Banner Good Samaritan
Medical Center

SUBCUTANEOUS INSULIN ORDER SET

Patient Label

STAT ORDERS - PLACE STAT STICKER HERE ➡
REMOVE STICKERS AFTER SCANNING
LEAVE BLANK FOR ROUTINE ORDERS

2-Hole 1/4 2 3/4 - 3-Hole 1/4 4 1/4

Medications approved by the pharmacy and therapeutics committee for generic or therapeutic equivalency may be dispensed in this case unless **"No Substitution"** is noted with the order.

DATE	TIME	SUBCUTANEOUS INSULIN ORDER SET

PHYSICIANS: See "BGSMC Inpatient Basal Insulin Guide" on back for initial doses
All orders with "☒" will be followed unless crossed out

1. **DISCONTINUE ORAL DIABETIC MEDICATIONS** (list below):
   - ☐ Discontinue: _____
   - ☒ Discontinue Regular Insulin Sliding Scale if previously ordered
2. **MONITOR BLOOD GLUCOSE:**
   - ☒ Before every meal & bedtime (2100) OR every 4 hours when NPO
   - ☒ Lab - HgbA1C (unless already ordered this admission)
   - ☒ For BS <70, follow nursing hypoglycemic protocol
3. **LONG ACTING/BASAL INSULIN:**

Physician choose one See reverse for dosing guide

- ☐ Insulin glargine (Lantus®) _____ units subq at bedtime (2100 hours)
  - ☒ Give full dose EVEN if NPO, on clear or full liquids or eating <50% of their meal
- ☐ Insulin NPH _____ units subq before breakfast and _____ units subq at bedtime (2100)
  - ☒ Give 50% of the dose if NPO, on clear or full liquids or eating <50% of their meal

4. **RAPID ACTING/BOLUS INSULIN:**

A. **Scheduled Nutritional/Meal Humalog® Insulin Orders:**
- ☒ Administer within 30 minutes of the start of the meal or tube feed.
- ☒ Hold if they are made NPO, on clear or full liquids, or eating <50% of the meal
- ☒ Do not give if tube feeds or TPN stopped

1. Patient eating solid foods OR on bolus tube feeds:
   - ☒ If blood sugar <70, follow nursing hypoglycemia protocol, decrease scheduled Humalog® dose by 50% and give at the completion of meal

Physician choose one See reverse for dosing guide

- ☐ Insulin lispro (Humalog®) _____ units subq with each meal (do not give at bedtime),

OR

- ☐ Insulin lispro (Humalog®) 1 unit per _____ grams carbohydrate (CHO) subq immediately after each meal. (1 CHO exchange = 15 grams)

2. Continuous tube feeds:
   - ☐ Insulin lispro (Humalog®) give _____ units subq every 4 hours

B. **Supplemental insulin lispro (Humalog®) orders: Administer supplemental Humalog® along with scheduled nutritional/meal Humalog® insulin orders in 4A**
- ☒ Do not give at bedtime
- ☒ Continue to give if NPO but use the scale for BMI <25
- ☐ By scale below (In general, exclusive use of this scale is discouraged.)

Physician choose one See reverse for dosing guide/correction factor formula

OR

- ☐ (Blood sugar - 120)/correction factor _____ = number of supplemental units

Glucose	☐ BMI <25, NPO or on Dialysis	☐ BMI 25-30	☐ BMI >30	☐ Other
<70	**Follow Nursing Hypoglycemia Protocol + reduce scheduled dose of humalog by 50%**			
70-150 mg/dl	No change	No change	No change	
151-175 mg/dl	+1 unit humalog subq	+2 units humalog subq	+3 units humalog subq	
176-200 mg/dl	+2 units humalog subq	+4 units humalog subq	+5 units humalog subq	
201-225 mg/dl	+3 units humalog subq	+6 units humalog subq	+7 units humalog subq	
226-250 mg/dl	+5 units humalog subq	+8 units humalog subq	+9 units humalog subq	
251-275 mg/dl	+7 units humalog subq	+10 units humalog subq	+11 units humalog subq	
276-300 mg/dl	+9 units humalog subq	+12 units humalog subq	+14 units humalog subq	
>300 mg/dl	+12 units humalog subq	+14 units humalog subq	+18 units humalog subq	
	No humalog at bedtime	No humalog at bedtime	No humalog at bedtime	

Physician Signature: _____ Pager # _____

ATTENTION: ALL MEDICATION ORDERS MUST INCLUDE ROUTE OF ADMINISTRATION

BANNER GOOD SAMARITAN INPATIENT BASAL INSULIN GUIDE

(See Banner Intranet Dosing Tool: Home page → "Departments"→ "Pharmacy"→ "Insulin dosing tool" Excel file)

Step 1: Discontinue oral antidiabetic agents if using this protocol. Check HbA1C and if it is >8 then consider making a change to their home regimen at the time of discharge. The hospital is not the ideal place to titrate oral medications since activity and intake vary.

Step 2: Calculate the estimated total daily dose (TDD) of insulin based on ONE of the following methods (in order of preference)

1. Transferring from insulin gtt. Use average hourly rate over the last 6 hours, multiply by 20 to get the TDD
2. Use total insulin required at home (all types added together)
3. Calculate/estimate insulin requirement as follows based on body size:
   a. Dialysis (regardless of BMI) use 0.3 units/kg/day
   b. Lean (BMI <25), new steroid induced hyperglycemia or new diagnosis of DM: use 0.4 units/kg/day
   c. Overweight (BMI 25-30) use 0.5 units/kg/day
   d. Obese (BMI >30) use 0.6 units/kg/day

TOTAL DAILY DOSE (TDD) of insulin = _____ Units

Step 3: Determine the distribution of the TDD

Long Acting/Basal:
Glargine (Lantus®) **OR** NPH

Lantus - 50% of TDD given once daily at HS

- For patients with renal impairment, reduce dose of Lantus to: 30% of total if CrCl 10-50 mL/min and 20% of total if CrCl <10 mL/min.

NPH - 50% of TDD divided into 2/3 in the am and 1/3 at bedtime (no adjustment needed for renal insufficiency)

For the first day,

- If it is prior to 5 pm, consider giving 1/2 the usual bedtime dose once only now
- If you are stopping an insulin drip, give lantus or NPH 2 h prior to turning drip off

Short acting: Lispro (Humalog®)

Meal/Nutritional Coverage

1. 50% of TDD as Humalog in
   - three equal doses prior to each meal
   - or six equal doses if on continuous tube feeds
2. OR Use the carbohydrate exchange calculation if they are on it at home or have particularly irregular eating. Typical starting dose: 1 unit per 15 grams

Supplemental: Given in addition to the routine pre-meal dose or when NPO based on results of fingerstick testing done prior to each meal.

Step 4: **EVALUATE** insulin dose daily. Determine the total dose received for the day prior and adjust as below

a. If some glucoses were <80 mg/dl use 80% of yesterday's total insulin given as new total
b. If some glucoses were >180 mg/dl and none <80 mg/dl use 110% of yesterday's total as new total
c. If the supplemental scale is not matching your patient's needs, consider calculating the expected decrease in glucose for one unit of insulin (correction factor) by using 1700/TDD given = Correction factor