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**Fig 1. Triptan Medications Reasons for Discontinuation by Administration Route**

What are the reasons you have stopped using this medication to treat your headaches?	Oral n = 2529	Injectable n = 794	Nasal Spray n = 867
It didn't work well enough	972 (38.4%)	316 (39.8%)	223 (25.7%)
I had side effects	577 (22.8%)	136 (17%)	179 (20.6%)
My HCP switched me to a different brand or form	305 (12.1%)	99 (12.5%)	166 (19.1%)
The medication was too expensive	277 (11%)	66 (8.3%)	90 (10.4%)
HCP would not prescribe or stopped prescribing	175 (6.9%)	77 (9.7%)	110 (12.7%)
Insurance would not cover	161 (6.4%)	48 (6%)	82 (9.5%)
Drug interaction concerns	126 (5%)	64 (8.1%)	75 (8.7%)
I didn't like using a nasal spray	NA	72 (9.1%) <sup>a</sup>	NA
I didn't like using an injection	NA	NA	72 (8.3%) <sup>b</sup>
I couldn't take the oral medication with my nausea	111 (4.4%)	NA	NA
Other: Decreased severity of my headaches	84 (3.3%)	7 (0.9%)	20 (2.3%)
Another health problem prevented me from taking	75 (3%)	35 (4.4%)	48 (5.5%)
Pregnant, trying to get pregnant, or nursing	48 (2.3%)*	6 (1.2%)*	7 (1.2%)*

\*Among Women only (Oral N=2086, Injectable N=589, Nasal Spray N=511)  
<sup>a</sup> Specific mentions: Nasal drip, burning, congestion n=28(38.8%), Disliked smell/taste n=22 (30.5%); <sup>b</sup> Specific mentions: Dislike needles n=38 (52.8%), Pain n=19 (26.3%)

## Conclusions

- Although considered the gold-standard for the acute treatment of migraine, only 37.0% of survey respondents had ever used a triptan and 15.9% were current users.
- While oral routes were the most common, 11.5% had ever used a non-oral formulation (31.1% of ever triptan users, 40.4% of current triptan users).
- Among ever triptan users, 56.7% have discontinued use, indicating substantial unmet medical needs.
- Dizziness, nausea and fatigue were the most common reasons for discontinuation due to side effects.

**Fig 3. Discontinuation of Triptan Medication(s) due to Side Effects**

What were the side effects that caused you to stop using this medication?	Oral n = 2529	Injectable n = 794	Nasal Spray n = 867
Felt dizzy	216 (37.4%)	40 (29.4%)	60 (33.5%)
Frequent nausea	177 (30.7%)	44 (32.4%)	44 (24.6%)
More fatigue	151 (26.2%)	33 (24.3%)	38 (21.2%)
Problems with tingling and/or numbness	100 (17.3%)	20 (14.7%)	43 (24%)
More weakness or loss of strength	99 (17.2%)	17 (12.5%)	34 (19%)
The headache got worse before it got better	95 (16.5%)	21 (15.4%)	31 (17.3%)
My heart started beating fast	79 (13.7%)	19 (14%)	30 (16.8%)
Flushing	70 (12.1%)	18 (13.2%)	41 (22.9%)
Jaw tightness	61 (10.6%)	7 (5.1%)	31 (17.3%)
Tightness in my chest	60 (10.4%)	9 (6.6%)	32 (17.9%)
Started to sweat	60 (10.4%)	12 (8.8%)	35 (19.6%)
Pressure in my chest	57 (9.9%)	15 (11%)	36 (20.1%)
Heart, circulation, or blood pressure problems	53 (9.2%)	15 (11%)	20 (11.2%)
Heaviness in my limbs	45 (7.8%)	5 (3.7%)	17 (9.5%)
Joint or bone pain	44 (7.6%)	10 (7.4%)	25 (14%)
Burning sensation	23 (4%)	20 (14.7%)	19 (10.6%)

**Fig 2. Past and Current Triptan Use by Form**

	Oral	Injectable	Nasal Spray	Total
<b>Triptan Use in MAST Sample (N=15,133)</b>				
Current triptan users	2050 (13.5%)	197 (1.3%)	400 (2.6%)	2421 (15.9%)
Discontinued triptan users	2529 (16.7%)	867 (5.7%)	794 (5.2%)	3175 (21.0%)
Ever (Past and current) triptan users	4579 (30.3%)	1064 (7.0%)	1194 (7.9%)	5596 (37.0%)
<b>% of Ever Triptan Users by Form</b>				
Current triptan users	2050 (44.8%)	197 (18.5%)	400 (33.5%)	2421 (43.3%)
Discontinued triptan users	2529 (55.2%)	867 (81.5%)	794 (66.5%)	3175 (56.7%)

## Results

- Among respondents with migraine meeting survey criteria (15,133) the mean age was 43.1, 73.0% were women, 81.0% were white, and median monthly headache frequency was 3.3 days per month.
- Of respondents meeting migraine criteria, 5,596 (37.0%) had ever used a triptan, 1,241 (8.2%) had used more than one route of administration, and 272 (1.8%) had used oral, nasal spray, and injectable forms.
- Among those who had ever used a triptan, 81.8% had used an oral agent, 21.3% used a nasal spray, 19.0% used an injectable; 22.2% had used more than one route of triptan administration.
- Among current triptan users (2421, 15.9%) 84.7% use oral, 16.5% use nasal spray and 8.1% use injectable; 9.3% currently use more than one route of triptan administration.
- Discontinuation rates were highest for injectable (81.5%), followed by nasal sprays (66.5%), and oral medications (55.2%). How were these calculated?
- The most common reason for discontinuation was perceived lack of efficacy (*Did not work for me*; 38.4% oral, 39.8% nasal spray, 25.7% injectable) followed by *side effects* (22.8% oral, 17% nasal spray, 20.6% injectable).
- The most common side effect was *dizziness* (37.4% oral, 29.4% nasal spray, 33.5% injectable) followed by *nausea* (30.7% oral, 32.4% nasal spray, 24.6% injectable) and *fatigue* (26.2% oral, 24.3% nasal spray, 21.2% injectable).

## Objective

- Triptans are indicated for the acute treatment of migraine and are available in oral, injectable, and nasal formulations.
- Patients may try various forms of triptans in the course of treatment.
- MAST ascertained information about patterns of medication use in a sample of people with migraine in the US.
- The objectives were to understand past and current triptan usage patterns and reasons for discontinuation for oral and non-oral triptans.

## Eligibility

- Respondents, ≥18 years, were recruited to the MAST Study from a nationwide online research panel, using stratified random sampling. A validated screener used modified ICHD-3-beta criteria to identify individuals with migraine. Responded averaging >1 monthly headache day (MHD) over the previous 3 months were included in the MAST Study.
- Those included reported using prescription acute migraine medications, >3 headache days in the previous 3 months, and >1 headache day in the past 30 days.

## Methods

- The MAST Survey assessed self-reported past and current triptan use including route of administration and reasons for discontinuing triptan medications.
- For discontinuations due to side effect(s), respondents were asked to identify side effects from a pre-coded list. "Other" responses were allowed and coded. Descriptive results were provided for each route of triptan administration used/discontinued. The groups are not mutually exclusive.