

**The effect of Glucagon-Like Peptide-1 Receptor Blockade on glucagon-induced stimulation
of insulin secretion**

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Abbreviated title: Glucagon-Induced Insulin Secretion

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Online Supplementary Materials

Participants in Study 1 – Glucagon Infusion	
n	11
Age (Years)	26 ± 1
Sex (M / F)	2 / 9
Total Body Mass (Kg)	70 ± 5
BMI (Kg/M²)	25 ± 1
Fasting glucose (mmol/l)	
	4.7 ± 0.1
120-minute glucose (mmol/l)	
	7.1 ± 0.4
<i>S_i</i> (10⁻⁴ dl/kg/min per μU/ml)	
	15 ± 3
Φ (10⁻⁹ min⁻¹)	
	55 ± 5
DI (10⁻¹⁴ dl/kg/min/pmol)	
	1450 ± 435
Participants in Study 2 – Glucagon Bolus	
n	11
Age (Years)	55 ± 2
Sex (M / F)	4 / 7
Total Body Mass (Kg)	94 ± 4
BMI (Kg/M²)	32 ± 1
Fasting glucose (mmol/l)	
	5.2 ± 0.1
120-minute glucose (mmol/l)	
	7.5 ± 0.5
<i>S_i</i> (10⁻⁴ dl/kg/min per μU/ml)	
	10 ± 3
Φ (10⁻⁹ min⁻¹)	
	60 ± 4
DI (10⁻¹⁴ dl/kg/min/pmol)	
	959 ± 342

Table 1: Participant characteristics at the time of screening. Data represent Mean ± SEM. *S_i* is insulin action and Φ is total β -cell responsivity calculated using the oral minimal model.

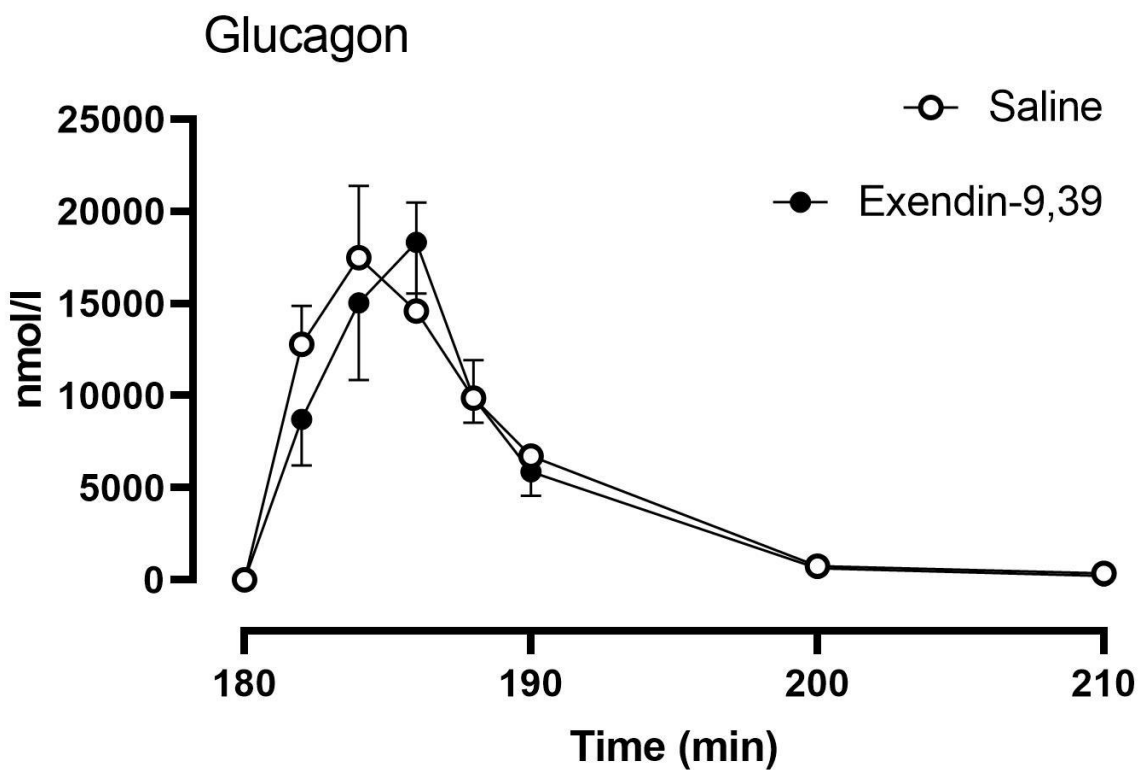


Figure 1: Peripheral glucagon concentrations observed in response to a 1mg glucagon bolus in 6 subjects