SUPPLEMENTARY FIGURE 1

SUPPLEMENTARY FIGURE 2
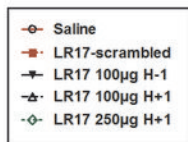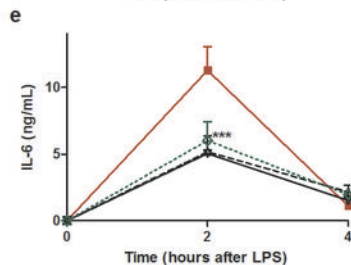
SUPPLEMENTARY FIGURES & TABLES

Supplementary Figure 1

LR17 decreases TLR2- and TLR4-induced TNF-α production by monocytes and neutrophils.

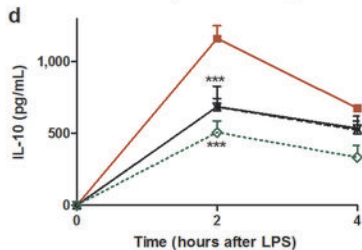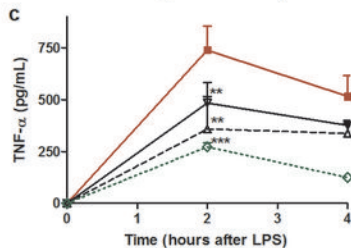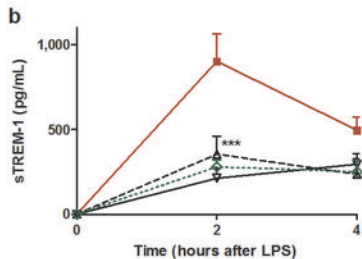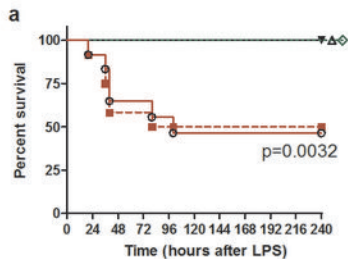Isolated human monocytes and neutrophils were stimulated with 100ng/mL LPS or 10µg/mL PAM_3CSK_4, in presence of LR17 of LR17-scrambled (20µg/mL) for 24h, and supernatants assayed for TNF-α concentration by ELISA. Results are expressed as mean±SD and are representative of 5 different experiments. *p<0.05, **p<0.01, ***p<0.001 LR17 vs LR17-scr.

Supplementary Figure 2

LR17 protects endotoxemic mice from death.

(a-e) Male Balb/c mice (20–23 g) were randomly grouped (15 mice per group) and treated with an LD_{50} of LPS. LR17, scrambled-LR17 (in 0.2 mL NaCl 0.9%), or 0.2 mL NaCl 0.9% was administered 60mins prior to or 60mins after LPS treatment. (a) LR17 treatment confers a survival advantage as shown by the survival curve (Log Rank test, p=0.0032) with no differences between doses or injection times of LR17. (b-e) plasma TNF-α, IL-6, IL-10 and sTREM-1 concentrations (n=4-6 per group at 2 and 4h). Results are expressed as mean±SD. p values are *p<0.05, **p<0.01, ***p<0.001 compared with LR17-scrambled treated animals.

Supplementary Table 1

Effects of LR17 on various inflammatory lung and liver gene expressions during CLP.

Data are representative of three different experiments, normalized by five housekeeping genes and expressed in $2^{-\Delta Ct}$ and fold differences between LR17-scrambled- and LR17-treated animals. (ND: not detected).

<u>**Supplementary Table 2**</u>

Characteristics of the patients at admission into the Intensive Care Unit.

P values are for comparisons between infected and non-infected patients using Student' t test (for normally distributed values) or Mann Whitney test.

SAPSII stands for Simplified Acute Physiology Score II, and SOFA for Sequential Organ Failure Assessment score.

SUPPLEMENTARY TABLE 1

Gene &Symbol	Protein	Liver				Lung			
		$2^{-\Delta Ct}$		Fold difference	P value	$2^{-\Delta Ct}$		Fold difference	P value
		LR17-scr treated	LR17 treated			LR17-scr treated	LR17 treated		
Adora2a	Adenosine A2a receptor	0.2	0.068	-2.94	<0.001	0.048	0.022	-2.22	0.04
C8a	Complement Component 8, alpha polypeptide	7.2	0.71	-10.02	0.0019	ND	ND	-	-
Casp1	Caspase 1	0.75	0.27	-2.76	<0.001	0.21	0.074	-2.82	0.002
Cd14	CD14	-	-	-	-	1.7	0.54	-3.24	<0.001
Crp	C-reactive protein	29	4.2	-6.86	0.06	-	-	-	-
IL-10	Interleukin 10	0.32	1.3	4.13	<0.001	0.14	0.0093	-14.61	<0.001
Il1a	Interleukin 1 alpha	4.4	0.54	-8.15	<0.001	0.37	0.099	-3.76	<0.001
Il1b	Interleukin 1 beta	12	2.5	-4.67	0.007	1.7	0.21	-8.37	<0.001
IL1ra	IL-1 receptor antagonist	9.8	4.5	-2.18	0.01	-	-	-	-
Il6	IL-6	0.17	0.064	-2.71	0.005	0.095	0.044	-2.14	<0.001
Lbp	LPS binding protein	25	1.3	-19.23	0.009	0.64	0.23	-2.71	<0.001
Mif	MIF	46	14	-3.26	0.04	-	-	-	-
MyD88	MyD88	0.3	0.02	-14.76	<0.001	ND	ND		
Nos2	iNOS	3.2	1.3	-2.43	0.0013	-	-	-	-
Pglyrp2	PG recognition protein 2	1.6	0.25	-6.32	<0.001	-	-	-	-
Proc	Protein C	7.1	0.53	-13.41	0.0017	ND	ND	-	-
Ptafr	Platelet-Activating Factor receptor	0.18	0.027	-6.61	0.004	0.085	0.022	-3.93	0.005
Tgfb1	TGF-β1	0.37	0.026	-13.89	<0.001	-	-	-	-

SUPPLEMENTARY TABLE 2

Parameter	Overall (n=50)	Infected patients (n=24)	Non infected patients (n=26)	P value
Age, mean (SD) yrs	55.1 (18.2)	59.1 (16.3)	51.2 (19.5)	0.21
Sex, male (%)	46	42	53	0.48
SAPSII, mean (SD)	44 (19)	49 (18)	39 (19)	0.11
SOFA score, median (IQR)	5.0 (3.0-8.5)	8.0 (5.5-12.0)	3.0 (2.0-5.0)	<0.0001
Procalcitonin, median (IQR) ng/mL	1.02 (0.28-6.47)	6.14 (0.74-41.68)	0.38 (0.18-1.61)	0.01
Soluble TREM-1, median (IQR) pg/mL	415 (293-714)	628 (413-1233)	331 (239-616)	0.01
Soluble TREM-1 ligand, median (IQR) RU	17.5 (0.0-70.5)	44.0 (19.0-98.0)	0.0 (0.0-6.5)	<0.0001