

**SUPPLEMENTAL FIGURE 1**

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**SUPPLEMENTAL TABLES 1 - 2**

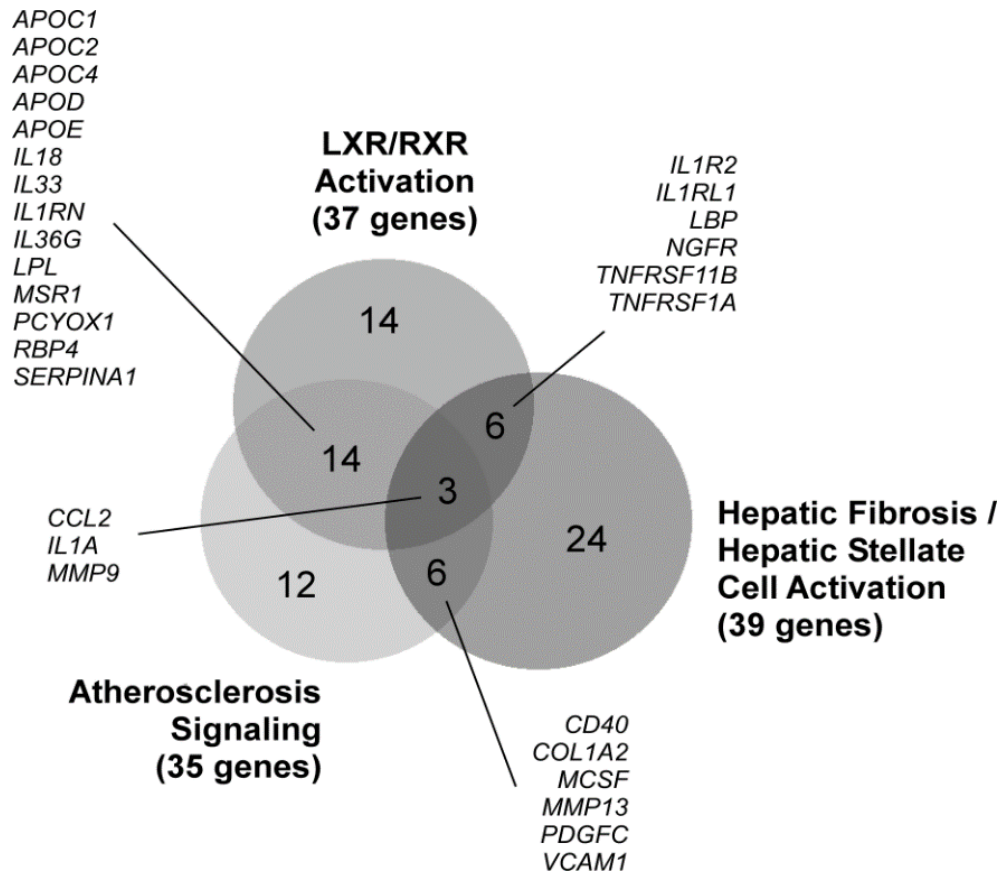
**Article Title:** Pathways analysis of differential gene expression induced by engrafting doses of total body irradiation for allogeneic bone marrow transplantation in mice

**Journal Name:** Immunogenetics

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## Supplemental Figure 1



**Supplemental Fig. 1.** Three-way Venn-diagrams of genes enriched in the LXR/RXR activation, atherosclerosis signaling, and hepatic fibrosis / hepatic stellate cell activation canonical pathways.

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**Supplemental Table 1. Real-time PCR primers.**

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<b>Primer</b>	<b>Sequence (5' to 3')</b>
<b><i>H2-Ab1</i></b>	
Forward	GCGACGTGGGCGAGTACC
Reverse	CATTCCGGAACCAGCGCA
<b><i>H2-Oa</i></b>	
Forward	AGACCAGCTTCTACTCTCAGCCTAAC
Reverse	ACAGATCAGGGTCTCTATGGTGTC
<b><i>H2-Ob</i></b>	
Forward	AGAGAATTTTGTGATTCAGGC
Reverse	TCTGGATACTACTGTCACCTCTG
<b><i>H2-DMb1</i></b>	
Forward	TTGGGGTGCTGTATCCATGGGCCGAAAATT
Reverse	GAAGCCCCAGACGTAGCAGGCCAGCATCACC
<b><i>H2-DMb2</i></b>	
Forward	TTGGGGTGCTGTCTAGATTGGCTGAAATAA
Reverse	GAAGCCCCAGACGTAGCAGGCCAGCATCACG
<b><i>Cd80</i></b>	
Forward	AAGTGGTGCTGTCTGTCATTG
Reverse	CGGAAGCAAAGCAGGTAATC

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**Supplemental Table 2. Differentially expressed genes in canonical pathways shared between BALB.K and B10.BR mice in the spleen after conditioning with engrafting TBI doses. <sup>a</sup>**

LXR/RXR Activation (37 genes)		Complement System (16 genes)		Atherosclerosis Signaling (35 genes)		Hepatic Fibrosis / Hepatic Stellate Cell Activation (39 genes)		Heme Biosynthesis II (8 genes)	
Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change
ABCG1	↑ 2.61	C2	↑ 2.80	ALOXE3	↑ 2.02	BAX	↑ 2.06	ALAD	↓ -6.34
ABCG4	↓ -57.13	C3	↑ 2.36	APOC1	↑ 4.65	CCL2	↑ 9.90	ALAS2	↓ -4.12
AHSG	↓ -3.07	C6	↑ 4.27	APOC2	↑ 3.32	CD40	↓ -2.36	CPOX	↓ -7.62
APOC1	↑ 4.65	C1QA	↑ 3.39	APOC4	↑ 2.13	COL1A2	↑ 2.13	FECH	↓ -3.99
APOC2	↑ 3.32	C1QB	↑ 3.67	APOD	↑ 3.95	EDNRA	↑ 2.44	HMBS	↓ -12.52
APOC4	↑ 2.13	C1QC	↑ 2.81	APOE	↑ 2.29	EDNRB	↑ 3.28	PPOX	↓ -3.19
APOD	↑ 3.95	C1R	↑ 3.10	CCL11	↑ 9.90	EGFR	↑ 2.69	UROD	↓ -6.20
APOE	↑ 2.29	C1S	↑ 3.09	CCL2	↑ 2.70	FGFR1	↑ 2.51	UROS	↓ -8.63
APOH	↑ 4.29	C4B	↑ 3.40	CD40	↓ -2.36	FLT1	↑ 2.38		
ARG2	↑ 3.25	C5AR1	↑ 2.26	COL18A1	↑ 2.27	FLT4	↑ 2.10		
C3	↑ 2.36	CD59	↓ -7.45	COL1A2	↑ 2.13	HGF	↑ 2.80		
C4B	↑ 3.40	CFB	↑ 2.38	IL18	↑ 2.12	IGF1	↑ 2.73		
CCL2	↑ 9.90	CFH	↑ 2.53	IL1A	↑ 2.39	IGFBP3	↑ 3.29		
FDFT1	↑ 2.16	CFI	↑ 4.07	IL1RN	↑ 2.22	IGFBP4	↑ 2.57		
IL18	↑ 2.12	CR2	↓ -2.43	IL33	↑ 2.22	IGFBP5	↑ 2.34		
IL33	↑ 2.39	SERPING1	↑ 3.07	IL36G	↑ 2.32	IL1A	↑ 2.32		
IL1A	↑ 2.22			ITGA4	↓ -2.50	IL1R2	↑ 2.22		
IL1R2	↑ 4.80			LPL	↑ 2.72	IL1RL1	↑ 4.80		
IL1RL1	↓ -14.24			MCSF	↑ 2.32	IL4	↓ -14.24		
IL1RN	↑ 2.22			MMP13	↑ 11.54	KDR	↑ 2.02		
IL36G	↑ 2.32			MMP3	↑ 2.07	LBP	↑ 2.61		
ITIH4	↑ 3.94			MMP9	↑ 6.19	LEPR	↑ 3.35		
KNG1	↑ 2.18			MSR1	↑ 4.56	MCSF	↑ 2.32		
LBP	↑ 2.61			PCYOX1	↑ 2.27	MMP13	↑ 7.41		
LPL	↑ 2.72			PDGFC	↑ 4.22	MMP2	↑ 2.07		
MMP9	↑ 2.07			PLA2G1B	↑ 3.53	MMP9	↑ 6.19		
MSR1	↑ 4.56			PLA2G2C	↓ -3.57	MYH11	↑ 6.85		
NGFR	↑ 2.88			PLA2G2D	↑ 3.56	MYH7	↑ 2.47		
NR1H3	↑ 2.29			PLA2G4F	↑ 2.28	NGFR	↑ 2.88		
PCYOX1	↑ 2.27			PLA2G7	↑ 5.12	PDGFC	↑ 4.22		
PON3	↑ 2.10			RBP4	↑ 2.83	PDGFRA	↑ 3.04		
RBP4	↑ 2.83			SELP	↑ 2.20	PDGFRB	↑ 2.26		
SAA2	↑ 26.88			SERPINA1	↑ 2.43	PGF	↑ 2.77		
SERPINA1	↑ 2.43			TNFSF12	↑ 2.53	STAT1	↑ 2.62		
TF	↑ 2.22			VCAM1	↑ 3.93	TIMP1	↑ 2.47		
TNFRSF11B	↑ 2.00					TIMP2	↑ 3.16		
TNFRSF1A	↑ 2.38					TNFRSF11B	↑ 2.00		
						TNFRSF1A	↑ 2.38		
						VCAM1	↑ 3.93		

Abbreviations: IPA, Ingenuity Pathways Analysis; TBI, total body irradiation.

<sup>a</sup> TBI doses were 400 cGy for BALB.K and 500 cGy for B10.BR mice.

**Supplemental Table 2 (Continued). Differentially expressed genes in canonical pathways shared between BALB.K and B10.BR mice in the spleen after conditioning with engrafting TBI doses. <sup>a</sup>**

B Cell Development (13 genes)		Altered T Cell and B Cell Signaling in Rheumatoid Arthritis (21 genes)		Matrix Metalloproteases (13 genes)		Heme Biosynthesis from Uroporphyrinogen-III I (4 genes)		Communication between Innate and Adaptive Immune Cells (18 genes)	
Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change	Gene Symbol	Fold Change
CD19	↓ -2.95	CD40	↓ -2.36	HSGP2	↑ 2.11	CPOX	↓ -7.62	CD40	↓ -2.36
CD40	↓ -2.36	CD80	↑ 2.29	LRP1	↑ 3.53	FECH	↓ -3.99	CD80	↑ 2.29
CD43	↓ -2.38	CD79A	↓ -2.88	MMP2	↑ 7.41	PPOX	↓ -3.19	CD8A	↓ -2.78
CD80	↑ 2.29	CD79B	↓ -2.62	MMP3	↑ 11.54	UROD	↓ -6.20	CD8B	↓ -5.17
CD79A	↓ -2.88	FCER1G	↑ 2.44	MMP9	↑ 2.07			CXCL10	↑ 3.39
CD79B	↓ -2.62	H2-DMB2	↓ -2.75	MMP13	↑ 6.19			FCER1G	↑ 2.44
DNTT	↓ -2.77	H2-OA	↓ -2.01	MMP14	↑ 2.40			IL4	↑ 2.32
H2-DMB2	↓ -2.75	H2-OB	↓ -3.92	MMP15	↑ 2.39			IL15	↑ 3.18
H2-OA	↓ -2.01	IL4	↑ 2.32	MMP25	↑ 2.81			IL18	↑ 2.12
H2-OB	↓ -3.92	IL15	↑ 3.18	SDC2	↑ 2.24			IL33	↑ 2.39
IGKC	↓ -2.58	IL18	↑ 2.12	THBS2	↑ 3.09			IL12B	↑ 2.43
IL7	↑ 2.53	IL33	↑ 2.39	TIMP1	↑ 2.47			IL1A	↑ 2.22
RAG1	↓ -3.62	IL12B	↑ 2.43	TIMP2	↑ 3.16			IL1RN	↑ 2.22
		IL1A	↑ 2.22					IIL36G	↑ 2.32
		IL1RN	↑ 2.22					TLR7	↑ 2.64
		IL36G	↑ 2.32					Tlr13	↑ 2.27
		MCSF	↑ 2.32					TNFRSF13C	↓ -3.35
		TLR7	↑ 2.64					TNFSF13B	↑ 3.59
		Tlr13	↑ 2.27						
		RNFRSF13C	↓ -3.35						
		TNFS13B	↑ 3.59						

Abbreviations: IPA, Ingenuity Pathways Analysis; TBI, total body irradiation.

<sup>a</sup> TBI doses were 400 cGy for BALB.K and 500 cGy for B10.BR mice.