

TABLE E-1 Patient Characteristics and Incidence of Potential Predictors

Characteristic	No. of Patients*
Patient factors	
Mean age (and standard deviation)† (yr)	39.5 ± 16.0
Sex	
Male	904 (73.7%)
Female	322 (26.3%)
Race	
White	986 (80.4%)
Black	109 (8.9%)
Hispanic	46 (3.8%)
Asian	33 (2.7%)
Native	23 (1.9%)
Other	29 (2.4%)
Mechanism of injury†	
High-energy injuries	796 (64.9%)
Motor-vehicle accident	256 (20.9%)
Pedestrian-motor-vehicle accident	248 (20.2%)
Motorcycle accident	143 (11.7%)
Direct blunt trauma	84 (6.9%)
Crush injury	64 (5.2%)
Snowmobile accident	1 (0.1%)
Low-energy injuries	430 (35.1%)
Fall	355 (29.0%)
Twist	57 (4.6%)
Direct penetrating trauma	18 (1.5%)
Previous surgery to affected limb‡ (n = 1223)	
Yes	73 (6.0%)
No	1150 (94.0%)
Smoking history†‡	
Current smoker	406 (33.3%)
Previous smoker	104 (8.5%)
Nonsmoker	711 (58.2%)
Side of fracture	
Left (isolated)	546 (44.5%)
Right (isolated)	658 (53.7%)
Bilateral	22 (1.8%)
Type of fracture†	
Open	392 (32.0%)
Closed	826 (67.4%)
Both open and closed§	8 (0.7%)
Medications	
Nonsteroidal anti-inflammatory medication†	87 (7.1%)
Oral steroids	7 (0.6%)

Characteristic	No. of Patients*
Anticonvulsants	32 (2.6%)
Anticoagulants	153 (12.5%)
Statins	16 (1.3%)
Bone stimulators#	34 (2.8%)
Isolated fractures†**	825 (67.3%)
AO/OTA fracture classification ⁴⁻⁶ †	
A	687 (56.0%)
B	362 (29.5%)
C	177 (14.4%)
Location of fracture†‡ (n = 1216)	
Proximal and proximal-middle	131 (10.8%)
Distal and distal-middle	792 (65.1%)
Middle	293 (24.1%)
Surgical factors	
Reamed intramedullary nailing†	622 (50.7%)
Intervention by fracture type†	
Open and reamed	206 (16.8%)
Open and unreamed	194 (15.8%)
Closed and reamed	416 (33.9%)
Closed and unreamed	410 (33.4%)
Nail material†‡ (n =1220)	
Stainless steel	388 (31.8%)
Titanium	832 (68.2%)
Number of locking screws†‡ (n =1220)	
≥2 on both sides	699 (57.3%)
<2 on at least 1 side	521 (42.7%)
Fracture gap (adjudicated)†‡ (n =1225)	
Gap of ≥1 cm	37 (3.0%)
Gap of <1 cm	100 (8.2%)
No gap	1088 (88.8%)
Time from injury to surgery†‡ (n =1218)	
Late (>24 h)	405 (33.3%)
Middle (6-24 h)	606 (49.8%)
Early (<6 h)	207 (17.0%)
Postoperative weight-bearing status†‡ (n =1224)	
Full	117 (9.6%)
Partial or non-weight-bearing	1107 (90.4%)
Type of coverage†	
Primary closure	239 (19.5%)
Delayed primary closure	100 (8.2%)
Additional soft-tissue reconstruction	61 (5.0%)
Closed fracture	826 (67.4%)

*Data are based on all 1226 patients who completed one year of follow-up. †Factors included in the predictors analysis. AO/OTA = Arbeitsgemeinschaft für Osteosynthesefragen/Orthopaedic Trauma Association. ‡Missing some data. §Fractures classified as “open” in outcomes analyses and that are bilateral injuries. #Some centers violated the prohibition of using bone stimulators during the one-year follow-up. **No other appendicular long-bone injuries.