#### Multicenter Perioperative Outcomes Group (MPOG) PCRC Meeting Notes – Monday, February 11, 2019

### **Ground Rules for PCRC**

- 1. Each protocol must have specific testable hypothesis with data available in MPOG data structure
- 2. People requesting specific data elements must also supply that data type to MPOG. If you don't submit that data type currently, then you can't get that type of data type out. However, if you have a co-investigator from another site that does supply that data, then you can ask for that type of data. The reason is so someone on the research team understands the limitations of each data element being requested and used
- 3. To ensure that there is not a lack of clarity about what the status of the proposal is, each proposal will get the following overall decision at the end of each presentation and discussion
  - a. Accept with no changes
  - b. Accept with minor changes send revision electronically
  - c. Accept with major changes and represent at PCRC
  - d. Reject
- 4. Meeting will be recorded to be shared later with members of MPOG via the MPOG website. There were no objections to this via the members that were on the call.

#### Attendance:

Bruce Adelman (Henry Ford)	Todd Liu (Memorial Sloan Kettering)
Dan Biggs (Oklahoma)	Mike Mathis (Michigan)
Elke Bos (Utrecht)	Sean Mackey (Stanford)
Mike Burns (Michigan)	Patrick McCormick (Memorial Sloan Kettering)
Ruth Cassidy (Michigan)	Graciela Mentz (Michigan)
Robert Craft (Tennessee)	Nathan Pace (Utah)
Germaine Cuff (NYU Langone)	Leif Saager (Michigan)
Kenneth Cummings (Cleveland Clinic)	Robert Schonberger (Yale)
Adit Ginde (Colorado)	Nirav Shah (Michigan)
Leslie Jameson (Colorado)	Amy Shanks (Michigan)
Sachin Kheterpal (Michigan)	Allie Thompson (Michigan)
Cor Kalkman (Utrecht)	Kevin Tremper (Michigan)
Kai Kuck (Utah)	Shelley Vaughn (Michigan)
Tory Lacca (Michigan)	

#### **Announcements/Updates:**

- Congratulations to Dr. Eric Sun and the entire PCRC 035 team on their JAMA acceptance.
- Please keep an eye out for details for the MPOG social event at the 2019 IARs conference.
- We hope to see you at the clinical trials network meeting on Sunday at the 2019 IARs conference.

# **PCRC 0061**: Association between Intraoperative Hypotension and Patient Outcomes: A Multicenter Retrospective Observational Study

#### PI: Dr. Nirav Shah

Institution: University of Michigan

- Q: Why aren't you choosing larger epochs for hypotension for improved clinical relevance?
   Perhaps under 5 minutes and then longer cutoffs?
  - A: Final protocol may extend the duration of hypotension as the MAP gets higher.
  - Comment: We could create a continuous hypotension variable.
- Q: Some cases have an A-line placed after induction, and you may miss hypotension during that time. Are you going to capture these data from the non-invasive cuff?
- Comment: Not good to dichotomize continuous variables into buckets. Further revision to the statistical analysis plan is needed with more detail regarding the modeling.
- Comment: Substantial risk for overestimating the risk of hypotension due to measurement bias.
   Sensitivity analysis assuming no outcome for those without measurements.
- Comment: Could look at an interaction model with blood pressure and time.
- Comment: Do we know how frequently preop creatinine is documented?
  - A: ~225K cases between 2010-present out of a few million MPOG cases.
  - Disclose what proportion of patients after meeting inclusion/exclusion were excluded due to missing creatinine.

#### Final Decision: Electronic revision and brief represent

	Vote
Academic Medical Center (AMC) Amsterdam	N/A
Beaumont	N/A
Brigham and Women's	N/A
Bronson	N/A
Children's Hospital of Orange County (CHOC)	N/A
Cleveland Clinic	Electronic revision
Columbia	N/A
Duke	N/A
Henry Ford	Electronic revision
Holland	N/A
MGH	N/A
Memorial Sloan Kettering	<b>Revise and represent</b>
NY Langone	<b>Revise and represent</b>
Oregon Health Science University	N/A
St. Joseph/Trinity	N/A
Sparrow	N/A
Stanford	Electronic revision
University Medical Center of Utrecht	N/A
University of Arkansas	N/A
University of California Los Angeles	N/A
University of Colorado	Electronic revision
University of Michigan	Abstain
University of Oklahoma	N/A
University of Pennsylvania	N/A

University of Tennessee	N/A
University of Utah	Revise and represent
University of Vermont	N/A
University of Virginia	N/A
University of Washington	Revise and represent
Vanderbilt	N/A
Wake Forest	N/A
Washington University, St. Louis	N/A
Weill-Cornell Medical Center – New York Presbyterian	N/A
Yale	Electronic revision

## PCRC 0069: Association Between Driving Pressure and Postoperative Outcomes in Non-Cardiac Surgery Patients

#### PI: Dr. Todd Liu

Institution: Memorial Sloan Kettering Cancer Center

- Comment: Peak and plateau pressures might consider either peak or plateau pressure.
- Comment: Restricted the study population to duration greater than 2 hours.
- Comment: Laparoscopic cases may have high inflation pressures how are you planning on examining those cases?
  - A: Include those cases as a sub-group analysis.
- Comment: Craniotomy we are often asked to hyperventilate a patient.
- Comment: Please amplify the methods section regarding the modeling. Why did you dichotomize driving pressure?
  - A: NEJM article supports this threshold
  - Comment: May want to consider keeping as a continuous variable.
- Comment: Consider removing the 1 lung ventilation population due to different physiology and previous MPOG research manuscript.
  - A: We will circle back with previous MPOG authors regarding this topic.
- Comment: Are LMAs used for controlled ventilation?
  - A: We are likely going to find that the LMA population is small.
- Comment: Should postoperative pulmonary complications be primary outcome?

   A: Will consider switching them.
- Comment: Be careful how to define the exposure threshold.

#### Final Decision: Electronic revision

	Vote
Academic Medical Center (AMC) Amsterdam	N/A
Beaumont	N/A
Brigham and Women's	N/A
Bronson	N/A
Children's Hospital of Orange County (CHOC)	N/A
Cleveland Clinic	Electronic revision
Columbia	N/A
Duke	N/A
Henry Ford	Electronic revision
Holland	N/A
MGH	N/A
Memorial Sloan Kettering	Abstain
NY Langone	Electronic revision
Oregon Health Science University	N/A
St. Joseph/Trinity	N/A
Sparrow	N/A
Stanford	N/A
University Medical Center of Utrecht	N/A
University of Arkansas	N/A
University of California Los Angeles	N/A
University of Colorado	Electronic revision
University of Michigan	Electronic revision

University of Oklahoma	N/A
University of Pennsylvania	N/A
University of Tennessee	N/A
University of Utah	Electronic revision
University of Vermont	N/A
University of Virginia	N/A
University of Washington	Electronic revision
Vanderbilt	N/A
Wake Forest	N/A
Washington University, St. Louis	N/A
Weill-Cornell Medical Center – New York Presbyterian	N/A
Yale	Revise and
	represent

## **PCRC 0072**: Adverse Events with Deep Sedation versus General Anesthesia for Endoscopic Retrograde Cholangiopancreatography: A Multicenter Observational Study

#### PI: Dr. Kenneth Cummings

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#### Institution: Cleveland Clinic

- Q: 99% of our Colorado's ERCPs are under general anesthesia. Should mortality be the primary endpoint?
  - Comment: Incidence is so low. Unplanned admission is difficult to capture.
  - Comment: Primary focus on hypoxia and hypotension.
  - Comment: Can you capture LOS data?
    - A: We've had variable success with calculating LOS from certain variables.
- Q: Are you including institution ID in the propensity score?
  - A: Propensity score weighting is the least recommended and produces a lot of bias with the estimates.
- Comment: Another primary or secondary endpoint could be case duration.
- Q: Is this procedure typically done in the prone position?
- Q: Do you want to capture in/out time or procedural time?
- Comment: May be able to identify conversion to GA.

#### Final Decision: Electronic Revision

	Vote
Academic Medical Center (AMC) Amsterdam	N/A
Beaumont	N/A
Brigham and Women's	N/A
Bronson	N/A
Children's Hospital of Orange County (CHOC)	N/A
Cleveland Clinic	Abstain
Columbia	N/A
Duke	N/A
Henry Ford	Electronic revision
Holland	N/A
MGH	N/A
Memorial Sloan Kettering	N/A
NY Langone	N/A
Oregon Health Science University	N/A
St. Joseph/Trinity	N/A
Sparrow	N/A
Stanford	N/A
University Medical Center of Utrecht	N/A
University of Arkansas	N/A
University of California Los Angeles	N/A
University of Colorado	Electronic revision
University of Michigan	Electronic revision
University of Oklahoma	N/A
University of Pennsylvania	N/A
University of Tennessee	N/A
University of Utah	Electronic revision

University of Vermont	N/A
University of Virginia	N/A
University of Washington	Electronic revision
Vanderbilt	N/A
Wake Forest	N/A
Washington University, St. Louis	N/A
Weill-Cornell Medical Center – New York Presbyterian	N/A
Yale	Electronic revision

### PCRC 0073: The Interference of Anti-hemostatic Medication with Neuraxial Analgesia Use

PI: Dr. Cor J. Kalkman

Institution: University Medical Center Utrecht

- Q: How good is the data for many of these variables specifically preoperative medications?
  - A: Variability across MPOG with extraction and uploading of home medications exists. Additionally, EPIC sites can have mixing between home medications and preoperative medications. Some work will be required to examine the quality of the data.
  - A: May need to limit the number of participating sites based on data quality.
- Comment: Previous MPOG research project proved difficult for capturing home medications.
- Comment: Any sites actively contributing good quality data related to home medications?
  - A: If there were a limited number of fields, then could do text searches.
- Q: How to identify epidural hematoma?
  - A: Would prefer to use diagnosis codes.
  - A: Previous studies have looked for a repeat operation within 10 days.
- Q: Would you expect most patients to have decompression procedure?

#### Final Decision: Electronic revision

	Vote
Academic Medical Center (AMC) Amsterdam	N/A
Beaumont	N/A
Brigham and Women's	N/A
Bronson	N/A
Children's Hospital of Orange County (CHOC)	N/A
Cleveland Clinic	Accept
Columbia	N/A
Duke	N/A
Henry Ford	Electronic revision
Holland	N/A
MGH	N/A
Memorial Sloan Kettering	Accept
NY Langone	Accept
Oregon Health Science University	N/A
St. Joseph/Trinity	N/A
Sparrow	N/A
Stanford	Electronic revision
University Medical Center of Utrecht	Abstain
University of Arkansas	N/A
University of California Los Angeles	N/A
University of Colorado	Revise
University of Michigan	Electronic revision
University of Oklahoma	N/A
University of Pennsylvania	N/A
University of Tennessee	<b>Electronic revision</b>
University of Utah	<b>Electronic revision</b>
University of Vermont	N/A
University of Virginia	N/A

University of Washington	Electronic revision
Vanderbilt	N/A
Wake Forest	N/A
Washington University, St. Louis	N/A
Weill-Cornell Medical Center – New York Presbyterian	N/A
Yale	Electronic revision