

**Table S1b.** Discovery cohort: Output of the cross-sectional association between proteins and FVC% pred. Significantly associated at FDR 5 %. Sorted by p-value. Marked in grey are proteins replicated in MOS

Protein	B-coff.	95% CI	Adjusted p-value
LEP	-5.31	(-6.40, -4,22)	6.8 10 <sup>-19</sup>
PON3	2.17	(1.40, 2.93)	3.4 10 <sup>-06</sup>
ADGRG2	1.89	(1.19, 2.59)	1.0 10 <sup>-05</sup>
RARRES2	-1.96	(-2.70, -1.22)	1.2 10 <sup>-05</sup>
FABP4	-2.35	(-3.27, -1.43)	2.6 10 <sup>-05</sup>
ADM	-1.91	(-2.70, -1.12)	9.5 10 <sup>-05</sup>
IGFBP2	1.66	(0.91, 2.42)	0.0005
HAOX1	-1.41	(-2.08, -0.73)	0.001
CCL16	-1.46	(-2,16, -0.76)	0.001
IGFBP1	1.53	(0.75, 2.30)	0.003
IL1ra	-1.55	(-2.35, -0.76)	0.003
TIM	-1.40	(-2,11, -0.68)	0.003
tPA	-1.41	(-2.15, -0.68)	0.003
IL-6	-1.34	(-2.04, -0.64)	0.003
PAI	-1.28	(-1.95, -0.60)	0.004
MMP7	-1.34	(-2.06, -0.62)	0.004
AGRP	1.19	(0.51, 1.87)	0.008
SPON2	-1.15	(-1.83, -0.46)	0.01
GH	1.24	(0.45, 2.02)	0.03
THBS2	-1.02	(-,68, -0.36)	0.03
CCL17	-1.03	(-1.70, 0.36)	0.03
CCL3	-1.02	(-1.72, -0.33)	0.04
FGF21	-1.02	(-1.72, -0.31)	0.05
RAGE	0.97	(0.30, 1.65)	0.05
CD84	0.93	(0,26, 1.59)	0.06
VCAN	0.93	(0.26, 1.60)	0.06
CTSD	-0.95	(-1.66, -0.23)	0.08
TFF3	-0.92	(-1.63, -0.21)	0.10
LDL receptor	-0.88	(-1.58, -0.19)	0.10
GDF15	-1.04	(-1.85, -0.22)	0.10
GHRL	0.90	(0.19, 1.62)	0.10
THPO	-0.85	(-1.52, -0.17)	0.10
ROR1	0.86	(0.17, 1.54)	0.11
LPL	0.92	(0.17, 1.67)	0.11
TIE2	0.80	(0.14, 1.46)	0.12
TNFR2	-0.87	(-1.59, -0.14))	0.13
REN	-0.82	(-1.52, -0.12)	0.14
CDHR5	-0.80	(-1.50, -0.11)	0.15
PARP1	-0.78	(-1.46, -0,10)	0.15
Gal4	-0.77	(-1.45, -0.10)	0.15
TNFRSF13B	-0.75	(-1.43, -0.07)	0.18

Protein	B-coff.	95% CI	Adjusted p-value
ANGPTL1	0,74	(0.07, 1.40)	0.18
XCL1	-0,73	(-1.40, -0.06)	0.18
AMBP	-0.74	(-1.42, -0.06)	0.19
FGF23	-0.75	(-1.46, -0.05)	0.19
AXL	0.70	(0.04, 1.35)	0.19
MCP1	-0.72	(-1.40, -0.03)	0.21
ACE2	-0.74	(-1.46, -0.02)	0.22
PSPD	-0.68	(-1.34, -0.01)	0.23
uPA	0.66	(0.00, 1.32)	0.25
APN	-0.65	(-1.30, 0.01)	0.25
CLMP	-0.72	(-1.46, 0.02)	0.25
BAG6	0.66	(-0.02, 1.34)	0.25
CDH5	0.65	(-0.02, 1.31)	0.25
PI3	-0.63	(-1.31, 0.06)	0.31
DECR1	-0.60	(-1.26, 0.06)	0.31
TNFRSF11A	-0.65	(-1.37, 0.06)	0.31
PDGFsubunitA	-0.59	(-1.24, 0.06)	0.31
PCSK9	-0.61	(-1.27, 0.06)	0.31
ACP6	0.59	(-0.08, 1.26)	0.34
FAS	0.59	(-0.09, 1.27)	0.36
TNFR1	-0.61	(-1.31, 0.10)	0.36
GAL	0.59	(-0.10, 1.29)	0.37
PSGL1	-0.56	(-1.24, 0.11)	0.38
TRAILR2	-0.63	(-1.38, 0.12)	0.38
TNFRSF10A	-0.57	(-1.26, 0.12)	0.38
CXCL16	-0.54	(-1.21, 0.12)	0.40
SCGB3A2	0.58	(-0.13, 1.30)	0.40
NEMO	-0.53	(-1.20, 0.14)	0.41
TYRO3	0.54	(-0.14, 1.22)	0.41
SRC	-0.52	(-1.19, 0.14)	0.41
MMP12	-0.59	(-1.33, 0.16)	0.42
ProteinBOC	0.53	(-0.15, 1.20)	0.42
PLC	-0.56	(-1.28, 0.16)	0.42
TINAGL1	0.52	(-0.15, 1.20)	0.42
EPHB4	0.50	(-0.15, 1.16)	0.42
SELE	-0.51	(-1.18, 0.17)	0.43
LILRA5	-0.52	(-1.21, 0.17)	0.43
TIMP4	-0.53	(-1.24, 0.18)	0.43
PDGFsTbTnitB	-0.49	(-1.16, 0.17)	0.43
CD1C	0.49	(-0.17, 1.16)	0.43
IL18BP	0.50	(-0.18, 1.19)	0.43
SOD2	0.50	(-0.18, 1.17)	0.43
THOP1	0.50	(-0.18, 1.18)	0.43
NTproBNP	-0.53	(-1.27, 0.20)	0.43

Protein	B-coff.	95% CI	Adjusted p-value
KLK6	-0.49	(-1.16, 0.18)	0.43
Dkk1	-0.48	(-1.15, 0.18)	0.43
MARCO	-0.49	(-1.17, 0.19)	0.43
GRN	-0.48	(-1.14, 0.19)	0.43
CTSO	-0.49	(-1.18, 0.20)	0.43
CD93	0.47	(-0.19, 1.13)	0.43
HSP27	-0.46	(-1.12, 0.19)	0.43
COL1A1	0.47	(-0.20, 1.14)	0.43
IGFBP7	-0.47	(-1.14, 0.20)	0.43
IDTA	-0.47	(-1.14, 0.20)	0.43
AZU1	0.47	(-0.20, 1.15)	0.43
SHPS1	0.45	(-0.21, 1.11)	0.44
SORT1	-0.47	(-1.16, 0.22)	0.44
PIGF	-0.51	(-1.25, 0.24)	0.44
CD163	-0.45	(-1.13, 0.22)	0.46
STK4	-0.44	(-1.10, 0.23)	0.47
TLT2	0.43	(-0.22, 1.09)	0.47
TR	-0.44	(-1.10, 0.23)	0.47
CCL15	-0.43	(-1.09, 0.23)	0.47
FABP2	-0.43	(-1.10, 0.23)	0.47
EpCAM	-0.43	(-1.08, 0.23)	0.47
GDF2	0.48	(-0.27, 1.22)	0.47
QDPR	-0.43	(-1.11, 0.25)	0.48
HBEGF	-0.41	(-1.07, 0.25)	0.49
ADGRE2	0.40	(-0.28, 1.08)	0.55
TM	0.39	(-0.29, 1.06)	0.57
SERPINB6	0.38	(-0.28, 1.04)	0.57
PRELP	-0.42	(-1.17, 0.33)	0.59
UPAR	-0.39	(-1.13, 0.34)	0.62
PRTN3	0.35	(-0.31, 1.02)	0.62
TYMP	-0.36	(-1.04, 0.32)	0.63
Gal3	0.37	(-0.34, 1.07)	0.63
EGFR	0.34	(-0.32, 1.00)	0.63
CTSZ	-0.36	(-1.05, 0.34)	0.63
SUMF2	-0.34	(-1.03, 0.34)	0.63
LRP11	0.34	(-0.34, 1.02)	0.63
TFPI	-0.33	(-0.99, 0.33)	0.63
CCL24	0.33	(-0.32, 0.98)	0.63
MEPE	0.34	(-0.34, 1.03)	0.63
CDH2	-0.35	(-1.06, 0.36)	0.65
LOX1	-0.34	(-1.02, 0.35)	0.65
MMP9	-0.32	(-1.00, 0.36)	0.67
CTSL1	-0.32	(-0.99, 0.36)	0.68
ENO2	0.31	(-0.35, 0.97)	0.68

Protein	B-coff.	95% CI	Adjusted p-value
ANGPTL7	0.32	(-0.38, 1.02)	0.68
IL17D	0.32	(-0.38, 1.03)	0.68
IL17RA	0.29	(-0.35, 0.94)	0.68
KLK10	0.29	(-0.36, 0.95)	0.68
GT	0.30	(-0.37, 0.97)	0.68
CHIT1	0.30	(-0.38, 0.99)	0.68
TNFRSF14	-0.31	(-0.99, 0.38)	0.68
CLUL1	0.30	(-0.39, 0.99)	0.69
NPTXR	0.29	(-0.38, 0.95)	0.70
IGFBPL1	-0.30	(-1.01, 0.41)	0.70
METRNL	0.29	(-0.40, 0.99)	0.70
FAM3C	-0.29	(-0.97, 0.39)	0.70
PECAM1	0.27	(-0.39, 0.93)	0.71
CTRC	-0.27	(-0.94, 0.40)	0.71
PAR1	-0.28	(-0.96, 0.40)	0.71
PTX3	0.26	(-0.40, 0.93)	0.71
IL27	0.27	(-0.41, 0.95)	0.71
ENPP7	-0.26	(-0.93, 0.41)	0.71
ANG1	-0.26	(-0.93, 0.41)	0.71
IL6RA	-0.25	(-0.91, 0.40)	0.71
IL16	-0.27	(-0.95, 0.42)	0.71
IL18	-0.27	(-0.96, 0.42)	0.71
CCL22	0.25	(-0.40, 0.91)	0.71
CHRD2	-0.26	(-0.92, 0.41)	0.72
IL2RA	-0.25	(-0.93, 0.42)	0.72
MMP2	0.25	(-0.42, 0.92)	0.72
ITGB2	-0.25	(-0.92, 0.42)	0.72
TF	0.24	(-0.45, 0.93)	0.77
IL1RL2	-0.23	(-0.91, 0.44)	0.77
MMP3	0.27	(-0.55, 1.10)	0.78
ST2	0.23	(-0.46, 0.92)	0.78
MPO	-0.22	(-0.88, 0.45)	0.78
SELP	0.21	(-0.45, 0.87)	0.79
VEGFD	0.22	(-0.47, 0.92)	0.79
KYAT1	-0.21	(-0.88, 0.45)	0.79
NADK	-0.22	(-0.90, 0.47)	0.79
VSIG2	-0.22	(-0.91, 0.48)	0.79
DCN	-0.21	(-0.92, 0.50)	0.81
PGLYRP1	0.19	(-0.47, 0.86)	0.81
ICAM2	0.18	(-0.47, 0.83)	0.82
Notch3	-0.20	(-0.91, 0.51)	0.82
REG4	-0.19	(-0.87, 0.49)	0.82
CD40L	-0.18	(-0.85, 0.48)	0.82
CANT1	0.18	(-0.48, 0.85)	0.82

Protein	B-coff.	95% CI	Adjusted p-value
vWF	-0.18	(-0.84, 0.48)	0.83
SIGLEC7	0.18	(-0.50, 0.87)	0.83
BLMHydrolase	-0.18	(-0.87, 0.51)	0.84
IL1RT1	0.17	(-0.49, 0.83)	0.84
SPON1	-0.17	(-0.86, 0.51)	0.84
DDC	0.17	(-0.50, 0.83)	0.84
ITGB1BP2	-0.16	(-0.83, 0.50)	0.84
CEACAM8	0.17	(-0.52, 0.86)	0.84
GIF	-0.16	(-0.84, 0.51)	0.84
CCDC80	-0.17	(-0.90, 0.55)	0.84
NPDC1	-0.17	(-0.86, 0.53)	0.84
RETN	0.16	(-0.51, 0.83)	0.84
Gal9	-0.17	(-0.92, 0.57)	0.84
FS	-0.16	(-0.84, 0.52)	0.84
SNAP23	-0.15	(-0.82, 0.51)	0.84
ANGPT2	-0.16	(-0.86, 0.54)	0.84
CLEC5A	0.15	(-0.55, 0.85)	0.86
CD2AP	0.14	(-0.53, 0.80)	0.86
SERPINA12	-0.14	(-0.83, 0.55)	0.86
CA13	0.13	(-0.53, 0.79)	0.86
JAMA	-0.13	(-0.78, 0.52)	0.86
hOSCAR	0.13	(-0.54, 0.81)	0.86
OPN	-0.13	(-0.81, 0.54)	0.86
CSTB	0.14	(-0.59, 0.88)	0.86
SEMA3F	-0.12	(-0.80, 0.56)	0.88
LRIG1	0.12	(-0.55, 0.79)	0.88
SOST	-0.12	(-0.81, 0.58)	0.89
CD4	-0.12	(-0.82, 0.58)	0.89
NOMO1	0.11	(-0.58, 0.81)	0.90
GLO1	0.11	(-0.56, 0.77)	0.90
PRSS8	-0.11	(-0.87, 0.65)	0.91
TFF2	0.10	(-0.60, 0.81)	0.91
NECTIN2	0.10	(-0.58, 0.78)	0.91
DLK1	-0.09	(-0.76, 0.58)	0.93
CNTN1	0.09	(-0.62, 0.81)	0.93
TNFRSF10C	0.07	(-0.58, 0.73)	0.96
CD164	0.07	(-0.60, 0.73)	0.97
ALCAM	0.07	(-0.62, 0.75)	0.98
PDL2	-0.06	(-0.74, 0.61)	0.98
IL1RT2	0.06	(-0.60, 0.72)	0.98
HO1	0.06	(-0.62, 0.74)	0.98
BMP6	-0.05	(-0.72, 0.61)	0.98
MCFD2	-0.05	(-0.74, 0.63)	0.98
ADAMTS13	-0.05	(-0.72, 0.62)	0.98

<b>Protein</b>	<b>B-coff.</b>	<b>95% CI</b>	<b>Adjusted p-value</b>
PAPPA	0.05	(-0.66, 0.76)	0.98
CHI3L1	-0.05	(-0.76, 0.66)	0.99
OPG	0.04	(-0.68, 0.76)	1.00
CASP3	-0.03	(-0.68, 0.62)	1.00
PRSS27	-0.03	(-0.70, 0.64)	1.00
MERTK	0.03	(-0.67, 0.72)	1.00
TNFSF13B	0.03	(-0.67, 0.72)	1.00
LTBR	0.02	(-0.65, 0.69)	1.00
CPB1	0.02	(-0.65, 0.68)	1.00
PILRB	0.02	(-0.65, 0.69)	1.00
CLSTN2	-0.02	(-0.68, 0.65)	1.00
TRAP	-0.02	(-0.69, 0.66)	1.00
TSHB	-0.02	(-0.68, 0.65)	1.00
CD79B	0.02	(-0.66, 0.69)	1.00
APLP1	0.01	(-0.68, 0.70)	1.00
SCF	-0.01	(-0.70, 0.68)	1.00
CPA1	-0.01	(-0.67, 0.65)	1.00
CXCL1	-0.01	(-0.68, 0.65)	1.00
SDC4	0.01	(-0.65, 0.67)	1.00
GRAP2	0.01	(-0.65, 0.67)	1.00
FCRL1	0.00	(-0.68, 0.67)	1.00
IL4RA	0.00	(-0.67, 0.67)	1.00
MB	0.00	(-0.73, 0.74)	1.00
TGM2	0.00	(-0.67, 0.67)	1.00
PIgR	0.00	(-0.69, 0.69)	1.00