## Intervention and Blood Collection Schedule

### Collect Baseline Hypoglycaemia Screen*
- Date ___/___/___  Time ___:___
*Can be done on admission, collect pack from trolley

### Loading Dose NeoGluCO Intervention
- Date ___/___/___  Time ___:___

### Insert Continuous Glucose Monitor
- Site: R/L thigh  Date ___/___/___  Time ___:___
- Removed: Date ___/___/___  Time ___:___
- Removed by: __________________________

### Continuous Glucose Monitor D1 Calibrations
- 2-3h Due: _________ Date: ___/___/___  Time ___:___
- 5-6h Due: _________ Date: ___/___/___  Time ___:___
- 11-12h Due: _________ Date: ___/___/___  Time ___:___
* Thereafter calibrate every 12h, or when requested by iPod Guardian App

### Maintenance Dose 1 (commence 10-14h after load)
- Due: ___/___/___  Time ___:___
- Given: ___/___/___  Time ___:___

### Maintenance Dose 2 (12h after 1st maintenance)
- Due: ___/___/___  Time ___:___
- Given: ___/___/___  Time ___:___

### Before 3rd Maintenance Dose:
- Commence Titration Protocol (see over)
- Collect Blood Sample B: 3 ml (up to 2 hours Before)
- Due: Date ___/___/___  Time ___:___
- Collected: Date ___/___/___  Time ___:___

### Echocardiogram ≥72 hours
- Performed: Date ___/___/___  Time ___:___
GENERAL MANAGEMENT OF NEOGLUCO BABY

- Monitor BGC ≥q6 h until the primary outcome is reached and then ≥q12 h while on intervention/CJM
- Manage feeds/fluids as per local protocol but aim to wean IVF and start enteral feeds ASAP
- Target BGC range 2.6 to 5.4 mmol/L. Management decisions should only be based on blood or plasma sample.
- Treat hypoglycaemic episodes as per local practice.
- Commence intervention titration algorithm immediately before the 3rd maintenance dose, i.e., loading dose + 2x maintenance doses (see below).
- If elevated BGC occurs ≥5.5 mmol/L prior to commencing the intervention titration algorithm, wean/stop IVF ± wean/stop supplementary feeds if the baby is breastfeeding.
- If there are difficulties following the algorithm, consult with the Site Primary Investigator.
- Intervention can be given by syringe, with feed, or NGT + 0.5 ml normal saline flush
- Collect study blood before 3rd maintenance dose (3 ml heparin) and contact study team.

MONITOR FOR PRIMARY OUTCOME

Starting 24 h after randomization. Check before each study dose. All three conditions must be met concurrently.

a) No IV fluids for last ≥24 hours  
   b) Full enteral feeding for last ≥24 hours, defined as either
      i) minimum of five E/F breastfeeds without supplements: or
      ii) breastfeeding with supplements at >2 hourly intervals: or
      iii) if not BF, gastric tube/bottle feeds at 3-4 hourly intervals
   c) Four pre-feed BGC in range 2.6 – 5.4 mmol/L in the last ≥24 hours (last BGC within 4 h of primary outcome; 4x pre-feed BGC spanning >20 h; no BGC out of range ≥24 h)

- If the primary outcome is achieved (all yes), give one further maintenance dose and then stop drug
- Continue CGM for further 24 hours after stopping the intervention
- Advise research team

CGM CALIBRATION & TROUBLE SHOOTING

- CGM calibration on iPod: 2h after insertion (ensure iPod ready to calibrate before taking BGC), then 3h later, then 6h later, thereafter q12h (enter calibration as soon as BGC result available)
- How to calibrate iPod:
  o Open up the Carelink Connect app located on the iPod home screen.
  o Select calibration button at top right-hand corner of app which is illustrated by a blood drop
  o Enter blood glucose value immediately on receiving the result
  o Select “calibrate” and confirm your calibration.

Trouble shooting:
1. “No sensor glucose, wait until notified” message on screen: Do not calibrate. Wait until next BGC result and recheck ability to calibrate. If message still appears contact research team.
2. “Sensor disconnected” message on screen: Anchor sensor and push white transmitter firmly against it. If message still appears, contact research team.
3. “Wait to calibrate” appears on screen: Do not calibrate. Wait until next BGC result and recheck ability to calibrate. If message still appears contact research team.
4. “Warming up” message appears on screen: Do not calibrate. Wait until next BGC result and recheck ability to calibrate. If message still appears contact research team.
5. “Lost sensor/transmitter communication” message: Move iPod closer to sensor.

NeoGluCO contacts: Chris McKinlay 027 4725099; Lisa Mravicich 021 430 564; Julena Ardern 0215 28881
## INTERVENTION TITRATION ALGORITHM

Commence immediately prior to third maintenance dose (excluding loading dose) and review prior to each subsequent dose

<table>
<thead>
<tr>
<th>BGC</th>
<th>Third maintenance dose: refer to last BGC ≤6 h</th>
<th>Subsequent maintenance doses: refer to BGC over the last 12 h</th>
</tr>
</thead>
</table>
| ≤2.5 mmol/L     | • Increase maintenance dose to 0.25 ml/kg (diazoxide 2.5 mg/kg) every 12 h and adjust fluids and feeds as clinically appropriate.  
                 - If any hypoglycaemia occurs after two doses of study drug at 0.25 ml/kg, increase maintenance dose to 0.5 ml/kg (diazoxide 5.0 mg/kg) every 12 h.  
                 - If any hypoglycaemia occurs after two further doses of study drug at 0.5 ml/kg, discuss with the Site Principal Investigator and a paediatric endocrinologist. |
| 2.6-5.4 mmol/L  | • Continue maintenance dose every 12 h while weaning intravenous fluids and grading up feeds.  
                 • Give one more dose after the primary outcome point is reached.  
| 5.5-6.9 mmol/L  | • If on intravenous dextrose, stop or wean fluids more rapidly OR if not on intravenous dextrose and breastfeeding, stop or wean any formula feeds  
                 • Withhold intervention dose and review in 12 hours.  
                 - If BGC does not return to and remain in the target range (2.6-5.4 mmol/L) over the next 12 h, discontinue the intervention.  
                 - If BGC returns to the target range with no further elevated BGC over the next 12 h, recommence next maintenance at 0.1 ml/kg (diazoxide 1 mg/kg) every 12 h.  
                 If further elevated BGC occurs, discontinue the intervention.  
| ≥7 mmol/L       | • Discontinue the intervention.  
|                 | • If any elevated BGC has occurred over the last 12 h stop intravenous dextrose and supplementary feeds if breastfeeding.  
                 • If the maintenance dose is 0.1 ml/kg (diazoxide 1 mg/kg) every 12 h, discontinue the intervention.  
                 • If the maintenance dose is 0.15 ml/kg (diazoxide 1.5 mg/kg) every 12 h, withhold intervention dose and review in 12 hours.  
                 - If BGC does not return to and remain in the target range (2.6-5.4 mmol/L) over the next 12 h, discontinue the intervention.  
                 - If BGC returns to the target range with no further elevated BGC over the next 12 h, recommence next maintenance at 0.1 ml/kg (diazoxide 1 mg/kg) every 12 h.  
                 • If the maintenance dose is >0.15 ml/kg (diazoxide 1.5 mg/kg) every 12 h, withhold intervention dose and review in 12 hours.  
                 - If BGC does not return to and remain in the target range (2.6-5.4 mmol/L) over the next 12 h, discontinue the intervention.  
                 - If BGC returns to the target range with no further elevated BGC over the next 12 h, recommence next maintenance at 0.15 ml/kg (diazoxide 1 mg/kg) every 12 h.  
|                 | • If any hyperglycaemia (BGC ≥7 mmol/L) has occurred over the last 12 h, discontinue the intervention.  

**NeogluCO contacts:** Chris McKinlay 027 4725099; Lisa Mravicich 021 430 564; Julena Arder 0215 28881