

Table 4 - Short-term and longer-term prediction of response to IASI in subsample[†]

Predictor Variable in Regression	Short-Term Responder (Yes/No)	Longer-Term Responder (Yes/No)
	Relative Risk (95% CI)	Relative Risk (95% CI)
Previous ligament/meniscus injuries, frequency (%)		
No	Reference category	Reference category
Yes	0.63 (0.44 to 0.91)	0.86 (0.35 to 2.10)
Crepitus ^a		
Absent	Reference category	Reference category
Audible and/or palpable	1.17 (0.66 to 2.08)	1.33 (0.21 to 8.26)
Quadriceps Muscle Wasting ^a		
Absent	Reference category	Reference category
Possible	1.37 (1.05 to 1.79)	2.01 (0.62 to 6.53)
Present	1.10 (0.83 to 1.47)	1.75 (0.63 to 4.87)
Bony Enlargement ^a		
Absent	Reference category	Reference category
Unsure	1.05 (0.76 to 1.46)	0.55 (0.08 to 3.57)
Present	0.86 (0.68 to 1.09)	0.68 (0.30 to 1.52)
Anserine Tenderness		
Absent	Reference category	Reference category
Present	1.27 (1.06 to 1.52)	1.14 (0.50 to 2.59)
Patellofemoral Tenderness		
Absent	Reference category	Reference category
Present	1.27 (1.04 to 1.55)	0.97 (0.46 to 2.06)
Tibiofemoral Tenderness		
Absent	Reference category	Reference category
Lateral tibiofemoral Joint	1.26 (0.86 to 1.84)	2.51 (0.91 to 6.96)
Medial tibiofemoral Joint*	1.42 (1.10 to 1.82)	1.22 (0.45 to 3.27)
Medial & lateral tibiofemoral joint	1.38 (1.03 to 1.84)	1.96 (0.73 to 5.31)
Ballottement		
Absent	Reference category	Reference category
Present with or without click	0.83 (0.61 to 1.12)	0.32 (0.08 to 1.27)
Bulge Sign ^a		
0	Reference category	Reference category
Trace	1.00 (0.79 to 1.26)	1.00 (0.42 to 2.36)
1	0.94 (0.68 to 1.30)	0.55 (0.13 to 2.29)
2	0.83 (0.54 to 1.28)	1.09 (0.35 to 3.47)
3	0.83 (0.37 to 1.89)	1.46 (0.26 to 8.08)
Quadriceps Muscle Strength (Nm/kg)	0.92 (0.74 to 1.16)	1.45 (0.73 to 2.85)
Knee Range of Movement (degrees)		
Flexion (0°-180°)	1.00 (0.99 to 1.01)	1.01 (0.98 to 1.04)
Extension (0°-180°)	1.00 (0.98 to 1.02)	1.01 (0.94 to 1.09)

[†]N=101 in all variables apart quadriceps muscle strength where N=98 due to size of limb being too large to allow testing in 3 participants. [‡]Further testing done using pairwise comparisons for equality by creating dummy variable coding confirms non-significance. ^{*}Further testing done using pairwise comparisons for equality by creating dummy variable coding confirms medial tibiofemoral joint tenderness improved response at short-term only.

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Supplementary Table 1 - Baseline characteristics in those without and with additional clinical assessment

Variable	Participants with no added clinical assessment	Participants with additional clinical assessment
Number	98	101
Age (years), mean (SD)	62.3 (10.2)	63.3 (10.5)
Females, frequency (%)	50 (51.0)	55 (54.5)
Number of days to follow up appointment, median (IQR)	8.0 (7.0 to 14.0)	8.0 (7.0 to 14.0)
KOOS pain subscale score (0-100)*, median (IQR)	45.8 (38.9 to 58.3)	41.7 (36.1 to 52.8)
Pain on nominated activity VAS (0-10)**, median (IQR)	6.9 (5.6 to 7.7) ^a	7.1 (5.8 to 8.4) [†]
Pain in last week VAS (0-10)**, median (IQR)	6.4 (4.6 to 7.8) ^a	6.6 (5.1 to 8.2) [†]
No. of responders to injection, at follow-up visit, frequency (%)	68 (69.4)	78 (77.2)

*KOOS pain subscale is scored from 100 (no pain) to 0 (extreme pain); **VASs are scored from 0 (no pain) to 10 (pain as bad as you can imagine); ^a5 and 2 participants neglected to complete their pain on nominated activity VAS and pain in last week VAS, respectively; [†]4 and 2 participants neglected to complete their pain on nominated activity VAS and pain in last week VAS, respectively; SD = Standard Deviation; IQR = Interquartile Range

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Supplementary Table 2 – Multivariable Model^A Retaining Variables Associated with Short-Term Response to IASI

Predictor Variable in Regression	Short-term responder (Yes/No)	
	Relative Risk (95% CI)	
Psychological factors		
IPQ-B Treatment Score (0-10)		0.97 (0.93 to 1.02)
Treatment-Related Factors		
Synovial Fluid Aspiration (yes vs no [ref.])		0.95 (0.77 to 1.19)
Clinical Factors		
Previous ligament/meniscus injuries, frequency (%)		0.62 (0.43 to 0.90)
Quadriceps Muscle Wasting ^a		
	Absent	Reference category
	Possible	1.38 (1.08 to 1.78)
	Present	1.08 (0.83 to 1.42)
Anserine Tenderness		
	Absent	Reference category
	Present	1.12 (0.95 to 1.32)
Patellofemoral Tenderness		
	Absent	Reference category
	Present	1.20 (0.99 to 1.46)
Tibiofemoral Tenderness		
	Absent	Reference category
	Lateral tibiofemoral Joint	1.06 (0.76 to 1.49)
	Medial tibiofemoral Joint	1.16 (0.89 to 1.52)
	Medial & lateral tibiofemoral joint	1.18 (0.89 to 1.56)

N=95 due to complete case analysis. ^aPoisson regression using robust standard errors

Supplementary Table 3 - Longer-term prediction of response to IASI: Number of pain sites, depression and IPQ-B Timeline Score as categorical variables

Predictor Variable in Regression	Longer-term responder (Yes/No)	
	N	Risk Ratio (95% CI)
Number of Pain Sites (range 0-10)	177	Reference category
	<2	1.11 (0.50 to 2.46)
	≥2 to <5	0.44 (0.16 to 1.25)
HAD – Depression (0-21)	170	Reference category
	<3	0.61 (0.30 to 1.27)
	≥3 to <6	0.44 (0.21 to 0.93)
IPQ-B Timeline Score (0-10)	172	Reference category
	<8	0.82 (0.38 to 1.76)
	≥8 to <10	0.51 (0.25 to 1.05)

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Supplementary Table 4 – Multivariable Model[^] Retaining Variables Associated with Longer-Term Response to IASI

Predictor Variable in Regression	Longer-term responder (Yes/No) Relative Risk (95% CI)
Symptoms	
Number of Pain Sites (range 0-10)	0.94 (0.75 to 1.18)
Chronic Widespread Pain (ACR)	0.41 (0.10 to 1.72)
Psychological factors	
HAD – Depression (0-21)	0.94 (0.84 to 1.05)
IPQ-B Timeline Score (0-10)	0.89 (0.81 to 0.99)

N=141 due to complete case analysis. [^]Log-binomial model

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