Advances in Migraine Management

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Disclosure Statement

Kelsey H. Blom, PharmD, BCACP, has no relevant financial relationships with with ineligible companies to disclose

Learning Objectives - Pharmacist

Analyze the latest data on the efficacy, safety, and administration of recently approved therapies for the management of migraine

Recall important counseling points for use of the novel acute migraine medications.

Recognize clinically significant drug interactions for newly approved migraine medications

Pre-Test Questions

A patient presents with a new prescription for **atogepant**. What is the best counseling point to provide regarding time to effect when initiating atogepant?

A. Patients will not realize benefit for at least 3 months.
B. Atogepant may improve migraines within the first week, however it should be continued for 12 weeks to realize full benefit.
C. Maximum benefit will be achieved after 4-weeks
D. If benefit is not realized after two weeks, it should be discontinued.

Pre-Test Questions

A patient is newly prescribed **lasmiditan** for acute migraine treatment. Which of the following counseling points is correct?

A. You must wait to drive or operate heavy machinery for 8-hours after taking lasmiditan
B. Take lasmiditan with food to improve absorption and gastrointestinal tolerance
C. If the first dose of lasmiditan is not effective at achieving relief from migraine, you may repeat the dose at least 2 hours later.
D. Lasmiditan may cause increase in heart rate

Pre-Test Questions

A patient brings a new prescription for **ubrogepant 50 mg** as needed for acute migraine treatment. They are also prescribed diltiazem for atrial fibrillation. What is the best education point to provide to the patient?

A. Ubrogepant is contraindicated with diltiazem, and their doctor will be contacted to discuss an alternative.
B. Do not exceed a dose of 50 mg, as diltiazem is a moderate CYP3A4 inhibitor.
C. Ubrogepant is contraindicated in the setting of atrial fibrillation.
D. They may take a second dose at least 2 hours later if their headache does not resolve.

Learning Objectives - Technician

Identify the names and therapeutic classes of newly approved migraine medications

Describe common side effects of newly approved migraine medications

Recall the strength, dosage forms, and routes of administration for newly approved migraine medications.

Pre-Test Questions

Which of the following medications is a **migraine prophylactic** medication?

A. Lasmiditan
B. Ubrogepant
C. Atogepant
D. Zavegepant

Pre-Test Questions

Which of the below is a common side effect of **lasmiditan**?

A. Sedation
B. Constipation
C. Anxiety
D. Dry mouth

Pre-Test Questions

Which of the below acute migraine medications can be administered **intranasally**?

A. Lasmiditan
B. Ubrogepant
C. Rimegepant
D. Zavegepant

Overview of Migraine

What is a Migraine?

- Chronic, often disabling, primary headache disorder
- Headache is often **unilateral** and **pulsating**
- Can be associated with **sensitivity** to **light** or **sound**, and/or with **nausea or vomiting**

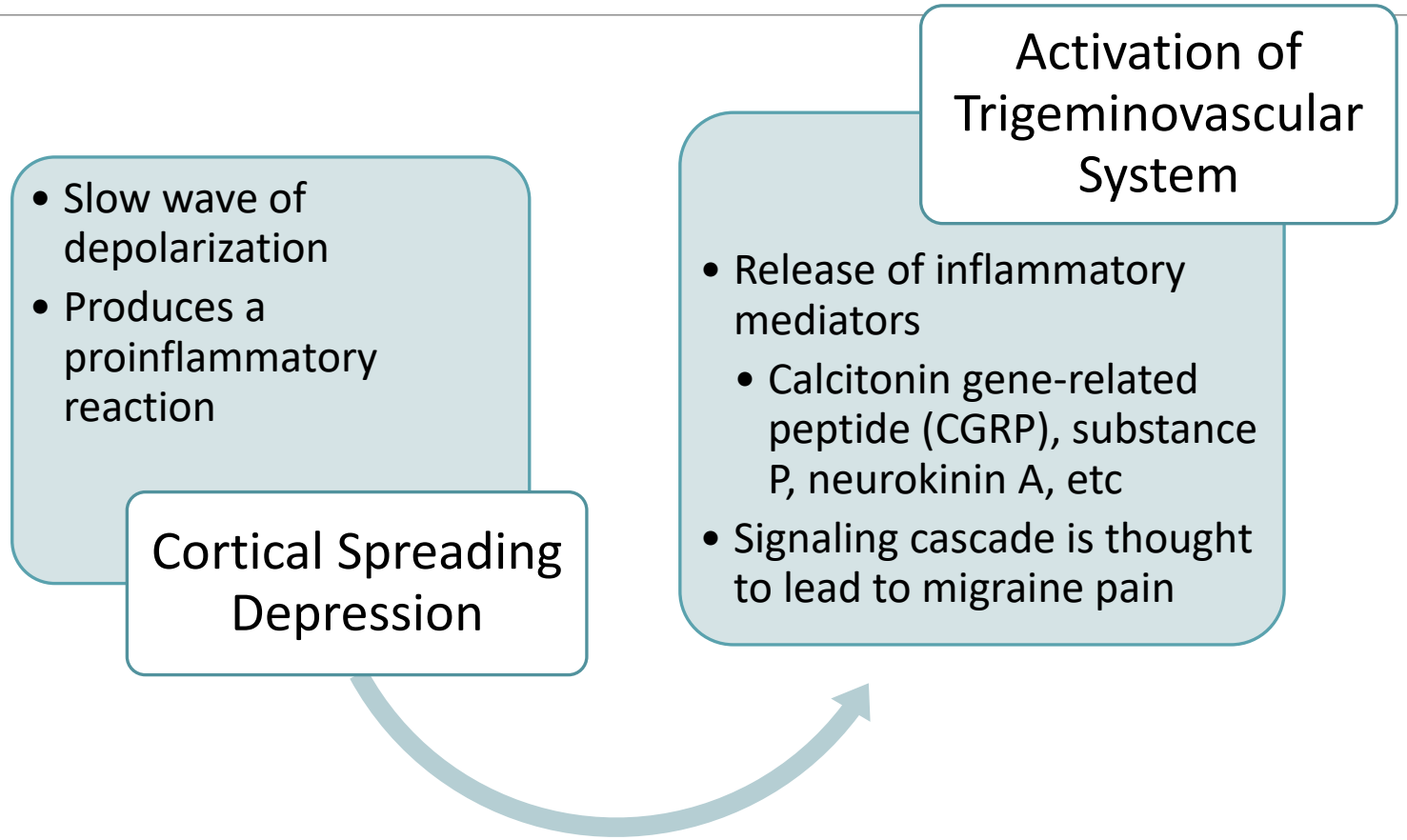
Headache Classification Committee of the International Headache Society (IHS). The International Classification of Headache Disorders, 3rd edition. *Cephalalgia*. 2018;38(1):1-211.

Disease Burden

- Second most disabling neurologic condition globally
- 1 First most disabling neurologic condition for women
- Affects women more than men 3:1
- One-third of patients require bed rest or report severe impairment
- Cost associated with migraine is estimated to be ≈$36 billion annually

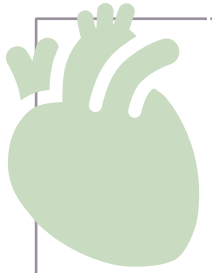
Lipton RB, et al. *Neurology*. 2007;68(5):343-349; Steiner TJ, et al. *J Headache Pain*. 2020;21(1):137; Bonafede M, et al. *Headache*. 2018;58(5):700-714.

Pathophysiology



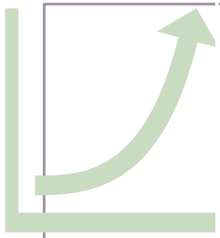
Burstein R, et al. *J Neurosci*. 2015;35(17):6619-6629; Goadsby PJ, et al. *Physiol Rev*. 2017;97(2):553-622.

Calcitonin Gene-Related Peptide (CGRP)



Potent vasodilator found in peripheral and cerebral vasculature

CGRP and its receptors are expressed widely in the nervous system, within central and peripheral sites

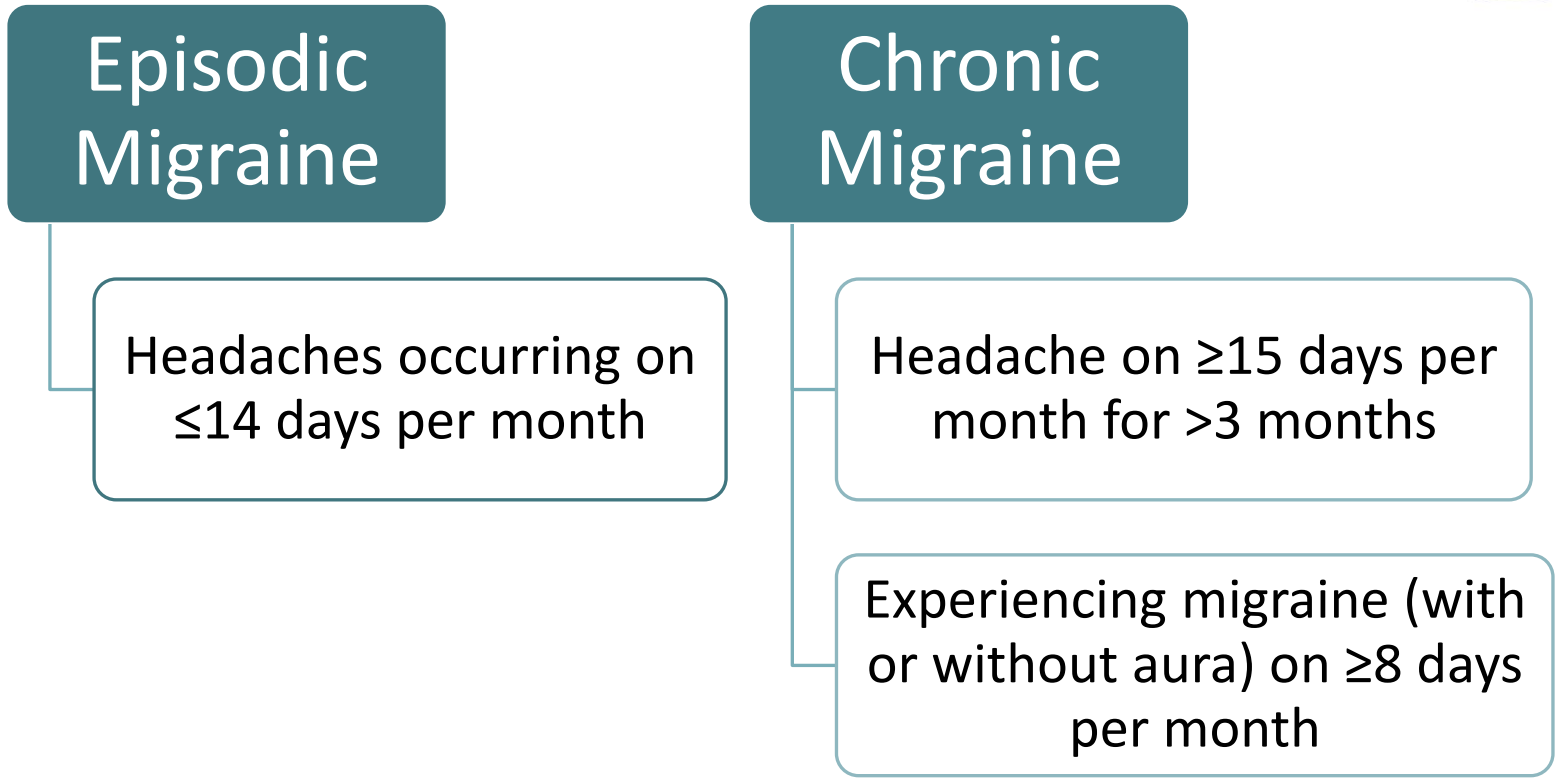


CGRP release has been shown to occur in response to vasoconstriction or as part of the proinflammatory response

Charles A, Pozo-Rosich P. *Lancet*. 2019;394(10210):1765-1774.

Classification of Migraine

- Migraine with or without aura



Headache Classification Committee of the International Headache Society (IHS). The International Classification of Headache Disorders, 3rd edition. *Cephalalgia*. 2018;38(1):1-211.

Migraine Treatment

Acute Treatment

- Nonsteroidal anti-inflammatory drugs (NSAIDs), acetaminophen (APAP), combined analgesics
- Triptans, dihydroergotamine
- Serotonin receptor agonists (ditans)
- CGRP antagonists (gepants)

Prophylactic Treatment

- β-blockers
- Antiepileptics
- Antidepressants
- CGRP-targeting monoclonal antibody
- CGRP antagonists (gepants)

Ailani J, et al. *Headache*. 2021;61(7):1021-1039.

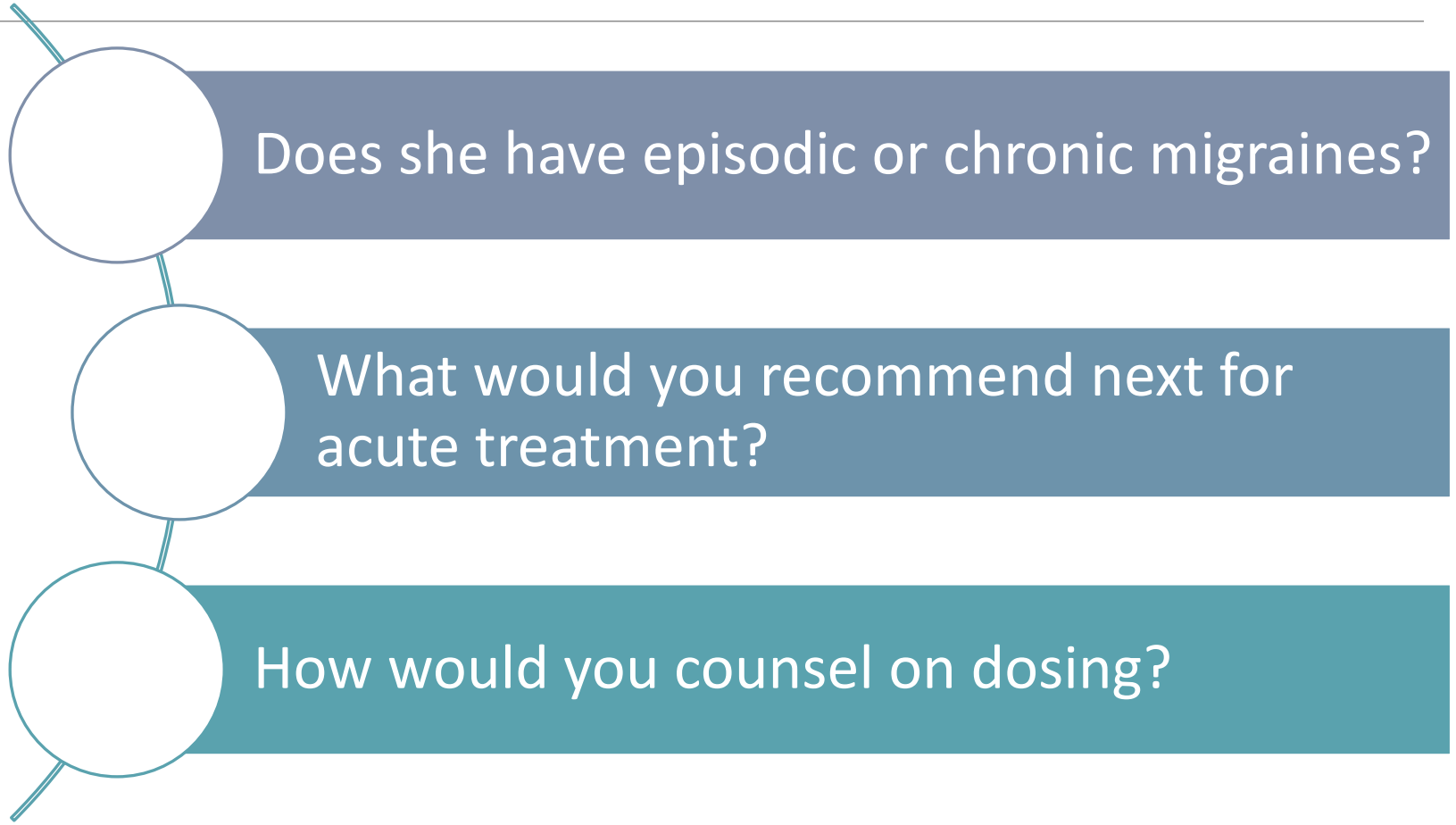
Acute Migraine Treatment

Patient Case

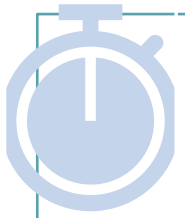
LP is a 28-year-old woman diagnosed with migraine with aura and reports moderate to severe pain with attacks. In the past she has used sumatriptan but has felt tired and groggy after use. Naratriptan was also tried but she reported stomach upset. She is currently using rizatriptan, but it has stopped being effective (has used for 6 months).

- Migraine days: 3 to 5 per month
- Other medications: oral birth control, fluticasone nasal aspirator, cetirizine

Patient Case – Questions to Consider



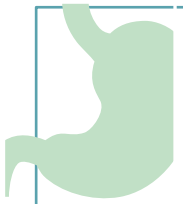
Goals of Acute Treatment



Consistent and fast pain and symptom relief

Restore ability to function

Reduce need for repeat doses, or rescue medications



No or minimal adverse effects

Optimize self-care and reduce use of medical resources

Ailani J, et al. *Headache*. 2021;61(7):1021-1039.

Traditional Acute Treatment: Triptans

Serotonin receptor agonists

- 5-HT_{1B} and 5-HT_{1D}

Established efficacy

- Pain relief in 2 hours is achieved by **42% to 76% of patients**

Use in at least 3 attacks

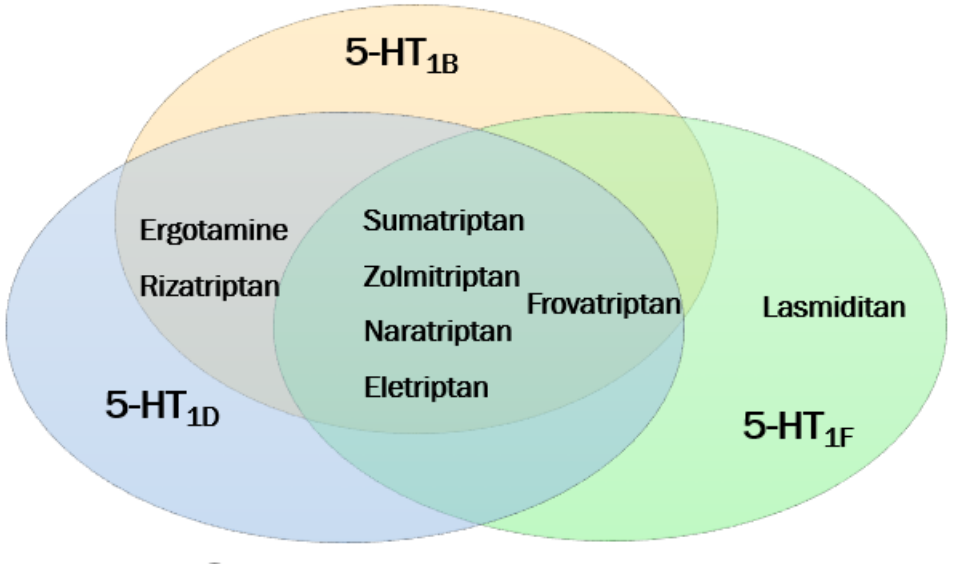
Cardiac Contraindications

- Ischemia or other heart disease
- History of stroke or transient ischemic attack
- Peripheral vascular disease
- Uncontrolled hypertension

Cameron C, et al. *Headache*. 2015;55(suppl 4):221-235; Worthington I, et al. *Can J Neurol Sci.* 2013;40(5 suppl 3):S1-S80; Leroux E, et al. *Adv Ther*. 2020;37:4765-4796; Vu M, et al. *Am Fam Physician*. 2018;98(6):342.

Lasmiditan (Reyvow)

- Selective 5-HT_{1F} receptor agonist
- FDA approved in 2019
- Schedule V controlled substance



Lasmiditan	
Dosing	50 mg, 100 mg, and 200 mg
Formulation	Tablets
Repeat dosing	No
Adverse effects	Dizziness (9%-17%) Fatigue (4%-6%) Paresthesia (3%-9%) Sedation (6%-7%) Nausea/vomiting (3%-4%)

Rubio-Beltrán E, et al. *Pharmacol Ther*. 2018;186:88-97; Reyvow. Prescribing information. Eli Lilly & Co; 2021.

Lasmiditan Clinical Trials

Primary end point: freedom from pain at 2 hours

	SAMURAI (N = 1856)		SPARTAN (N = 3005)		
	200 mg	100 mg	200 mg	100 mg	50 mg
N (%)	167 (32.2%)	142 (28.2%)	205 (38.8%)	167 (31.4%)	159 (28.6%)
OR (95% CI)	2.6 (2.0-3.6)	2.2 (1.6-3.0)	2.3 (1.8-3.1)	1.7 (1.3-2.2)	1.5 (1.1-1.9)
ARR	**16.9%**	**12.9%**	**17.5%**	**10.1%**	**7.3%**

ARR, absolute risk reduction; OR, odds ratio.

Kuca B, et al. *Neurology*. 2018;91(24):e2222-e2232; Goadsby P, et al. *Brain*. 2019;142(7):1894-1904.

Lasmiditan Safety & Drug Interactions

Drug Interactions

Lasmiditan **inhibits** P-glycoprotein (P-gp) and the breast cancer resistance protein (BCRP) in vitro

Avoid with:

- **P-gp substrates:** colchicine, dabigatran, digoxin, tacrolimus, etc
- **BCRP substrates:** methotrexate, sulfasalazine, rosuvastatin, etc

Warnings

- **Do not** drive for 8 hours after dose
- **Avoid** with **severe hepatic impairment**

- Heart rate decrease
- Blood pressure increase

Reyvow. Prescribing information. Eli Lilly & Co; 2021.

CGRP Receptor Antagonists: Gepants

	Ubrogepant (Ubrelvy)	Rimegepant (Nurtec)	Zavegepant (Zavzpret)
FDA Approval	2019	2020	2023
Dosing and formulation	50 mg, 100 mg tablets	75 mg ODT	10 mg NS
Repeat Dosing	Yes – 2 hrs later	No	No
Adverse Effects	• Nausea (2%-4%) • Somnolence (2%-3%) • Dry mouth (<1%-2%)	Nausea (2%)	• Taste disorders (18%) • Nausea (4%) • Nasal discomfort (3%) • Vomiting (2%)
Dose Adjustments for Special Populations			
• **Severe Hepatic Impairment**	50 mg	Avoid	Avoid
• **Severe Renal Impairment (CrCl 15-29 mL/min)**	50 mg	75 mg	Avoid
• **End-Stage Renal Disease (CrCl <15 mL/min)**	Avoid	Avoid	Avoid

CrCl, creatinine clearance; ESRD, end-stage renal disease; ODT, orally disintegrating tablet.

Ubrelvy. Prescribing information. Allergan USA, Inc; 2019; Nurtec ODT. Prescribing information. Biohaven Pharmaceuticals; 2022

Ubrogepant Clinical Trials

Primary end point: freedom from pain at 2 hours

	ACHIEVE I (N = 1672)		ACHIEVE II (N = 1686)	
	100 mg	50 mg	50 mg	25 mg
N (%)	95 (21.2%)	81 (19.2%)	101 (21.8%)	90 (20.7%)
OR (95% CI)	2.04 (1.41-2.95)	1.83 (1.25-2.66)	1.62 (1.14-2.29)	1.25 (1.09-2.22)
ARR	**9.4%**	**7.4%**	**7.5%**	**6.4%**

ARR, absolute risk reduction; OR, odds ratio.

Lipton RB, et al. *JAMA*. 2019;322(19):1887-1898; Dodick D, et al. *N Engl J Med*. 2019;381(23):2230-2241.

Ubrogepant Drug Interactions

Drug interactions	Management	
	Initial dose	Second dose
Strong CYP3A4 inhibitors: • Nefazodone, itraconazole, voriconazole, clarithromycin, posaconazole, etc	Avoid use	
Strong CYP3A4 inducers: • Phenytoin, phenobarbital, carbamazepine, rifampin, etc	Avoid use	
Moderate CYP3A4 inhibitors: • Diltiazem, ciprofloxacin, fluvoxamine, fluconazole, verapamil, etc	50 mg	Avoid within 24 hours
Weak/Moderate CYP3A4 inducers: • Rifabutin, dexamethasone, oxcarbazepine, modafinil, etc	100 mg	100 mg
P-gp or BCRP inhibitors: • P-gp inhibitors: amiodarone, quinidine, carvedilol, etc • BCRP inhibitors: eltrombopag, velpatasvir, etc	50 mg	50 mg
Weak CYP3A4 inhibitor: • Cimetidine, amiodarone, etc	50 mg	50 mg

Ubrelvy. Prescribing information. Allergan USA, Inc; 2019.

Rimegepant Clinical Trials

Primary end point: freedom from pain at 2 hours

	Lipton 2019 (N = 1072)	Croop 2019 (N = 1466)
	75 mg	75 mg
N (%)	105 (19.6%)	142 (21.2%)
P value	P <0.001	P <0.0001
ARR	**7.6%**	**10.3%**

Lipton RB, et al. *N Engl J Med*. 2019;381(2):142-149; Croop R, et al. *Lancet*. 2019;394(10200):737-745.

Rimegepant Drug Interactions

Drug interactions	Management
Strong CYP3A4 inhibitors: • Nefazodone, itraconazole, voriconazole, clarithromycin, posaconazole, etc	Avoid use
Strong/moderate CYP3A4 inducers: • Phenytoin, phenobarbital, carbamazepine, rifampin, etc • Rifabutin, dexamethasone, modafinil, etc	Avoid use
Moderate CYP3A4 inhibitors: • Diltiazem, ciprofloxacin, fluvoxamine, fluconazole, verapamil, etc	Avoid another dose within 48 hours
P-gp inhibitors: • Amiodarone, quinidine, carvedilol, etc	Avoid another dose within 48 hours

Nurtec ODT. Prescribing information. Biohaven Pharmaceuticals; 2022.

Zavegepant Clinical Trials

Primary end point: freedom from pain at 2 hours

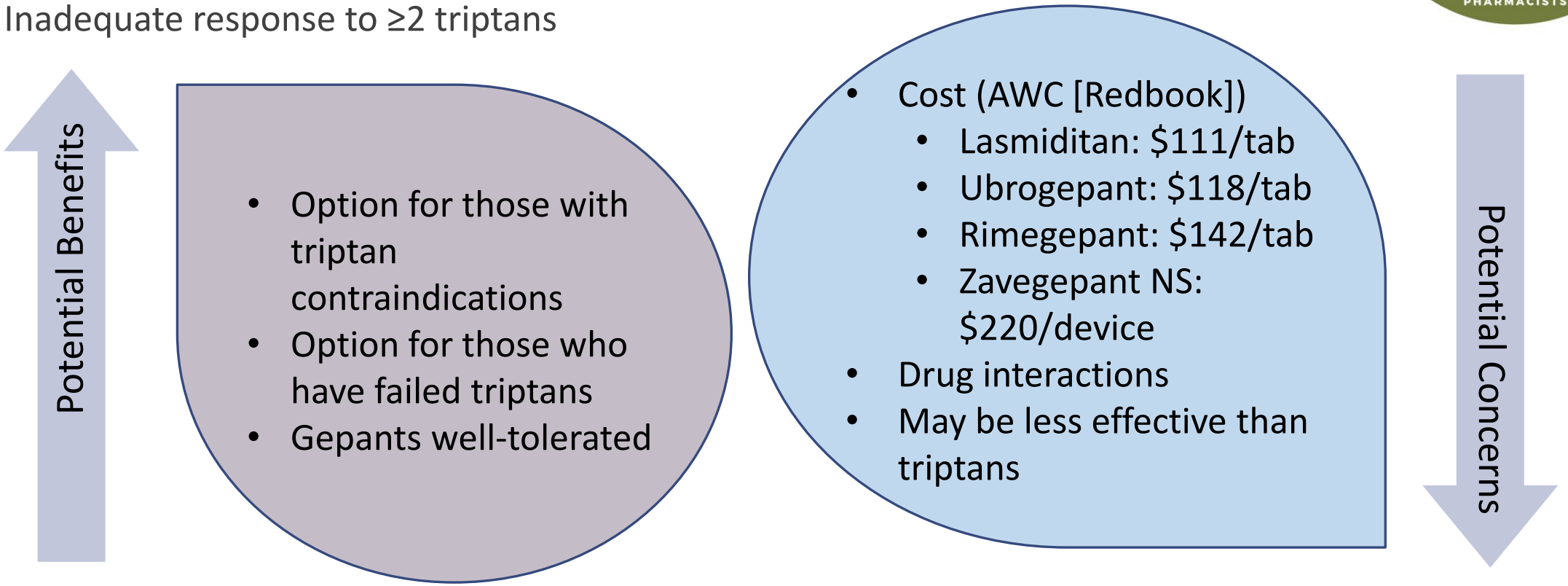
	Lipton 2023 (N = 1269)	Croop 2022 (N = 1581)		
	10 mg	5 mg	10 mg	20 mg
N (%)	147 (24%)	387 (19.5%)	391 (22.5%)	402 (23.1%)
P value	P <0.0001	0.1214	0.0113	0.0055
ARR	**8.8%**	**4.1%**	**7%**	**7.6%**

Lipton RB, et al. *Lancet Neurol*. 2023;22(3):209-217; Croop R, et al. Headache. 2022;62(9):1153-1163.

Appropriate Use

Consider the new oral acute medications (ditans and gepants):

- Contraindication, or intolerance to triptans **OR**
- Inadequate response to ≥2 triptans



Ailani J, et al. *Headache*. 2021;61(7):1021-1039; Red Book Online. Truven Health Analytics; 2022. Accessed September 2023; Yang CP, et al. *JAMA Netw Open*. 2021;4(10):e2128544.

Patient Case

LP is a 28-year-old woman diagnosed with migraine with aura and reports moderate to severe pain with attacks. In the past she has used sumatriptan but has felt tired and groggy after use. Naratriptan was also tried but she reported stomach upset. She is currently using rizatriptan, but it has stopped being effective (has used for 6 months).

- Migraine days: 3 to 5 per month
- Other medications: oral birth control, fluticasone nasal aspirator, cetirizine

Patient Case – Questions to Consider

- Does she have episodic or chronic migraines?
  - ***Episodic migraine (<15 days per month)***
- What would be recommended next for acute treatment?
  - ***Consider rimegepant or ubrogepant***
- How to counsel on repeat dosing?
  - ***Rimegepant: no repeat dosing (1 dose/24 hr)***
  - ***Ubrogepant: may repeat in 2 hours***

Prophylactic Migraine Treatment

Patient Case

KF is a 40-year-old woman with chronic migraine. She is currently treated with metoprolol for prophylaxis, but her doctor would like to switch medications due to low heart rate. She used divalproex in the past, but this was discontinued due to tremor and weight gain. She also tried topiramate but experienced paresthesia and “mental fog.”

- Migraine days: 16 to 20 per month
- Other medications: sumatriptan, pramipexole (restless leg), modafinil (excessive daytime sleepiness)

Patient Case

What would you recommend next for RF?

A. Atogepant 60 mg PO daily
B. Galcanezumab 300 mg SC monthly
C. Rimegepant 75 mg PO every other day
D. Fremanezumab 225 mg SC monthly

Additional Question to Consider:

How would you counsel on expected time to benefit?

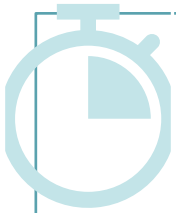
Indications for Migraine Prophylaxis

- Migraines significantly interfere with daily routine even after abortive treatment
- Frequent attacks
  - ≥6 migraine headache days (MHDs) with no disability
  - ≥4 MHDs with some disability
  - ≥3 MHDs with severe disability
- Contraindications to, failure of, or overuse of acute treatments
- Adverse effects with acute treatments
- Patient preference

Ailani J, et al. *Headache*. 2021;61(7):1021-1039.

Goals of Migraine Prophylaxis

50% reduction in the **frequency** of days with headache or migraine



Significant **decrease** in attack **duration** and attack **severity**

Improved **response** to **acute treatment**

Reduction in **migraine-related disability** and improvements in functioning

Improvements in **health-related quality of life** and reduction in psychological distress

Ailani J, et al. *Headache*. 2021;61(7):1021-1039.

CGRP-Targeting Monoclonal Antibodies (mAbs)

Subcutaneous CGRP-targeting mAbs:

- Erenumab
- Galcanezumab
- Fremanezumab

Injection site reactions

- Pain, redness, swelling, itching

Hypersensitivity reactions

- May occur within hours to weeks
- Rash, pruritis, urticaria, angioedema, anaphylaxis

When to evaluate effectiveness

- Three months of monthly injections
- Six months of quarterly injections

Aimovig. Prescribing information. Amgen Inc; 2021; Emgality. Prescribing information. Eli Lilly and Co.; 2022; Ajovy. Prescribing information. Teva Pharmaceuticals; 2021; Vyepti. Prescribing information. Lundbeck Seattle BioPharmaceuticals, Inc.; 2021; Ailani J, et al. *Headache*. 2021;61(7):1021-1039.

Erenumab (Aimovig)

Human monoclonal antibody (mAb) targeting the CGRP **receptor**

- Dosing: 70 mg or 140 mg SC monthly
- Half-life: 28 days

FDA approved in 2018

Adverse Effects:

- Injection reaction (5%-6% vs 3% placebo)
- Constipation (1%-3% vs 1% placebo)

Warnings:

- Constipation with serious complications
- Hypertension – development or worsening

Aimovig. Prescribing information. Amgen Inc; 2022.

Galcanezumab (Emgality)

Humanized mAb targeting the CGRP **ligand**

- Dosing: 240 mg SC for first dose, then 120 mg SC monthly
- Half-life: 27 days

FDA approved in 2018

Adverse Effects:

- Injection-site reactions (18% vs 13% placebo)

mAb, monoclonal antibody.

Emgality. Prescribing information. Eli Lilly and Co.; 2022

Fremanezumab (Ajovy)

Humanized mAb targeting the CGRP **ligand**

- Dosing: 225 mg SC monthly, or 675 mg SC every 3 months
- Half-life: 31 days

FDA approved in 2018

Adverse Effects:

- Injection-site reactions (43%-45% vs 38% placebo)

Ajovy. Prescribing information. Teva Pharmaceuticals; 2021.

Subcutaneous CGRP mAbs

Institute for Clinical and Economic Review meta-analysis: efficacy in episodic migraine

- Primary end point: change in mean monthly migraine days (MMDs) from baseline

	MMD dif from placebo
Erenumab 70 mg monthly	**-1.3** (-1.8 to -0.8)
Erenumab 140 mg monthly	**-1.9** (-2.7 to -1.2)
Fremanezumab 675 mg quarterly	**-1.2** (-2.2 to -0.3)
Fremanezumab 225 mg monthly	**-1.6** (-2.5 to -0.8)
Galcanezumab 120 mg monthly	**-1.8** (-2.4 to -1.2)

~ -1.5 days

Ellis AG, et al. Institute for Clinical and Economic Review. July 3, 2018;1-245.

Subcutaneous CGRP mAbs

Pivotal trials demonstrating efficacy in chronic migraine

- Primary end point: change in mean monthly migraine days from baseline

Clinical trial	Medication and dosage	MMD dif from Placebo	P value
Tepper 2017 (N = 667)	Erenumab 70 mg monthly	-2.5	<0.0001
	Erenumab 140 mg monthly	-2.5	<0.0001
HALO-CM (N = 1130)	Fremanezumab 675 mg quarterly	-1.8	<0.001
	Fremanezumab 225 mg monthly	-2.1	<0.001
REGAIN (N = 1113)	Galcanezumab 120 mg monthly	-2.1	<0.001

~ -2 days

Tepper S, et al. *Lancet Neurol*. 2017;16(6):425-434; Silberstein SD, et al. *N Engl J Med*. 2017;377(22):2113-2122; Detke HC, et al. *Neurology*. 2018;91(24):e2211-e2221.

Eptinezumab (Vyepti)

Humanized mAb targeting the CGRP **ligand**

- Dosing: 100 mg or 300 mg IV every 3 months
- Infuse over 30 minutes
- Half-life: 27 days

FDA approved in 2020

Adverse Effects:

- Hypersensitivity reactions
- Nasopharyngitis (6%-8% vs 6% placebo)

Vyepti. Prescribing information. Lundbeck Seattle BioPharmaceuticals, Inc.; 2022

Eptinezumab Clinical Trials

Primary end point: change in mean monthly migraine days from baseline

	PROMISE I – Episodic (N = 888)		PROMISE II – Chronic (N = 1072)	
	100 mg	300 mg	100 mg	300 mg
Change from baseline	-3.9	-4.3	-7.7	-8.2
Difference from placebo (95% CI)	**-0.7** (-1.3 to -0.1)	**-1.1** (-1.7 to -0.5)	**-2.0** (-2.9 to -1.2)	**-2.6** (-3.4 to -1.7)
P value	0.018	0.0001	<0.0001	<0.0001

Ashina M, et al. *Cephalalgia*. 2020;40(3):241-254; Lipton RB, et al. *Neurology*. 2020;94(13):e1365-e1377.

CGRP Receptor Antagonists: Gepants

	Rimegepant (Nurtec)	Atogepant (Qulipta)
FDA approval and indication	2021 (Episodic)	2021 (Episodic) 2023 (Chronic)
Dosing and Formulation	75 mg ODT every other day	Episodic: 10 mg, 30 mg, or 60 mg tablet daily Chronic: 60 mg tablet daily
Adverse effects	• Nausea (2.7%) • Abdominal pain/dyspepsia (2.4%)	• Nausea (5%-9%) • Constipation (6%) • Decreased appetite (1%-2%)
Dose Adjustments In Special Populations		
Severe Hepatic Impairment	Avoid	Avoid
Severe Renal Impairment (CrCl 15-29 mL/min)	75 mg QOD	Episodic: 10 mg Chronic: Avoid
End-Stage Renal Disease (CrCl < 15 mL/min)	Avoid	Episodic: 10 mg Chronic: Avoid

Nurtec ODT. Prescribing information. Biohaven Pharmaceuticals; 2022; Qulipta. Prescribing information. AbbVie; 2023.

Rimegepant Clinical Trial

Primary end point: change in mean monthly migraine days from baseline

Croop 2021 (N = 741)	
	Rimegepant 75 mg every other day
Change from baseline (95% CI)	-4.3
Difference from placebo (95% CI)	**-0.8** (-1.5 to -0.2)
P value	0.0099

Croop R, et al. *Lancet*. 2021;397(10268):51-60.

Rimegepant Drug Interactions

Drug interactions	Management
Moderate CYP3A4 inhibitors: • Diltiazem, ciprofloxacin, fluvoxamine, fluconazole, verapamil, etc	Avoid another dose within 48 hours
Strong CYP3A4 inhibitors: • Nefazodone, itraconazole, voriconazole, clarithromycin, posaconazole, etc	Avoid use
Strong/moderate CYP3A4 inducers: • Phenytoin, phenobarbital, carbamazepine, rifampin, etc • Rifabutin, dexamethasone, modafinil, etc	Avoid use
P-gp inhibitors: • Amiodarone, quinidine, carvedilol, etc	Avoid another dose within 48 hours

Nurtec ODT. Prescribing information. Biohaven Pharmaceuticals; 2022.

Atogepant Clinical Trials

- Primary end point: change in mean monthly migraine days from baseline

	ADVANCE (N = 910)			PROGRESS (N = 778)	
	10 mg	30 mg	60 mg	30 mg BID	60 mg
Change in MMD from baseline	-3.7	-3.9	-4.2	-7.5	-6.9
Difference from placebo (p-value)	**-1.2**	**-1.4**	**-1.7**	**-2.4**	**-1.8**
P value	<0.001	<0.001	<0.001	<0.002	0.0009

Schwedt TJ, et al. *Cephalalgia*. 2022;42(1):3-11; Goadsby PJ, et al. *Lancet Neurol*. 2020;19(9):727-737.

Atogepant Drug Interactions

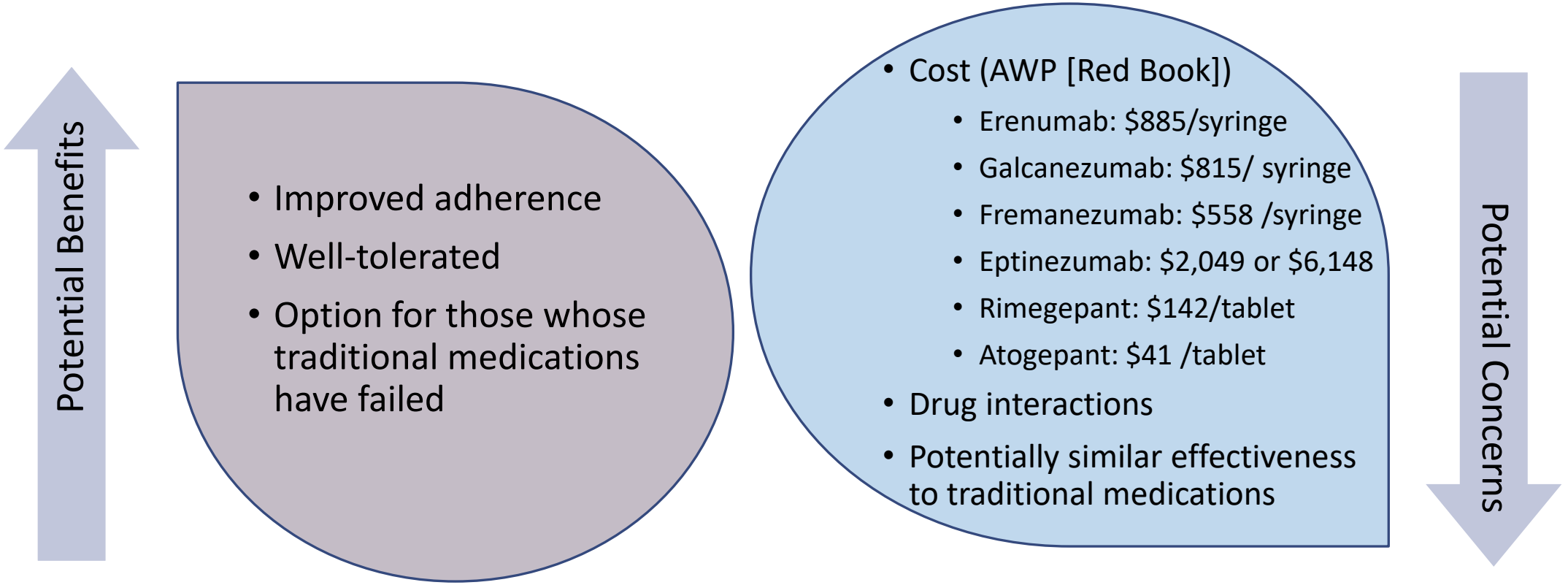
	Management	
	Episodic Migraine	Chronic Migraine
Strong CYP3A4 inhibitors: • Nefazodone, ketoconazole, itraconazole, voriconazole, clarithromycin, posaconazole, etc	10 mg daily	Avoid use
Strong, moderate, or weak CYP3A4 inducers: • Phenytoin, phenobarbital, carbamazepine, rifampin, etc • Rifabutin, dexamethasone, modafinil, etc	30 or 60 mg	Avoid use
OATP inhibitors • Cyclosporin, voclosporin	10 or 30 mg	30 mg

OATP, organic anion transporting polypeptide.

Qulipta. Prescribing information. AbbVie; 2023.

Appropriate Use: CGRP mAbs and Gepants

- Consider use in:
  - Patients intolerant or with an inadequate response **to at least 2 medications** with Level A or Level B recommendation for use



Red Book Online. Truven Health Analytics; 2022. Accessed September 2023; Overeem LH, et al. *CNS Drugs*. 2021;35(8):805-820.

Patient Case

KF is a 40-year-old woman with chronic migraine. She is currently treated with metoprolol for prophylaxis, but her doctor would like to switch medications due to low heart rate. She used divalproex in the past, but this was discontinued due to tremor and weight grain. She also tried topiramate but experienced paresthesia and “mental fog.”

- Migraine days: 16 to 20 per month
- Other medications: sumatriptan, pramipexole (restless leg), modafinil (excessive daytime sleepiness)

Patient Case

What would you recommend next for RF?

A. Atogepant 60 mg PO daily
B. Galcanezumab 300 mg SC monthly
C. Rimegepant 75 mg PO every other day
D. Fremanezumab 225 mg SC monthly

How would you counsel on expected time to benefit?

- May realize headache reduction after 4 weeks but it can take 3 months to see full benefits.
- Continue to take fremanezumab for at least 3 months to determine effectiveness.

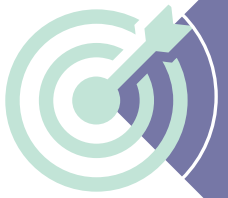
Pharmacist’s Role

The Role of the Pharmacist

Education

Time to effect for prophylactic medications

At least a 2-month trial



Treatment goal for prophylactics

50% reduction in headache frequency

Adverse effects

The Role of the Pharmacist

When to recommend prophylactic medications

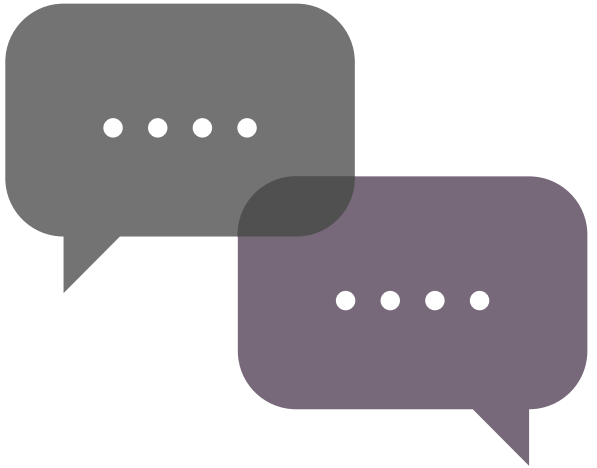
- Consider frequency, severity, and patient preference

Navigate drug interactions with oral CGRP antagonists (gepants)

- CYP3A4 drug interactions
- Avoid or dose reduce

Financial assistance

- Co-pay cards
- Income-based programs for Medicare Part D



Conclusion

Migraine is a disabling condition resulting in reduced quality of life and high health care costs

Ditans and gepants provide a safe and effective acute migraine treatment option for those with contraindications or have failed traditional agents

CGRP-targeting mAbs are monthly or every 3 month prophylactic options for patients with episodic and chronic migraine who have failed traditional agents

Gepants provide an alternative prophylactic migraine treatment option and come with drug interactions to consider

Post-Test Questions and Answers

A patient presents with a new prescription for **atogepant**. What is the best counseling point to provide regarding time to effect when initiating atogepant?

A. Patient's will not realize benefit for at least 3 months.

B. Atogepant may improve migraines within the first week, however it should be continued for 12 weeks to realize full benefit.

C. Maximum benefit will be achieved after 4-weeks

D. If benefit is not realized after two weeks, it should be discontinued.

Pre-Test Questions and Answers

A patient is newly prescribed **lasmiditan** for acute migraine treatment. Which of the following counseling points is correct?

A. You must wait to drive or operate heavy machinery for 8-hours after taking lasmiditan
B. Take lasmiditan with food to improve absorption and gastrointestinal tolerance
C. If the first dose of lasmiditan is not effective at achieving relief from migraine, you may repeat the dose at least 2 hours later.
D. Lasmiditan may cause increase in heart rate

Pre-Test Questions and Answers

A patient brings a new prescription for **ubrogepant 50 mg** as needed for acute migraine treatment. They are also prescribed diltiazem for atrial fibrillation. What is the best education point to provide to the patient?

A. Ubrogepant is contraindicated with diltiazem, and their doctor will be contacted to discuss an alternative.

B. Do not exceed a dose of 50 mg, as diltiazem is a moderate CYP3A4 inhibitor.

C. Ubrogepant is contraindicated in the setting of atrial fibrillation.

D. They may take a second dose at least 2 hours later if their headache does not resolve.

Post-Test Questions and Answers

Which of the following medications is a **migraine prophylactic** medication?

A. Lasmiditan
B. Ubrogepant
C. Atogepant
D. Zavegepant ★

Pre-Test Questions and Answers

Which of the below is a common side effect of **lasmiditan**?

A. Sedation
B. Constipation
C. Anxiety
D. Dry mouth

Pre-Test Questions and Answers

Which of the below acute migraine medications can be administered **intranasally**?

A. Lasmiditan
B. Ubrogepant
C. Rimegepant
D. Zavegepant

Questions?

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