

Supplementary Tables and Figures

Table S1. Primer list.

Gene name	Sequence	Size (bp)
IL-1 $\beta$ -5	AAACAGATGAAGTGCTCCTTCCAGG	391
IL-1 $\beta$ -3	TGGAGAACACCACTTGTGCTCCA	
IL-6-5	ATGAACTCCTCTCCACAAGCGC	628
IL-6-3	GAAGAGCCCTCAGGCTGGACTG	
IL-8-5	ATGACTTCCAAGCTGCCGTGGCT	289
IL-8-3	TCTCAGCCCTCTTCAAAAACTTCTC	
IL-23p17-5	AAA GGA TCC ACC AGG GTC	320
IL-23P17-3	TGC CAT CCT TGA GCT GCT	
CXCL1-5	ATTCACCCCAAGAACATCCA	183
CXCL1-3	CACCAGTGAGCTCCTCCTC	
CXCL10/IP-10-5	TGCAAGCCAATTTGTCCACGTGTTG	302
CXCL10/IP-10-3	GCAGCTGATTGGTGACCATCATTGG	
MMP2-5	AGATCTTCTTCTCAAGGACCG	224
MMP2-3	CTGGTCAGTGGCTGGGTA	
MMP9-5	GACGCAGACATCGTCATC	119
MMP9-3	AACTCGTCATCGTCGAAATGG	
$\beta$ -actin-5	ACTCTCCAGCCTCCTTCC	
$\beta$ -actin-3	TGTCACCTCACCGTTCCAG	516

Table S2. Alignment of 80 Cytokines on the human Cytokine Antibody Array

Positive control	Positive control	Positive control	Positive control	Negative control	Negative control	ENA-78	GCSF	GM-CSF	GRO	GRO- $\alpha$
I-309	IL-1 $\alpha$	IL-1 $\beta$	IL-2	IL-3	IL-4	IL-5	IL-6	IL-7	IL-8	IL-10
IL-12 p40/p70	IL-13	IL-15	IFN- $\gamma$	MCP-1	MCP-2	MCP-3	MCSF	MDC	MIG	MIP-1 $\beta$
MIP-1 $\delta$	RANTES	SCF	SDF-1	TARC	TGF- $\beta$ 1	TNF- $\alpha$	TNF- $\beta$	EGF	IGF-I	Angiogenin
Oncostatin M	Thrombopoitin	VEGF	PDGF-BB	Leptin	BDNF	BLC	Ck $\beta$ S-1	Eotaxin	Eotaxin-2	Eotaxin-3
FGF-4	FGF-6	FGF-7	FGF-9	Flt-3 Ligand	Fractalkine	GCP-2	GDNF	HGF	IGFBP-1	IGFBP-2
IGFBP-3	IGFBP-4	IL-16	IP-10	LIF	LIGHT	MCP-4	MIF	MIP-3 $\alpha$	NAP-2	NT-3
NT-4	Osteopontin	Osteoprotegrin	PARC	PIGF	TGF- $\beta$ 2	TGF- $\beta$ 3	TIMP-1	TIMP-2	Positive control	Positive control

Note: GRO detects CXCL1, CXCL2, CXCL3; GRO- $\alpha$  detects only CXCL1; IL-12 p40p70 detects both IL-12 p40 and IL-12 p70; TGF- $\beta$ 1 detects only active form; VEGF detects VEGF-165 and VEGF-121.

Table S3. Real-Time PCR Primer list.

Gene name	Sequence	size (bp)
IL-6-5	AGGGCTTCGGCAAATGTA	61
IL-6-3	GAAGGAATGCCCATTAACAAACAA	
CXCL1-5	TGCGAGTGGCACTGCTGCTC	157
CXCL1-3	TGGGGTCCGGGGACTTCAC	
IL-17-5	GGAACGTGGACTACCACATGAA	58
IL-17-3	GCGCAGGACCAGGATCTCT	
IL-21-5	GGAAAGGATTGTCATCTGTCTG	155
IL-21-3	GCTGGCAGAAATTCAAGGGAC	
IL-23-5	TTCTGCTTCAAAGGATCCA	58
IL-23-3	TCCGATCCTAGCAGCTTCTCA	

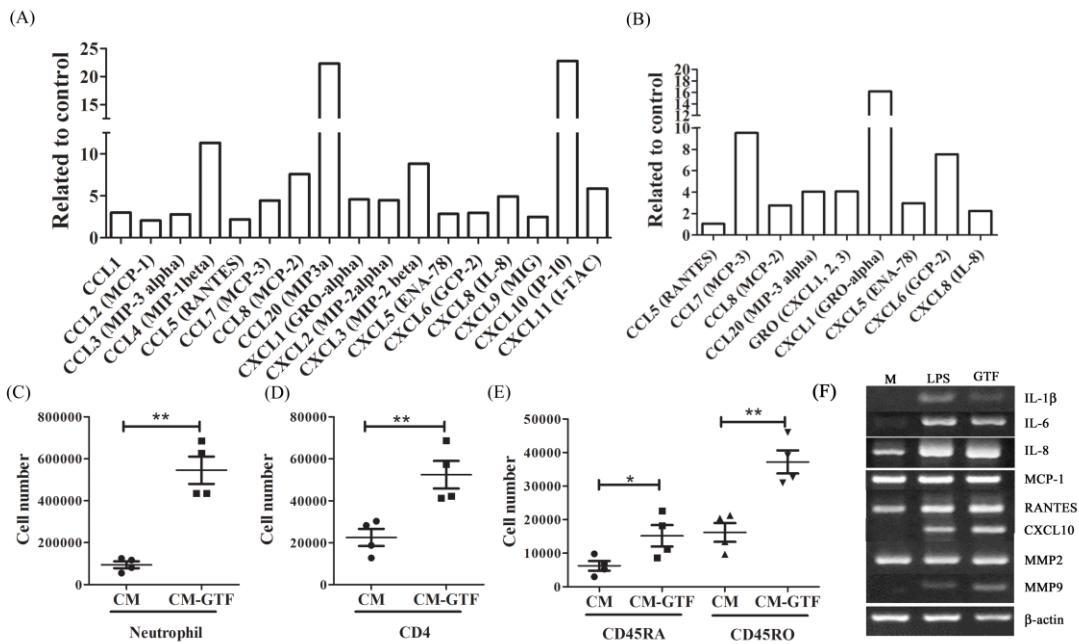


Figure S1. Chemokines and leukocyte migration profiles in valvular interstitial cells (VICs). The expression of chemokine genes in GTF-activated VICs was determined by chemokine PCR array (A), or chemokine protein array (B), the data represented as the related fold compared to unstimulated VICs. Migration of leukocyte by cultured medium (CM) or conditioned medium-GTF (CM-GTF) was measured using a two-chamber migration assay. The number of transmigrated Neutrophils (C), CD4 $^{+}$  T cells (D), CD45RA $^{+}$  or CD45RO $^{+}$  T cells (E) was stained with respective surface markers and analyzed by FACS. The expression of *IL-1 $\beta$* , *IL-6*, *IL-8*, *MCP-1*, *RANTES*, *CXCL10*, *MMP2*, *MMP9*, and *actin* were determined by RT-PCR (F). The experiments were performed independently from four individuals and indicated as the means of migrated cells  $\pm$  SEM. Significant differences among groups, as determined by student *t*-tests, are indicated by asterisks (\*\* $p < 0.01$ ).