Supplemental material

Supplemental Table S1. List of 92 biomarkers involved in the OLINK cardiovascular III panel and medians with interquartile ranges

Protein	N = 428[1]
TNFRSF14	4.10 (3.87, 4.38)
LDLreceptor	3.30 (2.95, 3.74)
ITGB2	4.55 (4.29, 4.78)
IL17RA	3.60 (3.20, 3.93)
TNFR2	5.01 (4.71, 5.31)
MMP9	4.45 (3.81, 4.98)
EPHB4	4.94 (4.74, 5.15)
IL2RA	3.34 (3.04, 3.63)
OPG	3.40 (3.18, 3.58)
ALCAM	6.99 (6.85, 7.21)
TFF3	4.80 (4.59, 5.14)
SELP	9.37 (9.02, 9.73)
CSTB	3.51 (3.19, 3.91)
MCP1	3.42 (3.20, 3.74)
CD163	7.28 (6.94, 7.63)

Protein	N = 428[1]
Gal3	2.64 (2.40, 2.87)
GRN	4.97 (4.81, 5.18)
BLMhydrolase	1.91 (1.72, 2.17)
PLC	7.61 (7.46, 7.84)
LTBR	3.15 (2.93, 3.38)
Notch3	4.89 (4.66, 5.14)
TIMP4	3.06 (2.72, 3.39)
CNTN1	3.95 (3.73, 4.18)
CDH5	3.54 (3.34, 3.77)
TLT2	4.56 (4.29, 4.88)
FABP4	5.15 (4.61, 5.73)
TFPI	8.68 (8.44, 8.89)
PAI	4.79 (4.30, 5.44)
CCL24	4.48 (3.87, 5.17)
TR	4.57 (4.20, 4.95)
TNFRSF10C	6.19 (5.78, 6.48)
GDF15	5.48 (5.06, 5.90)

Protein	N = 428[1]
SELE	11.46 (11.03, 11.87)
AZU1	1.46 (1.19, 1.77)
DLK1	5.36 (4.96, 5.83)
SPON1	1.23 (1.05, 1.38)
MPO	2.48 (2.23, 2.71)
CXCL16	4.74 (4.56, 4.90)
IL6RA	11.53 (11.23, 11.78)
RETN	5.79 (5.48, 6.17)
IGFBP1	3.63 (2.80, 4.40)
CHIT1	4.92 (4.16, 5.53)
TRAP	3.06 (2.80, 3.30)
GP6	2.21 (1.56, 2.73)
PSPD	2.36 (1.93, 2.82)
PI3	1.72 (1.33, 2.17)
EpCAM	4.97 (4.28, 5.77)
APN	4.34 (4.19, 4.51)
AXL	8.19 (7.99, 8.41)

Protein	N = 428[1]
IL1RT1	5.78 (5.61, 5.98)
MMP2	3.14 (2.93, 3.37)
FAS	5.41 (5.19, 5.62)
MB	7.07 (6.70, 7.57)
TNFSF13B	6.74 (6.52, 6.99)
PRTN3	3.11 (2.85, 3.40)
PCSK9	2.45 (2.20, 2.71)
UPAR	4.77 (4.50, 5.03)
OPN	6.75 (6.40, 7.10)
CTSD	2.01 (1.74, 2.31)
PGLYRP1	6.96 (6.62, 7.34)
CPA1	5.41 (4.94, 5.84)
JAMA	3.84 (3.47, 4.27)
Gal4	3.17 (2.83, 3.55)
IL1RT2	4.75 (4.56, 4.94)
SHPS1	3.08 (2.77, 3.33)
CCL15	6.38 (6.13, 6.82)

Protein	N = 428[1]
CASP3	6.89 (5.82, 7.59)
uPA	4.10 (3.90, 4.31)
CPB1	5.24 (4.80, 5.67)
CHI3L1	3.71 (3.14, 4.53)
ST2	3.67 (3.37, 4.00)
tPA	6.07 (5.66, 6.39)
SCGB3A2	2.08 (1.52, 2.58)
EGFR	2.46 (2.34, 2.58)
IGFBP7	7.23 (7.03, 7.45)
CD93	10.65 (10.44, 10.86)
IL18BP	5.34 (5.11, 5.59)
COL1A1	2.60 (2.39, 2.88)
PON3	5.60 (5.18, 6.05)
CTSZ	4.88 (4.62, 5.14)
MMP3	7.12 (6.58, 7.56)
RARRES2	10.90 (10.68, 11.15)
ICAM2	4.64 (4.39, 4.90)

Protein	N = 428[1]
KLK6	1.65 (1.40, 1.95)
PDGFsubunitA	2.73 (2.17, 3.32)
TNFR1	5.93 (5.70, 6.26)
IGFBP2	7.54 (7.01, 8.05)
vWF	6.88 (6.30, 7.34)
PECAM1	4.00 (3.75, 4.26)
MEPE	5.02 (4.72, 5.34)
CCL16	5.85 (5.51, 6.19)
NTproBNP	3.77 (2.93, 4.76)

[1] **Median (IQR)**

Supplemental Table S2. Frequency of different types of cardiovascular events

Event types	N
Cerebrovascular events	
Transient Ischemic Attack (TIA)	6
Ischemic stroke	5
Intracerebral hemorrhage	2
Subarachnoid hemorrhage	3

Cardiovascular events	
Angina pectoris	12
Myocardial infarction	6
Angioplasty/stent	7
Coronary bypass	1
Other (e.g. ICD implantation, cardioversion, ablation)	22

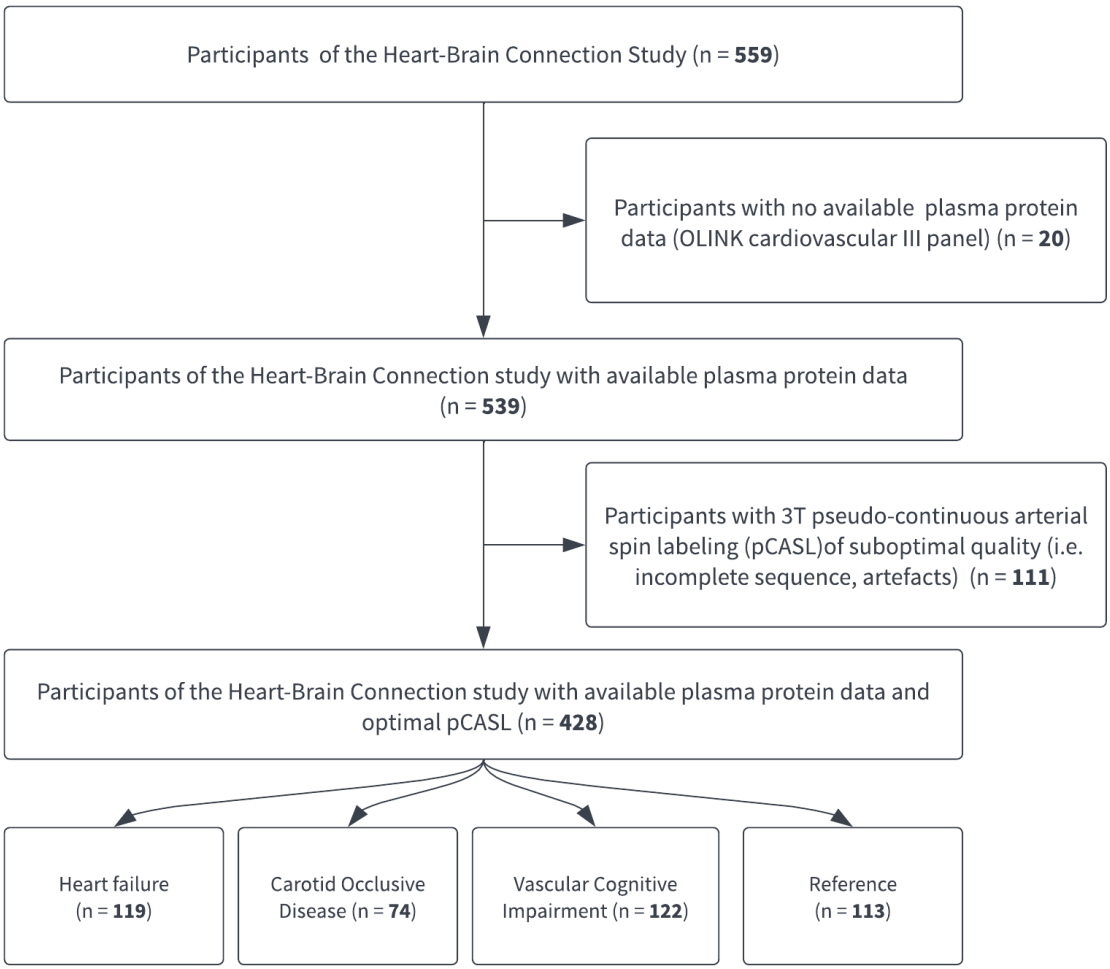
Supplemental Table S3. Logistic regression model results with cardiovascular events as outcome.

Variable	log(OR)[1]	95% CI[1]	p-value
BCS[2]	0.78	0.28, 1.3	0.003
SCORE[2]	-2.1	-7.8, 3.0	0.4

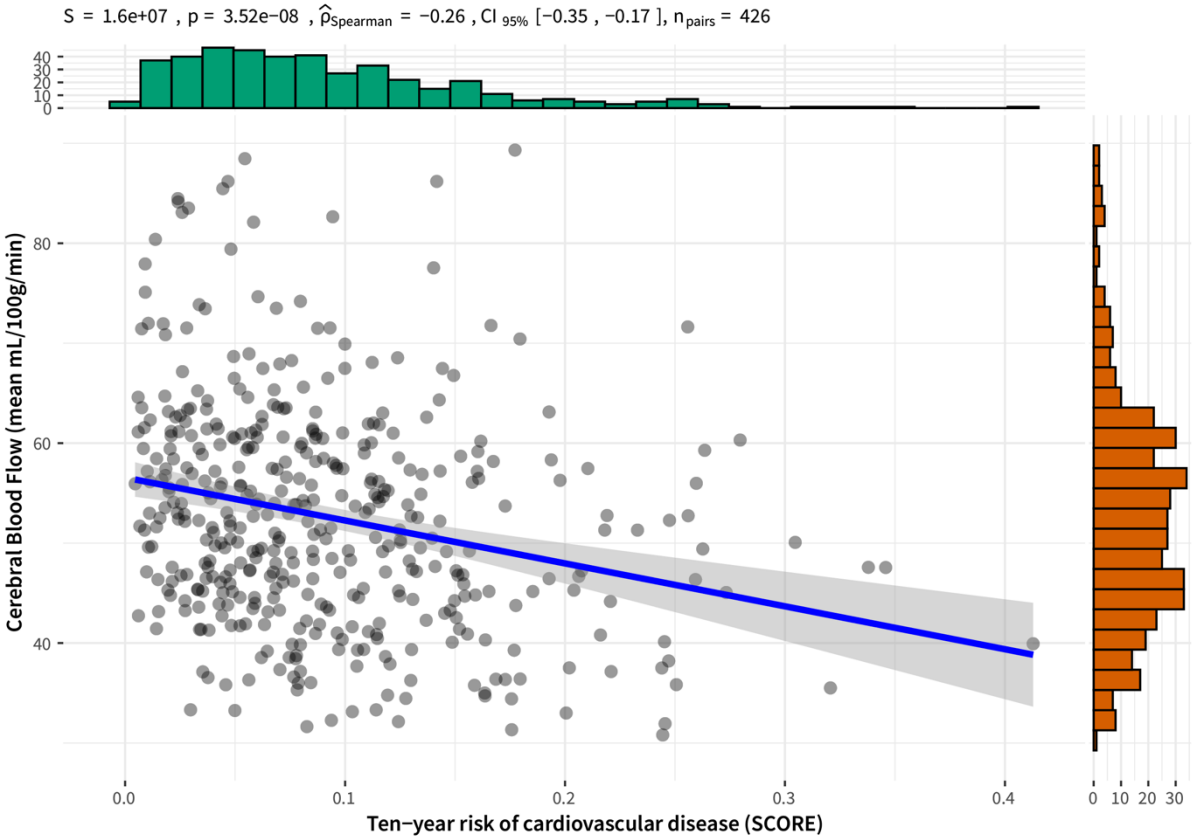
1 OR = Odds Ratio, CI = Confidence Interval

2 BCS = Biomarker Compound Score, SCORE = Systematic COronary Risk Evaluation

Supplemental Figure S1. Flowchart of the study population selection.

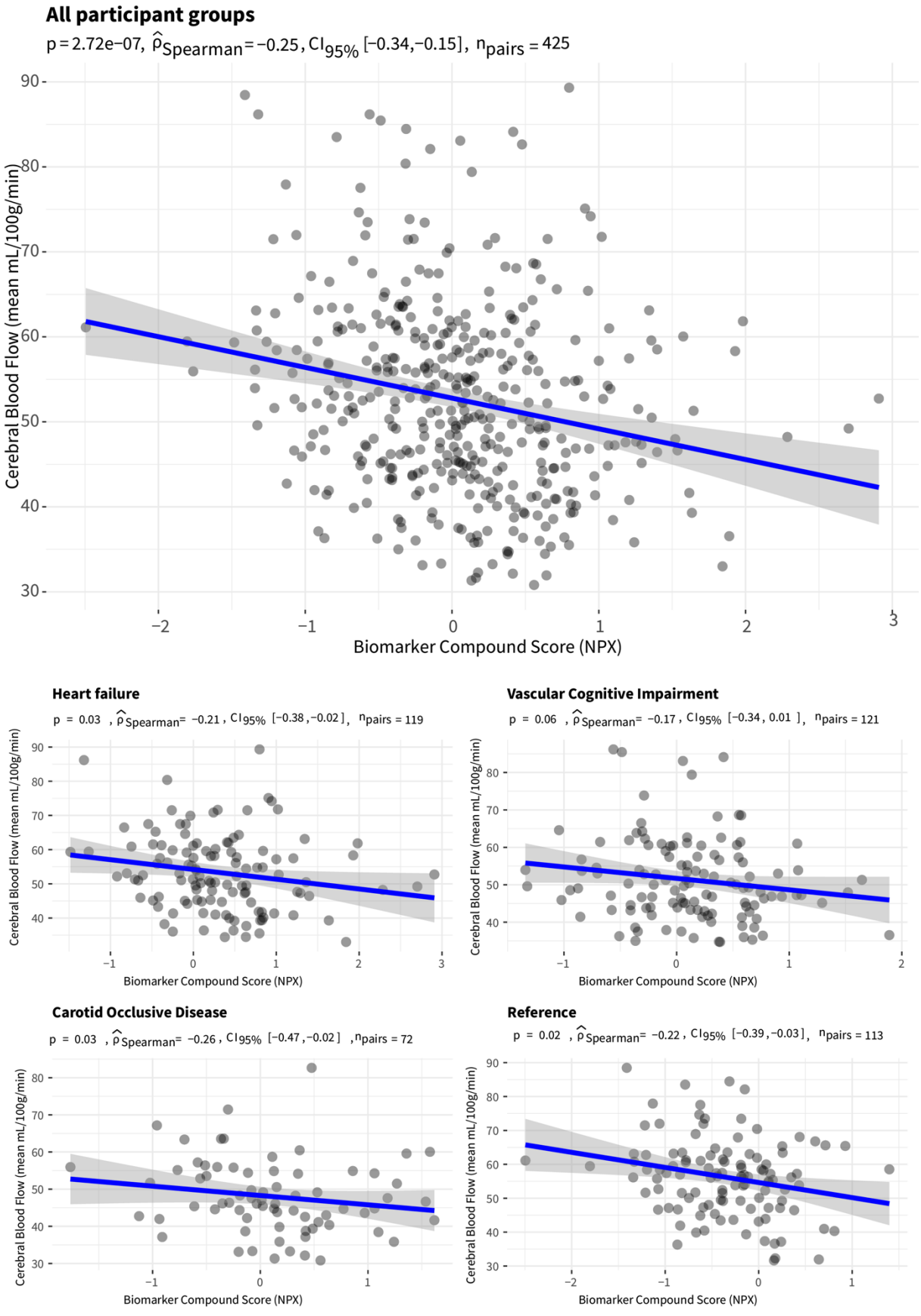


Supplemental Figure S2. Relationship between cerebral blood flow (CBF) and cardiovascular risk (SCORE)



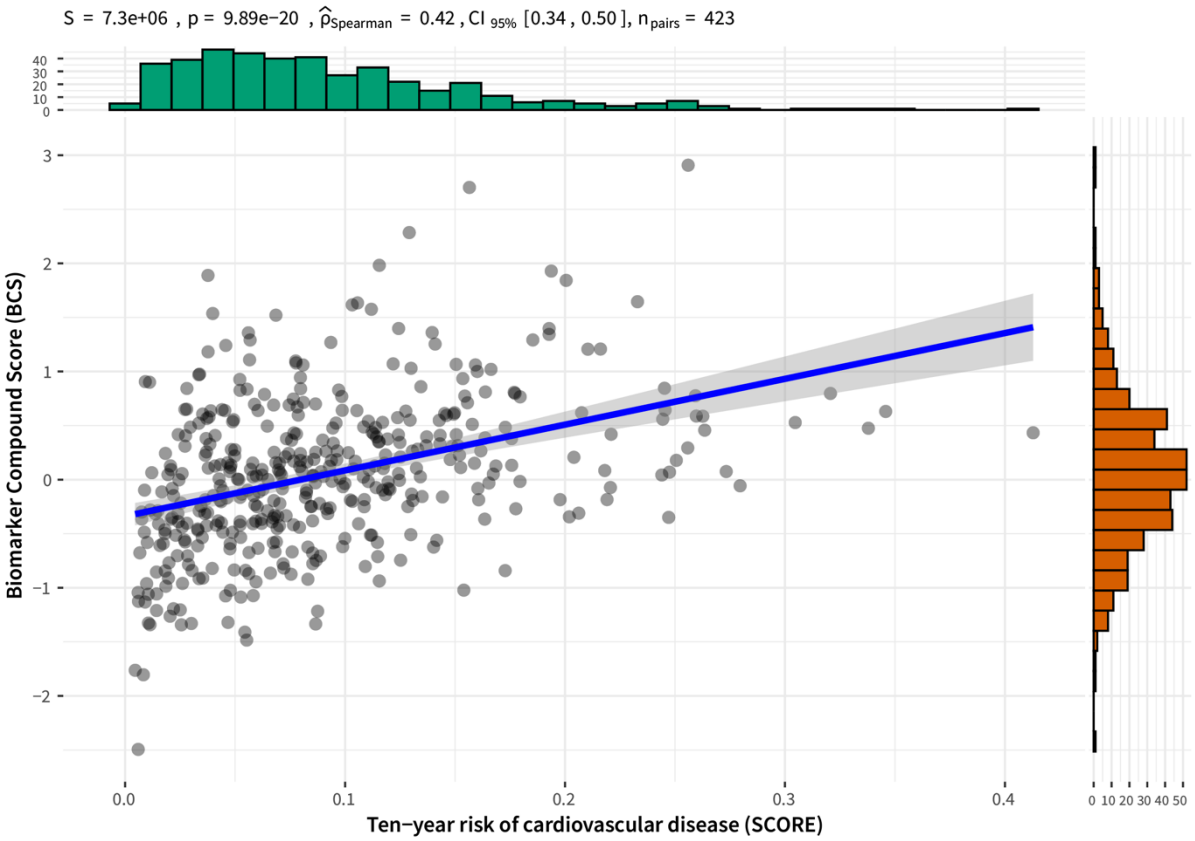
The histograms show the distribution of CBF (orange) and SCORE (green).

Supplemental Figure S3. Relationship between the Biomarker Compound Score (BCS) in NPX and Cerebral Blood Flow (CBF) in mL/100g/min, stratified by participant group



Supplemental Figure S4

Relationship between the Biomarker Compound Score (BCS) in Normalized Protein eXpression (NPX) and cardiovascular risk (SCORE).



The histograms show the distribution of the BCS (orange) and SCORE (green).