

Figure S1. Reasons for rejecting insulin therapy. Results of the Therapy Attitude Questionnaire, which was completed by 448 patients with T2DM. T2DM, type 2 diabetes mellitus.

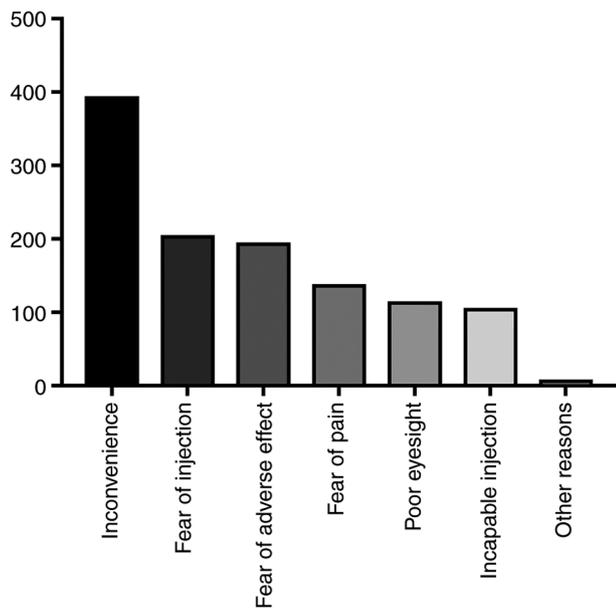


Table SI. Demographic and therapy demand data of patients who completed the questionnaire.

| | Total n (%) | Oral preference n (%) | Insulin preference n (%) |
|--------------------------------|----------------|--------------------------|-----------------------------|
| Gender | 448 | 413 (92.18) | 35 (7.81) |
| Sex | | | |
| Male | 255 (56.92) | 230 (55.42) | 25 (71.43) |
| Age (years) | | | |
| 18-35 | 26 (5.80) | 22 (5.30) | 4 (11.42) |
| 36-55 | 162 (36.16) | 152 (36.63) | 10 (28.57) |
| >55 | 260 (58.04) | 239 (57.59) | 21 (60.00) |
| Years since diabetes diagnosis | | | |
| <10 | 266 (59.38) | 251 (60.48) | 15 (42.86) |
| 10-20 | 168 (37.50) | 151 (36.39) | 17 (48.57) |
| >20 | 14 (3.13) | 11 (2.65) | 3 (8.57) |
| Current treatment | | | |
| Oral | 182 (40.63) | 182 (43.86) | 0 (0) |
| Oral and insulin | 100 (22.32) | 93 (22.41) | 7 (20.00) |
| Insulin | 166 (37.05) | 138 (33.25) | 28 (80.00) |

Table SII. Baseline demographic and clinical characteristics in total groups.

| | Sig (n=64) | Ins (n=104) | P-value |
|--------------------------|-------------|-------------|---------|
| Male sex (%) | 76.56 | 76.92 | 0.957 |
| Age (years) | 48.89±11.24 | 45.34±12.06 | 0.059 |
| Height (cm) | 169.41±7.43 | 169.66±7.09 | 0.825 |
| Weight (kg) | 72.66±9.29 | 70.13±9.81 | 0.100 |
| BMI (kg/m ²) | 25.27±2.52 | 24.29±2.64 | 0.019 |
| FPG (mmol/l) | 12.68±1.66 | 14.15±2.13 | <0.001 |
| HbA1c (%) | 10.35±1.18 | 11.22±1.53 | <0.001 |
| TG (mmol/l) | 1.99±1.04 | 3.58±5.46 | 0.005 |
| Cho (mmol/l) | 4.84±0.95 | 5.11±1.21 | 0.130 |
| LDL-C (mmol/l) | 2.98±0.72 | 2.91±0.84 | 0.565 |
| HDL-C (mmol/l) | 1.05±0.19 | 1.06±0.23 | 0.703 |
| ALT (U/l) | 29.33±17.87 | 33.29±18.54 | 0.181 |
| AST (U/l) | 25.67±14.23 | 24.69±11.30 | 0.627 |
| BUN (mmol/l) | 5.04±1.07 | 5.84±7.08 | 0.381 |
| Cr (mmol/l) | 56.12±12.07 | 56.04±9.89 | 0.966 |

Normally distributed values are expressed as the mean ± SD. Unpaired t-tests were used to assess any differences between the Sig and Ins groups. Treatment groups: Sig, sitagliptin combined with metformin; Ins, insulin. HbA1c, glycosylated haemoglobin; BMI, body mass index; FPG, fasting plasma glucose; TG, triglyceride; Cho, cholesterol; LDL-C, low-density lipoprotein-cholesterol; HDL-C, high-density lipoprotein-cholesterol; ALT, alanine transaminase; AST, aspartate aminotransferase; BUN, blood urea nitrogen, Cr, creatinine.

Table SIII. Benefits and drawbacks of sitagliptin combined with insulin and metformin combined with insulin.

| Item | Insulin + sitagliptin | Insulin + metformin |
|---|--|------------------------------------|
| Cost | High | Relatively low |
| Frequency of administration/convenience | Once daily; convenient | Three times a day; less convenient |
| Side effects | Certain risk but rare occurrence of pancreatitis and pancreatic cancer | Gastrointestinal discomfort |
| Effect on body weight | Neutral | Weight loss |