

SUPPLEMENTARY DATA

Withdrawal of consent

Supplementary Table S1 Reasons for patient withdrawal of consent (each patient could have more than one reason)

	Exenatide BID→QWS-AI		Exenatide QWS-AI	
	0–28 weeks	28–52 weeks	0–28 weeks	28–52 weeks
	(n=146)	(n=116)	(n=229)	(n=193)
Withdrawal of consent	n=11	n=7	n=17	n=16
Reasons for withdrawal of consent				
Adverse events*	3	1	6	2
Concern about increased blood glucose, decreased renal function	0	0	1	0
Concerns for risks of study drug	1	0	1	0
Did not feel medication was helping	0	0	1	0
Did not want to attend study visits	0	0	0	2
Did not want to continue injections	1	0	0	2
Unable to draw blood at study visit	1	0	0	0
Did not want to continue study	0	2	0	4

	Exenatide BID→QWS-AI		Exenatide QWS-AI	
	0–28 weeks	28–52 weeks	0–28 weeks	28–52 weeks
	(n=146)	(n=116)	(n=229)	(n=193)
Lack of efficacy	0	0	1	0
Moving out of area/state	2	0	4	3
No reason given	0	1	1	0
PCP advice	0	1	1	0
Personal issues	1	1	1	1
Transportation issues	1	0	0	0
Unable to remain compliant	1	1	1	0
Unable to attend clinic visits due to work schedule change	1	0	0	2

BID, twice daily; PCP, primary care provider; QWS-AI, once-weekly suspension for autoinjection.

*Adverse events leading to withdrawal of consent included abdominal pain, body weight gain, body weight loss, calf pain, injection site nodules, insomnia, nausea, painful leg cramps, vision changes, and worsening palpitations.

Compliance

Compliance was measured as the percentage of injections received relative to the number of planned injections and was high for both groups. Likewise, compliance was high for both groups when measured during the time between the first and last dose (rather than across the study period).

Supplementary Table S2 Compliance in the modified ITT population

	Exenatide BID→QWS-AI		Exenatide QWS-AI	
	0–28 weeks (n=146)	28–52 weeks (n=116)	0–28 weeks (n=229)	28–52 weeks (n=193)
Percentage of injections received*	83.7 ± 29.6	105.6 ± 38.6	90.2 ± 21.9	106.3 ± 31.2
Percentage of injections received by last dose [†]	96.4 ± 8.3	97.4 ± 11.8	98.6 ± 5.3	97.9 ± 6.4

Data are presented as mean ± standard deviation.

*Total number of injections/number of planned injections during defined period. Note: some patients may have received more injections if they had a longer exposure than the planned 52-week study duration.

[†]Total number of injections during defined period / number of planned injections based on first and last dose date.

BID, twice daily; ITT, intention to treat; QWS-AI, once-weekly suspension for autoinjection.

Other cardiovascular risk factors**Supplementary Table S3** Changes in cardiovascular risk factors in the modified intention-to-treat population

	Exenatide BID→QWS-AI (n=146)	Exenatide QWS-AI (n=229)
SBP, mm Hg		
Baseline	130.3 ± 1.2	129.8 ± 1.0
Change from baseline to Week 28	-3.0 ± 1.5	-1.8 ± 1.2
Change from baseline to Week 52	-1.3 ± 1.9	-1.1 ± 1.3
DBP, mm Hg		
Baseline	80.0 ± 0.7	78.1 ± 0.6
Change from baseline to Week 28	-2.5 ± 0.9	+0.2 ± 0.6
Change from baseline to Week 52	-1.7 ± 1.0	-0.6 ± 0.8
Total cholesterol, mmol/L		
Baseline	4.485 ± 0.087	4.726 ± 0.084
Change from baseline to Week 28	-0.031 ± 0.083	-0.135 ± 0.058
Change from baseline to Week 52	0.000 ± 0.100	-0.005 ± 0.067
HDL cholesterol, mmol/L		
Baseline	1.140 ± 0.025	1.161 ± 0.021
Change from baseline to Week 28	+0.014 ± 0.021	+0.015 ± 0.014

	Exenatide BID→QWS-AI	Exenatide QWS-AI
	(n=146)	(n=229)
Change from baseline to Week 52	+0.073 ± 0.022	+0.048 ± 0.016
LDL cholesterol, mmol/L		
Baseline	2.455 ± 0.082	2.622 ± 0.073
Change from baseline to Week 28	-0.094 ± 0.073	-0.145 ± 0.048
Change from baseline to Week 52	-0.048 ± 0.087	-0.055 ± 0.052
Triglycerides, mmol/L		
Baseline	1.979 ± 0.089	2.133 ± 0.100
Change from baseline to Week 28	+0.078 ± 0.108	+0.005 ± 0.077
Change from baseline to Week 52	-0.033 ± 0.096	-0.008 ± 0.072
Heart rate, bpm		
Baseline	74.0 ± 0.9	75.1 ± 0.7
Change from baseline to Week 28	+1.6 ± 0.8	+1.9 ± 0.7
Change from baseline to Week 52	+4.3 ± 0.9	+1.5 ± 0.8
hsCRP, mg/L		
Baseline	4.102 ± 0.467	5.915 ± 0.765
Change from baseline to Week 28	+0.563 ± 0.420	-2.047 ± 0.941
Change from baseline to Week 52	+0.039 ± 0.462	-2.620 ± 0.973
BNP, ng/L		
Baseline	17.54 ± 2.44	15.47 ± 1.63

	Exenatide BID→QWS-AI (n=146)	Exenatide QWS-AI (n=229)
Change from baseline to Week 28	-0.21 ± 2.11	+1.52 ± 1.79
Change from baseline to Week 52	+4.52 ± 7.00	-1.04 ± 1.80
UACR, mg/mol		
Baseline	10.480 ± 4.267	14.051 ± 3.268
Change from baseline to Week 28	-1.006 ± 0.683	-1.993 ± 1.673
Change from baseline to Week 52	-1.619 ± 0.731	-0.210 ± 1.353

Data are presented as mean ± standard error.

BID, twice daily; BNP, B-type natriuretic peptide; DBP, diastolic blood pressure; HDL, high-density lipoprotein; hsCRP, high-sensitivity C-reactive protein; LDL, low-density lipoprotein; QWS-AI, once-weekly suspension by autoinjector; SBP, systolic blood pressure; UACR, urinary albumin:creatinine ratio.

Antibodies**Supplementary Table S4** Treatment-emergent antibodies to exenatide in the modified ITT population

	Exenatide BID→QWS-AI	Exenatide QWS-AI
	(n=146)	(n=229)
Negative	39 (38.2)	82 (48.5)
Positive		
Any	63 (61.8)	87 (51.5)
Low titer, <625	49 (48.0)	67 (39.6)
High titer, ≥625	14 (13.7)	20 (11.8)

Data are presented as n (%).

BID, twice daily; ITT, intention to treat; QWS-AI, once-weekly suspension for autoinjection.