

TABLE E-1 Comparison of Loss to Follow-up with Full One-Year Follow-up Patients

Characteristic	Full One-Year Follow-up			Lost to Follow-up		
	Total (N = 1226)	Reamed (N = 622)	Unreamed (N = 604)	Total (N = 93)	Reamed (N = 49)	Unreamed (N = 44)
Age* (yr)	39.5 ± 16.0	39.1 ± 16.1	39.8 ± 15.9	36.1 ± 13.6	36.8 ± 11.9	35.3 ± 15.4
Sex (<i>no. of patients</i>)						
Male	904 (73.7%)	457 (73.5%)	447 (74.0%)	75 (80.6%)	39 (79.6%)	36 (81.8%)
Female	322 (26.3%)	165 (26.5%)	157 (26.0%)	18 (19.4%)	10 (20.4%)	8 (18.2%)
Race† (<i>no. of patients</i>)						
White	986 (80.4%)	495 (79.6%)	491 (81.3%)	52 (56.5%)	25 (52.1%)	27 (61.4%)
Black	109 (8.9%)	67 (10.8%)	42 (7.0%)	17 (18.5%)	11 (22.9%)	6 (13.6%)
Hispanic	46 (3.8%)	22 (3.5%)	24 (4.0%)	18 (19.6%)	11 (22.9%)	7 (15.9%)
Asian	33 (2.7%)	16 (2.6%)	17 (2.8%)	1 (1.1%)	0 (0%)	1 (2.3%)
Native	23 (1.9%)	8 (1.3%)	15 (2.5%)	2 (2.2%)	0 (0%)	2 (4.5%)
Other	29 (2.4%)	14 (2.3%)	15 (2.5%)	2 (2.2%)	1 (2.1%)	1 (2.3%)
Mechanism of injury† (<i>no. of patients</i>)						
Motor-vehicle accident	256 (20.9%)	127 (20.4%)	129 (21.4%)	21 (22.8%)	10 (20.4%)	11 (25.6%)
Pedestrian-motor-vehicle accident	248 (20.2%)	132 (21.2%)	116 (19.2%)	26 (28.3%)	9 (18.4%)	17 (39.5%)
Motorcycle accident	143 (11.7%)	71 (11.4%)	72 (11.9%)	4 (4.3%)	3 (6.1%)	1 (2.3%)
Crush injury	64 (5.2%)	31 (5.0%)	33 (5.5%)	4 (4.3%)	2 (4.1%)	2 (4.5%)
Fall	355 (29.0%)	179 (28.8%)	176 (29.1%)	19 (20.7%)	13 (26.5%)	6 (13.6%)
Twist	57 (4.6%)	28 (4.5%)	29 (4.8%)	8 (8.7%)	4 (8.2%)	4 (9.3%)
Direct trauma (penetrating)	18 (1.5%)	8 (1.3%)	10 (1.7%)	3 (3.3%)	2 (4.1%)	1 (2.3%)
Direct trauma (blunt)	84 (6.9%)	46 (7.4%)	38 (6.3%)	7 (7.6%)	6 (12.2%)	1 (2.3%)
Snowmobile accident	1 (0.1%)	0 (0.0%)	1 (0.2%)	0 (0%)	0 (0%)	0 (0%)
History of surgery on the affected lower limb† (<i>no. of patients</i>)						
Yes	73 (6.0%)	36 (5.8%)	37 (6.1%)	5 (5.4%)	2 (4.1%)	3 (7.0%)
No	1150 (94.0%)	584 (94.2%)	566 (93.9%)	87 (94.6%)	47 (95.9%)	40 (93.0%)
Smoking history† (<i>no. of patients</i>)						

Characteristic	Full One-Year Follow-up			Lost to Follow-up		
	Total (N = 1226)	Reamed (N = 622)	Unreamed (N = 604)	Total (N = 93)	Reamed (N = 49)	Unreamed (N = 44)
Current smoker	406 (33.3%)	200 (32.4%)	206 (34.2%)	40 (44.0%)	19 (39.6%)	21 (48.8%)
Previous smoker	104 (8.5%)	54 (8.7%)	50 (8.3%)	4 (4.4%)	3 (6.3%)	1 (2.3%)
Nonsmoker	711 (58.2%)	364 (58.9%)	347 (57.5%)	47 (51.6%)	26 (54.2%)	21 (48.8%)
Leg fracture history (<i>no. of patients</i>)						
Isolated						
Left	546 (44.5%)	279 (44.9%)	267 (44.2%)	49 (52.7%)	23 (46.9%)	26 (59.1%)
Right	658 (53.7%)	328 (52.7%)	330 (54.6%)	43 (46.2%)	26 (53.1%)	17 (38.6%)
Bilateral	22 (1.8%)	15 (2.4%)	7 (1.2%)	1 (1.1%)	0 (0%)	1 (2.3%)
Type of fracture history (<i>no. of patients</i>)						
Open	392 (32.0%)	202 (32.5%)	190 (31.5%)	35 (37.6%)	15 (30.6%)	20 (45.5%)
Closed	826 (67.4%)	416 (66.9%)	410 (67.9%)	58 (62.4%)	34 (69.4%)	24 (54.5%)
Both open and closed‡	8 (0.7%)	4 (0.6%)	4 (0.7%)	0 (0%)	0 (0%)	0 (0%)
Medications (<i>no. of patients</i>)						
Nonsteroidal anti-inflammatory drugs	87 (7.1%)	44 (7.1%)	43 (7.1%)	6 (6.5%)	5 (10.2%)	1 (2.3%)
Oral steroids	7 (0.6%)	4 (0.6%)	3 (0.5%)	1 (1.1%)	0 (0%)	1 (2.3%)
Anticonvulsants	32 (2.6%)	16 (2.6%)	16 (2.6%)	3 (3.2%)	0 (0%)	3 (6.8%)
Anticoagulants	153 (12.5%)	81 (13.0%)	72 (11.9%)	6 (6.5%)	3 (6.1%)	3 (6.8%)
Statins	16 (1.3%)	12 (1.9%)	4 (0.7%)	0 (0%)	0 (0%)	0 (0%)
Bone stimulators (<i>no. of patients</i>)	34 (2.8%)	13 (2.1%)	21 (3.5%)	0 (0%)	0 (0%)	0 (0%)
Isolated fractures (<i>no. of patients</i>)	825 (67.3%)	418 (67.2%)	407 (67.4%)	63 (67.7%)	36 (73.5%)	27 (61.4%)

*The values are given as the mean and the standard deviation. †Missing some data. ‡These fractures are categorized as “Open” in outcomes analyses.

TABLE E-2 Surgical Technique*

	Total (N = 1248)	Reamed Intramedullary Nail (N = 637)	Unreamed Intramedullary Nail (N = 611)
Individual who performed the majority of the surgery† (no. of patients)			
Surgeon	413 (33.7%)	211 (33.9%)	202 (33.4%)
Fellow	78 (6.4%)	39 (6.3%)	39 (6.5%)
Resident	735 (60.0%)	372 (59.8%)	363 (60.1%)
Intramedullary nail‡§ (mm)			
Length	344.6 ± 28.5	345.1 ± 29.8	344.1 ± 27.1
Diameter	9.8 ± 1.1	10.2 ± 1.0	9.2 ± 0.9
Intramedullary nail manufacturer‡ (no. of fractures)			
Zimmer	197 (15.8%)	96 (15.1%)	101 (16.6%)
Smith and Nephew/Richards	500 (40.2%)	268 (42.3%)	232 (38.1%)
Synthes	360 (29.0%)	174 (27.4%)	186 (30.5%)
Stryker/Howmedica	121 (9.7%)	63 (9.9%)	58 (9.5%)
DePuy	65 (5.2%)	33 (5.2%)	32 (5.3%)
Intramedullary nail material‡ (no. of fractures)			
Titanium	843 (67.9%)	433 (68.3%)	410 (67.4%)
Stainless steel	399 (32.1%)	201 (31.7%)	198 (32.6%)
Number of proximal locking screws‡ (no. of fractures)			
Zero	2 (0.2%)	2 (0.3%)	0 (0.0%)
One	483 (38.9%)	250 (39.4%)	233 (38.3%)
Two or more	757 (61%)	382 (60.3%)	375 (61.7%)
Number of distal locking screws‡ (no. of fractures)			
Zero	2 (0.2%)	1 (0.2%)	1 (0.2%)
One	149 (12.0%)	79 (12.5%)	70 (11.5%)
Two or more	1090 (87.8%)	554 (87.4%)	536 (88.3%)
Cortical continuity post intramedullary nail‡ (no. of fractures)			
0%	15 (1.2%)	9 (1.4%)	6 (1.0%)
25%	116 (9.3%)	65 (10.2%)	51 (8.4%)
50%	187 (15.0%)	86 (13.5%)	101 (16.6%)
75%	464 (37.2%)	234 (36.7%)	230 (37.8%)
100%	464 (37.2%)	243 (38.1%)	221 (36.3%)

	Total (N = 1248)	Reamed Intramedullary Nail (N = 637)	Unreamed Intramedullary Nail (N = 611)
Postoperative fracture gap†‡ (no. of patients)			
≥1 cm	37 (3.0%)	15 (2.4%)	22 (3.6%)
<1 cm	100 (8.2%)	63 (10.1%)	37 (6.1%)
No gap	1088 (88.8%)	544 (87.5%)	544 (90.2%)
Time to do intramedullary nailing‡# (min)	75 (55 to 105)	75 (55 to 109)	75 (55 to 100)
Time to surgery from injury‡# (min)	960 (420 to 1920)	957 (420 to 1715)	960 (420 to 2160)
Additional procedures† (no. of patients)			
Yes	310 (25.3%) of 1226	166 (26.7%) of 622	144 (23.8%) of 604
Fixation of other lower extremity fracture	132 (42.6%) of 310	74 (44.6%) of 166	58 (40.3%) of 144
Fixation of upper extremity fracture	65 (21.0%) of 310	30 (18.1%) of 166	35 (24.3%) of 144
Fixation of pelvic/acetabular	17 (5.5%) of 310	11 (6.6%) of 166	6 (4.2%) of 144
Upper extremity amputation	0 (0.0%) of 310	0 (0.0%) of 166	0 (0.0%) of 144
Fixation of non-eligible tibial fracture	27 (8.7%) of 310	12 (7.2%) of 166	15 (10.4%) of 144
Laparotomy	8 (2.6%) of 310	3 (1.8%) of 166	5 (3.5%) of 144
Lower extremity amputation	2 (0.6%) of 310	1 (0.6%) of 166	1 (0.7%) of 144
Craniotomy	4 (1.3%) of 310	4 (2.4%) of 166	0 (0.0%) of 144
Spine fracture	4 (1.3%) of 310	3 (1.8%) of 166	1 (0.7%) of 144
Removal of hardware	7 (2.3%) of 310	3 (1.8%) of 166	4 (2.8%) of 144
Other wound closure	91 (29.4%) of 310	53 (31.9%) of 166	38 (26.4%) of 144
Fixation of facial fracture	2 (0.6%) of 310	1 (0.6%) of 166	1 (0.7%) of 144
Drain insertion	1 (0.3%) of 310	0 (0.0%) of 166	1 (0.7%) of 144
Knee dislocation repair	2 (0.6%) of 310	0 (0.0%) of 166	2 (1.4%) of 144

*Based on 1248 fractures in 1226 patients. †Based on 1226 patients (not on 1248 fractures). ‡Missing some data. §The values are given as the mean and the standard deviation. #The values are given as the median, with the interquartile range in parentheses.

TABLE E-3 Comparison of SPRINT Overall Event Rates with Previous Trials

Author, Year	Reoperations (<i>no. of patients</i>)					Composite Reoperation (<i>no. of patients</i>)	
	Bone Graft or Implant Exchange for Nonunion or Failure	Fasciotomy for Compartment Syndrome	Infection Irrespective of Fracture Gap	Dynamization		Not Including Dynamizations	Including Dynamizations
				In Operating Room	Autodynamization		
Court-Brown, 1996 (n = 50)	6 (12%)	5 (10%)	0 (0%)	0 (0%)	14 (28%)	11 (22%)	25 (50%)
Blachut, 1997 (n = 136)	13 (9%)	3 (2.2%)	1 (0.7%)	37 (27%)	0 (0%)	17 (13%)	54 (40%)
Keating, 1997 (n = 88)	9 (10%)	3 (3%)	3 (3%)	0 (0%)	16 (18%)	15 (17%)	31 (35%)
Finkemeier, 2000 (n = 83 [n = 58 with 1-yr follow-up])	7 (12%)	3 (5%)	4 (7%)	0 (0%)	6 (10%)	14 (24%)	20 (34%)
Larsen, 2004 (n = 45)	1 (2%)	8 (18%)	0 (0%)	16 (36%)	4 (9%)	9 (20%)	29 (64%)
Random-effects pooled estimate	10.6%	7.0%	3.2%	13.2%	13.9%	18.4%	44.1%
Current trial (n = 1226)	60 (5%)	22 (2%)	51 (4%)	60 (5%)	58 (5%)	133 (11%)	219 (18%)