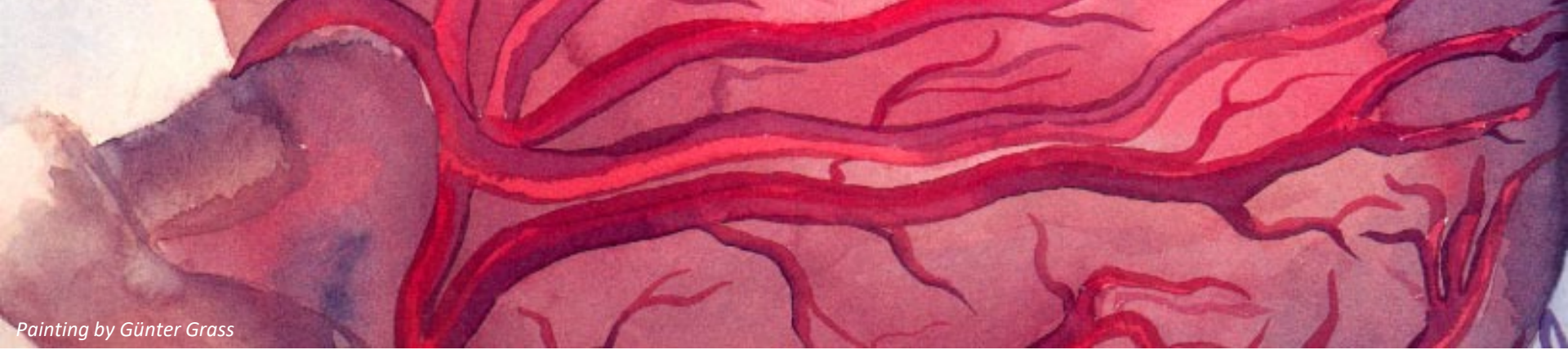




Painting by Günter Grass



Efficacy and Safety of Aficamten in Obstructive Hypertrophic Cardiomyopathy Patients Eligible for Septal Reduction Therapy: A FOREST-HCM Analysis

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Speaker Disclosures

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- Patent applications & patents on miRNA and DNA methylation: UKHD, Siemens Healthineers, Hummingbird Diagnostics
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Background

- Septal reduction therapy (SRT) has been used to successfully reduce left ventricular outflow tract (LVOT) gradients and improve symptoms and is guideline-recommended first-line therapy for severely symptomatic oHCM patients refractory to medical therapy.¹
- At experienced centers, the safety and efficacy of both alcohol septal ablation and surgical myectomy are well established.²
- Nevertheless, some risk of procedural morbidity and mortality remain at even the most experienced centers, and increase as procedural volumes decline.²
- Post-procedural disease-related morbidity also remains, likely due to the inability of SRT to treat the underlying cardiomyopathy.³
- We evaluated the potential for aficamten, a next-in-class cardiac myosin inhibitor, to reduce the indication for SRT over extended follow up in FOREST-HCM.

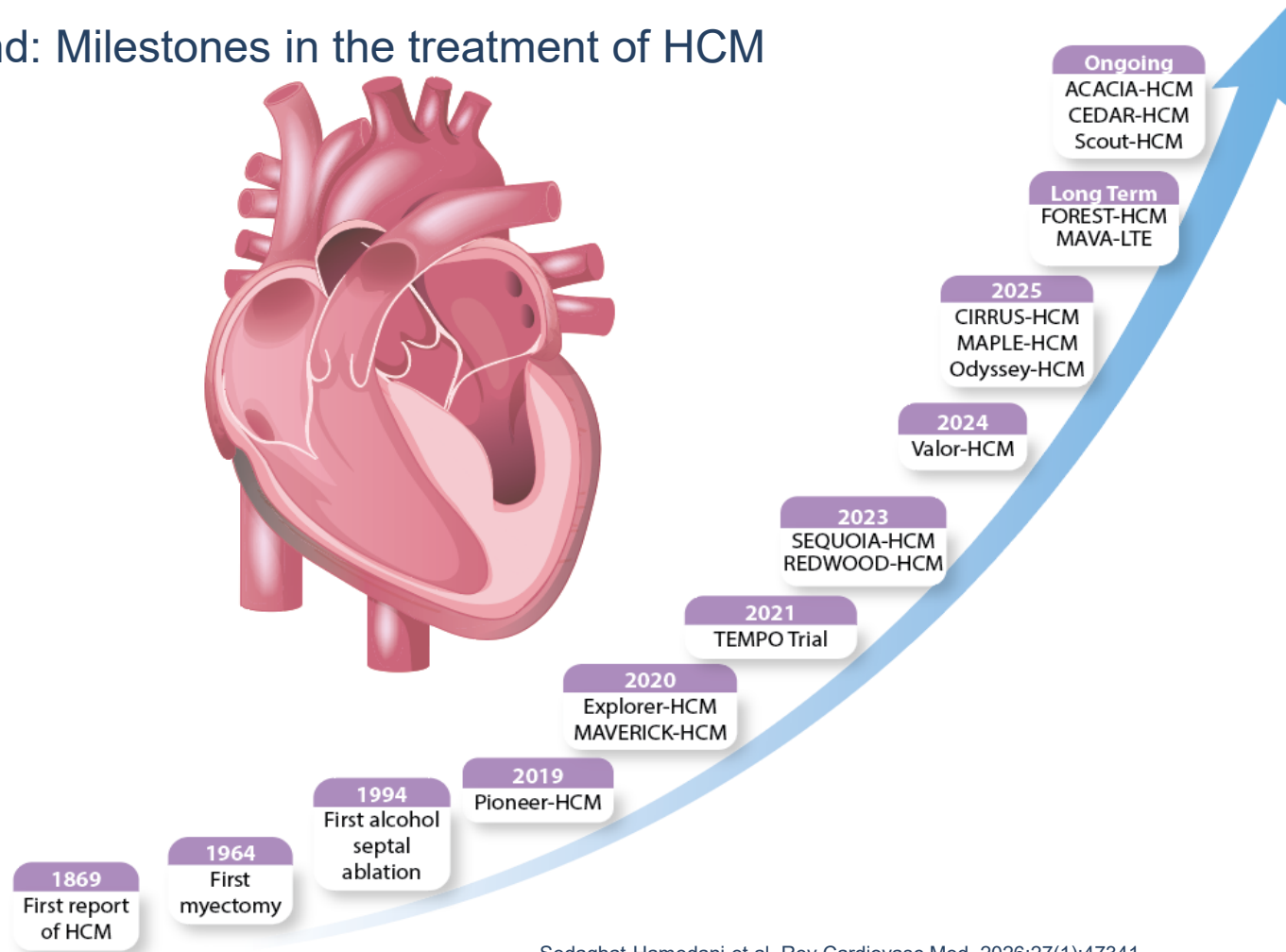
¹ Ommen et al, Circulation 2024;149(23);e1239-e1311.

² Altibi et al, J Am Heart Assoc. 2023;12(10);e030194.

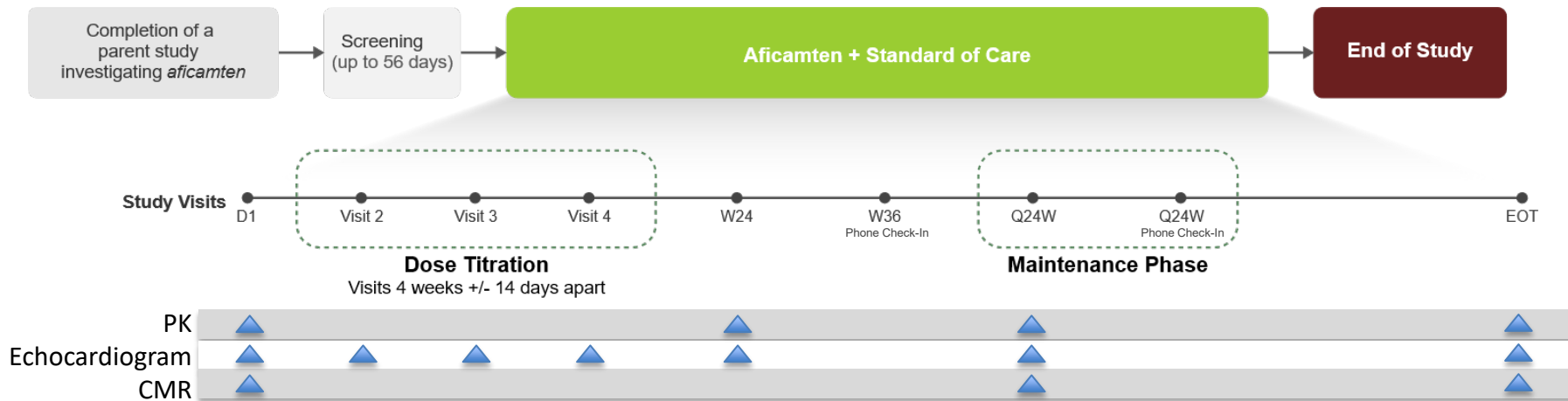
³ Maurizi et al, Circulation, 2024;150(17);1377-1390.

LVOT, left ventricular outflow tract; oHCM, obstructive hypertrophic cardiomyopathy; SRT, septal reduction therapy

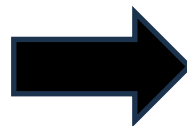
Background: Milestones in the treatment of HCM



Background: FOREST-HCM study design



Guideline-eligibility for SRT was defined as patients treated according to standard of care (SoC), and according to the recent ACC/AHA and ESC consensus documents



SRT Eligible
Severe symptoms: NYHA Class III
and peak
LVOT gradient ≥ 50 mmHg

Results: Baseline characteristics

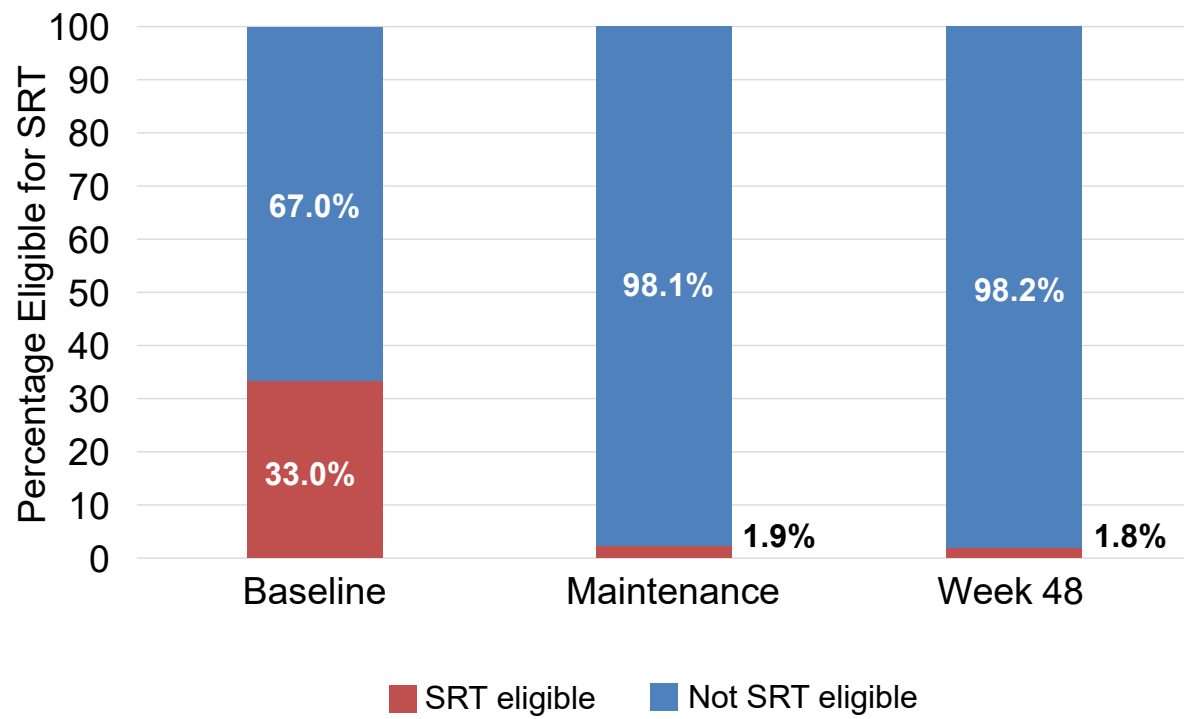
- Data reported as N (%) for categorical and mean (SD) or median (IQR) for continuous data, as appropriate.

	SRT Eligible (N=105)	Not SRT Eligible (N=212)
Age, years	61.9 (12.8)	60 (12.7)
Male sex	46 (43.8%)	130 (61.3%)
Race		
White	97 (92.4%)	201 (94.8%)
Black	3 (2.9%)	2 (0.9%)
Asian	3 (2.9%)	6 (2.8%)
NYHA		
Class I	0 (0%)	11 (5.2%)
Class II	0 (0%)	184 (86.8%)
Class III	105 (100%)	17 (8%)^a
Background Therapy		
Beta Blocker	57 (54.3%)	142 (67%)
Calcium channel blocker	33 (31.4%)	30 (14.2%)
Disopyramide	17 (16.2%)	28 (13.2%)
2 or more background HCM meds	17 (16.2%)	33 (15.6%)
LVEF	69.4 (5.5)	67.8 (5.9)
KCCQ-CSS	58 (19.1)	76.9 (16.5)
Resting LVOT Gradient, mmHg	63 (39.3)	52.5 (35.2)
Valsalva LVOT Gradient, mmHg	109.7 (42.1)	86.2 (40.3)
NT-proBNP, pg/mL	814 (387, 1714)	764.5 (328.5, 1528)
Troponin, ng/L	11.9 (5.5, 28.4)	10.7 (6.1, 18.8)

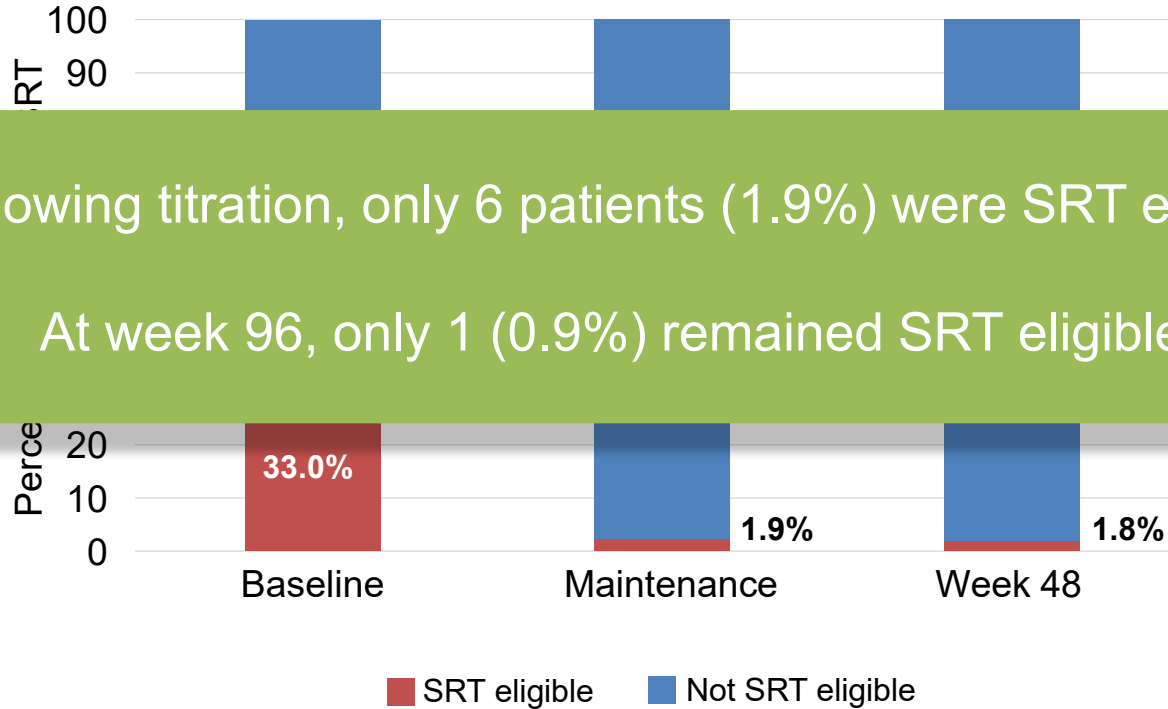
^a Patients with NYHA class III symptoms were deemed not SRT eligible if LVOT gradient was not ≥ 50 mmHg

IQR, interquartile range; Kansas City Cardiomyopathy Questionnaire – Clinical Summary Score; LVEF, left ventricular ejection fraction; LVOT, left ventricular outflow tract; NT-proBNP, N-terminal pro-B-type natriuretic peptide; NYHA, New York Heart Association; SRT, septal reduction therapy

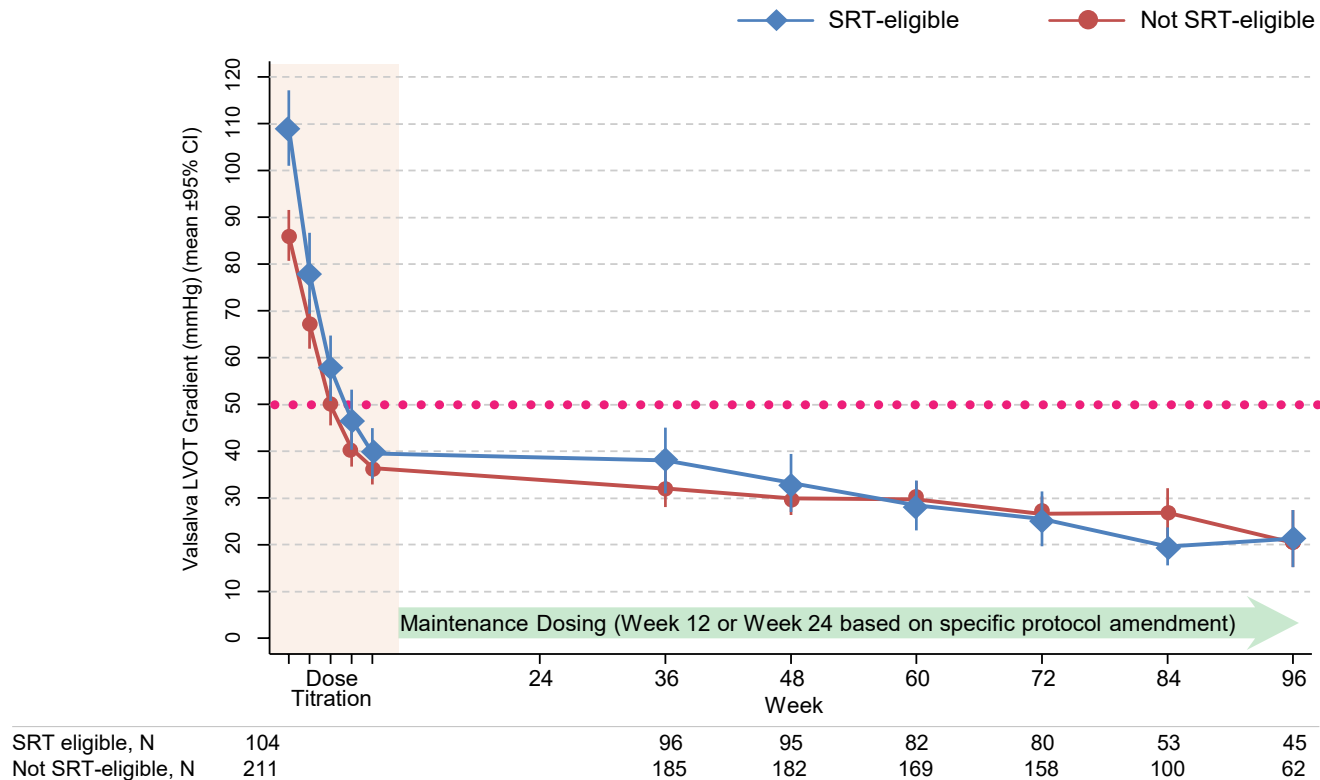
Results: Eligibility for SRT over time



Results: Eligibility for SRT over time

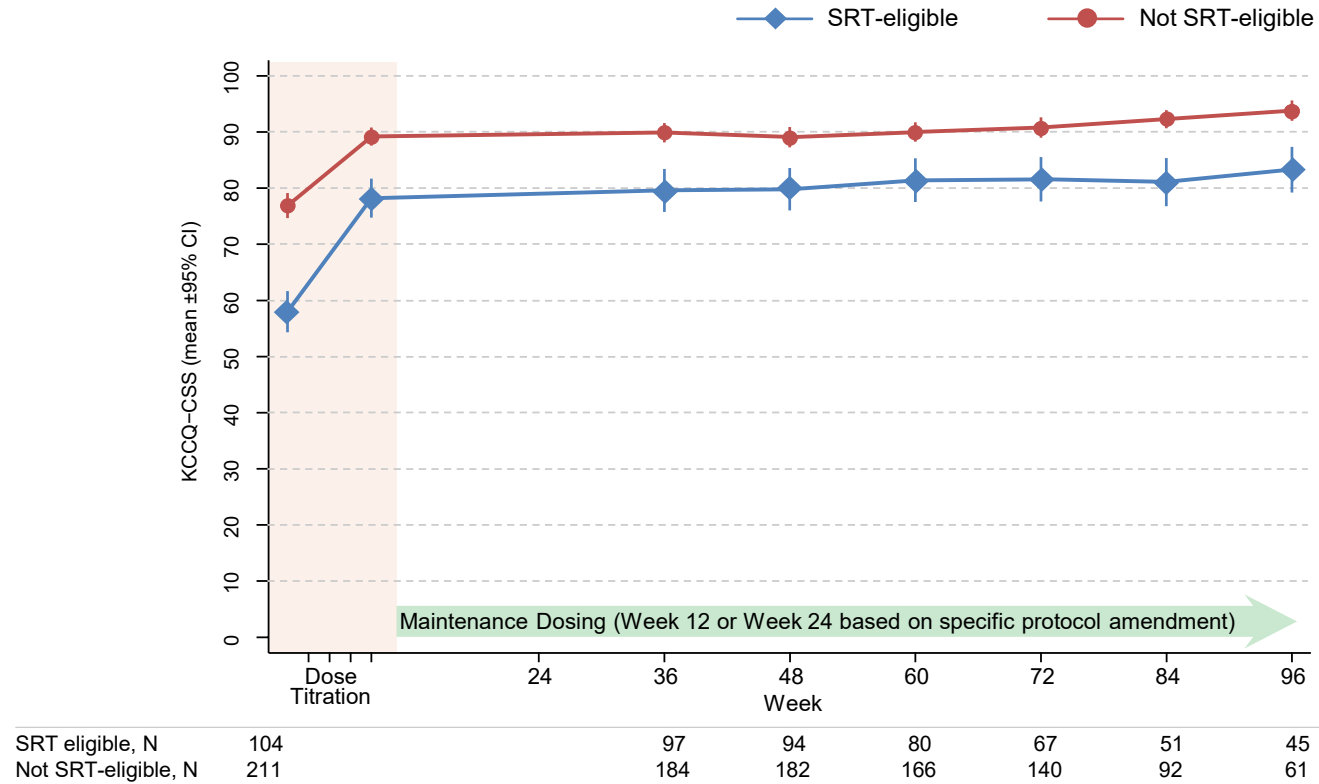


Results: Valsalva LVOT gradient over time



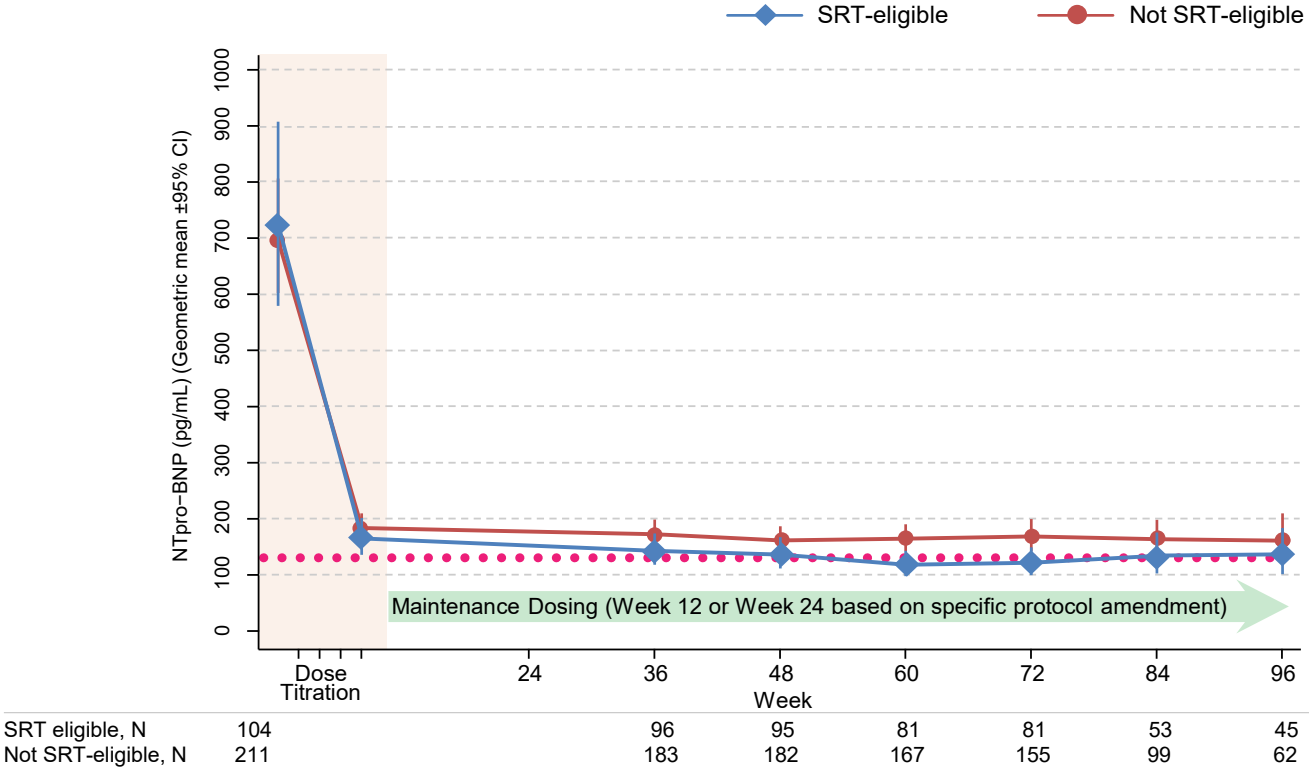
Baseline 109.1 mmHg $\pm$ 8.1 mmHg vs Maintenance 39.5 mmHg $\pm$ 5.5 mmHg; $p < 0.0001$ for SRT eligible group

Results: KCCQ-CSS over time



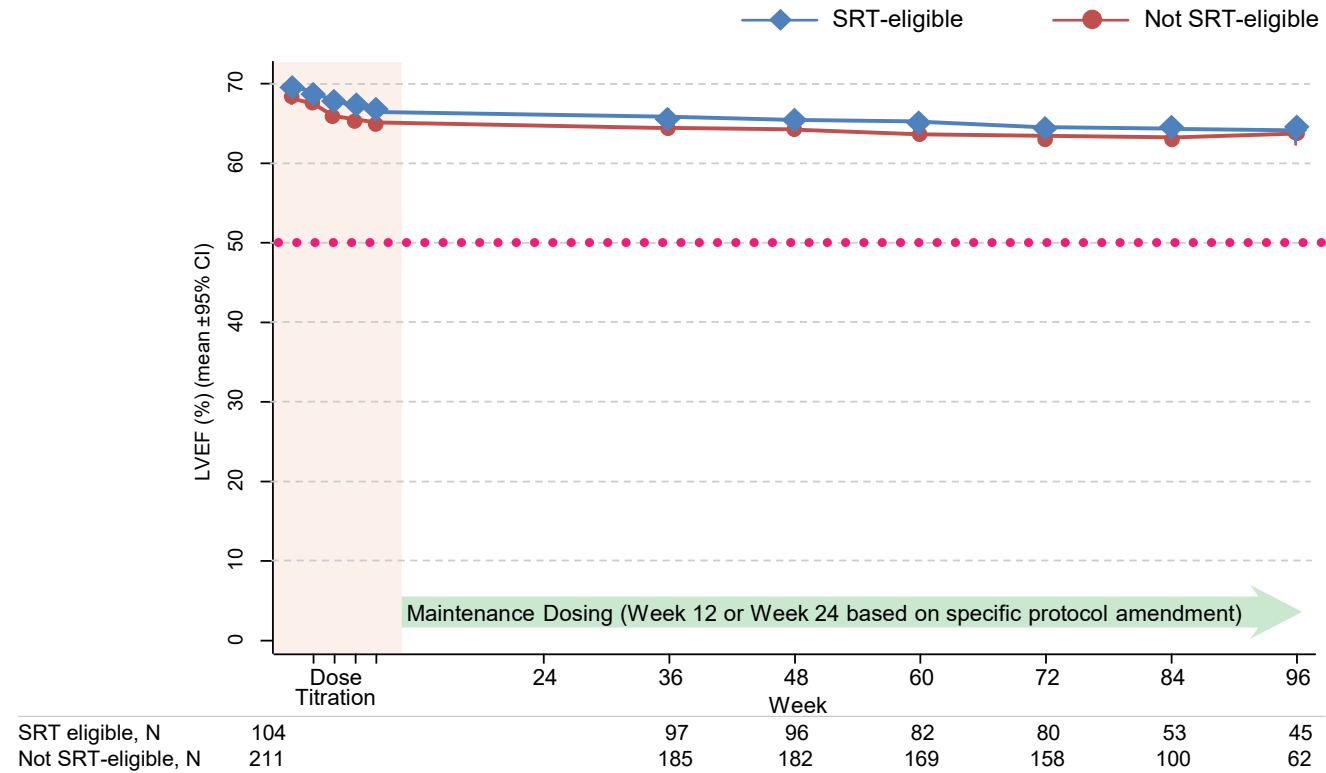
Baseline 58.0 ± 3.7 vs Maintenance 78.2 ± 3.5 ; $p < 0.001$ for SRT eligible group

Results: NT-proBNP over time



Baseline 725 pg/mL [579, 907] vs Maintenance 165 pg/mL [136, 201]; $p < 0.001$ for SRT eligible group

Results: LVEF over time

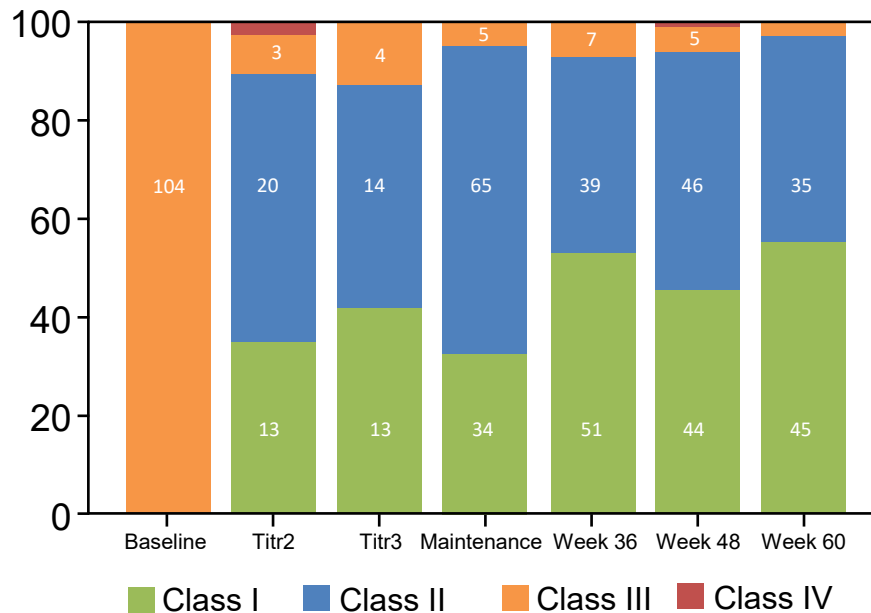


Baseline 69.5% ± 1.1% vs Maintenance 66.2% ± 1.1%; p<0.001 for SRT eligible group

LVEF, left ventricular ejection fraction; SRT, septal reduction therapy

Results: NYHA over time

NYHA Class Over Time – SRT-eligible

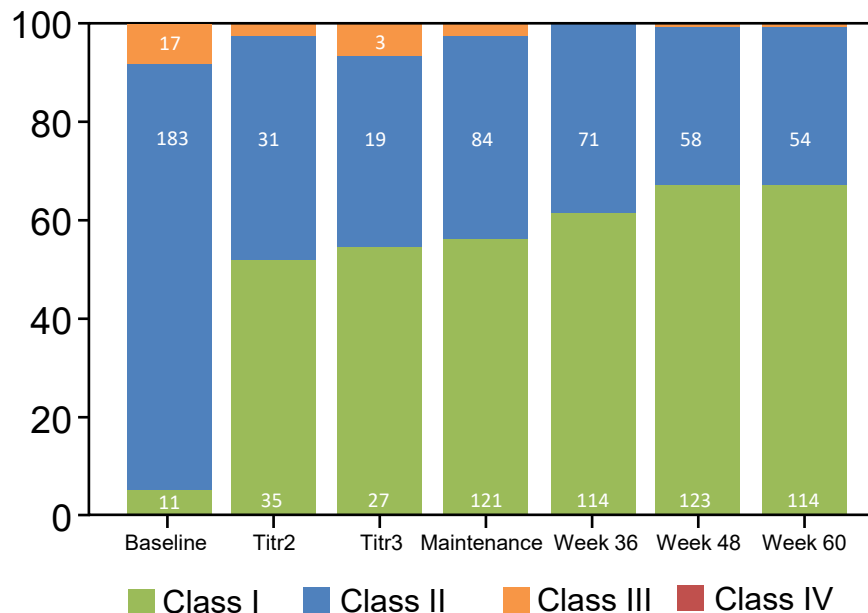


97.6% of SRT eligible patients improved by ≥ 1
NYHA class by week 60

Numbers in each graph represent n.

NYHA, New York Heart Association; SRT, septal reduction therapy; Titr, titration

NYHA Class Over Time – SRT-ineligible



66.3% of SRT ineligible patients improved by ≥ 1
NYHA class by week 60

Safety

- No occurrences of LVEF <40%
- 2 SRT-eligible patients (at baseline) had transient decline in LVEF <50%
 - Exposure-adjusted incidence rate of 1.0 per 100 patient-years
- Most frequent cardiac TEAEs:

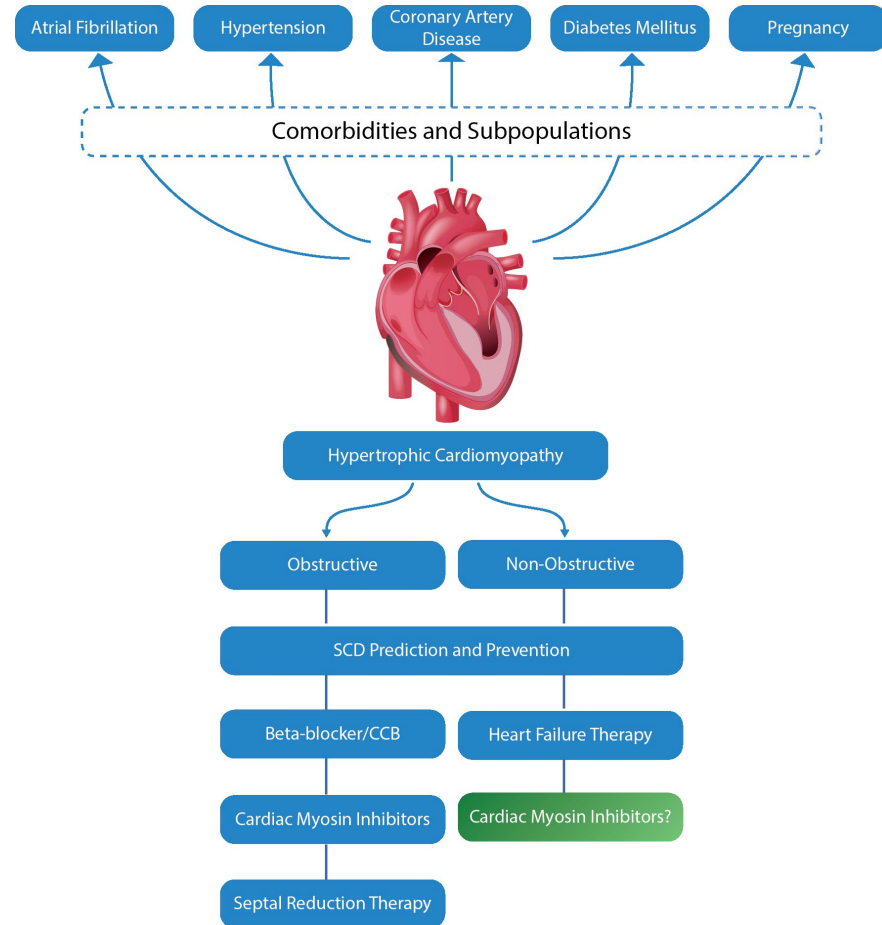
Preferred Term	SRT Eligible (N=105) n (%), m	SRT Ineligible (N=212) n (%), m	Overall (N=317) n (%), m
Palpitations	9 (8.6), 10	14 (6.6), 14	23 (7.3), 24
New onset atrial fibrillation	2 (1.9), 2	9 (4.2), 9	11 (3.5), 11
Angina pectoris	6 (5.7), 6	6 (2.8), 6	12 (3.8), 12
Sinus bradycardia	3 (2.9), 3	2 (0.9), 2	5 (1.6), 5
Tachycardia	2 (1.9), 2	3 (1.4), 3	5 (1.6), 5
Ventricular tachycardia	1 (1.0), 1	4 (1.9), 6	5 (1.6), 7

Conclusions

- Aficamten eliminates SRT eligibility in nearly all oHCM patients with durable efficacy over extended follow up.
- Improvements in clinically important assessments begin early in titration and remain stable over extended follow up and are similar between SRT eligible and non-eligible patients.
- SRT eligible patients treated with aficamten demonstrate a similar and favorable safety profile compared with non-SRT eligible patients.
- Aficamten treatment may provide an alternative to SRT in some patients and a trial of aficamten may be considered before SRT referral.

Conclusions

- Proposed approach to myosin inhibitor initiation in the treatment of oHCM



Adapted from Meder et al, Eur J Heart Fail. 2026, doi: 10.1093/ejhf/xuaf008

CCB, calcium channel blockers; oHCM, obstructive hypertrophic cardiomyopathy; SCD, sudden cardiac death

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- Investigators and study site staff
- Steering Committee members

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