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

## Attendees: P=Present; A=Absent; X=Expected Absence

Active PIs		In Progress PIs Continued		
Α	Kenneth Abbey, MD - OHSU	Α	David Robinowitz, MD - UCSF	
Р	Michael Avidan, MD - Wash U	Р	Leif Saager, MD – Cleveland Clinic	
Α	Michael Aziz, MD - OHSU	Р	Robert Schonberger, MD - Yale	
Α	Mitchell Berman, MD - Columbia	Α	Scott Springman, MD – Wisconsin	
Р	Daniel Biggs, MD – Oklahoma	Chairs		
Α	Robert Craft, MD –Tennessee	Α	David Adams, MD - Vermont	
Α	Douglas Colquhoun, MD –Virginia	Α	Wolfgang Buhre, MD - Utrecht	
Α	Marcel Durieux, MD, PhD- Virginia	Α	David Brown, MD – Cleveland Clinic	
Р	Jerry Epps, MD - Tennessee	Α	Michael Cahalan, MD - Utah	
Α	Jesse Ehrenfeld, MD - Vanderbilt	Α	Jerry Epps, MD – Tennessee	
Α	Ana Fernandez-Bustamente, MD - Colorado	Α	Alex Evers, MD – Wash U	
Α	Alexander Friend, MD –Vermont	Α	Jane Fitch, MD – Oklahoma	
Α	Daniel Helsten, MD – Wash U	Α	Hugh Hemmings, Jr., MD, PhD, FRCA - Cornell	
Α	Sandra Holtzclaw, MD - Vanderbilt	Α	Thomas Henthorn, MD –Colorado	
Р	Leslie Jameson, MD - Colorado	Α	Roberta Hines, MD, FANZA - Yale	
Р	Sachin Kheterpal, MD - Michigan	Α	Jeffrey Kirsch, MD - OHSU	
Α	Fabian Kooij, MD – AMC Amsterdam	Α	G. Burkhard Mackensen, MD, PhD – U of Wash	
Α	Philip Lirk, MD – AMC Amsterdam	Α	Mervyn Maze, MD - UCSF	
Α	Timothy Morey, MD - Florida	Α	Timothy Morey, MD - UCSF	
Р	Nathan Pace, MD – Utah	Α	Marco Navetta, MD – Santa Barbara Cottage	
Р	William Paganelli, MD – Vermont	Α	Robert Pearce, MD, PhD - Wisconsin	
Α	Stephen Robinson, MD - OHSU	Α	Howard Schapiro, MD - Vermont	
Α	Kelley Smith, MD – Utah	Α	Wolfgang Schlack, MD - AMC	
Р	Jonathan Wanderer, MD - Vanderbilt	Α	Kevin Tremper, PhD, MD - Michigan	
Α	Kevin Wethington, MD - Utah	Α	Warren Sandberg, MD, PhD – Vanderbilt	
		Α	Howard Schapiro, MD - Vermont	
In-Progress PIs		Α	George Rich, MD – Virginia	
Α	Maged Argalious, MD – Cleveland Clinic	Α	Wilton van Klei, MD – Utrecht	
P	Brian Bateman, MD - MGH	Α	Jeanine Wiener-Kronish, MD- MGH	
Р	Jurgen C. de Graaff, MD, PhD - Utrecht	Α	Margaret Wood, MD - Columbia	
Α	Karen Domino, MD, MPH – U of Washington	MPO	MPOG	
Α	Matthias Eikermann, MD - MGH	P	Genevieve Bell	
Α	Peter Fleishut, MD – Weill-Cornell	P	Tory Lacca, MBA	
Α	Bassam Kadry, MD - Stanford	P	Michelle Morris, MS	
Р	Bala Nair, PhD – U of Washington	P	Amy Shanks, MS, PhDc	
Α	Marco Navetta, MD – Santa Barbara Cottage	P	Tyler Tremper	
Р	Shu-Fang Newman – U of Washington	P	John Vandervest	
Р	W. Pasma - Utrecht	Р	Bukky Nafiu, MD	

### **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 minimal or no changes required
  - b. Accept with major changes required
  - c. Revise and reconsider at future meeting
  - 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.

#### **General Comments:**

- ASA retreat Friday (10/10/14). Same format as the past several year
- Every center has data or has a specifications sheet out to be approved for each project.
- MPOG contributing to AQI. Some centers are currently sending their data to AQI. Each
  site gets a specific user ID and password to send their MPOG data to AQI. It comes from
  each sites local server to AQI. The utility sends the entire MPOG record itself
- Epic Some sites have been able to run smaller extracts at a time. There is another call
  on Epic next week and we can determine if there is anything that they are waiting on
  from us.
- Would it be valuable for Dr. Jameson to send the data extracted a different way from Epic for this particular project for preop and PACU data?
  - Set up a web-ex to see what the data looks like to see if the data that is available could be put back into the MPOG structure. John Vandervest will set up time with Ken, Dr Jameson and Dr. Kheterpal.
- Currently no March PCRC meeting scheduled. Do you prefer one hour meetings or wait until April for a longer meeting?
  - Consensus is a shorter March meeting
  - Preference is to have a shorter monthly meeting

#### Presentation:

Title: Development of reference ranges for vital signs for children during anesthesia

Proposed Authors: Linda M. Peelen Ph.D., Wietze Pasma D.V.M., Wilton van Klei M.D., Ph.D, Olubukola O. Nafiu, Others as appropriate

Primary Institution: Utrecht

Presented by: Jurgen C. de Graaff, M.D., Ph.D.

#### **Discussion Points:**

- Do we do gender based and gender specific curves as well, not just weight based?
- Look at the percentile curve for all patients of a particular anthropometric category?
- Do a sensitivity analysis for patients without specific co-morbidities?
- When looking at BP, you need to look at age, gender, and height since those are well
  documented determinants of BP variability. Therefore, height needs to be controlled
  for in the analysis as well as gender
- Analyze separately or exclude completely overweight and obese children
  - o In obese children at Michigan, about 1/3 of patients have HTN
- Look at beta-blockers on HR
- Populations between US and Europe will differ according to BMIs
- Regarding EtCO2, do you use a lower sampling draw? Might want to confirm that each site using a side-stream or a standard sampling flow.
  - o Dr. de Graaff agrees that this is important to do
- Consider using quantile regression for the curves
  - o Dr. de Graaff will discuss with his statistician
  - Dr. Pace will send some recent publications and packages in R to do quantile regression
- To use median values, does not allow for mixed models.
- The strata that are being chosen, do you have pre-operative BP before an anesthetic is delivered and if so, would that be of interest? Some US sites have it via Centricity. Would that be helpful?
  - o Pre-op BP is very relevant. From the Netherlands, they do not have that data but if we can include that when available that would be very useful
    - All US Centricity sites, have preop BP
    - Tennessee have preop BP, % of ped patients is low
    - Oklahoma have 12,000 peds/year, do not have height information, have preop BP on kids >1 year
    - Vanderbilt 54,000 peds total, will have to go look at preop BP. It would be possible to combine clinic BP to specific patients.
    - Wash U May not be able to provide this information
    - Vermont Does not have heights on children <1 yr</li>
- Other thoughts on perimeters being investigated? Are the current perimeters reasonable or should others be looked at?
  - Oxygen saturation won't be so interesting
  - o RR Is the thought just to figure out type of RR people are using?
    - RR was included because wanted to look at EtCO2
  - o Both RR and EtCO2, the data will be limited for about half of the centers
- Would like to split the analysis by spontaneous verse controlled-ventilated patient
  - It is not easy to determine this. The only way to determine this is via medication administered perhaps. Only about half of the centers have vent mode documented
- Perhaps start with HR and BP first for this analysis because "less is more"
- Perhaps split the manuscript into two manuscripts
  - o First is the curves for BP and HR

o Second to look at the respiratory perimeters for those centers that have the data for pulmonary management

Institution	Vote
Academic Medical Center (AMC), Amsterdam	Not on call
Columbia	Not on call
Oregon Health Science University	Abstain
University of Colorado	Accept with Minor Revisions
University of Florida	Not on call
University of Michigan	Accept with Minor Revisions
University of Oklahoma	Accept with Minor Revisions
University of Tennessee	Accept with Minor Revisions
University of Vermont	Accept with Minor Revisions
University of Utah	Accept with Minor Revisions
University of Virginia	Not on call
Vanderbilt	Accept with Minor Revisions
Washington University, St. Louis	Accept with Minor Revisions

Final Decision: Accept with Minor Revisions