

**Supplemental Table 1: Functional Activity of PYY and GIP peptides at their respective mouse receptors.**

	Mouse Npy2r	Mouse Gipr	Mouse Glp1r
Coumpound	EC50 pMPm (SEM), n	EC50 pMPm (SEM), n	EC50 pMPm (SEM), n
LAPYY (Cpd 4)	3.9, (2.1), 2	ND	ND
PYY 1-36	3.8, (1.7), 2	ND	ND
LAGIPRA (Seq ID No 354)	ND	0.026 (0.015) 3	>5000 (na), 3
GIPRA (Seq ID No 123)	ND	0.0058 (0.002), 2	>5000 (na), 2
D-Ala2-GIP	ND	0.062 (0.007), 5	2530 (1070) 4
EC <sub>50</sub> values shown are the geometric means and the standard error of the mean (SEM) and the number of independent experiments (n), ND, not determined. Compound 4 and Sequence ID Numbers 354 and 123 refer to the respective identification numbers in Osterbaard et al., WO 2-16/198682 and Taiji et al., WO 2018/181864.			

**Supplemental Table 2. Summary of the mean pharmacokinetic parameters following a single subcutaneous (SC) dose of LAGIPRA or LAPYY to male CD-1 mice.**

	LAGIPRA	LAPYY
Dose (nmol/kg)	200	200
C <sub>max</sub> (nmol/L)	959	1360
T <sub>max</sub> (h)	6.0	6.0
AUC <sub>INF</sub> (h*nmol/L)	41147	44259
CL/F (mL/h/kg)	4.83	4.52
T <sub>1/2</sub> (h)	21.3	20.7
AUC <sub>INF</sub> : Area under the curve from 0 to infinity; CL/F: apparent clearance; C <sub>max</sub> = maximal concentration; T <sub>max</sub> = time at maximal concentration; T <sub>1/2</sub> = elimination half-life.		