

TABLE E-1 Overview of each patient with pertinent data: sex (M/F); age in years; medial or lateral allograft (MMT/LMT); concomitant procedure (CON PROC): high tibial osteotomy (HTO), femoral varus osteotomy (FVOS), anterior cruciate repair (ACL), osteochondral plug transfer (OPT), microfracture (M#); cartilage status according to Outerbridge pre-transplant (CART PRE); femorotibial mechanical axis (AXIS expressed in degrees); follow-up time (FU expressed in years); failure (F); COMMENT: total knee prosthesis (TKP), unicompartmental knee prosthesis (UKP), suture for allograft-capsular detachment (SUTURE), unrelated death (†); meniscus status at time of failure (MEN POST; severe, minor, normal); cartilage status according to Outerbridge at time of failure (CART POST).

CASE	SEX	AGE	MMT/LMT	CON PROC	CART PRE	AXIS	FU	FAILURE	COMMENT	MEN POST	CART POST
1	M	34	MMT	HTO	3/4	14	14.54				
2	M	48	MMT	HTO	2	3	14				
3	M	37	MMT	HTO	2/3	5	13.95				
4	M	35	LMT	-	3/4	7	13.95				
5	M	34	MMT	-	2	0	13.63				
6	M	28	MMT	-	3/4	3	13.39	F	TKP	Severe	5
7	M	32	LMT	-	1	8	12.88				
8	M	30	LMT	-	1/2	5	12.58				
9	M	32	MMT	HTO	4	6	11.79				
10	F	40	MMT	HTO	2	6	11.78				
11	F	27	LMT	-	2/3	7	11.72				
12	F	26	MMT	-	3/4	4	11.66				
13	M	31	MMT	-	3	4	11.3	F	UKP	Severe	5
14	M	39	MMT	-	2/3	4	11.26				
15	M	29	MMT	-	1/2	8	11.25				
16	M	31	MMT	HTO	2/3	8	11.02				
17	M	32	MMT	HTO	4	8	10.88				
18	M	36	MMT	-	2/3	0	10.72		†		
19	M	36	MMT	-	2/3	4	10.42				
20	M	42	MMT	HTO	3/4	5	10.35				
21	M	31	LMT		4	5	10.35				
22	M	38	MMT	HTO	1/2	8	10.33				
23	F	40	LMT	FVOS	4	0	10.23				
24	M	43	MMT	ACL	4	3	10.06				
25	F	29	LMT	-	1/2	2	10.05				
26	M	31	MMT	-	3/4	2	9.87				
27	M	22	MMT	ACL	1/2	4	9.87				
28	M	39	LMT	-	1	6	9.73				
29	M	50	LMT	-	4	8	9.72				
30	M	36	LMT	-	3/4	10	9.67	F		Severe	4
31	M	45	LMT	-	3	8	9.67				
32	M	45	LMT	-	4	7	9.42				
33	M	50	LMT	-	4	8	9.36				
34	M	31	MMT	-	1/2	4	9.09				
35	M	37	LMT	-	3/4	9	8.99				
36	M	41	LMT	-	1/2	4	8.98				
37	M	33	MMT	HTO	2/3	5	8.95				
38	M	29	LMT	-	4	9	8.78				
39	M	32	MMT	-	2/3	6	8.32				
40	M	40	MMT	-	1/2	8	8.32				
41	M	32	LMT	-	3/4	8	8.24				
42	F	33	LMT	-	3	10	7.93				
43	M	33	LMT	-	3	6	7.85	F	TKP	Severe	5
44	M	37	MMT	-	3	2	7.77	F		Severe	3
45	F	31	LMT	HTO	2/3	10	7.77				
46	F	38	MMT	-	1/2	7	7.75				
47	F	39	MMT	-	2/3	2	7.62	F		Minor	3
48	M	43	LMT	-	4	7	7.5				
49	F	30	LMT	-	2/3	7	7.42				

50	F	34	LMT	-	2/3	3	7.3					
51	F	45	LMT	-	1/2	7	6.65					
52	M	33	LMT	-	2/3	8	6.65					
53	F	30	LMT	-	1/2	7	6.45					
54	M	40	LMT	HTO	2/3	8	6.29					
55	M	29	LMT	-	1/2	4	6.06					
56	M	50	LMT	-	1/2	7	5.99	F	TKP	Minor	5	
57	M	28	LMT	-	2	6	5.87					
58	F	29	LMT	-	2/3	5	5.85					
59	F	33	LMT	-	1/2	3	5.71					
60	F	16	LMT	-	0	6	5.71					
61	M	38	LMT	OPT	3/4	8	5.71					
62	F	44	MMT	HTO	3/4	8	5.7	F	TKP	Severe	5	
63	M	23	LMT	-	2/3	4	5.46	F		Minor	3	
64	M	36	MMT	HTO	3	10	5.37	F	TKP	Severe	5	
65	M	38	LMT	-	2/3	5	5.37					
66	M	30	LMT	-	1/2	6	5.28					
67	F	27	LMT	-	2	9	5.15	F		Minor	3	
68	M	25	LMT	OPT	1/2	10	5					
69	M	46	LMT	-	2/3	8	4.8	F	TKP	Minor	5	
70	M	37	LMT	-	2	7	4.75					
71	M	27	LMT	-	1/2	2	4.55	F		Minor	3	
72	M	35	LMT	-	2/3	5	4.42					
73	M	46	MMT	-	2/3	8	4.25	F	TKP	Minor	3	
74	M	24	LMT	OPT	3/4	7	4.2					
75	M	35	LMT	-	1/2	8	4.17					
76	F	40	LMT	-	3	4	4.08					
77	F	33	LMT	FVOS	3/4	2	4.02					
78	F	35	MMT	-	2/3	7	4.02					
79	M	38	LMT	-	2/3	6	3.85					
80	M	42	LMT	-	1/2	5	3.79					
81	M	40	MMT	-	1/2	5	3.78	F	TKP	Minor	5	
82	F	39	LMT	-	2	3	3.6					
83	M	35	LMT	-	3	4	3.47					
84	F	36	LMT	-	1	7	3.3					
85	F	17	LMT	OPT	4	8	3.25					
86	M	38	MMT	-	1/2	6	3.25					
87	M	32	MMT	M#	2/3	3	2.93					
88	M	39	LMT	M#	3/4	2	2.93					
89	M	35	MMT	ACL	2/3	4	2.76	F		Minor	2/3	
90	M	35	LMT	M#	2/3	9	2.73					
91	M	36	MMT	HTO	3/4	6	2.5					
92	M	21	LMT	-	2/3	3	2.5					
93	M	42	LMT	-	1/2	5	2.48	F		Minor	2	
94	M	33	MMT	-	3/4	4	2.4		†			
95	M	29	MMT	-	1/2	6	2.3	F	SUTURE	Minor	2	
96	F	32	LMT	-	2/3	2	2.18					
97	F	40	LMT	-	2/3	10	2.18					
98	M	36	LMT	-	2/3	3	1.48	F	SUTURE	Normal	2/3	
99	M	40	MMT	-	2	6	1.18	F	TKP	Minor	5	
100	M	44	LMT	-	4	4	0.47	F		Severe	4	

Table E-2.

Modified HSS scoring system. The system is subdivided into a knee score that rates only the knee joint itself (max. 100 points) with regard to pain (max. 50 points), range of motion (max. 25 points) and stability (max. 25 points). Flexion contracture, extension deficit and malalignment are dealt with as deductions. Additionally, a daily functional score (max. 100 points) rates the patient's ability to walk (max. 50 points) and to climb stairs (max. 50 points), with deductions for walking aids.

: the pain score and functional score of the modified HSS system were used for the survival analysis.

KNEE SCORE

PAIN	POINTS
None	50
Mild or occasional	45
Stairs only	40
Walking & stairs	30
Moderate	
Occasional	20
Continual	10
Severe	0

RANGE OF MOTION

(5°=1 point) 25

STABILITY

Anteroposterior	
<5mm	10
5-10mm	5
10mm	0
Mediolateral	
<5°	15
6°-9°	10
10°-14°	5
15°	0

SUBTOTAL

DEDUCTIONS

Flexion contracture	
5°-10°	2
10°-15°	5
16°-20°	10
>20°	15
Extension lag	
<10°	5
10-20°	10
>20°	15
Alignment	
5-10°	0
0-4°	3 points each degree
11-15°	3 points each degree
other	20

TOTAL DEDUCTIONS

KNEE SCORE

FUNCTION SCORE

WALKING	POINTS
unlimited	50
> 10 blocks	40
5-10 blocks	30
< 5 blocks	20
housebound	10
unable	0

STAIRS

normal up&down	50
normal up, down with rail	40
up & down with rail	30
up with rail;unable down	15
unable	0
SUBTOTAL	

DEDUCTIONS

cane	5
two canes	10
crutches or walker	20

TOTAL DEDUCTIONS

FUNCTION SCORE

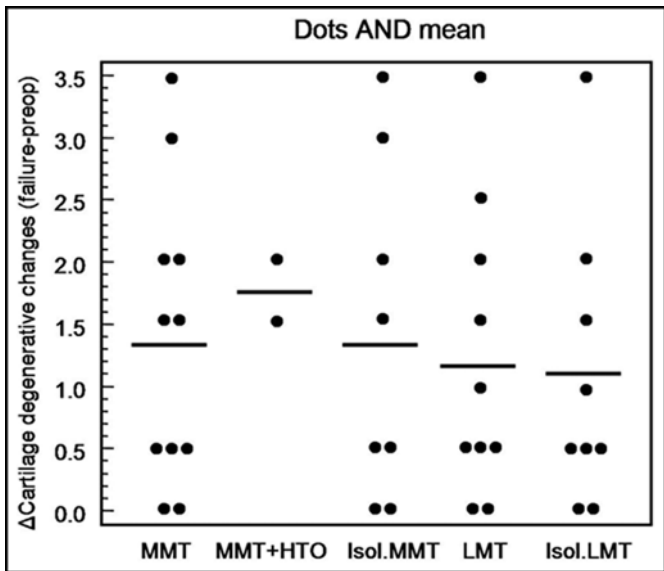


Fig. E1-A

Fig. E1-A and E1-B Scatterplots of failures. Abscissa = subgroups (MMT = total group of medial meniscal allografts, MMT+HTO = medial meniscal allografts transplanted in combination with a high tibial osteotomy, Isol.MMT = isolated medial meniscal allografts, LMT = total group of lateral meniscal allografts, and Isol.LMT = isolated lateral meniscal allografts). **Fig. E1-A** Ordinate = change in grade of articular cartilage degeneration according to the Outerbridge¹³ scale, which was calculated by subtracting the Outerbridge grade of the articular cartilage at the time of transplantation from the grade at the time of failure.

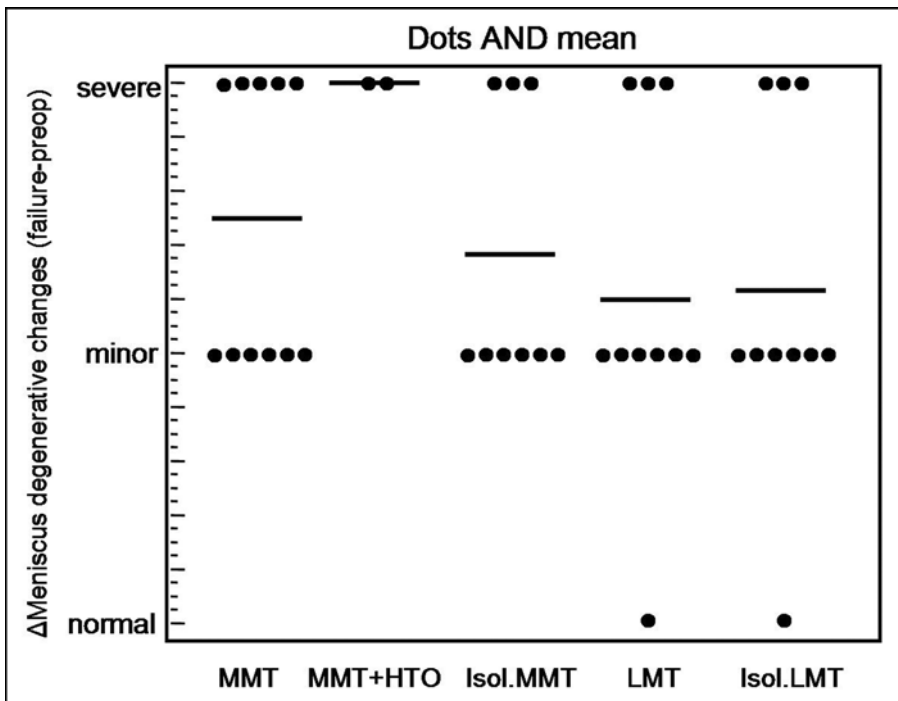


Fig. E1-B

Ordinate = change in the grade of the meniscal allograft degeneration, which was calculated by subtracting the grade for the meniscal allograft at the time of transplantation (normal, or 0 points) from the grade at the time of failure. Normal appearance = 0, minor degenerative changes = 1, and severe degeneration = 2. The dots represent cases, and the bar represents the mean change.