

## **On line material**

### **Tables**

**Supplementary Table I.** Cellular functions significantly over-represented by *E. bovis*-regulated genes in infected bovine endothelial host cells (selected).

Cellular functions	Number of regulated molecules*			
	4 h (p-value)	4 d (p-value)	8 d (p-value)	14 d (p-value)
<b>Cell death</b>				
Apoptosis	<b>4</b> (5.58E-03)	<b>15</b> (1.72E-04)	<b>53</b> (7.37E-12)	<b>217</b> (3.50E-13)
Cell survival	<b>1</b> (1.13E-02)	<b>8</b> (1.41E-03)	<b>26</b> (1.21E-07)	<b>93</b> (2.08E-07)
<b>Cellular growth/proliferation</b>				
Growth	<b>4</b> (1.74E-03)	<b>11</b> (2.38E-03)	<b>46</b> (3.85E-12)	<b>177</b> (2.58E-13)
Proliferation	<b>4</b> (1.87E-02)	<b>5</b> (9.70E-05)	<b>49</b> (1.53E-09)	<b>213</b> (9.24E-12)
<b>Cell morphology</b>				
Shape change	-	-	<b>23</b> (2.26E-10)	<b>64</b> (3.08E-08)
<b>Cell-to-cell signaling/interaction</b>				
Adhesion	<b>3</b> (2.85E-04)	<b>9</b> (1.58E-04)	<b>25</b> (1.08E-07)	<b>86</b> (6.57E-07)
<b>Cell cycle</b>				
Arrest	-	<b>4</b> (5.51E-03)	<b>21</b> (1.35E-08)	<b>64</b> (1.06E-07)
Progression	<b>1</b> (9.64E-03)	-	<b>28</b> (1.90E-09)	<b>95</b> (2.74E-09)
<b>Cellular movement</b>				
Cell migration	<b>3</b> (2.75E-02)	<b>10</b> (3.60E-05)	<b>39</b> (8.54E-13)	<b>129</b> (5.44E-11)
<b>Metabolism/biosynthesis</b>				
Carbohydrates	<b>1</b> (5.11E-03)	<b>5</b> (1.18E-04)	<b>9</b> (1.89E-05)	<b>42</b> (3.07E-05)
Lipids	<b>2</b> (3.01E-02)	<b>3</b> (2.28E-03)	-	<b>34</b> (4.01E-04)
Nucleic acids	<b>1</b> (4.54E-03)	<b>1</b> (2.28E-03)	-	<b>4</b> (2.81E-04)
Energy production	-	<b>1</b> (4.55E-03)	-	<b>4</b> (4.39E-05)
<b>Inflammatory response</b>				
Migration of leukocytes	-	<b>2</b> (1.53E-02)	<b>18</b> (3.48E-07)	<b>12</b> (6.00E-04)
Adhesion of leukocytes	-	<b>4</b> (2.56E-03)	<b>9</b> (2.66E-04)	-
Immune response	<b>4</b> (1.22E-03)	<b>5</b> (9.20E-03)	<b>17</b> (5.23E-06)	-

\*Note that in this prediction multifunctional molecules are considered in different functional categories

**Supplementary Table II.** Molecules involved in cellular functions in *E. bovis*-infected bovine endothelial host cells.

Cellular function	p. i.	Molecules
<b>Cell Death</b>		
Apoptosis	4 d	ANKRD1, CDH2, FOS, GNPTG, HIST1H1C, IGFBP5, OLR1, PLAU, PLAUR, SERPINE1, SLC2A1, STEAP3, THBS2, TOP2A, TRIB3
	8 d	ANKRD1, ATF3, BCL2L14, BHLHE40, BIRC2, BRCA1, CADM1, CCND2, CCNE1, CDCA2, CNN2, CXCL1, CYR61, DDIT4, DKK3, EDN1, EGR1, EIF4E, EZR, FHL2, FOS, HSPB8, IGF2R, IL8, KLF4, KLF5, LGALS1, LIMS1, MYC, NAD <sup>+</sup> , NAMPT, NR2F1, OLR1, PLAT, PLAU, PLAUR, PPP1R1B, PTGER4, PTTG1, RASD1, S100A4, SERPINE1, SLC2A1, SOCS1, SOD2, TGFB2, THBS2, TIMP2, TIMP4, TNFRSF12A, TOP2A, TRIB3, VEGFC
	14 d	ABCG1, ABCG2, ADM, ALDH1A2, ANGPT2, ANKRD1, ATF7, BAK1, BCL2A1, BCL2L14, BHLHE40, BMP2, BOK, C1QBP, C8ORF4, CCND2, CCND3, CCNE1, CD44, CD74, CD200, CD247, CDC42, CDCA2, CDH5, CDK2AP1, CDKN1A, CDKN1C, CEACAM1, CENPF, CIITA, CITED2, CNN2, COX5A, CTSB, CXCR4, CYBA, CYCS, CYR61, DAP3, DCN, DDB2, DDIT4, DHCR24, DKK3, DUT, EBF1, EDN1, EEF1E1, EFNA1, EGR1, ENO1, ENTPD5, ERG, EZR, F2R, FANCC, FASN, FBL, FES, FHL2, FN1, FOS, FOXO4, FOXP1, GAB1, GADD45A, GATAD2A, GLI3, GLO1, GNE, GNL3, GNPAT1, GPI, GPS2, GPX4, GSTP1, HDAC3, HES1, HIST1H1C, HK2, HSD17B10, HSP90AA1, HSPA5, HSPA8, HSPA1A, HSPB1, HSPB6, ICAM2, ID3, IGF2, IGF2R, IGFBP5, IL6, IL15, IL6R, IRF8, ITGA2, ITGAV, ITGB5, JAG2, JAK3, JUN, JUP, KAT2B, KIT, KLF2, KLF4, KLF5, KLF6, KLF10, KRT8, LATS1, LDLR, LGALS1, LIMS1, LRIG1, LTB, LYN, MAD2L1, MAP1B, MAP3K3, MAP3K11, MAPK14, MCF2L, MDH1, MECOM, MEF2C, MEOX2, MERTK, MIF, MMP11, MSH6, MSRB2, MSX1, MTMR9, MYC, MYCN, NAD <sup>+</sup> , NAMPT, NEK6, NME1, NOTCH1, NPC1, NR2F1, NUMB, OLR1, P4HB, PALLD, PARVB, PHB, PIGT, PIK3IP1, PIK3R2, PLA2G16, PLA2G4A, PLAT, PLAU, PLD1, PLK2, POLB, PPARG, PPIF, PPP1R1B, PPP3CB, PRDX2, PSMG2, PTGER4, PTPN1, PTTG1, RALB, RASD1, REV3L, RPS6KA5, RPS6KB2, S100A4, S1PR1, SAT1, SCARB1, SERPINE2, SH3KBP1, SIRPA, SLC25A4, SLC2A1, SLC2A3, SMPD1, SNAI2, SOCS1, SOD2, SOX4, SP1, STAT1, STIP1, STMN1, TENC1, TFRC, TGFB2, TGFB2R2, TGFB2R3, THBS2, TIMP2, TIMP3, TIMP4, TNFRSF12A, TNFSF10, TOP2A, TRAP1, UGCG, USP2, UTP11L, VCAN, VCL, VDAC1, VEGFC, YARS, ZBTB16, ZFAND5
Cell survival	4 d	FGF1, MCAM, OLR1, PLAU, PLAUR, SERPINE1, SLC2A1, TOP2A
	8 d	BHLHE40, BRCA1, CADM1, CXCL3, CYR61, EIF4E, FGF1, ICAM1, IL8, LIMS1, MCAM, MYC, NAD <sup>+</sup> , OLR1, PLAU, PLAUR, RRM2, SERPINE1, SLC2A1, SLC31A1, SOCS1, SOD2, TGFB2, TIMP2, TOP2A, VEGFC
	14 d	ABCG1, ABCG2, ADM, ALDH1A2, ANGPT2, ANKRD1, ATF7, BAK1, BCL2A1, BCL2L14, BHLHE40, BMP2, BOK, C1QBP, C8ORF4, CCND2, CCND3, CCNE1, CD44, CD74, CD200, CD247, CDC42, CDCA2, CDH5, CDK2AP1, CDKN1A, CDKN1C, CEACAM1, CENPF, CIITA, CITED2, CNN2, COX5A, CTSB, CXCR4, CYBA, CYCS (includes EG:54205), CYR61, DAP3, DCN, DDB2, DDIT4, DHCR24, DKK3, DUT (includes EG:1854), EBF1, EDN1, EEF1E1, EFNA1, EGR1, ENO1, ENTPD5, ERG, EZR, F2R, FANCC, FASN, FBL, FES, FHL2, FN1, FOS, FOXO4, FOXP1, GAB1, GADD45A, GATAD2A, GLI3, GLO1, GNE, GNL3, GNPAT1, GPI, GPS2, GPX4, GSTP1, HDAC3, HES1, HIST1H1C, HK2, HSD17B10, HSP90AA1, HSPA5, HSPA8, HSPA1A, HSPB1, HSPB6, ICAM2, ID3, IGF2, IGF2R, IGFBP5, IL6, IL15, IL6R, IRF8, ITGA2, ITGAV, ITGB5, JAG2, JAK3, JUN, JUP, KAT2B, KIT, KLF2, KLF4, KLF5, KLF6, KLF10, KRT8, LATS1, LDLR, LGALS1, LIMS1, LRIG1, LTB, LYN, MAD2L1, MAP1B, MAP3K3, MAP3K11, MAPK14, MCF2L, MDH1, MECOM, MEF2C, MEOX2, MERTK, MIF, MMP11,

MSH6, MSRB2, MSX1, MTMR9, MYC, MYCN, NAD+, NAMPT, NEK6, NME1, NOTCH1, NPC1, NR2F1, NUMB, OLR1, P4HB, PALLD, PARVB, PHB, PIGT, PIK3IP1, PIK3R2, PLA2G16, PLA2G4A, PLAT, PLAU, PLD1, PLK2, POLB, PPARG, PPIF, PPP1R1B, PPP3CB, PRDX2, PSMG2, PTGER4, PTPN1, PTTG1, RALB, RASD1, REV3L, RPS6KA5, RPS6KB2, S100A4, S1PR1, SAT1, SCARB1, SERPINE2, SH3KBP1, SIRPA, SLC25A4, SLC2A1, SLC2A3, SMPD1, SNAI2, SOCS1, SOD2, SOX4, SP1, STAT1, STIP1, STMN1, TENC1, TFRC, TGFB2, TGFB2, TGFB3, THBS2, TIMP2, TIMP3, TIMP4, TNFRSF12A, TNFSF10, TOP2A, TRAP1, UGCG, USP2, UTP11L, VCAN, VCL, VDAC1, VEGFC, YARS, ZBTB16, ZFAND5

### Cellular growth/proliferation

Growth	4 d	COL1A2, FGF1, FOS, IGFBP5, MCAM, PLAU, PLAUR, SERPINE1, STEAP3, THBS2, UPP1
	8 d	ATF3, BRCA1, CCND2, CCNE1, CDCA8, CXCL1, CXCL3, CYR61, DKK3, EDN1, EGR1, EIF4E, EZR, FGF1, FHL2, FOS, GEM, HSPB8, IFI30, IGF2R, IL8, KIAA0101, KLF4, KLF11, LGALS1, MCAM, MEST, MYC, PLAT, PLAU, PLAUR, PMP22, PTTG1, RASD1, S100A4, SERPINE1, SERPINH1, SOCS1, SOD2, TGFB2, THBS2, TIMP2, TIMP4, TNFRSF12A, UPP1, VEGFC
	14 d	ADM, AK2, AKR1B1, ANG, ATP5G1, ATP6V0E2, BCL2A1, BMP2, C8ORF4, CCND2, CCND3, CCNE1, CCT5, CD44, CD320, CDC42, CDCA8, CDH5, CDK2AP1, CDKN1A, CDKN1C, CEACAM1, CNOT6L, COL1A2, CTSB, CTSC, CXADR, CXCR4, CXCR7, CYR61, DAP3, DCHS1, DCN, DKK3, DLG5, DNAJA1, DNAJB6, EDN1, EEF2K, EFNA1, EGR1, EIF4A1, ENC1, ENO1, ENTPD5, ERFFI1, ETFDH, EZH2, EZR, F2R, FADS1, FADS3, FANCC, FASN, FES, FGF1, FHL2, FLOT2, FN1, FOS, GADD45A, GEM, GPX4, GRB10, GSS, GSTP1, HDAC3, HSPA5, HTRA1, HYAL1, ID3, IFI30, IGF2, IGF2R, IGFBP5, IL6, IL15, IL6R, IRF8, ITGAV, ITGB5, JAK3, JARID2, JUN, JUP, KCTD11, KIAA0101, KIT, KLF2, KLF4, KLF10, LAMC1, LATS1, LGALS1, LTBP1, LYN, MAP3K11, MECOM, MEST, MIF, MMP11, MRAS, MTHFD1, MYC, MYCBP, MYCN, NEU1, NME1, NOTCH1, NOTCH4, NOV, OSMR, PARVB, PER1, PGK1, PHB (includes EG:5245), PIK3R2, PLA2G4A, PLAT, PLAU, PLCG1, PLK2, PMP22, PNN, PPARG, PPP1CA, PRKCH, PSMB2, PSMC4, PTPN1, PTTG1, RASD1, RBM3, RPS6KB2, RSL1D1, S100A4, S1PR1, SAT1, SCAMP2, SCAMP4, SEMA6A, SERPINE2, SERPINH1, SIRPA, SLC7A7, SLC9A3R2, SOCS1, SOCS2, SOD2, SP1, ST3GAL2, STAT1, STMN1, TAP1, TCN2, TEK, TENC1, TFRC, TGFB2, TGFB2, TGFB3, TGIF1, THBS2, TIMP2, TIMP3, TIMP4, TMEM49, TNFRSF12A, TNFSF10, TRAP1, TRIM25, TRPM6, UPP1, VCAN, VDAC1, VEGFC, ZBTB16
Proliferation	4 d	FGF1, FOS, IGFBP5, PLAU, PLAUR, SERPINE1
	8 d	ATF3, BRCA1, CADM1, CCND2, CCNE1, CFB, CNN2, CXCL1, CXCL3, CYR61, EDN1, EGR1, EIF4E, EMP3, FGF1, FOS, GUCY1B3, HSPB8, ICAM1, IFI30, IGF2R, IL8, KIAA0101, KLF4, KLF5, KLF11, LGALS1, MXI1, MYC, NAD+, NAMPT, NOLC1, PLAT, PLAU, PLAUR, PMP22, PPAP2C, PTGER4, PTPN2, PTTG1, SERPINE1, SOCS1, SOD2, TGFB2, TIMP2, TNFRSF12A, TPX2, VCAM1, VEGFC
	14 d	ABCG1, ADAMTS1, ADM, AEBP1, AKR1B1, ALDH1A2, ANG, ANGPT2, APOA1, ATP1F1, BAK1, BCL2A1, BMP2, BOP1, C1QBP, C8ORF4, CAV2, CCND2, CCND3, CCNE1, CD44, CD74, CD247, CDCA7, CDH5, CDK2AP1, CDKN1A, CDKN1C, CEACAM1, CENPF, CFB, CIITA, CITED2, CKS2, CNN2, COL4A1, CST6, CTNNBIP1, CTSB, CXADR, CXCR4, CXCR7, CYR61, DCN, DHCR7, DHCR24, DLG5, DLL4, EBNA1BP2, EDN1, EEF1E1, EFNA1, EGR1, EPS8, ERG, EZH2, F2R, FABP4, FANCC, FASN, FDFT1, FES, FGF1, FGF13, FN1, FOS, FOXO4, FOXP1, FSCN1, GAB1, GADD45A, GCNT1, GLI3, GNE, GNL3, GNPAT1, GPI, GSTM1, GSTP1, GUCY1B3, HDAC3, HES1, HK2, HOXA10, HOXB3, HSP90B1, HSPA5, HYAL1, ID3, IFI30, IGF2, IGF2R, IGFBP5, IL6, IL15, IL6R, INSIG1, IRF8, ITGA2, ITGAV, ITGB5, JAG2, JAK3, JARID2, JUN, JUP, KAT2B, KCTD11, KIAA0101, KIT, KLF2, KLF4, KLF5, KLF6, KLF10, KRT8, LAMA3, LAMC1, LATS1, LCAT, LGALS1, LGR4, LRIG1, LTBP1, LYN, MAD2L1, MAP3K3, MAP3K11, MAPK14, MARCKSL1, MECOM, MERTK, MIF, MMP11, MSX1, MTUS1, MYC, MYCN, NAD+, NAMPT, NME1, NOLC1, NOTCH1, NOV, NRD1, NUMB, OSMR, PATZ1, PDXK, PES1, PIK3IP1, PIK3R2, PLA2G4A, PLAT, PLAU, PLD1, PLXNB2, PMP22, PPAP2C, PPARG, PRDX2, PRMT5, PRR5, PTGER4, PTPN1, PTPRM, PTTG1, PVR, RALB, RAPGEF3, RBBP7, RPS6KB2, S1PR1, SAT1, SCARB1, SERPINE2, SHMT2, SIRPA, SNAI2, SOCS1, SOCS2, SOD2, SOX4, SPRY1, SPTBN1, STAT1, STC1, STMN1, STRA13, TBC1D8, TENC1, TFRC, TGFB2, TGFB2, TGFB3, TGIF1, TIMP2, TIMP3, TNFRSF12A, TNFSF10, TRIM25, TSPAN5, TSPAN31, UCHL1, UGCG, UTP20,

		VCAN, VDAC1, VEGFC, WIPF1, YPEL3, ZBTB16, ZFP36L1
<b>Cell morphology</b>		
Shape change	8 d	CAPG, CCL26, CCNE1, CNN2, CYR61, EZR, FGD4, FOS, GEM, IL8, LGALS1, LIMS1, MYC, NR2F1, OLR1, PLAT, PLAU, PLAUR, PMP22, SOD2, THBS2, VCAM1, VEGFC
	14 d	ANGPT2, ARAP3, ARHGEF11, BMP2, CAPG, CCL26, CCNE1, CD44, CD247, CDC42, CDC42EP2, CDC42EP4, CENPF, CNN2, CYR61, DCN, DLL4, EFNA1, EZR, F2R, FGD4, FN1, FOS, FOXO4, GEM, HES1, HSP90AA1, HSPB1, IGF2, IL6, ITGA2, ITGAV, ITGB5, JUN, LAMA3, LGALS1, LIMS1, LMO2, LYN, MAPK14, MARCKS, MERTK, MYC, NR2F1, OLR1, PALLD, PARVB, PFDN6, PLAT, PLAU, PLCG1, PLD1, PMP22, PRKCH, PVR, SIRPA, SNAI2, SOD2, SULF2, TEK, THBS2, VCL, VEGFC, WIPF1
<b>Cell-to-cell signaling/interaction</b>		
Adhesion	4 d	CDH2, FGF1, MCAM, OLR1, PLAU, PLAUR, SDC3, SERPINE1, THBS2
	8 d	CADM1, CXCL3, CYR61, DKK3, EDN1, EGR1, FGF1, ICAM1, IGF2R, IL8, LIMS1, MCAM, MYC, OLR1, PLAU, PLAUR, RND1, SDC3, SELP, SERPINE1, TGFB2, THBS2, TNFRSF12A, VCAM1, VEGFC
	14 d	ANGPT2, AOC3, APLP2, ARHGDIB, ATP2A2, BCAM, C1QBP, CASK, CD34, CD44, CDC42, CDH5, CEACAM1, CHST10, CLDN1, CST6, CXADR, CXCR4, CYR61, DCN, DKK3, EDN1, EGR1, EPAS1, F2R, FASN, FES, FGF1, FN1, FOXP1, GNE, GNPAT1, HES1, HYAL1, ICAM2, IGF2R, IL6, IL15, IL6R, ITGA2, ITGAV, ITGB5, JAG2, JUP, KIT, LAMA3, LAMC1, LIMS1, LYN, MAD2L1, MAP3K8, MARCKS (includes EG:4082), MMP16, MYC, NID2, OLR1, PALLD, PARVB, PCDH12, PLAU, PLCG1, PLD1, PNN, PODXL, PPAP2B, PPARG, PRDX2, PTPRM, PVR, RND1, S1PR1, SDC3, SELP, SIRPA, STAT1, TEK, TGFB2, TGFB2R2, THBS2, TIMP3, TMOD1, TNFRSF12A, TSPAN5, VCAN, VCL, VEGFC
<b>Cell cycle</b>		
Arrest	4 d	FOS, IGFBP5, PLAU, PLAUR
	8 d	ATF3, BHLHE40, BRCA1, CCND2, CCNE1, CYR61, EGR1, EIF4E, FOS, IL8, KLF4, LGALS1, MYC, PLAU, PLAUR, PPAP2C, PTTG1, S100A4, SGOL1, TGFB2, TIMP2
	14 d	AURKB, BAK1, BHLHE40, BMP2, C1QBP, CCND2, CCND3, CCNE1, CD44, CD247, CDC42, CDKN1A, CDKN1C, CKS2, CYR61, DCN, EGR1, FANCC, FASN, FLNA, FN1, FOS, FOXO4, GADD45A, GNL3, GPS2, HOXA10, HSP90AA1, ID3, IGF2, IGFBP5, IL6, ITGA2, ITGAV, JAK3, JUN, KAT2B, KLF4, KLF6, LATS1, LGALS1, LYN, MAD2L1, MAPK14, MEOX2, MIF, MLL5, MYC, NEK6, NOTCH1, PLAU, POLB, PPAP2C, PPARG, PRKCH, PTTG1, S100A4, SP1, STAT1, TFRC, TGFB2, TIMP2, YWHAG, ZBTB16
Progression	8 d	ATF3, BHLHE40, BRCA1, CCND2, CCNE1, CDCA8, CYR61, EDN1, EGR1, EIF4E, FGF1, FOS, IL8, MXI1, MYC, NAMPT, NOLC1, NUSAP1, PTPN2, PTTG1, S100A4, SGOL1, SOCS1, TGFB2, TIMP2, TOP2A, TPX2, VEGFC
	14 d	ADM, AKAP8, ANKS1A, AURKB, BAK1, BCL2A1, BHLHE40, BMP2, BOP1, C1QBP, CALM2, CARD10, CCND2, CCND3, CCNE1, CCNE2, CD44, CD320, CDC42, CDCA8, CDKN1A, CDKN1C, CEACAM1, CENPF, CITED2, CKS2, CYR61, DCTN3, EDN1, EGR1, ERFF1, EZH2, FANCC, FASN, FGF1, FOS, FOXO4, GAB1, GADD45A, GNL3, GPI, GPS2, HDAC3, HOXA10, HOXB3, HSP90AA1, HSPA8, HSPA1A, ID3, IGF2, IGFBP5, IL6, ITGA2, JARID2, JUN, KAT2B, KIF22, KIT, LATS1, LRIG1, LYN, MAD2L1, MAPK14, MARCKS (includes EG:4082), MIF, MYC, NAMPT, NOLC1, NOTCH1, NUSAP1, PES1, PHB (includes EG:5245), PLA2G16, PLCG1, PLK2, PNN, PPARG, PRMT5, PSMB5, PSMG2, PTTG1, RAPGEF3, S100A4, S1PR1, SOCS1, STAT1, TGFB2, TGIF1, TIMP2, TNFSF10, TOP2A, TRIM25, TUBB, VEGFC, ZBTB16
<b>Cell movement</b>		
Cell migration	4 d	CDH2, FGF1, IGFBP5, OLR1, PLAU, PLAUR, S100A2, SDC3, SERPINE1, THBS2
	8 d	CCL26, CCNB2, CNN2, CXCL1, CXCL3, CXCL6, CYR61, EDN1, EGR1, EZR, FGF1, FHL2, GUCY1B3, ICAM1, IGF2R, IL8, KLF4, KLF5, LGALS1, MYC, NR2F1, OLR1, PLAT, PLAU, PLAUR, PMP22, PTGER4, PTPN2, SDC3, SELP, SERPINE1, SOCS1, SOD2, TGFB2, THBS2, TIMP2, TNFRSF12A, VCAM1, VEGFC
	14 d	ADM, ANGPT2, ANKS1A, AOC3, APLP2, APOA1, ARAP3, ARHGDIB, CCL26, CCNB2, CD34, CD44, CD247, CDC42, CDH5, CDKN1A, CEACAM1, CITED2, CNN2, COL4A1, CST6,

		CTSB, CXCR4, CXCR7, CYR61, DCN, DLL4, EBF1, EDN1, EFNA1, EGFL7, EGR1, ELMO1, ERRFI1, EZR, F2R, FGF1, FGF13, FHL2, FN1, FOXO4, GAB1, GADD45A, GCNT1, GLI3, GUCY1B3, HSP90AA1, ICAM2, ID3, IGF2, IGF2R, IGFBP5, IL6, IL15, ITGA2, ITGAV, ITGB5, JUP, KIT, KLF2, KLF4, KLF5, LAMA3, LAMC1, LDLR, LGALS1, LYN, MAP1B, MAP3K8, MAPK14, MARCKS, MEOX2, MIF, MRAS, MRC2, MYC, NES, NME1, NOV, NR2F1, NRD1, OLR1, PALLD, PDE2A, PHB, PIK3IP1, PLAT, PLAU, PLD1, PLXNB2, PMP22, PODXL, PON2, PPAP2A, PPAP2B, PPARG, PTGER4, PTPN1, PVR, RALB, RAPGEF3, RPS6KA5, S100A2, S1PR1, SDC3, SELP, SERPINE2, SIRPA, SLC9A3R2, SNAI2, SOCS1, SOD2, STAT1, STC1, STMN1, TEK, TENC1, TGFB2, TGFB2, THBS2, TIMP2, TIMP3, TNFRSF12A, TNFSF10, VCAN, VCL, VEGFC, YARS, ZBTB16
<b>Metabolism</b>		
Carbohydrates	4 d	PLAU, PLAUR, SERPINE1, SLC2A1, GM2A
	8 d	EDN1, IL8, MYC, NAMPT, PLAU, PLAUR, SERPINE1, SLC2A1, SOCS1
	14 d	AKR1B1, AKR7A2, APOA1, B3GALT2, CD44, CDC42, CHST2, CHST7, CPT1A, CS, CSGALNACT2, DSE, EXT1, GALE, GALT, GLO1, GMDS, GNE, GNPAT1, GPI, GUSB, HK2, HYAL1, HYAL2, IL6, LCAT, LYN, LYVE1, MAPK14, MYC, PCDH12, PGD, PGK1, PGM3, PLCG1, PLD1, PPP1CA, PYGL, SERP1, ST3GAL2, TPI1, UGDH
Lipids	4 d	GM2A, FGF1, PLAU
	14 d	ACER3, ACLY, ACSS2, ANG, APOA1, CD74, CDC42, DHCR7, DLD, EDN1, FADS1, FASN, FGF1, GPR77, GPX4, IGF2, IL6, INSIG1, LCAT, LDLR, LYN, MIF, NAMPT, PLA2G4A, PLAU, PLD1, PPAP2A, PPARG, S1PR1, SCAP, SCD, SERINC5, SMPD1, UGCG
Nucleic acids	4 d	UPP1
	14 d	GMDS, GNPAT1, PGM3, UGDH
Energy production	4 d	SLC16A1
	14 d	MDH1, MDH2, ME1, ME3
<b>Inflammatory response</b>		
Migration of leukocytes	4 d	PLAU, SERPINE1
	8 d	CCL26, CNN2, CXCL1, CXCL3, CXCL6, EDN1, ICAM1, IL8, LGALS1, PLAU, PLAUR, SELP, SERPINE1, SOCS1, TGFB2, THBS2, TIMP2, VCAM1
	14 d	AOC3, CEACAM1, COL4A1, FN1, ITGAV, LDLR, MAPK14, PPARG, PVR, SIRPA, TIMP2, TIMP3
Adhesion of leukocytes	4 d	OLR1, PLAU, PLAUR, THBS2
	8 d	CXCL3, ICAM1, IL8, OLR1, PLAU, PLAUR, SELP, THBS2, VCAM1
Immune response	4 d	FOS, OLR1, PLAU, PLAUR, THBS2
	8 d	CCL26, CHST2, CXCL1, CXCL3, CXCL6, EDN1, FOS, ICAM1, IL8, LGALS1, OLR1, PLAU, PLAUR, PTGER4, SELP, TGFB2, THBS2