

**Electronic supplementary material**

**ESM Table 2** Associations with clamp *M/I* for different predictors of insulin sensitivity (standardised and log-transformed)

Predictor	Lean		Overweight		Obese	
	$\beta$ (SEM)	<i>p</i> value	$\beta$ (SEM)	<i>p</i> value	$\beta$ (SEM)	<i>p</i> value
LAR	-0.35 (0.036)	$3.8 \times 10^{-20}$	-0.59 (0.058)	$2.9 \times 10^{-22}$	-0.57 (0.113)	$1.4 \times 10^{-6}$
HOMA-S	-0.27 (0.039)	$4.8 \times 10^{-12}$	-0.47 (0.046)	$5.6 \times 10^{-22}$	-0.66 (0.073)	$7.8 \times 10^{-16}$
Fasting insulin	-0.28 (0.039)	$7.4 \times 10^{-13}$	-0.48 (0.046)	$5.2 \times 10^{-23}$	-0.66 (0.072)	$3.1 \times 10^{-16}$
LAR vs HOMA-S <sup>a</sup>	<i>p</i> =0.19		<i>p</i> =0.10		<i>p</i> =0.48	
LAR vs insulin <sup>a</sup>	<i>p</i> =0.26		<i>p</i> =0.13		<i>p</i> =0.48	

<sup>a</sup>Significance of differences in associations between predictors and *M/I*