

**Subcutaneous insulin guidance to be used if CVRIII is not available**

**TYPE 1 Diabetic patient OR TYPE 2 diabetic patient receiving insulin prior to admission:**

1. Establish current insulin regimen and administer 50% of their **total daily dose (TDD)** using **Tresiba** (100units/ml) subcutaneously once a day (this will form the background/basal part of their insulin regimen).

e.g. If the patient usually receives **Novorapid** - 10 units three times a day at home plus Tresiba - 30 units once daily, total daily dose = 60 units. Background/bolus part of insulin regimen would therefore be Tresiba - 30 units subcutaneously once a day.

Note: If the pre-admission dose of insulin is unknown prescribe Tresiba 0.5units/kg subcutaneously once a day.

2. Monitor blood glucose 1-2 hourly. Administer Novorapid subcutaneously as per table 1 (see overleaf).

**If total daily insulin dose calculated above is:**

≤40 units = Start regimen 1

41-80 units = Start regimen 2

≥ 81 units = Start regimen 3

If blood glucose levels are consistently above 11mmol/L for 4 consecutive hours, escalate to regimen 2 (or regimen 3 if currently already on regimen 2).

Check blood ketones if blood glucose levels are consistently above 13mmol/L.

Blood ketones >1.5mmol need converting to CVRIII (see trust guidance). Consider arterial gases in these patients. If diabetic ketoacidosis (DKA) is diagnosed – follow DKA pathway and fixed intravenous insulin regimen.

**TYPE 2 Diabetic patients who are diet controlled OR on oral hyperglycaemic agents  
 OR non-diabetic patients with persistent blood glucose over 11mmol/L:**

1. Administer **Tresiba** - 14 units subcutaneously once a day.
2. Monitor blood glucose **2 hourly**.
3. Administer **Novorapid 4 to 6 hourly** as per table 1.
4. If feeding stopped, omit regular dosing **Novorapid** and prescribe 4 units PRN if CBG>11mmol/l
5. If blood glucose levels are consistently above 11mmol/L for 4 consecutive hours, escalate to regimen 2 (or regimen 3 if currently already on regimen 2).

**Table 1: Novorapid SC administration sliding scale:**

Capillary blood glucose (mmol/L)	Regimen 1 (TDD ≤40 units)	Regimen 2 (TDD 41 – 80 units)	Regimen 3 (TDD ≥81 units)
<b>Below 7mmol/L</b>	0 Units	0 Units	0 Units
<b>7.1 - 11 mmol/L</b>	4 Units	6 Units	10 Units
<b>11.1 - 17 mmol/L</b>	6 Units	10 Units	14 Units
<b>&gt;17 mmol/L</b>	8 Units	12 Units	18 Units