

### Supplementary data

**Table S1.** Treatment regime glargine-DPP4i group.

Patients treated with diet or only one oral antidiabetic agent <ul style="list-style-type: none"> <li>- CBG 150-250 mg/dl: 0.2 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.3 UI/Kg/d</li> </ul>
Patients treated with more than one oral antidiabetic agent <ul style="list-style-type: none"> <li>- CBG &lt;150 mg/dl: 0.2 UI/Kg/d</li> <li>- CBG 150-250 mg/dl: 0.3 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.4 UI/Kg/d</li> </ul>
Patients treated with basal insulin +/- any oral antidiabetic <ul style="list-style-type: none"> <li>- CBG &lt;150 mg/dl: 0.3 UI/Kg/d</li> <li>- CBG 150-250 mg/dl: 0.4 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.5 UI/Kg/d</li> </ul>
Patients treated with $\geq$ two insulin dose +/- any oral antidiabetic <ul style="list-style-type: none"> <li>- Any CBG: 0,6 UI/Kg/d</li> </ul>
<b>Daily insulin adjustment</b>
Fasting and pre-meal BG between 100-180 mg/dl without hypoglycemia the previous day: same dose
Fasting and pre-meal BG >180 mg/dl: increase glargine dose by 10%
Fasting and pre-meal BG between 70-99 mg/dl: decrease glargine dose by 10%
If hypoglycemia (<70 mg/dL): decrease glargine dose by 20%
If hypoglycemia (<40 mg/dL): decrease glargine dose by 30-40%.
<b>Supplemental (correction) insulin:</b>
If CBG was >300 mg/dL, 6 UI of aspart insulin was administered

\*Abbreviations: BG, blood glucose; CBG, capillary blood glucose.

**Table S2.** Treatment regim basal-bolus group.

Patients treated with diet or only one oral antidiabetic agent <ul style="list-style-type: none"> <li>- CBG 150-250 mg/dl: 0.3 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.4 UI/Kg/d</li> </ul>
Patients treated with more than one oral antidiabetic agent <ul style="list-style-type: none"> <li>- CBG &lt;150 mg/dl: 0.3 UI/Kg/d</li> <li>- CBG 150-250 mg/dl: 0.4 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.5 UI/Kg/d</li> </ul>
Patients treated with basal insulin +/- any oral antidiabetic <ul style="list-style-type: none"> <li>- CBG &lt;150 mg/dl: 0.4 UI/Kg/d</li> <li>- CBG 150-250 mg/dl: 0.5 UI/Kg/d</li> <li>- CBG &gt;250 mg/dl: 0.6 UI/Kg/d</li> </ul>
Patients treated with $\geq$ two insulin dose +/- any oral antidiabetic <ul style="list-style-type: none"> <li>- Any CBG: 0,6 UI/Kg/d</li> </ul>
Half of total daily dose will be given as glargine and half as aspart

<b>Daily glargine insulin adjustment</b>
Fasting and pre-meal BG between 100-180 mg/dl without hypoglycemia the previous day: no change
Fasting and pre-meal BG >180 mg/dl: increase glargine dose by 20%
Fasting and pre-meal BG between 70-99 mg/dl: decrease glargine dose by 10%
If hypoglycemia (BG <70 mg/dL): decrease glargine dose by 20%
If hypoglycemia (BG <40 mg/dL): decrease glargine dose by 30-40%.
<b>Daily aspart insulin adjustment</b>
Increase aspart insulin dose following the scale (supplementary table 2.1) for BG >140 mg/dl based on TDI dose
Decrease aspart insulin dose following the scale (supplementary table 2.1) for BG <80 mg/dl based on TDI dose

\*Abbreviations: BG, blood glucose; CBG, capillary blood glucose; TDI, total daily insulin.

**Table S3.** Aspart insulin scale.

BG (mg/dL)	TDI <40 UI	TDI 40-80 UI	TDI >80 UI
<80	-2	-2	-2
81-140	+0	+0	+0
141-190	+1	+1	+2
191-240	+2	+3	+5
241-290	+4	+6	+7
291-350	+6	+9	+10
>350	+7	+11	+12

\*Abbreviations: BG, blood glucose; TDI, total daily insulin.