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 in-person at the symposium on October 3, 2025, during the following times:
    - Registration & Networking: 7:00 – 8:00 am
    - Networking Lunch: 12:00 – 1:30 pm
    - 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 or fellowship programs or within three years of training)? Yes ☐ No ☒

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Disclosures: Please list any relevant financial disclosures.
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Abstract Topic (must be gender- or sex-specific)

☐ 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-based Differences In Comparison to Biomarkers and Response to Mavacamten in Hypertrophic Cardiomyopathy

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.

Mavacamten is a cardiac myosin inhibitor which is used in treating patients with the most common genetic heart disease in America hypertrophic cardiomyopathy (HCM). This treatment has shown promise in treating HCM by reducing dynamic obstruction in the left ventricular outflow tract (LVOT) in patients with obstructive physiology. We aim to investigate sex-based differences and the influence of body composition specifically BMI and BSA on NT-proBNP levels in patients with HCM.

Methods: Briefly state the methods used.
A retrospective review of 601 patients at single center (The Christ Hospital, Cincinnati OH) utilizing dedicated HCM database and electronic medical records of these 131 patients were identified being treated with Mavacamten. Among them 58 patients (N= 41 females, 17 males) were identified having baseline BMI, BSA, and NT-proBNP levels as well has follow up NT-proBNP levels. In addition, cardiac imaging parameters including echocardiographic measurements were captured.

Results: Summarize the results in sufficient detail to support the conclusions.
Baseline NT-proBNP levels were similar between females and males (676 vs 641 pg/mL; 0.414). Post treatment NT-proBNP levels were significantly lower in males (96 vs 265 pg/mL; p=0.021) although the median change from baseline was not statically different (p=0.758). There was no significant sex difference observed in changes in LVOT at rest, LVOT with Valsalva, and LVEF. Additionally, there were no significant differences in NT-proBNP levels when comparing them to BMI and BSA.
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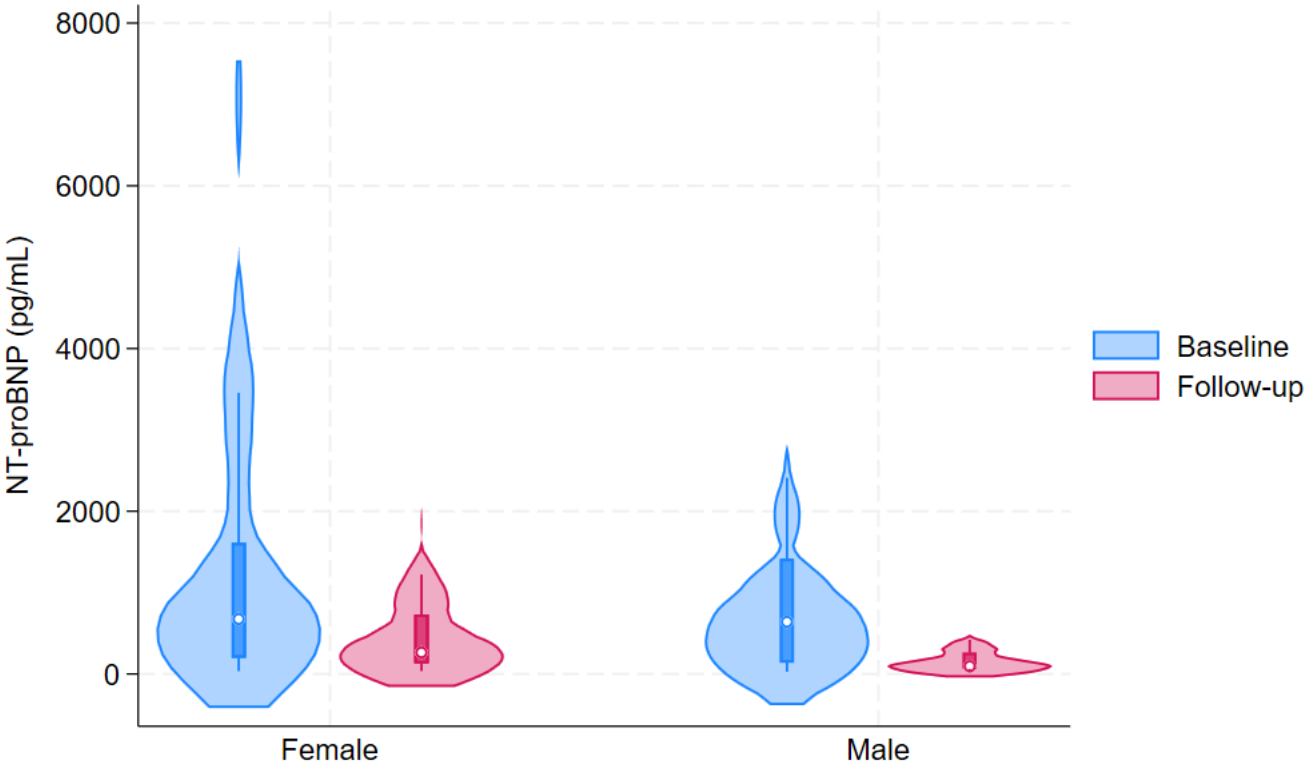
Conclusions: Concisely state the conclusions reached.

In this retrospective analysis males demonstrated a trend of lower post Mavacamten NT-proBNP levels compared to females, however there were no statistically significant sex-based differences in NT-proBNP change. Furthermore, there was no clinically significant differences in improvements in LVEF or LVOT gradients at either rest or with Valsalva based on sex. After adjusting for BMI, BSA, and age there was no significant association with changes in NT-proBNP levels. This observational study demonstrates the trend of NT-proBNP differences between sex, however a future study with a larger sample size will be necessary to further elucidate these differences.

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".

	Unadjusted Model		Adjusted Model*	
Change in NTproBNP	Estimate [95% CI]	p-value	Estimate [95% CI]	p-value
Male Sex	355.0 [-447.6, 1157.5]	0.378	382.1 [-440.2, 1204.5]	0.354
Male Sex^	---	---	304.0 [-691.9, 1299.8]	0.542
Age (10-years)	47.1 [-197.1, 291.2]	0.700	57.7 [-195.2, 302.6]	0.666
Age (10-years)^	---	---	61.0 [-188.8, 310.7]	0.625
BMI (5%)	65.6 [-229.7, 360.8]	0.657	67.9 [-232.2, 368.1]	0.651
BSA^	468.0 [-930.6, 1866.5]	0.504	215.1 [-1521.8, 1952.0]	0.804
Change in LVEF	**Estimate [95% CI]**	**p-value**	**Estimate [95% CI]**	**p-value**
Male Sex	3.09 [-1.89, 8.06]	0.219	3.05 [-1.98, 8.09]	0.229
Male Sex^	---	---	1.18 [-4.95, 7.31]	0.701
Age (10-years)	0.17 [-1.38, 1.72]	0.824	0.25 [-1.30, 1.80]	0.748
Age (10-years)^	---	---	0.42 [-1.16, 2.00]	0.599
BMI (5%)	0.99 [-1.00, 2.99]	0.323	0.96 [-1.05, 2.96]	0.343
BSA^	6.49 [-1.80, 14.77]	0.122	5.83 [-4.68, 16.33]	0.271
Change in LVOT (rest)	**Estimate [95% CI]**	**p-value**	**Estimate [95% CI]**	**p-value**
Male Sex	-7.78 [-28.73, 13.18]	0.451	-5.29 [-26.59, 16.02]	0.612
Male Sex^	---	---	1.01 [-29.72, 31.73]	0.946
Age (10-years)	4.86 [-1.93, 11.64]	0.152	5.33 [-1.99, 12.64]	0.145
Age (10-years)^	---	---	4.83 [-2.21, 11.86]	0.169
BMI (5%)	-1.57 [-10.57, 7.43]	0.722	-3.05 [-12.41, 6.30]	0.506
BSA^	-18.67 [-58.57, 21.23]	0.344	-19.54 [-78.20, 39.13]	0.497
Change in LVOT (Valsalva)	**Estimate [95% CI]**	**p-value**	**Estimate [95% CI]**	**p-value**
Male Sex	0.59 [-37.52, 38.69]	0.975	0.76 [-39.58, 41.09]	0.970
Male Sex^	---	---	10.60 [-45.33, 66.54]	0.700
Age (10-years)	3.04 [-10.50, 16.59]	0.649	2.99 [-11.21, 17.20]	0.669
Age (10-years)^	---	---	2.59 [-11.74, 16.92]	0.713
BMI (5%)	2.83 [-15.41, 21.08]	0.753	2.60 [-16.61, 21.81]	0.783
BSA^	-13.02 [-86.53, 60.49]	0.720	-24.74 [-134.30, 84.82]	0.647

	Female	Male	p-value
	N=41	N-17	
Pre-Mava NTproBNP, median (IQR)	676 (204, 1609)	641 (140, 1415)	0.414
Post-Mava NTproBNP, median (IQR)	265 (131, 731)	96 (63, 260)	**0.021**
Change in NTproBNP, median (IQR)	-450 (-1293, -52)	-304 (-592, -85)	0.758
Pre-Mava LVEF, mean ± SD	67.3 ± 7.3	64.0 ± 9.0	0.150
Post-Mava LVEF, mean ± SD	61.5 ± 7.9	60.8 ± 8.3	0.784
Change in LVEF, mean ± SD	-6.3 ± 8.7	-3.2 ± 8.2	0.219
Pre-Mava LVOT Resting, median (IQR)	35 (19, 49)	33 (19, 68)	0.697
Post-Mava LVOT Resting, median (IQR)	9 (6, 18)	9 (8, 13)	0.875
Change in LVOT Resting, mean ± SD	-27.6 ± 23.9	-35.4 ± 27.2	0.451
Pre-Mava LVOT Valsalva, median (IQR)	62 (46, 94)	74 (42, 100)	0.826
Post-Mava LVOT Valsalva, median (IQR)	23 (11, 37)	27 (13, 52)	0.301
Change in LVOT Valsalva, mean ± SD	-52.0 ± 40.6	-51.4 ± 63.4	0.975


8000
6000
4000
2000
0
NT-proBNP (pg/mL)
Female
Male
Baseline
Follow-up