



Supplementary materials

Table 1. Primer sets used for quantitative real-time PCR.

Gene	Forward Primer (5'–3')	Reverse Primer (5'–3')
18 S	CGGCTACCACATCCAAGGAA	GCTGGAATTACCGCGGCT
TNF- α	TGCTTGTTCCTCAGCCTCTT	GGGCTACAGGCTTGCA
IL-6	TTCGGTACATCCTCGACG	AAGCATCCATCTTTTTCAGC
MCP-1	CCCCAGTCACCTGCTGTTAT	TGGAATCCTGAACCCACTTC
PPAR γ	ACCCAGAAAGCGATTCTTCA	AGTGGTCTTCCATTACGGAGAGATC
Leptin	GTGCGGATTCTTGTGGCTTT	GGAATGAAGTCCAAACCGGTG
Adiponectin	CCTGGTGAGAAGGGTGAGAA	CAATCCCACACTGAATGCTG
FABP-4	GAAAGTCAAGAGCACCATAACC	CCACCACCAGTTTATCATCC
VEGF	TCACCATGCAGATTATGCGGA	TGTTGTGCTGTAGGAAGCTCA
COLI	GAGAGCATGACCGATGG	GTGACGCTGTAGGTGAA
COLIII	GCAGGGTCTCCTGGTTCAAA	CGGGACCCATTTTCGCCTTTA
COLVI	AAGGAGAACCTGGGAGGAAA	ACAGCGCTTCTCACAGTCG
GPNMB	CCCCTTCTTTAGGACCTGCTG	GTGATGGTGGCTTGAAAGTGG
ITH5	TCCTCAGGCTGGTCTCTGAT	GATGACTCTGCTCGGTGTGA
SERPIN2	CTTTGAGGATCCAGCCTCTG	TGCGTTTCTTTGTGTTCTCG

Table 2. Demographic data of ACL and end-stage OA patients.

	ACL Rupture	End-Stage OA	<i>p</i>
Number of patients	28	25	
Sex, male number (%)	21 (75%)	7 (28%)	0.001
Age, years, median (IQR)	31 (42–22)	68 (75–62)	<0.0001
BMI, Kg/m ² , median (IQR)	23.04 (25.26–20.57)	29.52 (32.25–25.95)	<0.0001

ACL = anterior cruciate ligament, OA = osteoarthritis, IQR = interquartile range, BMI = body mass index. Data are expressed as median (IQR).

Table 3. IFP immunohistochemistry grading.

IL-6 IHC Grading	ACL (<i>n</i> =21)	End-stage OA (<i>n</i> =14)	<i>p</i>
IL-6, number (%)	8 (38.1)	13 (92.9)	<0.001
Grade 0, number (%)	13 (46.4)	1 (4)	
Grade 1, number (%)	6 (21.4)	4 (16)	
Grade 2, number (%)	1 (3.6)	3 (12)	
Grade 3, number (%)	1 (3.6)	6 (24)	

IHC =immunohistochemistry, IFP = infrapatellar fat pad. Data are expressed as number (%).

Table 4. Generalized linear regression model to investigate the association of variables with BMI and age in all patients.

Response Variable	BMI (<i>p</i> -Value)	Age (<i>p</i> -Value)
Vascularization	0.744	0.922
Lymphocytic infiltration	0.310	0.734
IL6 IHC Grade	0.377	0.836
Adipocyte Area	0.033	0.385
Number of adipocytes	0.603	0.280

BMI = body max index, IHC = immunohistochemistry.

Table 5. Generalized linear regression model to investigate the association of variables with BMI and age in ACL group.

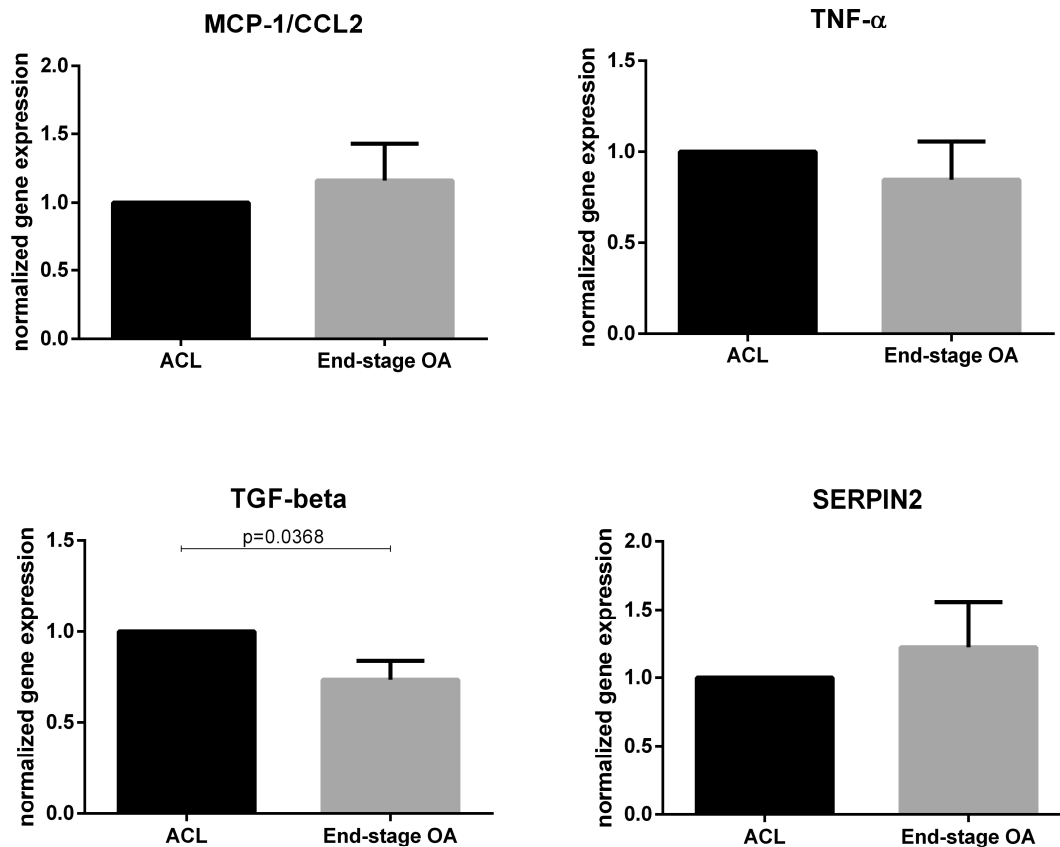
Response Variable	BMI (<i>p</i> -Value)	Age (<i>p</i> -Value)
Vascularization	0.510	0.668
Lymphocytic infiltration	0.518	0.470
IL6 IHC Grade	0.286	0.613
Adipocyte Area	0.477	0.125
Number of adipocytes	0.796	0.207

BMI = body mass index, IHC = immunohistochemistry, ACL = anterior cruciate ligament.

Table 6. Generalized linear regression model to investigate the association of variables with BMI and age in End-stage OA group.

Response Variable	BMI (<i>p</i> -Value)	Age (<i>p</i> -Value)
Vascularization	0.468	0.662
Lymphocytic infiltration	0.475	0.836
IL6 IHC Grade	0.811	0.070
Adipocyte Area	0.057	0.329
Number of adipocytes	0.235	0.410

BMI = body mass index, IHC = immunohistochemistry, OA = osteoarthritis.

**Figure 1** Monocyte Chemoattractant Protein-1 (MCP-1), Tumor necrosis factor (TNF- α), Transforming growth factor beta (TGF- β) and serine proteinase inhibitor 2 (SERPIN 2) gene expression levels in ACL ($n = 8$) and end-stage OA IFP ($n = 8$). ACL = anterior cruciate ligament, OA = osteoarthritis.

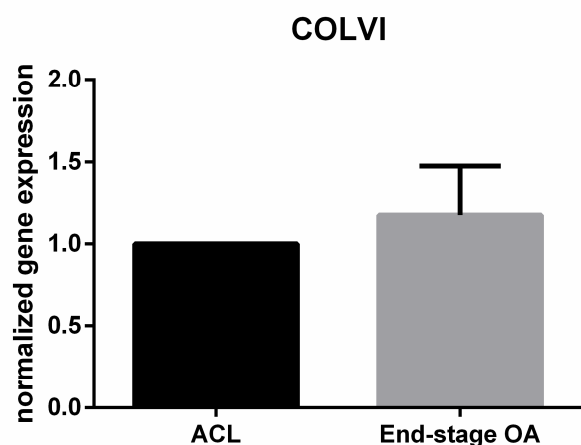


Figure 2. Collagen VI gene expression levels in ACL ($n = 8$) and end-stage OA IFP ($n = 8$). ACL = anterior cruciate ligament, OA = osteoarthritis.

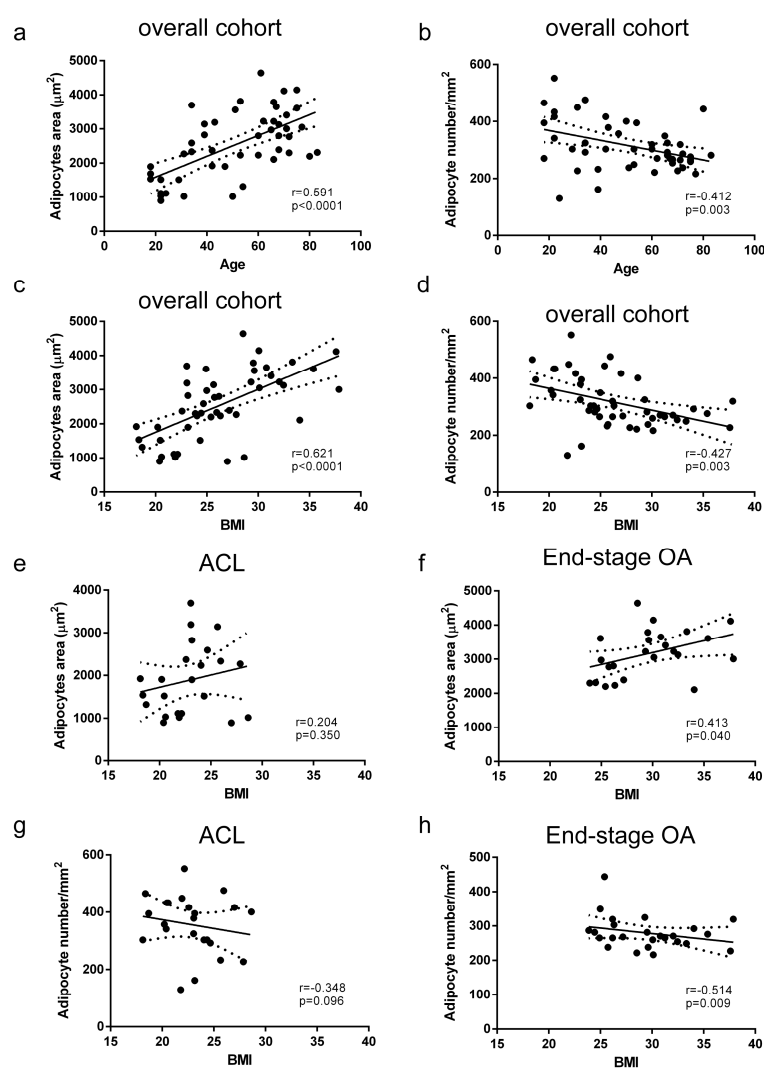


Figure 3. Correlations between adipocyte area, adipocyte number, age and BMI.