SUPPLEMENTARY MATERIAL

Transcriptome sequencing of 3,3',4,4',5-Pentachlorobiphenyl (PCB126)-treated human preadipocytes demonstrates progressive changes in pathways associated with inflammation and diabetes.

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Table S1: Chemical signature pathways (top 10) of PCB126-treated preadipocytes after 9 hours.

Chemical Id	Chemical Name	pv_p_fdr	zscore
D013749	Tetrachlorodibenzodioxin	4.96E-10	4.15862
C023035	3,4,5,3',4'-pentachlorobiphenyl (PCB126)	4.00E-13	3.53009
C086401	pentabromodiphenyl ether	1.17E-06	4.351941
D008748	Methylcholanthrene	2.55E-07	2.886751
D000336	Aerosols	1.79E-06	3.152963
D001564	Benzo(a)pyrene	0.000206	4.004543
C022838	nickel chloride	0.000179	3.577709
D017632	Asbestos, Serpentine	2.51E-05	2.683282
D009853	Omeprazole	1.96E-05	2.236068
D004137	Dinitrochlorobenzene	0.00027	3.464102

Table S2: Pathways in common between different timepoints (9-hour, 1-day, 3-day) of PCB126 exposure of preadipocytes. P≤0.05, Fdr≤0.05.

Name of Pathway	9-Hour pv_fdr	1-Day pv_fdr	3-Day pv_fdr
Cytokine-cytokine receptor interaction	0.000213	1.58E-06	3.69E-06
MAPK signaling pathway	0.000213	0.000499	1.10E-05
Osteoclast differentiation	0.002083	0.013481	7.33E-05
Neuroactive ligand-receptor interaction	0.04661	0.000775	7.33E-05
AGE-RAGE signaling pathway in diabetic complications	0.00959	8.53E-05	0.000132
Pathways in cancer	0.011362	0.000813	0.000177
Ras signaling pathway	0.037673	0.043676	0.000197
Complement and coagulation cascades	0.015962	0.049746	0.000197
Rheumatoid arthritis	0.001351	0.000393	0.000214
NF-kappa B signaling pathway	0.017713	0.004984	0.000553
Hematopoietic cell lineage	0.043771	0.012131	0.000975
Fluid shear stress and atherosclerosis	0.04661	0.010475	0.00362

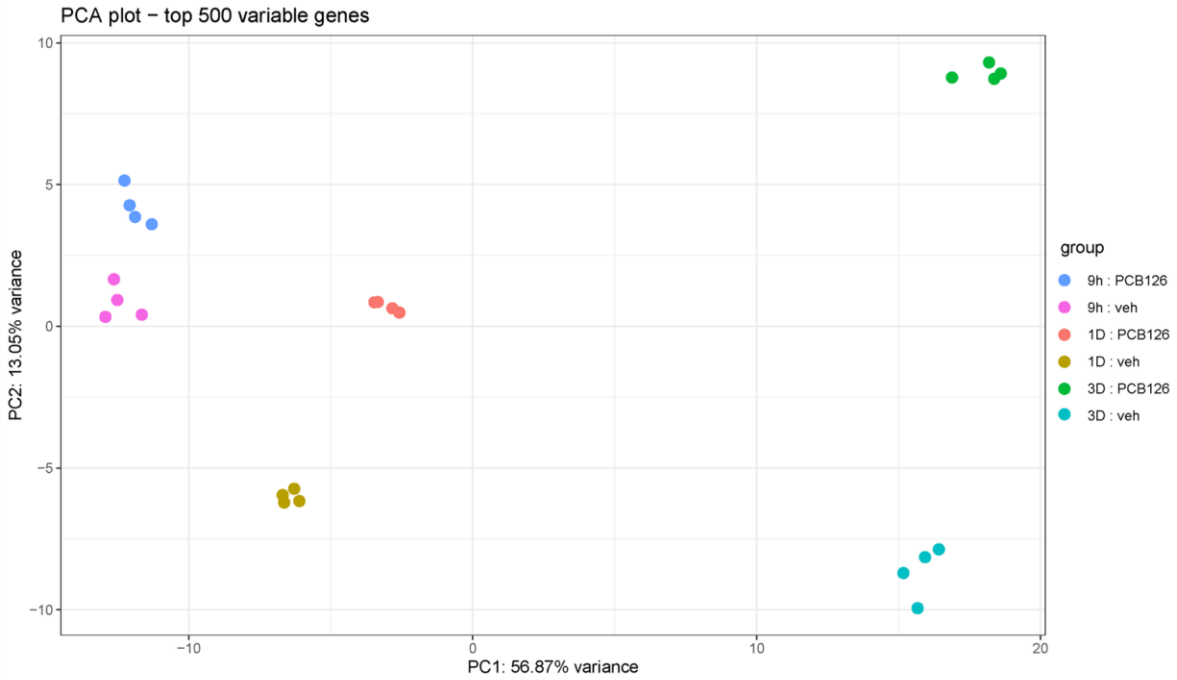

Figure S1: Principal Component Analysis of top 500 variable gene transcripts from replicates of vehicle and PCB126 treated preadipocytes over a time course of 9 hours (9h), 1 day (1D), and 3 days (3D).

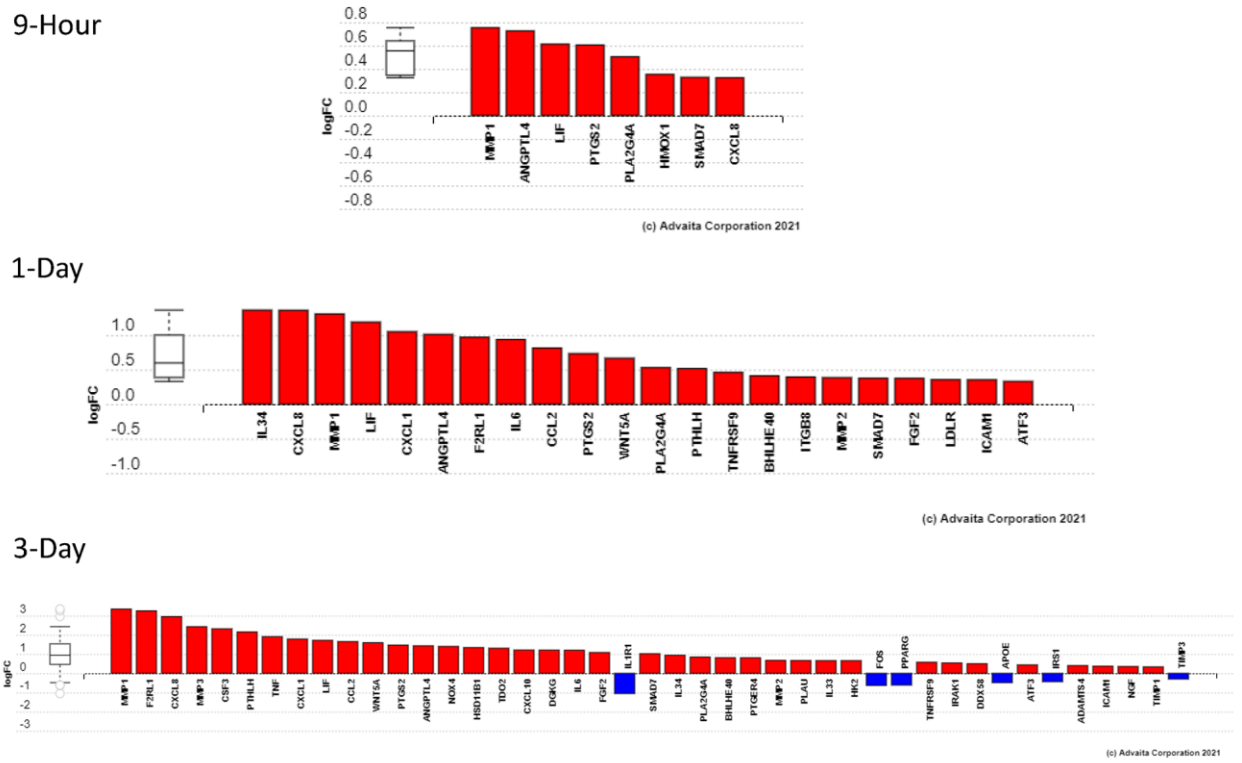

Figure S2: Transcript level changes (log2fold) of genes in the IL-1β pathway at different timepoints (9-hour, 1-day, 3-day) of PCB126-exposed preadipocytes compared to vehicle controls at the same timepoints. Fdr≤0.05.