

## SUPPLEMENTAL MATERIAL

**Supplemental Table 1. Murine blood serum levels of lipids and liver enzymes after lipid treatment.** Triglycerides, cholesterol, glutamic oxaloacetic transaminase (GOT) and glutamic pyruvic transaminase (GPT) are displayed 3h after intravenous administration of 1 g/kg of different lipid emulsions or normal saline. Data are presented as mean  $\pm$  SEM; n.s. = not significant.

	<u>Mice</u>	<u>Triglycerides</u>	<u>Cholesterol</u>	<u>GOT</u>	<u>GPT</u>
	N	(mg/dl)	(mg/dl)	(U/l)	(U/l)
Control	6	50 $\pm$ 10	100 $\pm$ 10	230 $\pm$ 40	100 $\pm$ 30
Clinoleic	9	130 $\pm$ 20*	90 $\pm$ 10	190 $\pm$ 30	80 $\pm$ 10
Smoflipid	9	90 $\pm$ 10*	80 $\pm$ 10	190 $\pm$ 30	75 $\pm$ 10
Lipofundin	7	90 $\pm$ 10*	90 $\pm$ 10	250 $\pm$ 30	110 $\pm$ 15
		* vs. control	n.s.	n.s.	n.s.

**Supplemental Table 2. Hemodynamic and microvascular parameters of cremaster muscle venules after lipid treatment during trauma-induced inflammation.** Vessel diameter, centerline velocity, and wall shear rate are displayed after intravenous administration of 1g/kg of different lipid emulsions or normal saline. Data are presented as mean  $\pm$  SEM; n.s. = not significant.

	<u>Mice</u>	<u>Venules</u>	<u>Diameter</u>	<u>Centerline Velocity</u>	<u>Wall Shear Rate</u>	<u>Systemic Leukocyte Counts</u>
	N	n	( $\mu\text{m}$ )	( $\mu\text{m/s}$ )	( $\text{s}^{-1}$ )	(/ $\mu\text{l}$ )
Control	4	18	28 $\pm$ 1	2200 $\pm$ 100	1900 $\pm$ 100	6300 $\pm$ 100
Smoflipid	4	12	28 $\pm$ 1	2200 $\pm$ 50	2200 $\pm$ 150	5100 $\pm$ 600
Clinoleic	4	18	28 $\pm$ 1	2200 $\pm$ 50	2000 $\pm$ 100	7300 $\pm$ 600
Lipofundin	3	29	27 $\pm$ 1	2100 $\pm$ 50	2000 $\pm$ 100	4900 $\pm$ 500
			n.s.	n.s.	n.s.	n.s.

**Supplemental Table 3. Hemodynamic and microvascular parameters of cremaster muscle venules after lipid treatment during LPS-induced inflammation.** Vessel diameter, centerline velocity, and wall shear rate are displayed after intravenous administration of 1g/kg of different lipid emulsions or normal saline. Data are presented as mean  $\pm$  SEM; n.s. = not significant.

	<u>Mice</u>	<u>Venules</u>	<u>Diameter</u>	<u>Centerline Velocity</u>	<u>Wall Shear Rate</u>	<u>Systemic Leukocyte Counts</u>
	N	n	( $\mu\text{m}$ )	( $\mu\text{m/s}$ )	( $\text{s}^{-1}$ )	(/ $\mu\text{l}$ )
Control	3	21	27 $\pm$ 1	2100 $\pm$ 50	1900 $\pm$ 100	3700 $\pm$ 100
Clinoleic	3	34	26 $\pm$ 1	2100 $\pm$ 50	2100 $\pm$ 100	4400 $\pm$ 200
Smoflipid	3	34	27 $\pm$ 1	2100 $\pm$ 50	1900 $\pm$ 100	6200 $\pm$ 500
Lipofundin	3	29	26 $\pm$ 1	2100 $\pm$ 50	2000 $\pm$ 100	6500 $\pm$ 200
			n.s.	n.s.	n.s.	n.s.

**Supplemental Figure 1. Effect of different lipid compositions on neutrophil infiltration into LPS-stimulated cremaster muscles.** Neutrophil infiltration (number of transmigrated neutrophils per mm<sup>2</sup> of perivascular surface area) in Giemsa-stained cremaster muscle whole mounts of mice treated with Clinoleic, Lipofundin, Smoflipid (1g/kg) or saline (control) was investigated after intravital microscopy in the LPS model. All values are presented as mean  $\pm$  SEM from three or more mice per group. Significant differences ( $p < 0.05$ ) to saline treated mice are indicated by the asterisk.

