

Table S2: The PRDRMS of CAD in HSN.

Method	Module	Genes of the module	JT test P-values
Our Method	M'1	SUGT1 NLRP3 NLRP6 CARD8 HSP90B1 CASP1	0.0256
	M'2	NLRP1 PYDC1 PYCARD MEFV CARD18 AIM2	0.0293
	M'3	CCNO SMUG1 NTHL1 S100A12 TDG TPSAB1 MBD4	0.0008
PageRank	PM'1	CDK4 ATF2 CREBBP CTNNB1 EP300 KLK3 AR SMAD2 SMAD3 SMAD4 MAX MYB MYC PPARG RXRA RXRB RXRG TGFB2 TP53	0.0362
	PM'2	FAS TP53 TP63 FADD TNFRSF10B	0.0417
CFinder	CM'1	CREB1 EPO HIF1A VEGFA COPS5	0.0161
	CM'2	FGF4 FGFR4 SDC2 SPP1	0.017
	CM'3	ANGPT1 MAPK14 HGF TNF	0.0121
	CM'4	FGFR4 SDC2 SPP1 FGF23	0.0167
	CM'5	IFNG IL8 IL10 TLR2	0.025
	CM'6	HGF IGF1R PIK3CA PTEN	0.0209
	CM'7	FGF2 FGFR4 SDC2 SPP1	0.0234
	CM'8	CSF3 IFNG JAK2 CXCL12	0.005
	CM'9	GRB2 IL6R JAK2 PTPN11	0.0177
	CM'10	IFNG IL12B JAK2 TNF	0.0118
	CM'11	CCR5 JAK2 CXCL12 CXCR4	0.0323
	CM'12	HSP90AA1 KDR ROCK1 VEGFA	0.025
	CM'13	EGFR ICAM1 IL8 NFATC1	0.0268
	CM'14	JAK2 PDGFB PTPN11 STAT1	0.0276
	CM'15	HGF MAPK1 PTGS2 TGFB1	0.0129
	CM'16	MAPK14 EGFR FGF2 STAT1	0.0292
	CM'17	JAK2 PDGFRB PTPN11 STAT1	0.0158
	CM'18	IFNG JAK2 CXCL12 STAT3	0.0157