TABLE E-1 Patient and Surgery Characteristics According to the Presence or Absence of an Intra-Articular Pain Pump*

	Intra-Articular Pain Pump	
	Absent	Present
Number of surgical procedures	262	109
Arthroscopic SLAP repair	6%	38%
Arthroscopic suture capsular plication	19%	31%
Arthroscopic Bankart repair	9%	15%
Arthroscopic debridement	36%	37%
Arthroscopic cuff repair	55%	16%
Arthroscopic decompression/acromioplasty	33%	32%
Arthroscopic capsular release	2%	5%
Arthroscopic biceps tenodesis	5%	6%
Arthroscopic distal clavicular excision	37%	28%
One or more suture anchors in glenoid	14%	50%
One or more suture anchors in humerus	3%	0%
Metal anchors	59%	55%
Bioabsorbable anchors	41%	19%
Anesthesia		
General without scalene block	58%	83%
General with scalene block	41%	14%
Scalene block alone	1%	2%
Unknown	0%	1%
Radiofrequency inside joint	18%	28%
Radiofrequency outside joint	36%	39%
Pain pump outside joint	35%	43%
Marcaine (0.5%)	7%	30%
Marcaine (0.25%)	1%	7%
Lidocaine	23%	65%
Epinephrine	22%	71%
Pump make		
DonJoy (Vista, California)	2%	4%
I-Flow (Lake Forest, California)	8%	23%
Stryker (Mahwah, New Jersey)	5%	9%
Zimmer (Warsaw, Indiana)	0%	6%
Not applicable or available	85%	57%
Biceps tenotomy	45%	14%
Thermal capsulorrhaphy	4%	6%
Open surgery	40%	20%
With biceps tenodesis	32%	12%
Without biceps tenodesis	8%	8%
Surgery not open	60%	80%
Female	34%	40%
Right side	64%	63%
Pump volume†‡ *(mL)*	254 ± 56	279 ± 118
Age at surgery† *(yr)*	53 ± 15	45 ± 12
Surgery duration† *(min)*	134 ± 54	127 ± 52

*Four patients without data for the presence of an intra-articular pain pump are excluded. †The values are given as the mean and standard deviation. ‡Applies only to patients treated with a pump.

TABLE E-2 Sensitivity Analysis of Effect of Definition of Date of Onset of Chondrolysis*

	Unadjusted Models					Models Adjusted for Age and Date of Surgery				
		Onset = Diagnosis		Onset = 1st Symptoms			Onset = Diagnosis		Onset = 1st Symptoms	
	No.	Hazard Ratio (95% Confidence Interval)	P Value	Hazard Ratio (95% Confidence Interval)	P Value	No.	Hazard Ratio (95% Confidence Interval)	P Value	Hazard Ratio (95% Confidence Interval)	P Value
Arthroscopic SLAP repair	109	0.86 (0.47-1.58)	0.6	0.85 (0.48-1.53)	0.6	108	1.33 (0.75-2.35)	0.3	1.40 (0.75-2.62)	0.3
Arthroscopic suture capsular plication	109	2.17 (1.25-3.77)	0.006	1.97 (1.12-3.47)	0.02	108	0.98 (0.48-2.03)	1	0.85 (0.38-1.88)	0.7
Arthroscopic Bankart repair	109	2.60 (1.32-5.13)	0.006	3.83 (2.09-7.01)	<0.001	108	2.76 (1.47-5.17)	0.002	3.32 (1.73-6.35)	<0.001
Arthroscopic debridement	109	1.29 (0.74-2.26)	0.4	1.44 (0.82-2.52)	0.2	108	1.77 (1.04-3.00)	0.03	1.80 (1.08-3.00)	0.02
Arthroscopic cuff repair	109	0.81 (0.43-1.53)	0.5	0.85 (0.41-1.73)	0.6	108	0.92 (0.38-2.23)	0.9	0.96 (0.39-2.35)	0.9
Arthroscopic decompression/acromioplasty	109	0.52 (0.27-0.98)	0.04	0.46 (0.24-0.89)	0.02	108	0.67 (0.34-1.31)	0.2	0.58 (0.30-1.15)	0.12
Arthroscopic capsular release	109	0.81 (0.23-2.83)	0.7	0.95 (0.23-3.93)	0.9	108	1.00 (0.38-2.65)	1	1.41 (0.34-5.82)	0.6
Arthroscopic biceps tenodesis	109	1.04 (0.22-4.86)	1	0.80 (0.19-3.36)	0.8	108	1.11 (0.26-4.79)	0.9	0.76 (0.19-3.09)	0.7
Arthroscopic distal clavicular excision	108	0.49 (0.24-0.98)	0.04	0.47 (0.23-0.98)	0.04	107	0.66 (0.31-1.39)	0.3	0.62 (0.27-1.39)	0.2
One or more suture anchors in glenoid	109	1.41 (0.82-2.44)	0.2	1.55 (0.88-2.73)	0.13	108	2.60 (1.54-4.39)	<0.001	2.99 (1.62-5.51)	<0.001
Metal anchors	108	0.93 (0.54-1.61)	0.8	1.00 (0.57-1.75)	1	108	1.55 (0.87-2.77)	0.14	1.61 (0.90-2.88)	0.11
Bioabsorbable anchors	108	1.20 (0.54-2.71)	0.7	1.06 (0.49-2.30)	0.9	108	1.78 (0.89-3.54)	0.10	1.47 (0.71-3.05)	0.3
Anesthesia	108		0.6		0.6	107		0.4		0.4
General with scalene block		Ref. category		Ref. category			Ref. category		Ref. category	
General without scalene block		1.28 (0.54-3.07)	0.6	1.27 (0.54-2.99)	0.6		1.44 (0.63-3.28)	0.4	1.45 (0.65-3.26)	0.4
Scalene block alone		NA (NA)†	NA†	NA (NA)†	NA†		NA (NA)†	NA†	NA (NA)†	NA†

Radiofrequency inside joint	109	1.39 (0.83-2.32)	0.2	1.54 (0.89-2.67)	0.12	108	1.36 (0.80-2.31)	0.3	1.62 (0.90-2.93)	0.11
Radiofrequency outside joint	109	0.47 (0.26-0.82)	0.008	0.52 (0.29-0.92)	0.03	108	0.60 (0.32-1.12)	0.11	0.67 (0.36-1.23)	0.2
Pain pump outside joint	108	0.32 (0.18-0.59)	<0.001	0.36 (0.19-0.69)	0.002	107	0.52 (0.25-1.10)	0.09	0.56 (0.27-1.17)	0.12
Marcaine (0.5%)	96	0.59 (0.30-1.19)	0.14	0.63 (0.33-1.22)	0.2	95	1.25 (0.61-2.58)	0.5	1.33 (0.68-2.62)	0.4
Marcaine (0.25%)	97	0.00 (NA) ‡	<0.001	0.00 (NA)‡	<0.001	96	0.00 (NA)‡	<0.001	0.00 (NA)‡	<0.001
Lidocaine	100	2.42 (1.15-5.10)	0.02	2.39 (1.17-4.87)	0.02	99	1.31 (0.45-3.78)	0.6	1.27 (0.45-3.63)	0.6
Epinephrine	96	2.10 (0.94-4.70)	0.07	2.36 (1.01-5.52)	0.047	96	2.36 (0.94-5.87)	0.07	2.71 (1.04-7.06)	0.04
Biceps tenotomy	109	1.15 (0.53-2.49)	0.7	1.26 (0.57-2.79)	0.6	108	1.88 (0.75-4.71)	0.2	2.04 (0.88-4.72)	0.1
Thermal capsulorrhaphy	109	1.09 (0.42-2.84)	0.9	1.38 (0.45-4.20)	0.6	108	1.67 (0.57-4.93)	0.4	2.30 (0.69-7.64)	0.2
Open surgery	109	0.89 (0.40-1.98)	0.8	0.94 (0.42-2.14)	0.9	108	1.82 (0.94-3.52)	0.08	1.96 (0.92-4.16)	0.08
Open surgery/biceps tenodesis	109		0.07		0.047	108		0.3		0.2
Open surgery without biceps tenodesis		Ref. category		Ref. category			Ref. category		Ref. category	
Open surgery with biceps tenodesis		9.07 (0.91-90.25)	0.06	11.03 (1.15-105.9)	0.04		2.03 (0.18-22.49)	0.6	3.29 (0.33-32.84)	0.3
Surgery not open		5.10 (0.56-46.42)	0.15	5.18 (0.60-44.52)	0.13		1.01 (0.09-10.86)	1	1.37 (0.14-13.21)	0.8
Female	109	1.51 (0.89-2.56)	0.12	1.52 (0.88-2.61)	0.13	108	0.99 (0.57-1.73)	1	1.04 (0.59-1.86)	0.9
Right side	109	1.10 (0.63-1.91)	0.7	1.22 (0.71-2.09)	0.5	108	0.94 (0.54-1.61)	0.8	0.99 (0.58-1.70)	1
Pump volume (per 100 mL)	95	1.10 (0.93-1.29)	0.3	1.28 (1.02-1.61)	0.03	95	1.24 (0.99-1.55)	0.06	1.43 (1.09-1.88)	0.009
Surgery duration (per 1 hour)	101	1.04 (0.72-1.49)	0.8	1.12 (0.80-1.57)	0.5	101	1.41 (1.07-1.86)	0.01	1.40 (1.07-1.82)	0.01
Age at surgery (per 10 years)	108	0.66 (0.52-0.82)	<0.001	0.69 (0.56-0.86)	<0.001	—	—	—	—	—
Surgery date (per 1 year)	109	1.44 (1.19-1.74)	<0.001	1.40 (1.17-1.67)	<0.001	—	—	—	—	—

*The analyses included only the procedures followed by use of an intra-articular pump. †The results are not shown because there were only two procedures with a scalene block alone. NA = not applicable. ‡The zero hazard ratio was due to no chondrolysis cases in the six patients who received 0.25% Marcaine. The 95% confidence interval was not estimated. NA = not applicable.