MACRO Research Newsletter
Your source for information about current clinical trials in your UPMC workplace

January 2014

MACRO in the Emergency Department

MACRO has become an integral part of research in Emergency Medicine at Pitt. One of the most visible growths of MACRO is that over the past two years our Research Associates (RA) have been physically stationed in the emergency department at UPMC-Presbyterian, and more recently at UPMC-Mercy.

The RA role has developed into much more than persons who "screen" for potential research subjects and then call Clinical Research Coordinators. Instead, RAs are performing significant portions or even all of several research studies, including consent (PIPELINE, TRAC), laboratory processing (PIPELINE), randomization (SHINE, POINT), and monitoring of patients through the first few hospital days (SHINE). Funding from several trials (NETT and TRAC) and departments provided the activation energy for this increase in staffing and duties, and oversight from the MACRO Clinical Research Coordinators and Executive Committee ensure quality control. Pitt CTSI has also helped with training lectures on clinical research conduct for our RAs.

This huge increase in MACRO resources has allowed multiple studies to begin in the emergency department, and has attracted multiple investigators to embark on studies that would not otherwise be possible. Over 200,000 persons are treated in our core Emergency Departments each year: we at MACRO are committed to remaining strategically positioned to screen and enroll many of these persons into more and more studies and trials.

-Clifton Callaway, MD, PhD, Professor and Executive Vice-Chair of Emergency Medicine, Ronald D Stewart Endowed Chair of Emergency Medicine Research

The MACRO team has been enrolling in the Pittsburgh Pre-hospital LINking Evaluation (PIPeLINE II) trial since August 1st 2013. The goal of this trial is to identify a panel of biomarkers that are sensitive and specific for sepsis that can serve as a diagnostic and prognostic tool for pre-hospital providers. Such a tool would allow for earlier identification and intervention for patients at high risk for sepsis as well as more appropriate triage to centers capable of providing specialized care.

MACRO’s role in this trial has been collecting and processing blood samples drawn by EMS and ED staff, real time data collection, and obtaining consent from subjects for research participation. As of January 2nd, MACRO has enrolled a total of 805 subjects in UPMC Presbyterian and Mercy.

"MACRO has been an essential partner, as this is the first study in the United States to sample and collect blood in both the prehospital and ED setting. Through 24-hr staffing of the emergency departments at 2 UPMC hospitals (UPMC-Presby, UPMC-Mercy), many Research Associates have worked diligently to make this a huge success!"

-Dr. Christopher Seymour, MD, MSc, Assistant Professor, Departments of Critical Care and Emergency Medicine (Principal Investigator)
MACRO in the Emergency Department (cont.)

The Stroke Hyperglycemia Index Network Effort (SHINE) is a multicenter randomized controlled clinical trial that is testing the safety and efficacy of tight glucose management via continuous insulin infusion to a target range of glucose 80-130mg/dl compared to control standard management of glucose by subcutaneous shots of insulin to a range glucose<180mg/dl in ischemic stroke patients with hyperglycemia. Approximately 700,000 people in the US suffer an ischemic stroke and 40% are hyperglycemic at presentation. Hyperglycemia is associated with worse outcomes in this patient population but it is unclear whether aggressive treatment to assure euglycemia will improve outcomes. The study is from the National Institute of Neurological Disorders and Stroke (NINDS) sponsored Neurological Emergency Treatment Trial (NETT) network. 56 sites will enroll 1400 patients in this study over the next 4 years. Since January 2013, the MACRO and Post Cardiac Arrest Service (PCAS) team have enrolled 12 subjects at the Presbyterian and Mercy hospital sites, making Pittsburgh one of the top enrolling sites in the NETT network. Drs. Lori Shutter, Clifton Callaway, and Jon Rittenberger are the Principal Investigators.

The Platelet Oriented Inhibition of New TIA and minor ischemic stroke (POINT) trial is also sponsored by the NINDS-NETT. POINT is a multicenter randomized double blind controlled clinical trial that is testing the safety and efficacy of dual anti-platelet therapy (clopidogrel + aspirin) versus aspirin alone for prevention of major ischemic vascular events following a high risk TIA or minor ischemic stroke. 171 sites have enrolled 1873 subjects to date and aim to enroll a total of 5840 subjects by 2017. The MACRO and PCAS team have enrolled 6 subjects since February 2013 at Presbyterian and has recently opened enrollment at Shadyside. Drs. Vivek Reddy, Clifton Callaway, and Jon Rittenberger are the Principal Investigators.

The MACRO team has enrolled 11 subjects from the Presbyterian Emergency Department in the Study Tamsulosin for urOlithiasis IN the Emergency Department (STONE) trial since October 2013. This trial is sponsored by the National Institute of Diabetes and Digestive and Kidney Diseases and The George Washington University/School of Medicine. The aim of this trial is to see if Tamsulosin (Flomax) actually helps patients pass kidney stones faster compared to placebo control. Dr. Allan Wolfson is the study Principal Investigator and Sara DiFiore is the study coordinator.

Enrollment in the Texting to Reduce Alcohol Consumption (TRAC) Trial completed in October 2013. This trial enrolled 18-25 year old ED patients that screened positive for hazardous drinking behavior. 2,893 potential subjects were screened between October 2012 and October 2013, through a collaboration between MACRO and Dr. Suffoletto’s research staff. MACRO’s participation began at Mercy in December 2012 and at Presbyterian in March 2013; 533 subjects were enrolled at these hospitals. An additional 257 were enrolled at Magee and Shadyside by Dr. Suffoletto’s research staff, making TRAC one of the largest prospective cohort studies of its kind. Dr. Suffoletto’s staff includes Sydney Huerbin, Sandra Truong and Kyle McManigle.

We congratulate Dr. Suffoletto and Jeff Kristan on successful completion of the trial and look forward to reading the published results!

We would like to acknowledge one of Dr. Suffoletto’s research staff, Sydney Huerbin, former MACRO Research Associate (November 2011-April 2013) on being accepted to medical school. Congratulations Sydney!!
MACRO in the Emergency Department (cont.)

Thank you to all of our Mercy and Presby MACRO Research Associates covering our Emergency Department 24/7!

We have been very successful in recruiting and enrolling in all of the MACRO research studies.

MEET OUR NEWEST CLINICAL RESEARCH COORDINATOR - PETER ADAMS, BS, CCRC

Pete graduated from the University of Pittsburgh in 2011, where he majored in Neuroscience with a Chemistry Minor. While studying at Pitt, Pete was a MACRO Research Associate for almost two years where he served as Co-Investigator on two NIH/DOD funded trials.

Pete brings several years of clinical research experience to his present role at MACRO, which involves the coordination and management of clinical research activities from inception through completion.

Previously, Pete worked with the Center for Innovation in Restorative Medicine, organizing clinical studies of craniofacial fat grafting, muscle regeneration as well as fat grafting to amputation sites.

Pete’s interests include: trauma and emergency medicine, surgical critical care, and neonatology.

ELAD

The University of Pittsburgh, under the direction of Principal Investigator, Dr. Ali Al-Khafaji, is a significant leader in the enrollment of subjects into an open label, multicenter, randomized trial to assess the safety and efficacy of the ELAD (Extra-Corporeal Liver Assist Device) system in subjects with Alcohol-induced Liver De-compensation and Acute Alcoholic Hepatitis. The sponsor of the study is Vital Therapies Inc. and is being conducted under the study name VTI-208.

As of mid-January, 60 subjects have been enrolled in VTI-208 among 31 clinical sites in the United States and Australia. Overall study enrollment target is 200 subjects for this Phase 3 trial. The University of Pittsburgh has enrolled 6 subjects and anticipates continued enrollment.

Special thanks for the success of this study at The University of Pittsburgh to the Hepatology service for ongoing referrals and the clinical nursing staff of the TICU and 12th and 10th floor nursing units in MUH for their support in executing this complex research.
NEW LOGO

MACRO now has a logo (pictured below, left) that captures the unique identity of our Mission - to facilitate clinical research led by dedicated investigators in an ethical, regulatory compliant and fiscally sound manner.

We would like to thank Max Glider for his dedication and creativity in helping us come up with our new logo!

MACRO/CURISMA Collaboration

Collaboration between the MACRO and CRISMA Centers has facilitated successful clinical research in many areas at UPMC. The CRISMA (Clinical Research, Investigation, and Systems Modeling of Acute Illness) Center is housed within the Department of CCM, and is regarded by many as one of the world’s foremost translational research groups.

Overall, CRISMA focuses on study design and protocol development, while MACRO focuses on protocol execution and logistics. Recently completed and current studies the two centers have collaborated on include ProCESS (sepsis resuscitation), PIPeLine (prehospital sepsis biomarkers), ProGRESS-AKI/Consequences (sepsis recovery), GLUCOSE (advanced management of hyperglycemia) and ProACT (procalcitonin antibiotic management). In addition to protocol execution, MACRO also works with CRISMA and other groups with grant preparation, budgeting, and operationalization of the many intricate processes necessary for human subjects research.

Similarly, for certain large trials MACRO serves as Coordinating Center for (PAMPER, TXA - prehospital trauma), CRISMA assists with data management and web-based data collection form services. We look forward to many more future collaborations! http://www.ccm.pitt.edu/crisma
Actively Recruiting Studies

**Presby/Montefiore ICUs**
- **CMV** – A study to determine whether CMV reactivation impact outcomes in critically ill patients with sepsis due to blood stream infections.
  PI – Nina Singh
- **ELAD** – Extracorporeal liver assist device for alcohol induced liver decompensation.
  PI – Ali Al-Khafaji
- **EUPHRATES**—Endotoxin filtration using dialysis circuit for septic patients.
  PI – Ivonne Daly
- **GLUCOSE** – A study that will help to develop a unique way to understand the fluctuations in glucose levels and to ultimately control these glucose levels in critically ill patients.
  PI – Gilles Clermont
- **GRAIL** – A study for prevention of cytomegalovirus (CMV) in patients who have an established respiratory failure, including ALI, associated with either severe sepsis or trauma
  PI – Scott Gunn
- **ProGReSS AKI ConsequenceS** - A study looking at the long-term effects of sepsis with a focus on acute kidney injury and cardiovascular outcomes.
  PI – John Kellum & Sachin Yende
- **RECAP** – Impact of blood storage duration on physiologic measures
  PI – Hernando Gomez
- **RUBY** – A study to collect blood and urine samples to help identify and validate protein biomarkers of recovery from moderate or severe acute kidney injury (AKI).
  PI – Ali Al-Khafaji

**Presby Emergency Department**
- **PIPeLINE** – Pittsburgh Prehospital LINking Evaluation study II: Biomarkers in Critical Illness.
  PI – Christopher Seymour
- **POINT** – The study goal is to determine the safety and effectiveness of the combination of low-dose aspirin and clopidogrel (Plavix®) in reducing the risk of stroke, heart attacks and other complications in patients who have just had a TIA or minor ischemic stroke.
  PI – Vivek Reddy
- **SHINE** – A two-arm, multicenter, randomized, prospective clinical trial designed to test the safety and efficacy of tight glucose management (glu 80-130mg/dL) via continuous infusion of insulin versus control therapy (glu <180mg/dL) via subcutaneous insulin injections in patients that present with hyperglycemia after an acute ischemic stroke.
  PI – Lori Shutter
- **STONE** – The primary objective of this randomized multi-center study is to determine the effect of tamsulosin on the proportion of patients passing a kidney stone as determined by patient report.
  PI – Allan Wolfson

**Mercy Emergency Department**
- **PIPeLINE** – Pittsburgh Prehospital LINking Evaluation study II: Biomarkers in Critical Illness.
  PI – Christopher Seymour
- **SHINE** – A two-arm, multicenter, randomized, prospective clinical trial designed to test the safety and efficacy of tight glucose management (glu 80-130mg/dL) via continuous infusion of insulin versus control therapy (glu <180mg/dL) via subcutaneous insulin injections in patients that present with hyperglycemia after an acute ischemic stroke.
  PI – Lori Shutter

**Shadyside Emergency Department**
- **POINT** – The study goal is to determine the safety and effectiveness of the combination of low-dose aspirin and clopidogrel (Plavix®) in reducing the risk of stroke, heart attacks and other complications in patients who have just had a TIA or minor ischemic stroke.
  PI – Vivek Reddy