

## **Abstract Submission Form**

The Women's Heart Center Program Committee is accepting abstract submission forms through **August 15, 2025**. Completed forms should be emailed to WHC@TheChristHospital.com.

Abstract submissions should be gender- and sex-specific research pertaining to one of the program topics outlined below.

The Program Committee wishes to encourage young scientific investigators and will reward up to 4 abstracts/posters submitted by presenters considered early career (definition provided below). First place will receive \$1000, second place will receive \$500, and two honorable mentions will each receive \$250.

The presenting author will be sent an email with the status of the submission by **August 22**, **2025**. If your abstract is accepted, your notification will contain complete presentation information. However, please note the following:

- All human subject research must conform to the principles of the Declaration of Helsinki of the World Medical Association.
- The presenting author should be able to provide documentation of IRB approval if requested.
- The Program Committee is unable to reimburse presenters for travel, hotel, or per diem expenses.
- Submission of an abstract constitutes a commitment by the presenting author (or designee) to present inperson at the symposium on October 3, 2025, during the following times:
  - Registration & Networking: 7:00 8:00 am
  - o Networking Lunch: 12:00 1:30 pm
  - o Poster Session Award Announcement: 4:50 5:10 pm
- All accepted abstract presenters must register for the symposium via Eventbrite and pay the applicable registration fees (trainees and invited speakers will have the registration fee waived).
- If an author wishes to withdraw an abstract, please email <u>WHC@TheChristHospital.com</u>.

<b>Presenting Author Information</b>
Name (First, Last, Credentials): Karley Fischer, MD

Institutional Affiliation: Kettering Health

Email Address: Karley. fischer@ketteringhealth.org

Early Career (Defined as physicians, scientists, medical students, and other healthcare providers currently in residency

or fellowship programs or within three years of training)?

Yes ⊠ No □

## **Co-author Information**

Name: Ananya Reddy, BS, MPH Affiliation: Boonshoft School of Medicine Email: reddy.89@wright.edu Email: khouzam.2@wright.edu Name: John Paul Khouzam, BS Affiliation: Boonshoft School of Medicine Name: Damian Valencia, MD Email: damian.valencia@ketteringhealth.org Affiliation: Kettering Health Email: ziwar.karabatak@ketteringhealth.org Affiliation: Kettering Health Name: Ziwar Karabatak, M D Email: ajay.reddivari@ketteringhealth.org Name: Ajay Reddivari, MD Affiliation: Kettering Health Name: Ammar Safar, MD Email: ammar.safar@ketteringhealth.org Affiliation: Kettering Health Email: Niranjan.reddy@ketteringhealth.org Affiliation: Kettering Health Name: Niranjan Reddy, MD Name: Raja Nazir, MD Email: raja.nazir@ketteringhealth.org Affiliation: Kettering Health Name: Brian Schwartz, MD Email: brian.schwartz@ketteringhealth.org Affiliation: Kettering Health

**Disclosures:** Please list any relevant financial disclosures.

No relevant disclosures

## **Abstract Topic (must be gender- or sex-specific)**

☐ Preventative cardiology	☐ General cardiology	
☐ Heart failure	☐ Cardio-oncology	☐ Cardio-obstetrics
☐ Electrophysiology	☐ Cardiovascular Imaging	☐ Coronary Microvasculature
☐ Social Determinants of Health	☐ Mental Health	☐ Precision Medicine

**Title:** Include the full title as it will appear on the poster.

Sex Differences in Impact of Artificial Intelligence Clinical Decision Support Tools on Contrast Induced Acute Kidney Injury Following Percutaneous Coronary Intervention

**Background:** In an initial paragraph, provide relevant information regarding the background and purpose of the study, preferably in no more than two to three sentences.

Contrast-induced acute kidney injury (CI-AKI) is the leading cause of iatrogenic nephropathy, occurring in ~7% of patients undergoing percutaneous coronary intervention (PCI). Advanced artificial intelligence (AI) models, such as the ePRISM (Terumo Health Outcomes) clinical decision support tool, integrates patient-specific variables, including sex, to provide individualized CI-AKI risk and maximum contrast volume. While female sex has been suggested as a potential independent risk factor for CI-AKI, evidence is conflicting. Sex-specific impacts of AI-driven contrast management strategies have not been studied.

**Methods:** Briefly state the methods used.

We conducted a retrospective review of all patients undergoing PCI at Kettering Health between April 2023 and March 2024. ePRISM generated CI-AKI risk and maximum contrast volume were reported during each procedure timeout. The incidence of CI-AKI and length of stay (LOS) were compared between each group, male and female.

**Results:** Summarize the results in sufficient detail to support the conclusions.

A total of 642 patients were included (200 females [31.2%], 442 males [68.8%]). Mean age was similar between groups (68.2 vs 68.0 years, p=0.8584). Calculated CI-AKI risk trended higher in females (6.78% vs 6.35%. p=0.3404), although there was no statistical significance between groups. Maximum contrast volumes were comparable (106.4 mL vs 109.3 mL, p=0.1517). Observed CI-AKI incidence was 1.5% in females (3/200) versus 2.9% in males (13/442). LOS did not differ significantly (p=0.0902).

Click or tap here to enter text.

**Conclusions:** Concisely state the conclusions reached.

Implementation of ePRISM (an artificial intelligence clinical decision support tool) was associated with a reduced overall CI-AKI incidence compared with historical rates. Although females are traditionally considered at higher baseline risk, they experienced a numerically lower post-PCI CI-AKI rate compared to males in this cohort, suggesting a potentially greater protective effect of AI guidance in women. These differences did not reach statistical significance, and should be further studied.

**Tables/Figures/Graphics:** Sex Differences with Artificial Intelligence Risk Stratification Prior to Percutaneous Coronary Intervention

