Supplementary material

Table i. Sensitivity analysis of included studies based on risk of bias and the predominant surgical procedure performed within the trial

	Studies where surgery was arthroplasty for > 80% of studies		**Studies where surgery was fixation for > 80% of studies**		**Studies with unclear risk of bias**		**Studies with high risk of bias**	
Outcome of interest	**Fixed effects model**	**Random effects model**	**Fixed effects model**	**Random effects model**	**Fixed effects model**	**Random effects model**	**Fixed effects model**	**Random effects model**
Constant score at 24 mths								
Studies (n)	1		2		3		0	
Patients (n)	49		95		144		-	-
MD (95% CI)	–1.30 (-11.67 to 9.07)	-1.30 (-11.67 to 9.07)	0.55 (-7.98 to 9.07)	0.55 (-7.98 to 9.07)	–0.20 (-6.78 to 6.39)	–0.20 (-6.78 to 6.39)	-	-
p-value	0.81	0.81	0.90	0.90	0.95	0.95	-	-
Heterogeneity within group	-	-	I^2 = 0%	I^2 = 0%	I^2 = 0%	I^2 = 0%	-	-
Heterogeneity between groups (fixed effects, random effects)	I^2 = 0%, I^2 = 0%,				-			
Quality of life assessment at 24 mths								
Studies (n)	1		3		4		-	
Patients (n)	49		294		357		-	
MD (95% CI)	0.16 (0.04 to 0.28)	0.16 (0.04 to 0.28)	0 (-0.07 to 0.07)	0 (-0.07 to 0.07)	0.05 (-0.01 to 0.11)	0.06 (-0.04 to 0.17)	-	-
p-value	**0.007 (favour surgery)**	**0.007 (favour surgery)**	0.92	0.92	0.14	0.22	-	-
Heterogeneity within group	-	-	I^2 = 0%	I^2 = 0%	**I^2 = 55%**	**I^2 = 55%**	-	-
Heterogeneity between groups (fixed effects, random effects)	I^2 = 12.3%, I^2 = 12.3%				-			
Re-operation or secondary surgery								
Studies (n)	3		4		5		2	
Patients (n)	137		397		463		70	
OR (95% CI)	2.34 (0.51 to 10.82)	2.28 (0.47 to 11.05)	1.98 (1 to 3.93)	2.78 (0.74 to 10.49)	1.96 (1.02 to 3.76)	2.30 (0.82 to 6.45)	3.18 (0.31 to 32.06)	3.18 (0.31 to 32.06)
p-value	0.28	0.30	0.05	0.13	**0.04 (favour conservative)**	0.11	0.33	0.33
Heterogeneity within group	I^2 = 0%	I^2 = 0%	**I^2 = 47%**	**I^2 = 47%**	**I^2 = 33**	**I^2 = 33**	I^2 = 0%	I^2 = 0%
Heterogeneity between groups (fixed effects, random effects)	I^2 = 0%, I^2 = 0%				I^2 = 0%, I^2 = 0%			
Adverse events (AVN, Post-traumatic OA, non/malunion)								
Studies (n)	3		4		5		2	
Patients (n)	137		397		463		70	
OR (95% CI)	0.13 (0.04 to 0.48)	0.14 (0.04 to 0.51)	0.73 (0.40 to 1.34)	0.73 (0.39 to 1.34)	0.42 (0.24 to 0.74)	0.44 (0.22 to 0.86)	2.27 (0.36 to 14.19)	2.27 (0.36 to 14.19)
p-value	**0.002 (favour surgery)**	**0.003 (favour surgery)**	0.31	0.31	**0.003 (favour surgery)**	**0.02 (favour surgery)**	0.38	0.38
Heterogeneity	I^2 = 0%	I^2 = 0%	I^2 = 0%	I^2 = 0%	I^2 = 19%	I^2 = 19%	*	*
Heterogeneity between groups (fixed effects, random effects)	**I^2 = 82.2%. I^2 = 80.4%**				**I^2 = 65.9, I^2 = 63%**			