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Table S1A. List of adverse events that occurred in the arthrodesis group (N=23), the adverse event category, and the time from surgery the event occurred.

AE	Description	Category	Time since surgery (days)
1	takedown, rebone grafting and additional fixation	1	182
2	revision	1	585
3	fusion takedown, conversion to TAA **	1	334
4	revision, subtalar arthrodesis and bone graft	1	203
5	fusion of non-union	1	174
6	incision and drainage for wound infection	2	7
7	incision and drainage for osteomyelitis and deep infection	2	25
8	incision and drainage with hardware removal	2	203
9	revision for loosening of midfoot joint	2	90
10	revision	2	221
11	revision with hardware removal	2	436
12	revision for nonunion	2	556
13	revision for nonunion	2	16
14	revision for nonunion	2	116
15	revision for nonunion	2	158
16	revision for nonunion	2	462
17	hardware removal	2	329
18	revision for partial union	2	512
19	delayed union	3	283
20	osteomyelitis	3	30
21	nonunion	3	114
22	cellulitis	3	162
23	hardware removal	3	518

*Category (1= major revisions defined as reoperation requiring non-weight bearing and/or removal of the implant; 2= minor revisions defined as reoperation not requiring non-weight bearing (and no implant removal); 3= minor complications that did not require a reoperation).

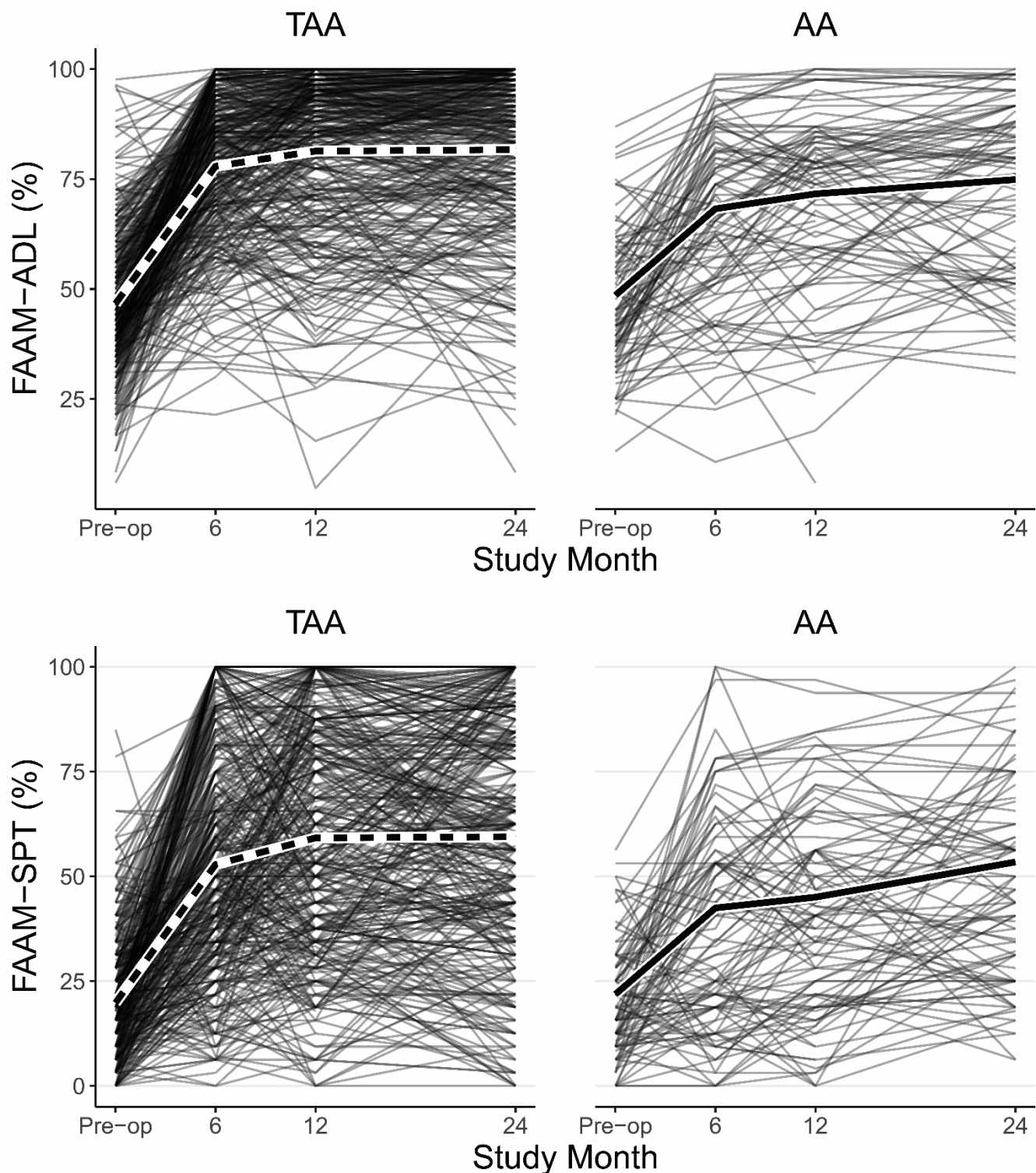
** this patient had a successful ankle fusion. Requested TAA but insurance company denied it leading to successful ankle fusion. Patient did not like the lack of motion and had an elective takedown and arthroplasty at another institution. We included it as an adverse event because it occurred during the study period.

Table S1B. List of adverse events that occurred in the arthroplasty group (N=48), the adverse event category, and the time from surgery the event occurred.

Arthroplasty (N=48)			
AE	Description	Category	Time since surgery (days)
1	revision	1	730
2	revision	1	434
3	below knee amputation due to severe wound infection	1	38
4	revision	1	616
5	revision	1	552
6	revision due to tibial subsidence (cause by infection)	1	364
7	revision	1	287
8	removal of implant & hardware	1	336
9	revision for tibial fracture	1	98
10	removal of implant & hardware	1	406
11	removal of implant & hardware	1	700
12	fracture repair	1	290
13	surgery planned calcaneal osteotomy + posterior tibial tendon repair	1	259
14	lateral ankle arthrotomy with cheilectomy of the lateral talus, fibula, and calcaneus (gutter debridement)	2	490
15	revision for implant loosening	2	246
16	revision for implant loosening	2	62
17	revision for wound infection	2	42
18	revision to shave fibula, joint cleaned of impingement	2	645
19	revision from screw backing-out with fibula stabilization	2	510
20	revision for tendon transfer and debridement	2	239
21	hardware exchange due to infected and non-healing surgical wound	2	27
22	revision of tibia with external fixation	2	377
23	removal of implant & hardware	2	200
24	revision for lateral displacing osteotomy	2	1
25	revision with medial debridement	2	365
26	revision for arthrofibrosis	2	632
27	revision for talar subsidence	2	299
28	incision and drainage	2	498
29	revision for bone spur removal subtalar joint	2	511
30	revisions for tarsal tunnel release	2	409
31	implant loosening	3	220
32	cellulitis	3	19
33	incision and drainage	3	2
34	intraoperative fracture	3	0
35	intraoperative fracture	3	0

36	intraoperative fracture	3	0
37	intraoperative fracture	3	0
38	tarsal tunnel syndrome	3	116
39	cellulitis	3	18
40	cellulitis	3	650
41	cellulitis	3	47
42	medial malleolus fracture	3	309
43	staphylococcus infection	3	31
44	cellulitis	3	20
45	medial malleolus fracture	3	37
46	medial malleolus fracture	3	0
47	broken screws	3	351
48	tarsal tunnel release	3	280

*Category (1= major revisions defined as reoperation requiring non-weight bearing and/or removal of the implant; 2= minor revisions defined as reoperation not requiring non-weight bearing (and no implant removal); 3= minor complications that did not require a reoperation).



Supplementary Figures 1A and 1B: (A) FAAM-ADL % and (B) FAAM-SPORT % by study visit and surgery type. Each gray line indicates a single participant trajectory. Black lines indicate estimated average trajectory based on linear mixed effects regression of outcome on visit, surgery type and visit by surgery type interaction.*
 *All models included confounders for age, sex, and BMI. Additional confounders include ESAA cause, and previous surgery history for FAAM-ADL, and employment for FAAM-SPORT.

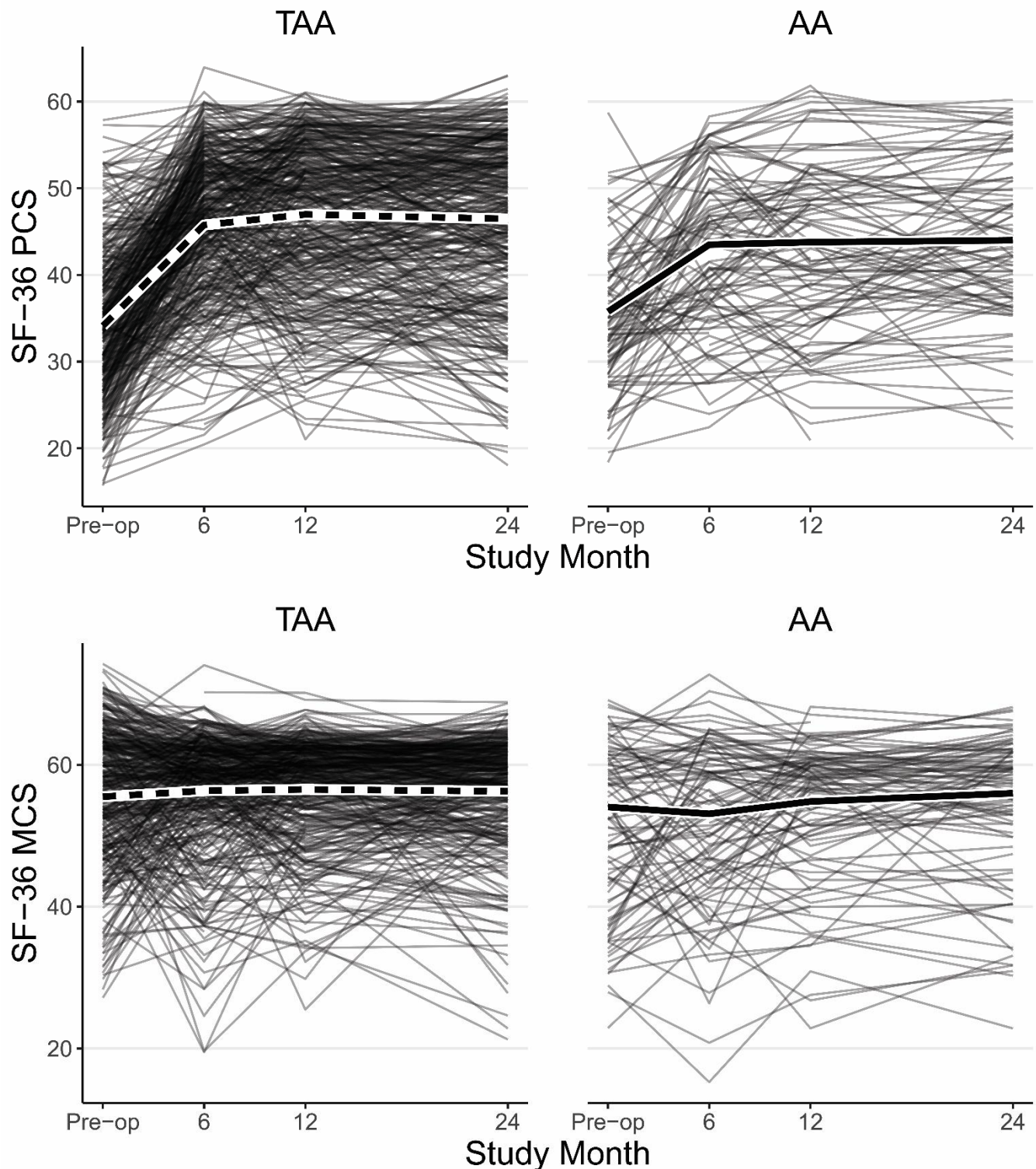
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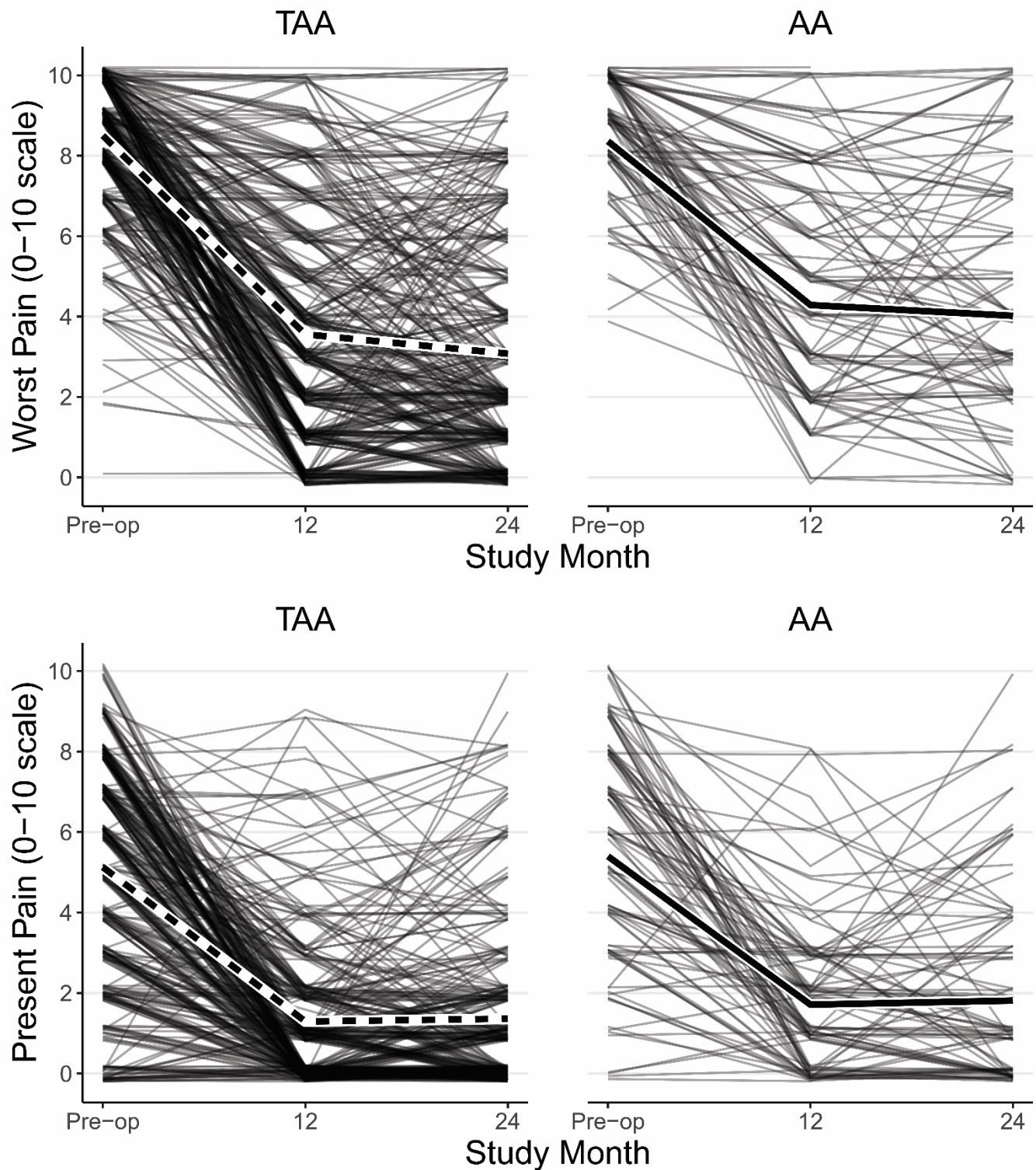
EFFECTIVENESS AND SAFETY OF ANKLE ARTHRODESIS VERSUS ARTHROPLASTY. A PROSPECTIVE MULTICENTER STUDY

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Supplementary Figures 2A and 2B: (A) SF-36 PCS and (B) SF-36 MCS scores by study visit and surgery type. Each gray line indicates a single participant trajectory. Black lines indicate estimated average trajectory based on linear mixed effects regression of outcome on visit, surgery type and visit by surgery type interaction.*
*All models included confounders for age, sex, and BMI. Additional confounders include employment, depression and/or anxiety history and current smoking use for SF-36 MCS.



Supplementary Figures 3A and 3B: (A) Worst pain and (B) Present pain by study visit and surgery type. Each gray line indicates a single participant trajectory. Black lines indicate estimated average trajectory based on linear mixed effects regression of outcome on visit, surgery type and visit by surgery type interaction.*

*All models included confounders for age, sex, and BMI. Additional confounders include previous surgery and/or anxiety history, FCI and smoking use for current pain.