The Canadian Cardiac
Chronicle

Volume 25 Issue No. 3 - Winter 2021

"We all have two lives. The second one starts when we realize we only have one." — Confucius

A year ago when I crafted this annual message for the 2020 Winter Chronicle, I was optimistic that we would re-engage in more normal behavior patterns in 2021. Like all of you, I yearned for the return of genuine human contact and social networking which invigorates our lives daily. Ironically, the extraordinary march of science that produced three highly effective vaccines to combat COVID-19 and fueled this optimism was accompanied by an equally resourceful virus. COVID-19's mutations proceeded to dampen our expectations and dissolved our ability to undertake much anticipated in-person presence on multiple occasions, including all three major international cardiac 2021 conferences sequentially planned for Atlanta, Amsterdam and Boston.

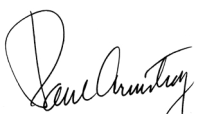
Remarkably while continuing to work from home, our team at the CVC has remained exceedingly productive as will be evident by perusing the pages of this edition of the Chronicle. Existing trials continued with adaptations to their design and conduct; in parallel, the process of outpatient care delivery has had to evolve. Undeniably, the pandemic has had a significant impact on patient recruitment and retention especially in those institutions where study coordinators (who are health providers) and investigators have been recruited into mainline COVID-19 patient care based on overwhelming and urgent clinical needs.

With our internal travel sharply curtailed given changes in our usual working environment, and external travel almost totally suspended, it is interesting to contemplate how this newly found "time credit" might be utilized. On a lighter note, as revealed through Zoom, neckties seem to have disappeared from men's shirts (Chris O'Connor at Inova being a notable exception!) and casual Fridays are the norm in the current work-from-home milieu. Self-time and reflection on work-life balance during the current circumstances has altered perceptions of what has real value in our lives. Given the persisting absence of face-to-face encounters, each organization's leadership has needed to adapt to the strains imposed by the continuing pandemic to sustain team esprit de corps.

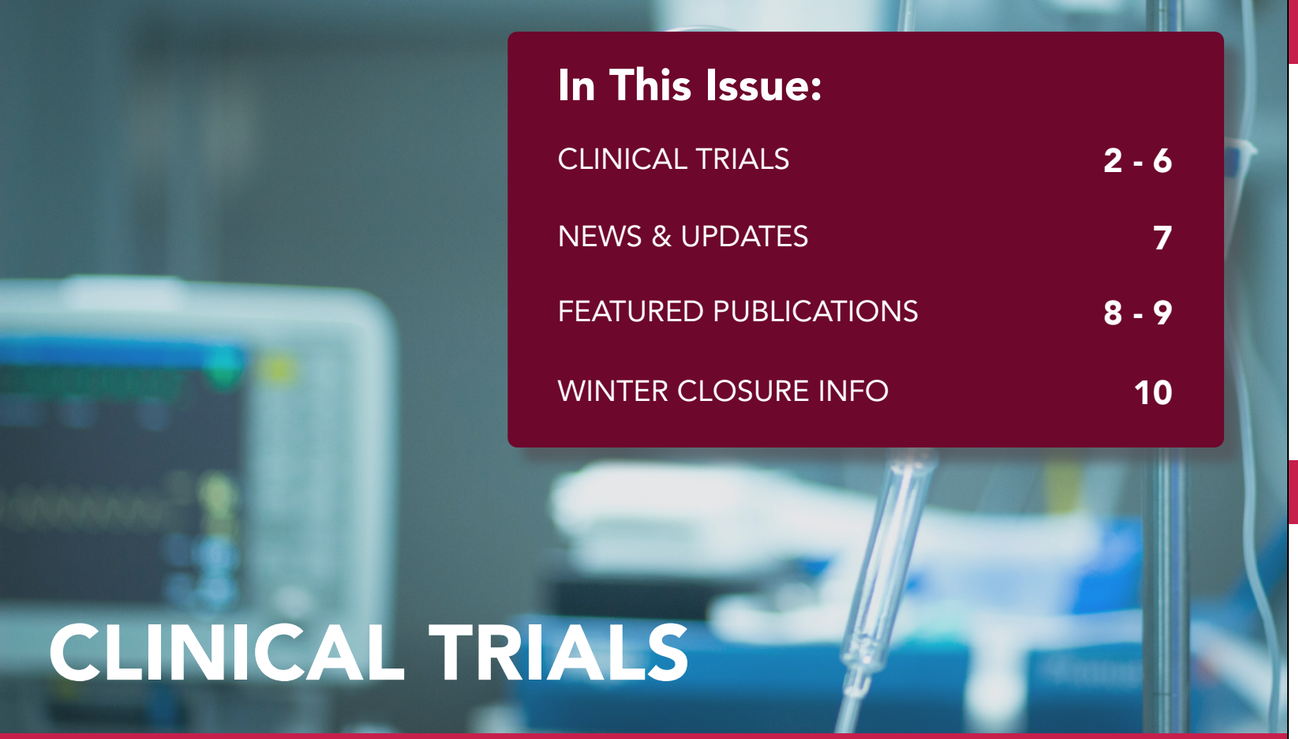
At the CVC one strategy that has been well-received by our team has been monthly "Town Hall" sessions that address a variety of subjects relevant to our mission and seeks to engage all of the CVC family from our board to our faculty, staff, trainees and students. It brings a variety of voices and perspectives discussing novel, and even controversial, topics in a new and unique manner. The primary presenter is asked to identify why the topic is important to health sciences, pertinent to our mission, deserving of our attention, and what challenge(s) will it address and who is expected to benefit? An invited discussant provides a context for the topic, addresses the strengths and limitations of the concept, and poses 2-3 key unanswered questions prior to an animated and open discussion.

As a marathoner editorialist mused on November 7th in the Sunday New York Times – unknowingly building on the wisdom of my opening quote from Confucius – *"it's about time to decide on what we want to do with our post pandemic lives."* Recognizing our environment for living is forever changed and - as we advocate in caring for our patients - adapting our behaviors to manage the benefit and risks the future holds is surely an inherently human trait well within our capabilities. For many of us the nobility of our shared calling to help patients with cardiovascular disease and seek novel solutions to address their unmet needs remains an overarching passion. Collaborating with great people and doing interesting things of lasting value which enhance the care of our patients and change the way people think and act is where life lives best for many of us. Interesting new opportunities to address unmet needs in heart failure and acute coronary disease are emerging as we look ahead to 2022.

As you prepare for the forthcoming holiday season, I hope you are able to find time to restore your spirit and energy that have been mitigated by so much of what has transpired in our lives since March of 2020. On behalf of all of us here at the CVC, we send you our very best wishes for a Happy Christmas, Hanukkah and all other celebrations. We are optimistic that 2022 will bring us together again.



Dr. Paul W. Armstrong
CVC Founding Director



In This Issue:

CLINICAL TRIALS

AEGIS-II

After a challenging fall due to COVID-19 in several Canadian provinces, and with the holidays right around the corner, the AEGIS-II team is grateful for your continued dedication to screening and enrolling the right patients for this study. Many thanks!

The majority of our sites have now enrolled at least one patient since re-activation and November brought us the highest enrolling month since pre-summer! We are looking forward to continuing to break that monthly record throughout 2022 as we move towards the end of the enrollment phase.

Thank you to all of our sites for their efforts and attention to detail with eCRF data entry and providing source documents and detailed information for endpoint event adjudication. The Canadian data clean metrics continue to be excellent thanks to your hard work.

A few friendly reminders:

- Review your site SOPs or other process documents to ensure they are current, reflect your actual practices and that your source documentation can confirm the same in the event of an audit.
- Review your site delegation log to ensure that all study staff are delegated the appropriate tasks based on their education and completion of study specific training. If updates are required, ensure the PI initials/dates any changes and a copy of the log is sent to the CVC.
- If a patient misses a visit and you are unable to contact them, a patient is contemplating IP discontinuation or consent withdrawal, please contact the CVC immediately to ensure that the appropriate processes are followed. PI involvement in each of these situations is very important and should be documented in your source.

The CVC and the AEGIS-II study team wish everyone a relaxing and joyous holiday season!

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 Garritty at 1-800-707-9098, ext. 4 or lyndsey.garritty@ualberta.ca.

AEGIS-II LEARN MORE

STREAM-2

Enrollment at our local Canadian site has remained steady. Great job everyone! With a couple more team members joining the study crew, we are expecting to keep up this pace or even improve on it. We are keeping our eye on this trial designed to determine efficacy and safety of early fibrinolytic treatment, with half-dose tenecteplase and additional antiplatelet and antithrombin therapy, in subjects with acute ST-elevation myocardial infarction, and are expecting continued impressive recruitment in 2022.

With 80% of the global enrollment reached, we anticipate completing this trial in 2022. Our New Year's resolution? To continue to lead global enrollment and push on towards the enrollment target all the while keeping our data and regulatory complete and accurate. Thanks for all your hard work team Canada!

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 courtney.gubbels@ualberta.ca.

Stream-2 Strategic Reperfusion Early After Myocardial Infarction

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EMPACT-MI

Start-up in Canada is nearly complete on this streamlined, multicentre, randomised, parallel group, double-blind placebo-controlled superiority trial to evaluate the effect of **EMPA**gliflozin on hospitalisation for heart failure and mortality in patients with a**C**u**T**e **M**yocardial **I**nfarction.

In Canada, 28 sites have now been activated for enrollment! With a planned 5000 patients to be enrolled, we are excited to see recruitment well underway not only in Canada but around the world. We are pleased to be working closely with our Canadian study leadership, Dr. Jay Udell (Women's College Hospital), Dr. Shaun Goodman (CVC Faculty) and Dr. Shelley Zieroth (St. Boniface Hospital) on this pragmatic trial. .

Enrollment continues to be strong in Canada. Congratulations go out to our top three enrolling sites: **Dr. Burstein and Hussam Sheikh; Dr. Har and Milada Pajevic; Dr. Daneault and Julie Caron!**

Reminders:

- ICF v3 – Once you obtain REB approval, be sure to send CVC a copy of the REB approval letter, along with a clean copy of the approved ICF in Word, so we can give you the **green light** to begin using your site's updated ICF.
- SUSAR process – Send the CVC your site's SUSAR process explaining how your site shares this information within the team, and whether or not your REB requires submission of individual SUSARs and/or Summary Reports.
- Delegation Log – Keep this current, and ensure the PI initials/dates any changes to the log. Ensure the CVC has a copy of the most recent version.

For questions about EMPACT-MI, please contact Jodi Parrotta, Clinical Trials Project Lead/QA-Regulatory Compliance Lead at 1-800-707-9098, ext. 3 or Jodi.Parrotta@ualberta.ca.

EMPACT-MI LEARN MORE

HEART-FID

We did it! With a great last push for enrollment, we exceeded our target! Canada especially worked hard, right until the very end. It was great to see all sites committing their time to ensure a strong finish for Canada. Amazing job everyone! Now we wind down the last year of this important trial to investigate the efficacy and safety of Injectafer® as treatment for heart failure with iron deficiency. We are so close to the finish line!

Data

Now that enrollment is complete, let us turn our focus to completing the remaining visits – on-site and on study drug – and data entry and review. Clean data entry is an important part of any trial and HEART-FID is no exception. Please continue to review your data for any queries on a routine basis. Also, please ensure that you enter visits into the eCRF within three business days of the visit occurring. Lastly, do not forget about the 6 minute walk test! If the 6MWT is not completed at the regular visit, it can be completed at a future visit. Contact the CVC for instructions on how to enter a 6MWT into the eCRF when completed after Day 360.

Retention

Keeping participants engaged and involved in the study is critical over the next year. Our goal is to keep as many participants as possible on study drug. Remember that participants who previously discontinued study drug can always come back on study drug at the next dosing cycle. If you have an exceptional case you need guidance on, please contact the CVC prior to your participant's visit. If you have a participant who is suspected to be lost to follow up please escalate this to the CVC as soon as possible. Currently, Canada does not have any lost to follow up participants. Keep up the great work! Every visit is important. If a participant is off study drug, or cannot make a certain visit, please complete a phone visit instead. If you have questions about options for visits, please let us know.

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 courtney.gubbels@ualberta.ca.

HEART-FID

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SODIUM-HF

Funded by the Canadian Institute of Health Research (CIHR) and the University Hospital Foundation (UHF), SODIUM-HF is a multicenter, randomized, open-label **S**tudy **O**f **D**ietary **I**ntervention **U**nder 100 **M**MOL in **H**eart **F**ailure.

We have reached an exciting milestone this month: all patients have completed their 12-month visit and we look forward to sharing some primary results in early 2022. We anticipate final analysis in 2023, so keep up the great work on those 18 and 24-month visits!

Reminders:

- We **cannot** have any **LTFU** patients in this trial! Every patient counts, so the expectation is for sites to search for all LTFU patients until database lock. Thank you for your continued diligence in this regard.
- For sites participating in the long-term follow up sub-study, about 85% of eligible patients have been approached thus far – keep up the excellent work!

For general study updates and news, **follow us on Twitter** @sodiumhf.

If you have questions about the SODIUM-HF trial, please contact the Clinical Trials Project Lead, Karin Kushniruk at 1-800-707- 9098, ext. 7 or karin.kushniruk@ualberta.ca.

SODIUM-HF 100

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SONOSTEMI-LYSIS

The **SONO**thrombolysis in patients with an **ST**-segment **E**levation **M**yocardial **I**nfarction with fibrino**LYSIS** (SONOSTEMI-LYSIS) trial is a single-centre project taking place at the University of Alberta Hospital/Mazankowski Alberta Heart Institute.

While prompt reperfusion therapy has been shown to reduce mortality, infarct size and improve left ventricular function in patients with STEMI, reperfusion itself may result in adverse events such as reperfusion injury. In patients with STEMI receiving fibrinolysis therapy, this study will explore whether the addition of *sonothrombolysis* (i.e., high mechanical index impulses during diagnostic ultrasound) to standard care results in enhanced myocardial perfusion, improved left ventricular function, and better clinical outcomes.

If you are interested in further information about the SONOSTEMI-LYSIS study, please contact the Clinical Trial Project Lead, Karin Kushniruk, at 1-800-707- 9098, ext. 7 or karin.kushniruk@ualberta.ca.

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MOIST

Congratulations to Dr. Ian Paterson and Dr. James White and theirs teams for completing recruitment into the **M**ulti-**O**rgan **I**maging with **S**erial **T**esting in COVID-19 infected patients (MOIST) study! We are in the process of some final data entry and look forward to sharing some initial results in 2022.

Patients with COVID-19 infection are at significant risk of deterioration from pulmonary and extra-pulmonary causes, and the long-term consequences of these abnormalities are unknown. Systemic inflammation is considered to be a central feature of disease pathogenesis, however, the respective extent and time-course of multi-organ involvement (heart, lungs, brain and liver) has not yet been evaluated to date. Furthermore, their respective and combined impact on patient morbidity and mortality has not been assessed.

Using novel MRI pulse sequences, the MOIST Study aims to assess the presence, extent and time course of inflammation in the heart, lungs, brain and liver of participants with new or recent COVID-19 infection.

If you are interested in further information about the MOIST Study, please contact the Clinical Trial Project Lead, Karin Kushniruk, at 1-800-707-9098, ext. 7 or karin.kushniruk@ualberta.ca.

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FEAST-HF

We've got only about a half year to complete recruitment before the dietary supplement kits will expire, so please focus your efforts on recruitment as much as possible over the coming months. As always, thank you to our sites for their dedication during the pandemic.

Got Fiber?

Recent attention has been focused on the role of the gut microbiome in human disease, including its significant role in the pathogenesis of heart failure (HF). Several small studies have shown an interplay between the microbiome and HF, and that the gut microbiome can be modulated by dietary interventions, such as the addition of dietary fiber. This trial will explore if modification of the microbiome can mitigate the symptoms of patients with HFand whether new avenues for treatment and future research for patients with HF will be revealed.

If you are interested in further information about the FEAST-HF trial, please contact the Clinical Trial Project Lead, Karin Kushniruk, at 1-800-707- 9098, ext. 7 or karin.kushniruk@ualberta.ca.

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The CVC is thrilled to announce that, after conducting remote monitoring visits for over 18 months due to COVID, as of July our CVC CRAs are now back on site! Since then, it's been a very busy 5 months and if your site is currently active in an ongoing trial, and have not already had an onsite visit, your CVC CRA will be in touch soon to schedule you in. This has been an unprecedented time, and on behalf of all our CRAs/in-house trial teams, we would like to extend a sincere thank you to all our sites who worked so hard to accommodate remote monitoring visits. We appreciate how much work went into developing alternate ways of ensuring continued monitoring oversight and are glad to be back to "business as usual".

Although COVID changed how we do our work, regulatory inspections/sponsor audits have continued to occur, and we would like to take this opportunity to share some tips arising from ones that have taken place in the past few months.

Documentation of processes: Per HC Division 5 and ICH-GCP, all sites should have SOPs that guide their overall day-to-day research activities. In some instances, site SOPS are quite general and do not cover some of the more specific trial related tasks that are being performed. In that case, sites may outline trial-specific processes in another fashion such as a NTF. Once a process is defined, it is critical that the site's source demonstrates that processes are being followed as an auditor/inspector will likely review the site SOPs/trial specific processes and then look for documentation to support that the site followed their SOPs/processes.

Examples:

- A study participant checks the "YES" option on the ICF document to confirm they want their primary care physician (PCP) to be notified that they are participating in a research trial. The site may develop a NTF that says that once a participant agrees to have their PCP notified, a trial specific PCP letter will be mailed or faxed to the PCP. To show the process was followed, a copy of the communication sent to the PCP with a notation of the day it was mailed should be filed, or a copy of the fax confirmation cover page & PCP letter could be maintained in the source.
- A process to detail how SUSAR safety alerts are reviewed in a timely fashion by the trial Principal Investigator (PI) and then if/how this info is to be shared with Sub-Investigator (Sub-I(s)) and/or other relevant staff. If the site process says the SUSAR alerts are reviewed by the PI within 1 week, the PI decides if other staff need to receive the information, and then the alert is electronically filed in the Investigator Site File (ISF), then documentation that this has been done for all safety alerts should be maintained in the ISF. To achieve this, the site might decide they will have the Study Coordinator (SC) send all SUSARs to the PI via email with a message asking the PI to review within the specified time frame and determine if the alert needs to be sent to the Sub-I(s). The PI would then respond to the SC via email to confirm they have reviewed the alert and confirm if it does/does not require dissemination to the Sub-I(s). If directed to do so by the PI, the SC would forward the alert to the Sub-I(s) and maintain the applicable emails on file to show how the process was followed.

Site Signature and Delegation Log (SSL): This living document is a key source of information for CRAs/auditors/inspectors. It not only contains a sample of initials and signatures for each person involved in a clinical trial, but it also documents who is delegated by the PI to perform various roles/tasks. Once an entry is made and initialed/dated by the PI, any future changes to that entry should be acknowledged by the PI. The SSL should continually be reviewed during the lifetime of a trial and updated as necessary to reflect current practice.

Source corrections and completing a "late entry: All sites should be familiar with the GCP principles of ALCOAC (**A**ttributable, **L**egible, **C**ontemporaneous, **O**riginal, **A**ccurate and **C**omplete) as all entries into source documentation should follow this standard. Given that making an error during documentation is inevitable, knowing how to properly correct an error is essential. One line through the error should be made, the correct information should be entered without obscuring the original entry, an explanation for the change should be made, if required, and then the correction should be initialed and dated by the person making the correction. It is still commonplace for CRAs/inspectors/auditors to point out that corrections have been made without following these principles.

Another situation that may arise is when site staff need to make a *retrospective* entry in the source to document something that happened in the past. Per GCP, entries that are not contemporaneous should be done as a late entry and signed off with the *current* date. For example, a PI reviewed labs on 23 Feb 2021 in the EMR when a participant was being screened for a trial, however, on 23 Jul 2021 it's recognized that there is no documentation of this review in the source. The PI might update the source to say: "Late entry: These labs were reviewed in the EMR during screening but inadvertently not signed at the time of review." This would then be initialed and dated by the PI with the *current* date of 23 Jul 2021. Clear documentation such as this makes it easier for CRAs/auditors to see the sequence of events more clearly.

NEWS & UPDATES

CVC Colloquium: Operationalizing Clinical Research

On September 23, 2021, we held the third and final virtual CVC Colloquium session for 2021. In this session we featured five key presentations focused on 'Operationalizing Clinical Research'.

Our first presenter, Patrick Clifford, the recently retired Director of Research and Innovation, at the Research Institute of Southlake Regional Health Centre shared **key insights for working with hospital administration**. While working with hospital administration can sometimes be daunting and feel non-collaborative, Patrick helped us to better understand the benefit of a team approach between the researcher, administration, ethics and the institution, and shared insights on how best to work collaboratively to achieve the end goal of being able to conduct research on site.

Research Coordinators, Noreen Lounsbury from the Victoria Heart Institute and Kim Robbins from the York PCI Group Inc. shared their on the ground experience and **tips for becoming a successful recruiter and top performing site**. Some key things they highlighted in their success included; involved investigators, making sure they have the patient population before agreeing to participate, having a positive attitude, motivating and involving the team of physicians and nurses from the start and keeping them updated throughout the study, and taking the time to explain the study and options to their patients. At the CVC we have seen first hand what an outstanding job both of these sites have done in the studies they have been involved in and thank them for sharing these key tips.

In our third presentation, we heard from Dr. Michael Heffernan with Oakville Hospital who shared an **investigator/site perspective on surviving a regulatory inspection**. While nobody looks forward to receiving a call about an upcoming audit or inspection, we all know it is necessary to ensure safety of the participants and that the trial is being conducted according to the protocol and regulations. Some key tips included the importance of investigator involvement, knowing your patients and the protocol, and ensuring your documentation is in order and can demonstrate to an inspector what happened during the study. This presentation was very informative and undoubtedly we walked away with some new insights to ensure we are audit and inspection ready.

Our CVC Clinical Trial Project Leads Lyndsey Garritty, Courtney Gubbels, Karin Kushniruk and Jodi Parrotta led the fourth presentation, sharing some **top things for sites to be aware of when negotiating study budgets.** Some key highlights from this presentation included; the importance of walking through the full project to ensure all of your costs are covered, knowing what milestone payments cover, thinking through unexpected costs and remembering to submit your invoices so they are not missed or forgotten. While you may not get approval on all of your requests, it is important to take the time to review your budgets and have the discussions with the sponsors/ARO/CRO.

Our final presenter Marlon Rajakaruna, a corporate/commercial lawyer with Kingsgate Legal who has worked with many of our Canadian sites, sponsors, and ARO's/CRO's, highlighted the **top three things to be aware of when drafting and negotiating clinical trial agreements**. His presentation focused on the three most serious mistakes contract negotiators make with improperly negotiated agreement (1) liability clauses, (2) insurance clauses and (3) governing law and jurisdiction clauses. With Marlon's wealth of knowledge negotiating clinical trial agreements it was so nice to have him join us and his presentation was a great reminder of why we should ensure legal review of clinical trial agreements before signing them.

For your reference, most of the presentations are now posted and available on the Canadian VIGOUR Centre website. If you were unable to join us or if you wish to share or discuss them within your teams we encourage you to check them out. A special thanks to all of our presenters for sharing your insights, experiences and expertise with the broader research community.

We would also like to take this opportunity to thank everyone for the positive response to our virtual colloquium series through 2021, and a final thank-you to our sponsors CSL Behring, Bayer, Novartis, BMS/Pfizer, Lilly/Boehringer Ingelheim and Amgen for their support this year. Please stay tuned for what's to come in 2022! Wishing everyone a relaxing holiday season and all the best for the year ahead!

If you have any questions regarding the CVC Clinical Trials Colloquium please don't hesitate to reach out to Tracy Temple at tracy.temple@ualberta.ca or by phone at 780-952-2140.

FEATURED PUBLICATIONS

Incidence and Prevalence of Cardiac Amyloidosis

Dr. Nariman Sepehrvand and his coauthors (including **Drs. Cindy Westerhout, Finlay McAlister, Padma Kaul, and Justin Ezekowitz** from the CVC) recently published their article, [The Incidence and Prevalence of Cardiac Amyloidosis in a Large Community-Based Cohort in Alberta, Canada] in the *Journal of Cardiac Failure*. We asked Dr. Sepehrvand a few questions to better understand the key findings of this study:

What were the important study findings? What are the key takeaways from this research?

In this cohort study, we used the administrative data to identify patients with cardiac amyloidosis in Alberta, Canada. A few key findings are noteworthy: First, we identified 982 patients with probable cardiac amyloidosis between 2004 and 2018. The incidence and prevalence of the cardiac amyloidosis in the province was higher than previously thought, and the incidence rates increased from 1.38 to 3.69 per 100,000 population during the study period. This increase can be attributed to the improved awareness about cardiac amyloidosis among clinicians and the addition of new, less-invasive diagnostic strategies. Second, the mortality decreased over the study period probably due to earlier detections through non-invasive techniques, which itself contributed to increase in prevalence over time (from 3.42 to 14.85 per 100,000 population). Third, the use of cardiac and extra-cardiac clinical features known to be associated with cardiac amyloidosis yielded a large cohort that was not feasible to be effectively screened.

What are the real-world implications of these research findings?

The majority of the existing literature so far have been based on selective populations or single-centre cohorts. This study, however, provides population-based data from a province with 3.1 million adults and a single integrated health authority. Given the emergence of new therapies for cardiac amyloidosis and the high cost associated with these therapies, it is important to find strategies to identify potential patients from administrative databases at an earlier stage. Using the phenotypes approach and features associated with cardiac amyloidosis, we identified a large at-risk population, not amenable for effective screening.

What should be the focus of future research on this topic?

As I mentioned before, with the advent of newer therapies for cardiac amyloidosis, it becomes important to identify suspected cases and patients who might benefit from those therapies early in the course of disease from health records. Future research should focus on refining the strategies for flagging suspected cases from health records and large cohorts, perhaps using methodologies such as machine learning and artificial intelligence.

Visit the publication archive on our website for a comprehensive list of the CVC's publications.

Remote Ischaemic Conditioning in ST Elevation Myocardial Infarction

Dr. Kevin Bainey and coauthors (including **Dr. Robert Welsh and Gray Zheng** from the CVC) recently published their article, [Remote Ischaemic Conditioning in ST Elevation Myocardial Infarction: a Registry-Based Randomised Trial] in *Heart Journal*. We asked Dr. Bainey a few questions to better understand the key findings of this study:

What were the important study findings? What are the key takeaways from this research?

In a registry-based randomized study of ST elevation myocardial infarction (STEMI) patients receiving primary percutaneous coronary intervention, remote ischemic conditioning compared to standard of care did not improve ST-segment resolution (ECG core lab) or infarct size (cardiac MRI core lab) as surrogate metrics. Consequently, there was no difference in clinical outcomes at 1 year.

What are the real-world implications of these research findings?

Using both surrogate metrics and clinical outcomes, our study found no benefits of remote ischemic conditioning in the treatment of STEMI using a pragmatic registry-based randomized design. As such, remote ischemic conditioning should be abandoned as an adjunct to STEMI.

What should be the focus of future research on this topic?

While we showed no benefits to remote ischemic conditioning in STEMI, our randomized design linked to population health outcomes allows us to explore future STEMI studies using a pragmatic approach.

Atrial Fibrillation Case Volume in the Emergency Department

Drs. Finlay McAlister, Roopinder Sandhu, Justin Ezekowitz, and Padma Kaul, along with their fellow coauthors (Drs. Nathaniel Hawkins, Erik Youngson, and Frank Scheuermeyer) recently published the article [Impact of Atrial Fibrillation Case Volume in the Emergency Department on Early and Late Outcomes of Patients With New Atrial Fibrillation] in *Annals of Emergency Medicine*.

The first presentation of atrial fibrillation is often to an emergency department (ED), and subsequent mortality is high, up to 8% at 1 year in industrialized countries. As there are relatively few randomized trials to guide acute atrial fibrillation management in the ED, there remains substantial variation in processes and outcomes.

It has been shown that low-volume EDs have higher rates of missed myocardial infarctions and worse outcomes for patients even with low-risk chest pain. Lower ED volume was also an independent predictor of hospitalization in patients with atrial fibrillation. Using an Alberta population-based cohort, the authors examined whether ED atrial fibrillation volume is associated with short and long-term mortality, hospitalizations, or repeat ED visits in patients with a new diagnosis of atrial fibrillation.

The authors conclude that there was no significant association between ED atrial fibrillation volume and mortality or longer-term risk of hospitalization among patients presenting with incident atrial fibrillation. Volume was inconsistently associated with process measures. However, treatment in higher volume EDs was associated with substantially lower admission rates and markedly fewer repeat ED visits, the causes for which warrant further investigation.

The CVC offices will be closed from December 27, 2021 to January 3, 2022

Should any urgent issues arise, we ask that you call the designated helpline for your study.

The CVC's main voicemail will be checked daily throughout the closure to address any important study-related issues, and staff email will be checked intermittently.

Any urgent requests can be sent to tracy.temple@ualberta.ca, or call 780-952-2140.

About the Chronicle

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The CVC gratefully acknowledges our sponsors and the funding support provided by:

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