

# UCSF Children's Hospital

at UCSF Medical Center

Orders must be written in black or blue ink. Nurse transcribing the orders will indicate the transcription by signing their name and classification, the date and time the transcribing is completed. When an order is discontinued, write "Discontinue" giving date and naming order.

UNIT NUMBER

PT. NAME

BIRTHDATE

DATE	TIME
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LOCATION

DATE

## SUBCUTANEOUS INSULIN ORDER SHEET FOR ALL PEDIATRIC PATIENTS

**ALLERGIES** Insulin Allergy:  Yes  No  WEIGHT (kg) \_\_\_\_\_  
 "✓" in box activates order Discontinue all previous insulin orders.

1.  a. **BLOOD GLUCOSE (BG) MONITORING: BEFORE meals at bedtime and 2AM.** Also as needed for Hypoglycemic symptoms.  
 b. Order Carbohydrate-controlled diet. Include  Morning snack  Afternoon snack  Bedtime snack

2. **BASAL INSULIN DOSE (in units)**

INSULIN	DOSE	TIME	DOSE	TIME
Glargine (Lantus®)				
NPH				
Other:				

Pump basal settings with  Aspart  Lispro insulin: \_\_\_\_\_

3. **FOOD COVERAGE (Written as basic nutritional dose or carbohydrate ratio) (in units) (Add to high blood glucose correction)**

**Check one:**  ASPART (Novolog) – formulary approved human analog insulin  
 For human analog insulin doses less than 1 unit – order LISPRO (Humalog) Insulin 10 units/mL (See conversion chart on back of form)  
 Other: \_\_\_\_\_

	BREAKFAST	LUNCH	DINNER	SNACKS
Insulin carb ratio or Basic nutritional dose	_____ unit(s) per _____ gram	_____ unit(s) per _____ gram	_____ unit(s) per _____ gram	_____ unit(s) per _____ gram

4. **HIGH BLOOD GLUCOSE CORRECTION (ADD TO FOOD COVERAGE) (IN UNITS)**

**Check one:**  ASPART (Novolog) – formulary approved human analog insulin  
 For human analog insulin doses less than 1 unit – order LISPRO (Humalog) insulin 10 units/mL (See conversion chart on back of form)  
 Other: \_\_\_\_\_

**BG Range:**

If <Target Treat for Hypoglycemia Per Protocol (See order #6)	BREAKFAST Target >80 or _____	LUNCH Target >80 or _____	DINNER Target >80 or _____	BEDTIME Target >120 or _____	2AM Target >120 or _____
80 - 100 give food coverage only					
101 - 150					
151 - 200					
201 - 250					
251 - 300					
301 - 350					
351 - 400					
> 400					

5. **CALL HOUSE OFFICER (HO) for BG < 80 mg/dL or > 400 mg/dL.**

6. **HYPOGLYCEMIA PROTOCOL for BG < target (see #4 above).**

- a. For patient who can take PO, give 15gm of oral fast acting carbohydrate. (give three **GLUCOSE** tablets PO (5 grams / tablet) OR 4 oz juice OR  \_\_\_\_\_)
- b. For patient who cannot take PO, give **D10W** (0.2-1gm/kg) IV push. \_\_\_\_\_ gm/kg X \_\_\_\_\_ kg = \_\_\_\_\_ grams x 10 mL/grams = \_\_\_\_\_ mL.
- c. Check fingerstick glucose every 15 minutes and repeat above treatment until BG > Target mg/dL and then give insulin for food coverage.

**NOTE: Regular insulin should be given 15-30 minutes prior to meal. Aspart and Lispro (Humalog) Insulin 10 units/mL should be given when meal is present. Glargine should not be mixed with another insulin. Give Glargine as a separate shot. Insulin should not be refrigerated once opened.** Store insulin in patient's cassette.

Signature \_\_\_\_\_ M.D. # \_\_\_\_\_ Time \_\_\_\_\_ Date \_\_\_\_\_ Pager # \_\_\_\_\_

FLAG CHART TO INDICATE NEW ORDER Checked by \_\_\_\_\_ R.N. Time \_\_\_\_\_ Date \_\_\_\_\_

602-262 (Rev. 05/07) WorkflowOne ORIGINAL - MEDICAL RECORD COPY WHITE - PHARMACY COPY YELLOW - NURSING COPY

## PEDIATRIC LOW DOSE - SUBCUTANEOUS INSULIN POLICY AND PROCEDURE

**BACKGROUND** Low doses of insulin are often indicated in pediatric patients. Low doses can be measured from commercial 100 units/mL insulins (U100), using “BD Ultra-fine II” 30 unit low dose insulin syringes. These insulin syringes are calibrated in 0.5 unit increments.

Occasionally very low doses (<1 unit) of insulin are needed in pediatric patients. Doses <1 unit cannot accurately be measured and administered from commercial 100 units/mL insulins (U100). Therefore, when doses <1 unit are ordered, the pharmacy will prepare a special insulin dilution of 10 units/mL (U10). Regular and Lispro insulin are the insulins used to titrate these very low doses and are the ones made in dilution by pharmacy. The only insulin dilution that pharmacy makes is 10 units/mL.

**POLICY:** Subcutaneous insulin Doses  $\geq 1$  unit will be administered using commercially available 100 units/mL insulins (U100).  
Doses <1 units are administered from a pharmacy prepared special dilution of 10 units/mL (U10).

### PROCEDURE:

- 1) Low dose insulin shall be administered using “BD Ultra-fine II” short 30 unit low dose insulin syringes. These syringes are available from Material Services.
- 2) When doses <1 unit are ordered, pharmacy will prepare a special dilution of 10 units/mL.
- 3) Pharmacy will dispense the special dilution of 10 units/mL to the patient along with a copy of this P&P with attached “10 units/mL - insulin syringe conversion table”. This insulin will be labeled for the individual patient and will be kept in the patient’s cassette.
- 4) The nurse will use the conversion table to determine the calibration on the insulin syringe that represents the correct dose and will administer the insulin accordingly.
- 5) Once the dose is consistently 1 unit or greater, the special dilution of 10 units/mL will be returned to the pharmacy and commercial 100 units/mL will be dispensed.
- 6) Once this special dilution of 10 units/mL is discontinued it will be returned to the pharmacy.
- 7) Do NOT keep this special insulin dilution of 10 units/mL on the nursing unit - once it is no longer indicated return it to the pharmacy.

### 10 units/mL Insulin - Insulin Syringe Conversion Table

<b>For 10 units/mL Insulin (Special Dilution)</b> Use the following table to convert: Ordered <b>UNITS</b> of Insulin to the <b>CALIBRATION</b> on the Insulin Syringe	
INSULIN DOSE IN <b>UNITS</b>	CORRESPONDING <b>CALIBRATION</b> ON INSULIN SYRINGE
1 UNITS	10
0.9 UNITS	9
0.8 UNITS	8
0.7 UNITS	7
0.6 UNITS	6
0.5 UNITS	5
0.4 UNITS	4
0.3 UNITS	3
0.2 UNITS	2
0.1 UNITS	1