA and 432 TKA
Lin et al. ¹⁰ (2012)	1363	28 (2.1)	4983	0			139,532 (2010)	Primary TJA: 457 THA, 837 TKA, 36 CMC, 30 TSA, and 3 TEA
Spine								
Wu and Fourney ¹⁶ (2007)	1775	3 (0.17)	36,342	1 (0.056)	Amyloidosis with unusual immunological features	145,366	145,366 (2005 Can\$ converted to US\$)	Routine intervertebral disc surgery
Grzybicki et al. ¹² (1998)	1071	3 (0.28)	8835.75	0			26,507 (1997)	Routine intervertebral disc surgery
Reddy et al. ¹³ (2001)	1287	0		0			72,713 (2000)	Routine intervertebral disc surgery
Hasselblatt et al. ¹⁷ (2006)	2102	1 (0.048)	52,550	2 (0.095)	Metastatic prostate carcinoma and diffuse large B-cell lymphoma	26,275	52,550 (2006)	Routine intervertebral disc surgery

*PVNS = pigmented villonodular synovitis, RA = rheumatoid arthritis. †TJA = total joint arthroplasty, THA = total hip arthroplasty, TKA = total knee arthroplasty, CMC = carpometacarpal arthroplasty, TSA = total shoulder arthroplasty, and TEA = total elbow arthroplasty.