Therapeutic Alternatives in the Event of a Sumatriptan Injection Shortage
National Clinical Recommendations
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VA Pharmacy Benefits Management Services and the National Formulary Committee
In collaboration with the VA Headache Centers of Excellence

The following recommendations are based on medical evidence, clinician input, and expert opinion. The content of the document is dynamic and may be revised as new information becomes available. The purpose of this document is to assist practitioners in clinical decision-making, to standardize and improve the quality of patient care, and to promote cost-effective drug prescribing. THE CLINICIAN SHOULD USE THESE CLINICAL RECOMMENDATIONSAND INTERPRET IT IN THE CLINICAL CONTEXT OF THE INDIVIDUAL PATIENT. The Prescribing Information or other clinical resources should be consulted for detailed and most current drug information.

Background

In the event of a shortage or unreliable availability of sumatriptan for subcutaneous injection, it may be necessary to find alternative therapy options in some situations.

Indications for Treatment[1]

- Sumatriptan oral, nasal, and subcutaneous injection have an FDA approved indication for acute treatment of migraine with or without aura.
- Only the subcutaneous injection dosage form also has FDA approved indication for acute treatment of cluster headache.

Considerations for Alternative Therapies

Recommendations for alternatives will depend on the indication. Drug interactions may exist for some pharmacologic options that are different from sumatriptan. It is recommended that alternatives are evaluated with the patient's headache provider and are made on a case-by-case basis based on the clinical context of the individual patient.

Cluster Headache[2-4]

The nature of cluster headache is a rapid escalation to maximum intensity with typical durations of less than one hour. Thus, a non-oral treatment is recommended in most cases as these tend to have a faster onset of action. Although intranasal dosage forms of sumatriptan and zolmitriptan do not have an FDA-approved indication for cluster headache, there is evidence supporting their use in cluster headache and they are commonly used by clinicians for this purpose.[1-3] Table 1 summarizes treatment alternatives to sumatriptan injection for patients with cluster headache. Refer to the PBM INTRAnet or VA Formulary Advisor for current formulary status, additional formulary information, and VA Criteria for Use.

Table 1: Cluster headache abortive treatment alternatives to sumatriptan injection[1-5]

Drug	Typical Dosing / Comments
Pharmacologic Options	
Sumatriptan nasal spray	20 mg once in the nostril contralateral to the side of headache. May repeat a single 20 mg dose after ≥ 2 hours if needed. Maximum dose: 40 mg per 24 hours
Zolmitriptan nasal spray	5 to 10 mg once in the nostril contralateral to the side of headache. May repeat a single 5 mg dose after ≥ 2 hours if needed. Maximum dose: 10 mg per 24 hours. Of note, zolmitriptan nasal spray is only available as a 2.5 mg or 5 mg dose. The use of 10 mg as a single dose is off-label for cluster headache.

Non-Pharmacologic Options	
High-flow normobaric oxygen	12 to 15 L/min for 20 minutes via non-rebreather mask
Non-invasive vagus nerve stimulator (gammaCore™)	2 two-minute stimulations. Both stimulations may be performed on the same side of the neck or the patient can switch sides for the second stimulation. Refer to product information for specific instructions. Patients will require training on appropriate use.

Migraine Headache[2, 4-11]

Patients with migraine who are prescribed subcutaneous sumatriptan injection may have migraines that are associated with severe nausea with or without vomiting and/or a rapid escalation to maximum intensity of their migraine episodes. Thus, making a non-oral, faster-onset dosage form more desirable.

- Orally disintegrating tablets (ODTs) can be considered for patients with severe nausea without vomiting. ODTs should be avoided in patients who experience vomiting as they still require gastrointestinal absorption (i.e., ODTs are not buccally or sublingually absorbed).
- Adding an antiemetic may also benefit the patient who experiences severe nausea and vomiting with their migraines.
- Intranasal dihydroergotamine (DHE) has similar contraindications as triptans in vascular disease. It is essential that patients understand DHE cannot be given within 24 hours of a triptan or vice versa.

Table 2 summarizes treatment alternatives to sumatriptan injection for patients with migraine headache. Refer to the PBM INTRAnet or VA Formulary Advisor for current formulary status, additional formulary information, and VA Criteria for Use.

Table 2: Migraine headache abortive treatment alternatives to sumatriptan injection[1, 2, 5-11]

Drug	Typical Dosing / Comments
Pharmacologic Options	
Rizatriptan ODT	5 to 10 mg. May repeat a single dose after ≥ 2 hours if needed. Maximum dose: 30 mg per 24 hours
Zolmitriptan ODT	1.25 to 5 mg. May repeat a single dose after ≥ 2 hours if needed. Maximum dose: 10 mg per 24 hours
Rimegepant ODT	75 mg. Maximum dose: 75 mg per 24 hours
Sumatriptan nasal spray	5 mg to 20 mg in one nostril. May repeat a single dose after ≥ 2 hours if needed. Maximum dose: 40 mg per 24 hours
Zolmitriptan nasal spray	2.5 to 5 mg in one nostril. May repeat a single dose after ≥ 2 hours if needed. Maximum dose: 10 mg per 24 hours.
Dihydroergotamine nasal spray (eqv. MIGRANAL)	0.5 mg per spray: 1 spray (0.5 mg) into each nostril; repeat after 15 minutes. Maximum: 4 sprays (2 doses) per 24-hours.
Dihydroergotamine HFA nasal spray (eqv. TRUDHESA)	0.725 mg per spray: 1 spray (0.725 mg) into each nostril; may repeat after ≥ 1 hour if needed. Maximum: 4 sprays (2 doses) per 24-hours.
Zavegepant nasal spray	10 mg per spray: 1 spray (10 mg) in one nostril as a single dose. Maximum: 10 mg per 24-hours.
Non-pharmacologic Options	
Neuromodulation devices	Multiple options exist including non-invasive vagus nerve stimulator (e.g., gammaCore™), external trigeminal nerve stimulator (e.g., Cefaly™). Refer to product information for specific instructions. Patients will require training on appropriate use.

References

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9. Dihydroergotamine nasal spray (MIGRANAL) [prescribing information online] Bausch Health, Bridgewater, NJ, April 2022
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11. Zavegepant (ZAVZPRET) [prescribing information online] Pfizer, New York, NY, April 2023

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