Effect of acute TLR4 inhibition on insulin resistance in human subjects

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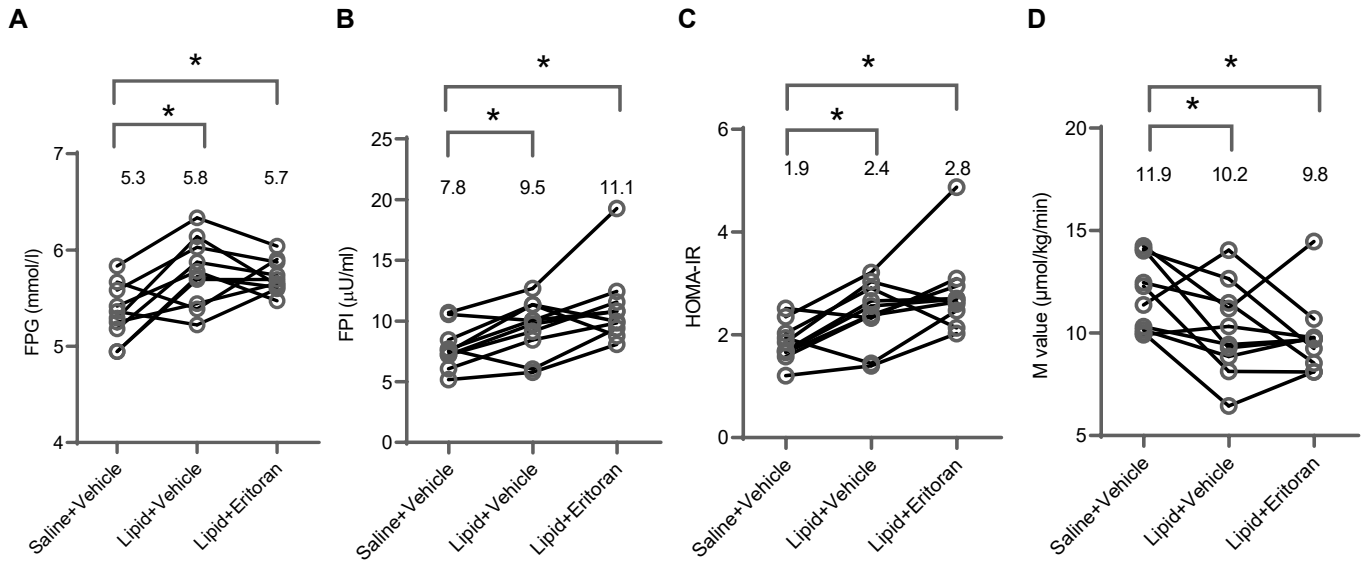
SUPPLEMENTARY MATERIALS

Figure S1. Effect of lipid and eritoran on metabolic parameters in lean subjects. Fasting blood glucose (FPG) (A), fasting plasma insulin (FPI) (B), HOMA insulin resistance index (HOMA-IR) (C), and insulin-stimulated glucose metabolism (M values) (D) were determined following saline+vehicle, lipid+vehicle, and lipid+eritoran infusions. n=10. Mean values of each group are shown above individual data points. Data were compared using one-way ANOVA followed by Holm-Šídák's multiple comparisons test. * $P < 0.05$.
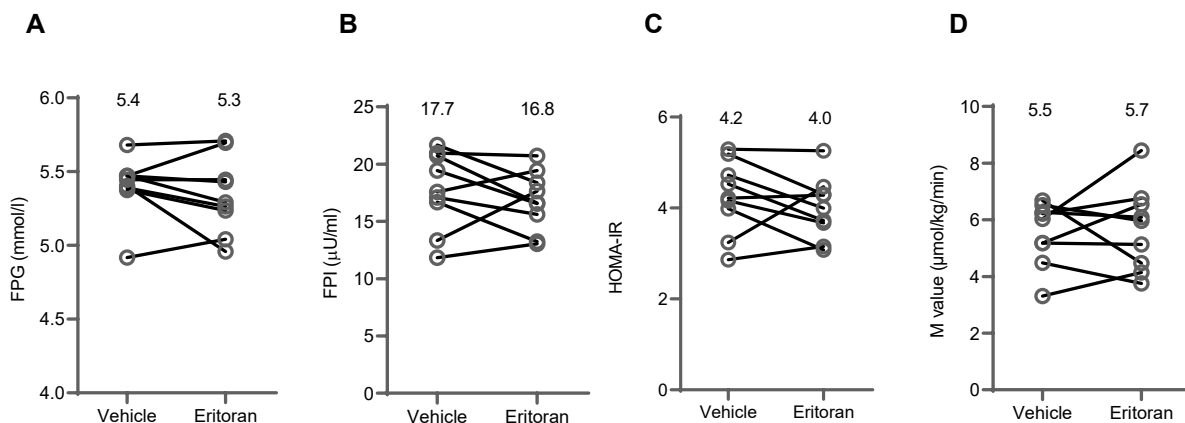
Figure S2. Effect of eritoran on metabolic parameters in obese subjects. Fasting blood glucose (FPG) (A), fasting plasma insulin (FPI) (B), HOMA insulin resistance index (HOMA-IR) (C), and insulin-stimulated glucose metabolism (M values) (D) were determined following vehicle or eritoran administration. n=9. Mean values of each group are shown above individual data points. Comparisons were made using paired t-tests or Wilcoxon signed-ranked test.
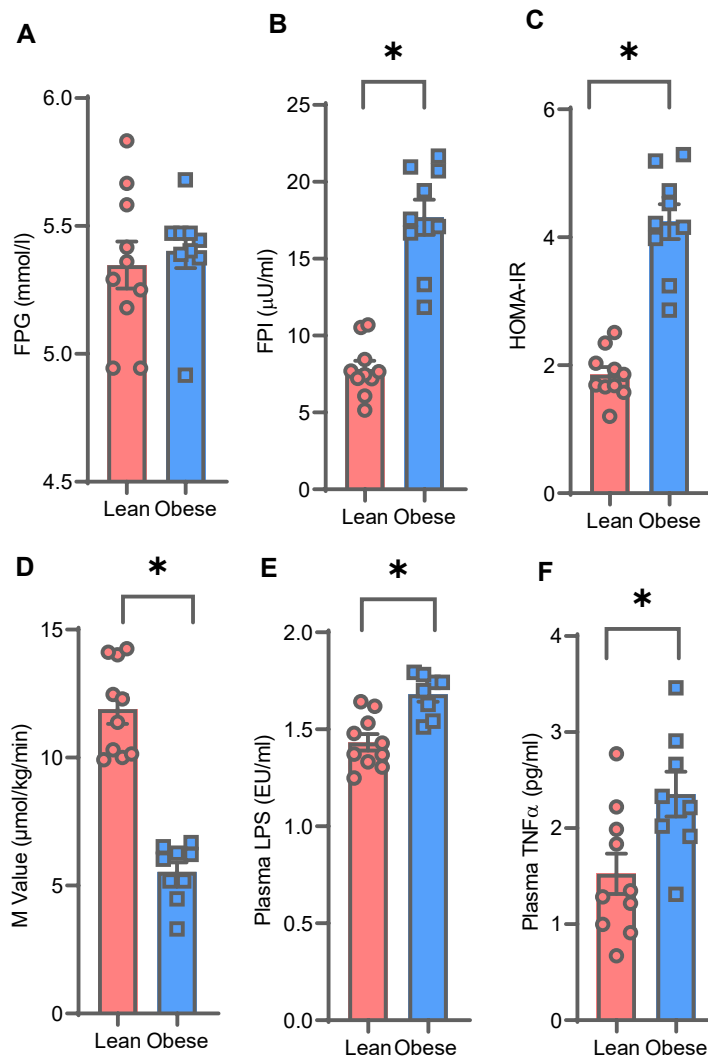
Figure S3. Comparison of metabolic parameters in lean and obese subjects. FPG (A), FPI (B), HOMA-IR (C), M value (D), plasma LPS (E) and TNFα levels (F) were determined in lean and obese subjects, following saline+vehicle (Protocol I) and vehicle administration (Protocol II), respectively. All data are the mean ± SEM of data obtained from 10 lean and 9 obese subjects. FPG: Fasting plasma glucose; FPI: fasting plasma insulin; M value: insulin-stimulated glucose metabolism; Data were compared using an unpaired t-test. $* P < 0.05$.

Table S1. Plasma glucose, insulin and FFA concentrations before and during the insulin clamp – Protocol I

Parameters		Saline+Vehicle	Lipid+Vehicle	Lipid+Eritoran
FFA (µmol/l)	**Basal**	513 ± 65	481 ± 47	537 ± 26
	Clamp	52 ± 11	157 ± 36*	138 ± 8*
Insulin (µU/ml)	**Basal**	7.8 ± 0.5	9.5 ± 0.7*	11.1 ± 1.0*
	Clamp	183.1 ± 10.5	178 ± 9.3	180.4 ± 9.1
Glucose (mmol/l)	**Basal**	5.3 ± 0.1	5.8 ± 0.1*	5.7 ± 0.1*
	Clamp	5.5 ± 0.1	5.5 ± 0.1	5.4 ± 0.1

All values are mean $\pm$ SEM. n=10. * P <0.05 compared to saline+vehicle. Comparisons made with repeated measures ANOVA followed by Holm-Šídák's multiple comparisons test.

Table S2. Plasma glucose, insulin and FFA concentrations before and during the insulin clamp – Protocol II

Parameters		Vehicle	Eritoran
FFA (μmol/l)	Basal	536 ± 35	605 ± 78
	Clamp	48 ± 7	52 ± 7
Insulin (μU/ml)	Basal	17.7 ± 1.1	16.8 ± 0.9
	Clamp	239.2 ± 16.8	252.8 ± 14.2
Glucose (mmol/l)	Basal	5.4 ± 0.1	5.3 ± 0.1
	Clamp	5.4 ± 0.0	5.5 ± 0.1

All values are mean ± SEM. n=9. Treatments compared with a paired t-test.