

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 <u>WHC@TheChristHospital.com</u>.

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 WHC@TheChristHospital.com.

Presenting Author Information

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Early Career (Defined as physicians, scientists, medical students, and other healthcare providers currently in residency Yes 🖂 No \square

or fellowship programs or within three years of training)?

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Disclosures: Please list any relevant financial disclosures.

N/A

Abstract Topic (must be gender- or sex-specifi	Abs	stract '	Topic	(must be	e gender-	or sex-specif	fic)
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☐ Preventative cardiology	☐ General cardiology	☐ Interventional 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-Specific Differences in HCM: Under the Scope of Cardiac Magnetic Resonance Imaging

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.

Sex-specific differences in hypertrophic cardiomyopathy (HCM) have been reported, yet comprehensive evaluation using advanced cardiac magnetic resonance (CMR) imaging remains limited. Understanding structural, functional, and tissue characterization differences between male and female HCM patients may have important implications for diagnosis and management.

Methods: Briefly state the methods used.

We conducted a retrospective analysis of consecutive patients (N=323) with HCM who underwent clinical CMR at a single tertiary center. Sex-based comparisons were made across CMR-derived parameters including biventricular volumes, myocardial mass, wall thickness, ejection fraction, cardiac output, and tissue characterization (late gadolinium enhancement [LGE], native T1, extracellular volume fraction [ECV], and T2 mapping). Median values with interquartile ranges (IQR) were reported

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

Females (N=165) demonstrated significantly smaller indexed left ventricular end-diastolic volume (LVEDV index: 69.3 mL/m^2 [IQR: 61.5-80.0] vs. 80.0 mL/m^2 [64.0-92.4], p < 0.001) and end-systolic volume (LVESV index: 28.0 mL/m^2 [23.3-32.0] vs. 35.0 mL/m^2 [27.5-42.0], p < 0.001) compared to males (N=158). Left ventricular cardiac output was lower in females (5.3 L/min [4.5-6.4] vs. 6.2 L/min [5.1-7.2], p < 0.001). Right ventricular volumes showed similar trends.

Maximum wall thickness was significantly lower in females (16 mm [15–18] vs. 17.9 mm [16–21], p < 0.001). LGE was predominantly observed in males (54% vs. 39%, p = 0.012), though extent of LGE did not differ significantly. Parametric Native T1 values did not demonstrate any clinically significant differences between female and male groups (1046 ms [1021–1072] vs. 1037 ms [1011–1063], p = 0.042), and a non-significant trend toward higher ECV was observed (29% vs. 28%, p = 0.076).

Conclusions: Concisely state the conclusions reached.

Cardiac MRI in this HCM cohort revealed distinct sex-based differences in myocardial structure and tissue phenotype. Female patients demonstrated smaller ventricular cavity sizes, lower cardiac output, and less focal fibrosis, while male patients exhibited greater hypertrophy and higher LGE prevalence. Subtle increases in parametric mapping (T1, ECV) were observed in females. These findings may have implications for individualized clinical assessment and therapeutic decision-making in HCM and should be considered in future studies and treatment strategies

Tables/Figures/Graphics: Include images that are part of your submission here. Images should be high resolution and have a file type of "gif", "jpg", or "jpeg"

HCM CMR sex differences.jpg

