“Each man delights in the work that suits him best.”

*Odysseus in Homer’s *The Odyssey*

As winter was quietly preparing to wrap up for this year, and spring unpacking its bags (in some parts of North America very slowly), one of the larger cardiovascular outcomes trials had been feverishly wrapping up and unpacking the data.

My colleague and co-director, Dr. Shaun Goodman, and CVC Project Leads Amanda, Jodi and Julianna, along with Regulatory Specialist Paula, led the Canadian effort from the CVC which included 38 sites, 361 patients, 29 cities and >100 investigators and site personnel from Canada. The trial was eagerly anticipated to support prior research in the area of chronic coronary artery disease progression as well as expand our knowledge on this patient population early after an acute coronary syndrome.

The ODYSSEY Outcomes results were presented at the American College of Cardiology meeting in Orlando, Florida in March, and disseminated via multiple avenues. Traditionally, the scientific exchange has relied on a presentation and often simultaneous publication of the same results in a leading medical journal. While important to disseminate efficiently, this can be challenging to get right with the vast amount of data available and many different explanations for a result covering many endpoints. To this end, the trial leadership of ODYSSEY Outcomes have taken a modicum of time to better relay the results that will stand the test of time, supported and explored by subsequent analyses.

How should the investigative team convey the results to the broader public and healthcare population? The ODYSSEY Outcomes results were disseminated to the investigative team via email, webinars, our CVC twitter feed (@CVC_Ualberta), and local efforts to ensure dissemination to the medical community at large. Knowledge translation, dissemination and exchange of scientific information is the bedrock of how advances are made both in discovery and implementation. Patients cannot benefit if the health system does not uptake the new information and transform this into practice – numerous examples exist such as the slow uptake of beta-blockers in heart failure, discontinuation of medications with no additional benefit or potential harm (e.g. some oral hypoglycemic medications) or de-adoption of historical unproven practices (morphine and oxygen in acute MI).

The scientific and clinical discourse has undergone many changes from simple lecture based didactic learning, lengthy book chapters in even heavier books, and published manuscripts to now add additional channels of learning such as webinars, live-streamed videos, twitter, and interactive chart audit. One can foresee that there may be a role for patient engagement in the design, delivery and dissemination of the results and thus this should be embraced.

An important shift is moving the scientific and clinical exchange from an asynchronous didactic exchange to one that is more interactive, inclusive and timely. We at CVC look forward to embracing this and measuring the change in clinical outcomes for our patients – we hope you will join us on this next odyssey.

*Justin Ezekowitz*

*CVC Co-director*
On February 25th, 2018, the Canadian VIGOUR Centre welcomed 13 sites from 8 provinces to participate in the 5th Annual CVC Clinical Trials Colloquium in Banff, AB.

A sincere thank you to our sponsors Amgen Canada Inc., AstraZeneca, Bayer Inc., Boehringer-Ingelheim, CSL Behring LCC, Novartis, BMS-Pfizer Alliance, Sanofi Canada Inc., and Servier for their support towards making this event possible!

Building upon objectives and key feedback from previous colloquia, the focus of this year’s gathering was to share innovative approaches and ideas for conducting clinical trials, including:

1. enhancing best practices in conducting clinical trials, through an open forum of discussions, breakouts and sharing
2. examining pragmatic, cost effective and alternative approaches to conducting clinical trials and better understanding how these can be effective in achieving the desired outcomes and results
3. sharing and developing successful strategies for how to best engage patients
4. sharing and gaining knowledge from current and past experiences in order to achieve success in all trial aspects (from start-up through to close out) of future research studies

Our Founding Director, Dr. Paul Armstrong, welcomed us with some opening remarks regarding the future of medical innovation. He reminded us of our social contract between health care and the medical innovation system and society, and that our future work requires a more personalized, transdisciplinary collaboration towards advancing medical research and practice.

Led by CVC Co-Director Dr. Shaun Goodman, we began the day by reviewing some of the biggest challenges we face today in conducting clinical trials, including complexity of protocols and logistics, privacy laws and their associated restrictions, reasons for low or slow enrollment, hurdles regarding ethics, legal and operational logistics, as well as an overall theme of increasing demands vs. site resources, both time and financial constraints.

This discussion naturally segued into our next topic of how sites select which clinical trials to participate in when invited. We were pleased to welcome back our colleagues from Duke Clinical Research Institute (DCRI); Ty Rorick, Associate Director of Mega Trials and Lisa Berdan, DCRI Director of Mega Trials.

Ty led us in a case-study debate on the ‘pros’ and ‘cons’ of whether to participate in a potential new trial. This lively debate highlighted sites’ top criteria for opting-in: Adequate per-patient and operational compensation, Canadian involvement early on in relation to global recruitment, Canadian involvement in the protocol development and early trial planning phases with an eye towards simplified visit schedules and minimal regulatory burden.

Next, CVC Co-Director, Dr. Justin Ezekowitz and Lisa Berdan presented a comparison of ‘traditional’ vs.
‘pragmatic’ research design, noting how pragmatic trials hold the potential for increased efficiency, reduced costs, and simplified operationalization of future trials. While the ever-growing use of electronic medical records (EMRs) is critical to being able to participate in pragmatic clinical trials, the various barriers to obtaining access to EMRs and other database information continues to be a challenge for many sites. Although current provincial regulations and privacy laws are widely varied across the country, we received a glimpse of what kinds of novel designs are beginning to be implemented and how this exciting trend is evolving within Canada.

We began our afternoon session with a sharing of Innovative Approaches/Ideas, and the ‘Secret Ingredients’ for running a successful clinical trial. CVC Co-Director, Dr. Shaun Goodman and CVC Associate Director of Clinical Trials, Tracy Temple, facilitated a wonderful round-table discussion where each site had the opportunity to share one idea they have implemented (or would like to see implemented) that has truly made a difference in the way they conduct research. A myriad of excellent ideas – ranging from simple to a little more complex – were collected and we were inspired to see the cross-pollination of ideas between sites.

Our colleagues from DCRI, Lisa Berdan and Ty Rorick, then challenged us to step into the shoes of a research participant and consider all of the thoughts, feelings and logistical considerations our patients face every day. We were tasked with how to apply these insights towards best practices for keeping our patients engaged in clinical research. Once again, we had the privilege of learning from each site how even the seemingly small things they do make a big difference in terms of making their patients feel like ‘research VIPs.’

CVC Co-Directors, Dr. Shaun Goodman and Dr. Justin Ezekowitz closed out our afternoon session with a group brainstorm about how to attract and mentor new investigators/sites to research. We learned that it takes not only a dedicated and passionate core research team but also the engagement and ‘buy-in’ from the front lines clinical team to promote and facilitate research within the local site. Many strategies for attracting new sites/investigators were shared, including one-on-one mentorship, regular research rounds, meetings and/or journal clubs, and even dedicated financial support and educational sessions for new investigators and their teams.

We wish to extend our appreciation to all of the investigators, coordinators, and sponsors who participated in this year’s Colloquium. Your valuable experiences and contributions amongst a variety of settings throughout the country are what make this such an engaging and unique event.

While we can gather only a small group of sites to the Colloquium each year, our goal remains to continue learning from each of our sites how best to optimize the conduct and improve performance of clinical trials as well as share key information within our entire network of sites across Canada.

If you are interested in hearing more about this year’s meeting or would like to inquire about participation in a future Colloquium, please contact Tracy Temple at tracy.temple@ualberta.ca or 780-492-1876.
**SODIUM-HF**

**Congratulations** to all SODIUM-HF team members on reaching a major milestone with 510 patients enrolled to date.

A special shout out to Dr. Shelley Zierothe, Charissa, Wendy and Jennifer on randomizing patient 499 and Dr. Heather Ross, Enza, Margaret and Lisa on randomizing patient 500. Keep up the excellent work everyone!

We saw strong enrollment at the end of 2017 and encourage all sites to continue screening for SODIUM patients to keep up this trend.

We would also like to congratulate Dr. Heather Ross, Enza, Margaret and Lisa on accomplishing another major feat – the team has enrolled more than 100 patients to date. To read more about how this site operationally runs their heart function clinics to screen and enroll so many patients, please take a look at the SODIUM-HF Newsletter (Volume 18).

We want to extend a big welcome to Dr. Atherton, Linda, Leeanne, and Adrienne from Brisbane, Australia. We also want to welcome Dr. Andrea Lavoie, Dr. Dehghani, and Sheila from Regina, Saskatchewan to the study. We look forward to both sites enrolling their first patients soon!

**Reminders:**

1. We want to remind study dietitians to respond to the email from Eloisa regarding publication of dietary materials. It is important that we receive everyone’s feedback so that we can appropriately plan our next steps.

2. All sites are also encouraged to frequently login to REDCap and check for data queries. These are updated on a regular basis, but notifications only appear within REDCap, so please be diligent about checking your queries within the system.

3. Please send in the source documents and non-CV reviews that were recently requested by Kate Dawson. If you would like this information re-sent, please contact Kate directly and she can re-forward these to you.

Finally, we would like to welcome Karin Kushniruk to the study. Karin has worked with the CVC for a number of years, and will be supporting the SODIUM-HF study as a back-up Project Lead. Several of you have likely worked with Karin already on other studies, but for those that haven’t please join us in giving Karin a warm welcome to the team.

If you are interested in receiving more information about the SODIUM-HF trial, please contact the Clinical Trial Project Lead, Nubia Zepeda via email at nzepeda@ualberta.ca. You may also contact the SODIUM-HF trial Regulatory Specialist, Kate Dawson, via email at kedawson@ualberta.ca, or the back-up Project Lead, Karin Kushniruk at kushniru@ualberta.ca or 1-800-707-9098, ext 7.

**ClinicalTrials.gov Identifier:** NCT02012179
VICTORIA-HF Registry

Thank you to all sites for completing the feasibility questionnaires and participating in the Site Initiation visits! Our site selection process is now complete and we wish to thank all sites for their interest.

Many sites have already been activated for participation and contract negotiations/submissions to Ethics are well underway for a number of others. Please continue to submit your required regulatory and training documentation so that we may activate your site in a timely manner.

We are thrilled to announce that Canada is leading the way with patient enrollment!

Congratulations to the following sites for enrolling their first patients:

- **Dr. Ronald Bourgeois** and Karen Boyd (Moncton, NB)
- **Dr. Justin Ezekowitz** and Quentin Kushnerik (Edmonton, AB)
- **Dr. Richard Vandegriend** and Sandi Thiessen (New Westminster, BC)
- **Dr. Shekhar Pandey** and Jenna Reinhart (Cambridge, ON)
- **Dr. Christian Constance** and Marie-France Gauthier/Nathalie Leblanc (Montreal, QC)

If you are interested in further information about the VICTORIA Heart Failure Registry, please contact the Clinical Trial Project Lead, Karin Kushniruk, at 1-800-707-9098, ext 7 or via email at kushniru@ualberta.ca or the Regulatory Specialist, Kate Dawson via email at kedawson@ualberta.ca.

STREAM 2

The STREAM 2 study is examining the safety and efficacy of early fibrinolytic treatment of ST-elevation myocardial infarction patients compared to primary PCI.

Globally STREAM 2 has enrolled 13 patients. In Edmonton, approvals are almost in place and training Emergency Medical Professionals on study procedures has begun.

The study processes closely match the current standard of care already in place in Edmonton. We anticipate Canada’s first patient will be enrolled soon.

If you are interested in further information regarding this trial, please contact Clinical Trial Project Lead Courtney Gubbels at 1-800-707-9098 ext 2 or via email at courtney.gubbels@ualberta.ca or Regulatory Specialist Kalli Belseck, ext 6 or via email at kalli@ualberta.ca.

ClinicalTrials.gov Identifier: NCT02777580

Sponsored by Leuven Research & Development (LRD) at University of Leuven, Belgium, STREAM-2 is a Phase 4 trial on STrategic Reperfusion in elderly patients Early After Myocardial Infarction.
**Patient Retention** and **Data Cleaning** remain the top priorities during this phase of the study. Follow-up of patients within their visit windows is important so no one becomes lost to follow-up (LTFU). Should a patient miss a visit, be sure to document all attempts to reach the patient, and know that a late visit is better than no visit.

As a reminder, patients who want to stop “study drug” still remain in the study until the End of the Study, and continue to be followed at their regular visits for SAEs and Endpoints. Refer to eCRF instructions (version 5) for guidance on the required visits once a patient stops study drug, as well as for how to add subsequent follow-up visits in the database.

There were a few changes to the database recently which are reflected in version 5 of the eCRF instructions (sent to sites 27Feb2018).

**A couple of key changes are:**

**CRF Pages**

There is no longer a need to sign all completed and cleaned CRF pages. This signature on each CRF page is now optional. The signature by the PI at the end of the study remains **mandatory**.

**NOAF**

If NOAF is detected outside a visit window, a **NOAF unscheduled related visit** should be added. There are 2 types of these visits that can be created in the study:

1. In case a change in medication is required, an unscheduled visit needs to be added in **Almac IxRS**, which will push through and generate the unscheduled NOAF visit in the database (see p.45).

2. In case no medication change is needed, an unscheduled visit needs to be **manually** added in the database (see p.47).

**IP Shipment Documentation**

The sponsor has clarified that sites do not need to send CVC copies of their IP shipment documentation (see CVC’s 27Mar2018 email to sites). Please continue to retain and file copies of these essential documents in your Investigator Site File, per GCP and HC Division 5 requirements.

**General Reminders**

- Please report all endpoints, even if they are just “suspected” endpoints.
- Ensure copies of all study communications are on file at your site (per the listing that CVC sends out) and let CVC know if you are missing any.
- Send invoices to CVC for any outstanding items per your site’s contract/budget.
- Promptly notify CVC of any temperature excursions for Rivaroxaban.

If you have any questions about this trial, please contact the Clinical Trial Project Lead, Jodi Parrotta at 1-800-707-9098, ext. 3 or via email at jodi.parrotta@ualberta.ca or Regulatory Specialist Paula Priest at paula.priest@ualberta.ca.

Sponsored by Bayer Healthcare AG, GALILEO is a Global multicenter, open-label, randomized, event-driven, active-controlled study comparing a rivArxaban-based antithrombotic strategy to an antipLatelet-based strategy after transcatheter aortIc vaLve rEplacement (TAVR) to Optimize clinical outcomes.
AEGIS-II

The start-up phase of AEGIS-II is now well under way in Canada. CVC is in the final stages of the site selection process and we are now working closely with the selected sites on ethics submissions and contracts.

We are pleased to announce that the first few site ethics submissions were completed in April.

AEGIS-II plans to enroll approximately 17,400 patients from 1000 sites in 45 countries. March was an exciting month as the first site was activated in the USA, and the first patient was enrolled shortly thereafter. Canada is projected to activate our first site by June.

The first Investigator Meeting is planned for May 2018 and we are encouraging our sites to ensure that their start-up activities are in the advanced stages in order to attend this meeting.

AEGIS-II is a large, international, multicentre Phase 3 trial of infusing an intravenous formulation of apolipoprotein A-I (CSL112) to reduce cardiovascular events in acute coronary syndrome patients. CSL112, an intravenous formulation of apoA-I, enhances cholesterol efflux capacity, and therefore has the potential to reduce plaque burden, stabilize plaque lesions at risk of rupture and decrease the high rate of early recurrent events.

If you are interested in further information regarding this trial, please contact Clinical Trial Project Lead, Lyndsey Garrity at 1-800-707-9098, ext 8 or via email at lyndsey.garrity@ualberta.ca or Regulatory Specialist Kalli Belseck at kalli@ualberta.ca.

HILO-HF

Congratulations to Dr. Ezekowitz, Nariman and Quentin on reaching the enrollment goal for the HILO-HF Registry and Pilot study!

The team is currently following up with patients in the registry and will be starting to analyze the data from the Pilot study. We eagerly await the results from these studies.

If you would like further information on the HILO-HF study, please contact the Clinical Trial Project Lead, Nubia Zepeda, via email at nzepeda@ualberta.ca.

Sponsored by CSL Behring LLC, this is a Phase 3, Multicentre, Double-blind, Randomized, Placebo-controlled, Parallel-group Study to Investigate the Efficacy and Safety of CSL112 in Subjects with Acute Coronary Syndrome.

ClinicalTrials.gov Identifier: NCT03473223

Funded by the Heart and Stroke Foundation and Alberta Innovates Health Solutions, HILO-HF is a study examining High versus Low SpO2 Oxygen Therapy in Patients with Acute Heart Failure.

ClinicalTrials.gov Identifier: NCT02518828
Thanks to the hard work and dedication from our sites, their patients, our sponsors and study teams, after six years we were pleased to hear the results of the ODYSSEY Outcomes trial presented by Dr. Phillippe Gabriel Steg, Study Co-chair, at the American College of Cardiology (ACC) Annual Scientific Sessions in Orlando, Florida on March 10, 2018.

“The ODYSSEY OUTCOMES trial showed that use of alirocumab, taken every other week, significantly reduces ischemic events, including all-cause mortality and MI, compared with placebo among patients with an ACS event within the preceding 1-12 months.”

For additional details and the full presentation on the ACC website please click on the following link: [http://www.acc.org/latest-in-cardiology/clinical-trials/2018/03/09/08/02/odyssey-outcomes](http://www.acc.org/latest-in-cardiology/clinical-trials/2018/03/09/08/02/odyssey-outcomes)

As we work through the closeout phase of the ODYSSEY Outcomes trial we want to draw your attention to the following “General End-of-Trial Reminders”:

**Close-out Preparation**
Please ensure all regulatory requirements are complete; including addressing all action items listed in your final monitoring visit follow-up letter.

**Study Archival**
It is recommended that site documents are not archived until the green-light is given by sponsor.

**REB Closure**
Please ensure that you submit your site’s study termination report to your local/central REB, as applicable, once the green light is given by the Project Lead. Forward any relevant submission/approval documents to CVC & file the final report in your ISF.

**Record Retention**
Investigators must retain all study records and source documents for the maximum period required by applicable regulations and guidelines. As per Health Canada regulations, investigators are responsible for maintaining all study-related records, including essential documents, for twenty-five years. The Investigator must contact the sponsor prior to destroying any records associated with the study. If the Investigator withdraws from the study (e.g. retirement, relocation), the records shall be transferred to a mutually agreed upon designee. Notice of such transfer will be given in writing to the sponsor.

**FDA/Health Canada Audit**
It is required that you make study records available if requested by Health Canada, the FDA or other regulatory authority. If you are contacted by the Health Canada, the FDA, or other regulatory authority regarding this protocol, please notify the sponsor, your REB and your CVC Project Lead as soon as possible for audit preparation assistance.

**Financial Disclosure**
Principal Investigators and Sub-Investigators are required to promptly provide any relevant updates to previously submitted financial disclosure/certification forms for one year after the study end date. Kindly forward any updates for you or any additional investigators or sub-investigators listed on the 1572 for this protocol to the Project Lead at CVC. If financial disclosure/certification status remains unchanged, no action is required.

Thank you for all your hard work throughout the study and your continued support in these final months!

For further information regarding this trial, please contact Clinical Trial Project Lead Jodi Parrotta at 1-800-707-9098, Ext 3 or via email at jodi.parrotta@ualberta.ca or Regulatory Specialist Paula Priest at paula.priest@ualberta.ca.

Sponsored by Sanofi-aventis
Recherche & Développement this is a randomized, double-blind, placebo-controlled, parallel-group study to evaluate the effect of Alirocumab on the occurrence of cardiovascular events in patients who have recently experienced an Acute Coronary Syndrome.

ClinicalTrials.gov Identifier: NCT01663402
The HEART-FID study is currently in the enrollment phase with 21 of Canada’s sites activated. Out of the 23 activated sites, 15 sites have screened and 11 sites have randomized. Canada’s highest enrolling month was March 2018. We are excited to see enrollment continue to increase over the upcoming months.

Covance Reminders

Screening Lab Kit

Please review your kit and Covance supplies prior to the screening visit to ensure you have what you need to ship the sample. Please note: You will need an international waybill and a commercial invoice in order to ship the sample.

Day 0 Kit

Please remove the sub-study tubes (i.e.: Vitamin D and Parathyroid Hormone) from the kit prior to the Day 0 visit to ensure that they are not drawn by your lab team and processed by Covance.

6 Month Kit

Initial lab kits arrived at your site containing 6 Month Lab Evaluation kits and 6 Month Dosing kits. Both kits should be used at the lab evaluation visit. Re-supply 6 month lab evaluation kits will contain all tubes in one kit.

Please check lab kit expiry 3 or 4 weeks prior to a visit. If you need to reorder supplies on the Covance website it will take between 2 and 3 weeks to receive new kits.

Patient Materials

The following patient materials are (or soon will be) available for this trial:

- Wallet Card
- Poster
- Participant Guide
- Welcome Letter
- ICF Flipchart

Once approved by your REB please forward the approval correspondence to CVC for our files.

CEC Source Document Submission

If a patient experiences a clinical event, begin gathering source documents as soon as the event is reported. Please upload the source documents to BOX within 1 week (if possible).

If you are interested in further information regarding this trial, please contact Clinical Trial Project Lead Courtney Gubbels at 1-800-707-9098 ext 2 or via email at courtney.gubbels@ualberta.ca or Regulatory Specialist Kate Daw-son, 780-492-3789 or via email at kedawson@ualberta.ca.

Sponsored by Luitpold Pharmaceuticals Inc., HEART-FID is a Randomized, Double-Blind, Placebo-Controlled Study to Investigate the Efficacy and Safety of Injectafer® (Ferric Carboxymaltose) as Treatment for Heart Failure With Iron Deficiency

ClinicalTrials.gov Identifier: NCT03037931
Monitoring Tips

What do you do when your research participant tells you they “no longer want to be in the study”.

Most research sites have experienced this scenario….your participant tells you at their clinic visit, or by phone, that they no longer want to participate in the study. This can happen for a variety of reasons, such as the participant has experienced an adverse event that they attribute to the study medication, their life or social circumstances have changed, the participant is moving, a family member has withdrawn their support for the study, the trial has gone on for longer than expected, there is discord between the participant and a member of the study staff, the participant wants to go onto a prohibited medication, etc.

It is crucially important at this juncture that study staff react promptly to avoid having a lost to follow-up or withdrawn consent research participant. Rapid intervention can often enable sites to maintain contact with participants and ensure all possible study data is collected and reported.

1. **Determine why the participant wants to end their participation** and determine if there is anything study staff can do to rectify the situation. For example, if the participant is moving to another city, perhaps they could be transferred to another site.

2. **Direct engagement of the PI** to meet with or speak to the participant about their decision. Oftentimes direct contact with the physician is very meaningful to the participant and they may be more willing to consider alternate follow up options.

3. Establish if the participant might agree to stop study drug, but **continue with clinic and/or phone visits**. Many participants think that in order to stop study drug they must get “out of the study”. Taking the time to explain to them that the information collected from them is vitally important, regardless of whether or not they are taking study drug might assist them to consider other follow up options. Some participants might be willing to consider being contacted at a decreased frequency, i.e. rather than every 3 months, per protocol, they may agree to being contacted twice per year.

If participants indicate they absolutely do not want to be contacted at all by study staff, explore if they would be willing to consider any of the following options (or combinations thereof):

- Being followed via their primary care physician (PCP) or an alternate contact such as a family member-study staff could periodically contact the PCP/alternate contact to obtain updates on the participant’s status.
- Being followed by medical records review- study staff can review available medical records to obtain updates on the participant’s status.
- One final end of study contact- in most studies, vital status at the end of the study is critical

4. It is essential to **document all discussions** with participants, including what options were offered and agreed to or declined. Ensure the PI is involved in the discussions and that the source documents show evidence of their discussions with the participant. Many trials have source documentation tools/worksheets to assist with documenting this information.

5. **Contact your CVC Project Lead and/or CRA** for ideas and/or assistance early and often. Ensuring follow up on all participants is a vital component of the trial and every member of the study team is dedicated to assisting sites in whatever way they can in this endeavor.
**Publications**


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**CVC News**

**Congratulations** to CVC Founding Director Dr. Paul W. Armstrong on being appointed an Officer of the Order of Canada. Established in 1967, the Order of Canada is one of the country’s highest civilian honours. It recognizes outstanding achievement, dedication to the community and service to the nation from peoples across all sectors of Canadian society.

Dr. Armstrong received the honour in recognition of “his contributions to the advancement of cardiology, notably for his pioneering research in acute cardiac care, and for his leadership in health care institutions.”

**Mentoring the Next Generation**

As part of CVC’s mission to mentor the next generation we would like to welcome 5 new students who will be working with our faculty in the months ahead:

Amy Du - undergrad - advisor Justin Ezekowitz

Anukul Ghimire - undergrad - advisors Justin Ezekowitz and Finlay McAlister

Junyi Mei - undergrad - advisor Kevin Bainey

Garrison Dyck - undergrad - advisor Justin Ezekowitz

Zakariya Kashour - MSc Trainee - advisors Padma Kaul and Finlay McAlister

Morteza Hajihosseini - PhD trainee - advisor Padma Kaul
Clinical features and outcomes of patients with type 2 myocardial infarction: Insights from the Thrombin Receptor Antagonist for Clinical Event Reduction in Acute Coronary Syndrome (TRACER) trial. Am Heart J. 2018;196:28-35


