Clinical trial guidance for Mount Sinai Nursing

Study sponsor: CalciMedica
Study acronym: CARPO
Study title: A randomized, double-blind, placebo controlled dose-ranging study of auxora in patients with acute pancreatitis and accompanying systemic inflammatory response syndrome (CARPO)
Study arms: Auxora (3 different dose levels) vs placebo (randomized 1:1:1:1)
Approvals: IRB, ED medical/nursing leadership, Pharmacy, Clinical Nutrition Services, Patient Services, Food and Nutrition.

For study-related questions/issues, please contact:

- *Clinical Trials Research Coordinator*: 646-960-1911 (weekday daytime)
- *Clinical Trials Manager*: 201-423-3585 (weekday daytime)
- *Site Principal Investigator*: Jonathan Schimmel, MD, via Epic Secure Chat or 646-818-9502 (**24/7**)

Study summary

- Placebo-controlled, double-blind, randomized, study on efficacy/safety of a new IV drug (auxora) for pancreatitis. It works on pancreas calcium channels, and prior studies found it may improve pancreatitis.
- There are 4 treatment arms (placebo, or 3 different dose levels), so there is 25% chance of getting placeo.
- Subjects get a monetary stipend for participation.

Eligibility

- Research Coordinators determine eligibility and obtain consent.
- Adults with pancreatitis + SIRS criteria + other criteria like abdominal guarding.
    - Excluded if suspected cholangitis, on dialysis, allergy to eggs.
    - Needs CT abdomen to exclude necrotizing pancreatitis.

Assessments

- Labs are tested in the Mount Sinai lab. This trial does not use special research tubes for blood.
- *Please document accurate blood draw times in an Epic note.*
    - Research Coordinators will attempt blood draws, but may need assistance. They will tell you what time windows to anticipate for phlebotomy.
- Assessment (baseline)
    - Height/weight (Research Coordinator assists)
    - Vitals
    - Blood tests
- Dose #1 administer
    - Start tracking food tolerance (see below)
- Dose #2 administer
    - Occurs 24 hours after Dose #1 starts.
    - Has blood tests just before the dose.
- Dose #3 administer
    - Occurs 48 hours after Dose #1 starts.
    - Has blood tests just before the dose.
- Continue tracking food tolerance until discharge
- Research team will follow the patient throughout hospitalization.

Food tolerance

- Primary outcome of this trial is solid food tolerance, so this is important.

Offer food

- Patient will have Heart Healthy Diet order. This diet should start immediately, even if the patient remains in the ED. Nutrition services will be aware.
- If patient does not tolerate a solid meal, RN should offer a liquid diet from items in the unit (eg applesauce, Ensure, yogurt, juice, instant oatmeal). If patient finds these unappetizing, RN can call Food and Nutrition Services to send a full liquid diet for that meal (eg broth, cream of wheat, etc).

Assess food tolerance

- Note each meal/snack delivery time, and keep each tray at bedside for at least 2 hours.
- **2 hours after each meal/snack is served, do a meal assessment by copying the text below into a new note and fill it out:**

Food Tolerance Assessment for CARPO trial

- Did patient get a solid meal delivered? _____ *(write Heart Healthy Diet or specify)
- Time of meal/snack delivery: _____
- Time of 2-hour assessment: _____
- If solid food was delivered
  - At 2 hours was **more** or **less** than 50% of the meal/snack eaten (estimate): _____
- If no solid food was delivered
  - Did patient drink PO liquid (yes/no): _____
- Did abdominal pain increase within 2 hours of the meal (yes/no)? _____
- Did vomiting increase within 2 hours of the meal (yes/no)? _____

Drug info

- Epic order: "GCO#21-1120 auxora/placebo in 0.9% sodium chloride."
- Research Coordinators bring the drug from pharmacy to RN (not via tube station).
- Drug is dissolved in a lipid emulsion. Dose may be 0.3125, 0.625, or 1.25 mL/kg (based on randomization).

Drug administration instructions (over 4h)

- Peripheral IV must be at least 20 gauge

Bag #1 (study drug in lipid emulsion)

- Drug is delivered to the RN (not tube system) with the line already primed by pharmacy, with a 1.2-micron filter
- Set up pump at rate _____ mL/hour, VTBI _____ mL
- Scan the patient wristband and drug barcode then start infusion
  - Note the start time that Epic lists
- Occasionally check Bag #1 is infusing (eg patient bends elbow or air in line)
  - If infusion is interrupted, resolve the issue and restart it asap
- Bag #1 will empty in 1.5-3 hours
  - When Bag #1 is empty, spike the tubing that contains study drug into Bag #2, and discard Bag #1

Bag #2 (normal saline flush)

- When Bag #1 is empty, spike the tubing that contains study drug into Bag #2
  - Study drug still in the drip chamber/line must enter the patient from the line being slowly flushed
- Continue infusion at _____ mL/hour (same rate as Bag #1)
- Occasionally check Bag #2 is infusing (eg patient bends elbow or air in line)
  - If infusion is interrupted, resolve the issue and restart it asap
- Tubing turns clear slowly over ~2 hours as saline flushes study drug into the patient
- Stop Bag #2 when the line near the patient's IV is clear

        - **Infusion completion is based on when the line is fully clear, meaning the last bit of study drug enters the patient, *NOT* the time the saline flush starts/ends**
        - You do *NOT* need to infuse the full saline bag
    - Total infusion duration should be 4 hours (includes all of Bag #1 plus some of Bag #2 until line clear).
        - If >4 hours is needed for the line to run clear, keep infusing Bag #2 and notify the study team.
    - Write Epic event note: "Study drug infusion started at _____, completed at _____."
        - Start and completion times should be roughly 4 hours apart.

Risks

- Possible risks are palpitations, headache, infusion site pain, dermatitis.
- Possible lab abnormalities are hyperglycemia, ↑ cholesterol/triglycerides, hypoK, hypophosphatemia.
- Patients with acute pancreatitis are at risk for adverse outcomes related to their underlying pancreatitis.
- Notify provider team immediately for new signs, symptoms, or vital sign changes.

Monitoring

- No specific monitoring is required for this drug. Treating team may order telemetry if severe pancreatitis.
- Record times accurately (vitals, drug start/end, blood draws, meal/snack delivery, 2-hour post-meal assessment).
- Record vitals accurately (eg respiratory rate, well-fitting BP cuff).