

STANDARD OF CARE MEDICATION PATTERNS OF USE BEFORE AND AFTER SEPTAL MYECTOMY IN PATIENTS WITH OBSTRUCTIVE HYPERTROPHIC CARDIOMYOPATHY

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INTRODUCTION

Patients with drug-refractory obstructive hypertrophic cardiomyopathy (oHCM) frequently undergo septal myectomy (SM) to improve quality of life and, secondarily, reduce the need for ongoing medical therapy. The pattern of standard of care (SoC) medication use post-SM remains unclear at the national level. We studied SoC prescribing patterns post-SM to further examine this knowledge gap.

METHODS

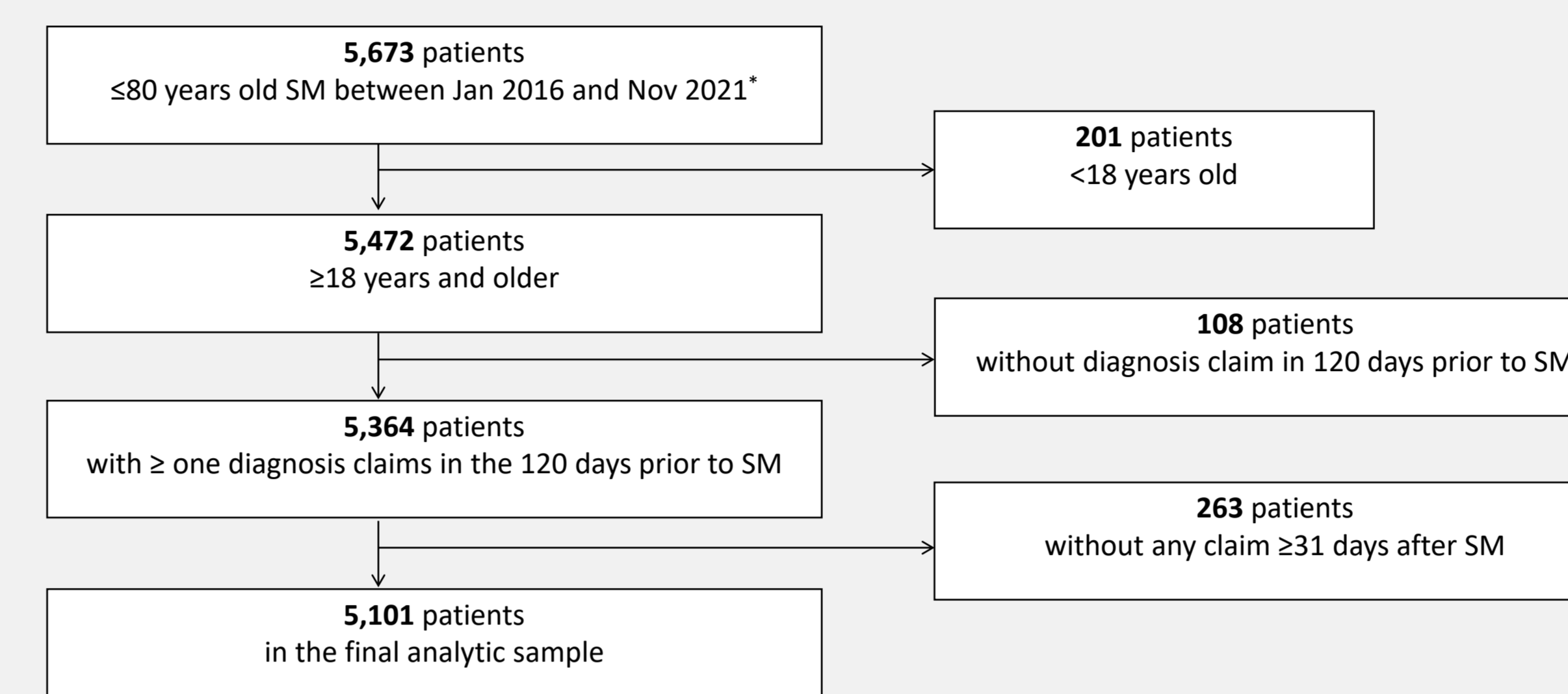
- We used payer agnostic Symphony Health Claims database to define a cohort of patients with oHCM from January 1, 2016 to November 30, 2021.
- HCM patients were identified from diagnosis claims using ICD-10 codes I42.1 and I42.2 with a qualifying SM.
 - The first chronological claim indicating SM was used as each patients' index procedure and repeat procedures not assessed.
- We assessed prescription claims for beta-blockers (BBs), non-dihydropyridine calcium channel blockers (CCBs) and disopyramide.
- Medication use for each drug was categorized as follows:
 - Pre-SM included fills within the preceding 180 days
 - Post-SM fills (≥ 31 days) were divided into direct (within 180 days) and delayed (>180 days). Duration of use was divided into short-term (360-899 days) and long-term (≥ 900 days).
- In addition to the identification of "No use" and "Other Patterns," prescription claims were categorized into 8 patterns (Table 1).

Table 1: Medication use grouped by duration and proximity to SM

Pattern	Description
No use	No pharmacy claims for medication during follow-up
Delayed short term use	2-4 consecutive 180-day periods with ≥ 1 pharmacy claim for medication starting at least one 180-day period after follow-up
Delayed long term use	5 or more consecutive 180-day periods with ≥ 1 pharmacy claim for medication starting at least one 180-day period after follow-up
Short term use directly after SM	2-4 consecutive 180-day periods with ≥ 1 pharmacy claim for medication beginning in first 180-day period of follow-up
Long term use directly after SM	5 or more consecutive 180-day periods with ≥ 1 pharmacy claim for medication beginning in first 180-day period of follow-up
Short term use before and after SM	2-4 consecutive 180-day periods with ≥ 1 pharmacy claim for medication starting before the first 180-day period of follow-up
Long term use before and after SM	5 or more consecutive 180-day periods with ≥ 1 pharmacy claim for medication starting before the first 180-day period of follow-up
Other patterns	All other patterns of medication use during follow-up

Abbreviation: SM = septal myectomy

Figure 1. Study flow diagram



RESULTS

- 5,101 patients underwent SM (age 62 [52, 70] years, 53% female) and met inclusion criteria. Baseline characteristics are shown in Table 2.
- 1472 (29%) of patients never had a prescription fill for a SoC medication.
- Pre-SM percent use for BB, CCB, and disopyramide was 47.4%, 7.0% and 0.7%, while post-SM use at any point was 67.8%, 12.6% and 1.4%, respectively. Detailed proportions and patterns of use from pre- to post- SM are shown in Figure 2.

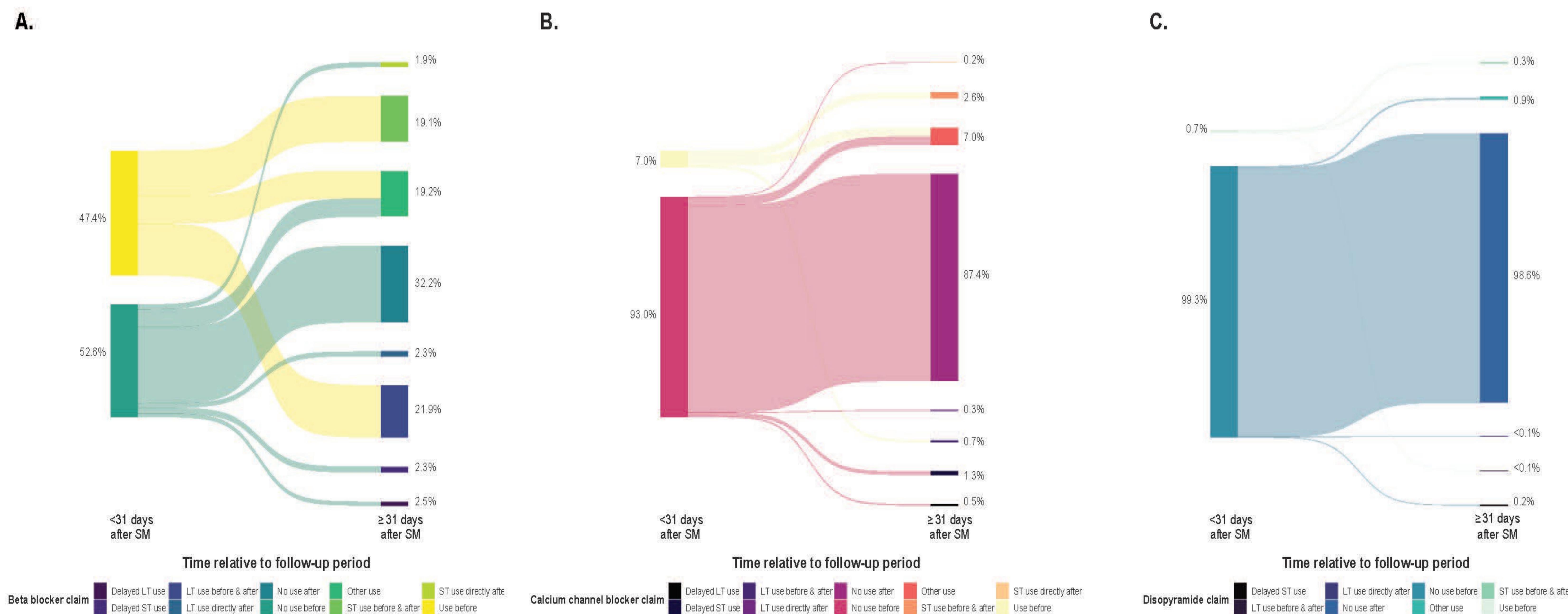
Table 2: Baseline characteristics of study population¹

Characteristic	Overall (n = 5,101)
Age at baseline, median (IQR) [min, max]	62 (52, 70) [18, 80]
Female	2,716 (53.2)
Insurance status	
Commercial	3,574 (70.1)
Other	1,527 (29.9)
Any claim with select medications after 30 days post-SM	3,629 (71.1)

Abbreviations: IQR = interquartile range, SM = septal myectomy.
¹Data are n (%) unless otherwise noted.

RESULTS

Figure 2: Sankey Plots for (A) Beta Blocker, (B) Calcium Channel Blocker, and (C) Disopyramide medication claim patterns.



CONCLUSIONS

- A significant proportion of patients use SoC therapies for oHCM post-SM.
- It is unclear why the majority of patients post-SM still require SoC medications. Potential explanations are:
 - SoC is secondary to comorbidities
 - Lack of proactive deprescribing attempts
 - Ongoing symptoms and/or residual obstruction necessitating continuation or initiation of SoC medications
- Further examination of the rationale and outcomes for each usage pattern will ultimately shed light on optimal treatment methods for this patient population.

CONTACT INFORMATION

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DISCLOSURES

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