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Migraineur

For those who strive to live well despite migraine

INTRO TO MIGRAINE:

Its biological origin and its treatment

MIGRAINE MYTH OF THE MONTH:

Migraine always vanishes following menopause

BOTOX® onabotulinumtoxinA injection

CHRONIC MIGRAINE

BOTOX® for Chronic Migraine?

BOTOX® prevents headaches in adults with Chronic Migraine: 15 or more headache days a month, each lasting 4 hours or more. BOTOX® is not approved for 14 or fewer headache days a month.

BOTOX® prevents, on average, 8 to 9 headache days and migraine/probable migraine days a month (vs 6 to 7 for placebo).

does it work?

what about cost?

Questions about BOTOX®? It's time to ask your doctor.

INDICATION

BOTOX® (onabotulinumtoxinA) is a prescription medicine that is injected into muscles and used to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older.

It is not known whether BOTOX is safe and effective to prevent headaches in patients with migraine who have 14 or fewer headache days each month (episodic migraine).

IMPORTANT SAFETY INFORMATION

BOTOX may cause serious side effects that can be life threatening. Get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX:

- **Problems swallowing, speaking, or breathing,** due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are preexisting before injection. Swallowing problems may last for several months.
- **Spread of toxin effects.** The effect of botulinum toxin may affect areas away from the injection site and cause serious symptoms, including loss of strength and all-over muscle weakness; double vision; blurred vision; drooping eyelids; hoarseness or change or loss of voice; trouble saying words clearly; loss of bladder control; trouble breathing; and trouble swallowing.

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX has been used at the recommended dose to treat chronic migraine.

BOTOX may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of receiving BOTOX. **If this happens, do not drive a car, operate machinery, or do other dangerous activities.**

Do not receive BOTOX if you are allergic to any of the ingredients in BOTOX (see Medication Guide for ingredients); had an allergic reaction to any other botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); have a skin infection at the planned injection site.

The dose of BOTOX is not the same as, or comparable to, another botulinum toxin product.

Serious and/or immediate allergic reactions have been reported, including itching; rash; red, itchy welts; wheezing; asthma symptoms; dizziness; or feeling faint. Get medical help right away if you experience symptoms; further injection of BOTOX should be discontinued.

in a survey,

97%

of current BOTOX® users say they plan to keep using it!*(n=71)

and

92%

of current BOTOX® users said they wish they'd talked to a doctor and started sooner!*(n=71)

BOTOX® prevents headaches in adults with Chronic Migraine before they even start.

It's about 10 minutes of treatment once every 3 months.†

It's time to talk to your doctor about BOTOX® and ask if samples are available.

By participating in the BOTOX® Savings Program, you acknowledge and agree to the full Terms & Conditions set out at BOTOXSavingsProgram.com/TermsandConditions. Patients enrolled in Medicare, Medicaid, TRICARE, or any other government-reimbursed healthcare program are not eligible. Other restrictions and maximum limits apply.

you may pay

$0

text SAVE to 27747‡

BOTOX® onabotulinumtoxinA injection

CHRONIC MIGRAINE

BOTOXChronicMigraine.com

*2020 BOTOX® Chronic Migraine Patient Market Research BOTOX® Current Users. †BOTOX® injections are given by your doctor. ‡See Privacy & Terms: http://bit.ly/2RvxiWr. Message & data rates may apply. Message frequency may vary. Text HELP for help or STOP to end.

IMPORTANT SAFETY INFORMATION (continued)

Tell your doctor about all your muscle or nerve conditions, such as ALS or Lou Gehrig's disease, myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects, including difficulty swallowing and difficulty breathing from typical doses of BOTOX.

Tell your doctor about all your medical conditions, including if you have or have had bleeding problems; have plans to have surgery; had surgery on your face; have weakness of forehead muscles, trouble raising your eyebrows, drooping eyelids, and any other abnormal facial change; are pregnant or plan to become pregnant (it is not known if BOTOX can harm your unborn baby); are breastfeeding or plan to (it is not known if BOTOX passes into breast milk).

Tell your doctor about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. Using BOTOX with certain other medicines may cause serious side effects. **Do not start any new medicines until you have told your doctor that you have received BOTOX in the past.**

Tell your doctor if you received any other botulinum toxin product in the last 4 months; have received injections of botulinum toxin such as Myobloc®, Dysport®, or Xeomin® in the past (tell your doctor exactly which product you received); have recently received an antibiotic by injection; take muscle relaxants; take an allergy or cold medicine; take a sleep medicine; take aspirin-like products or blood thinners.

Other side effects of BOTOX include dry mouth; discomfort or pain at the injection site; tiredness; headache; neck pain; eye problems such as double vision, blurred vision, decreased eyesight, drooping eyelids, swelling of your eyelids, and dry eyes; drooping eyebrows; and upper respiratory tract infection.

For more information, refer to the Medication Guide or talk with your doctor.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

Please see accompanying Summary of Information about BOTOX®.

If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

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Summary of Information about BOTOX® (onabotulinumtoxinA)

What is the most important information I should know about BOTOX®?

BOTOX® may cause serious side effects that can be life threatening. Call your doctor or get medical help right away if you have any of these problems any time (hours to weeks) after injection of BOTOX®:

- **Problems swallowing, speaking, or breathing,** due to weakening of associated muscles, can be severe and result in loss of life. You are at the highest risk if these problems are pre-existing before injection. Swallowing problems may last for several months
- **Spread of toxin effects.** The effect of botulinum toxin may affect areas away from the injection site and cause serious symptoms including: loss of strength and all-over muscle weakness, double vision, blurred vision and drooping eyelids, hoarseness or change or loss of voice, trouble saying words clearly, loss of bladder control, trouble breathing, and trouble swallowing

There has not been a confirmed serious case of spread of toxin effect away from the injection site when BOTOX® has been used at the recommended dose to treat Chronic Migraine.

BOTOX® may cause loss of strength or general muscle weakness, vision problems, or dizziness within hours to weeks of taking BOTOX®. **If this happens, do not drive a car, operate machinery, or do other dangerous activities.**

BOTOX® dosing units are not the same as, or comparable to, any other botulinum toxin product.

What is BOTOX®?

BOTOX® is prescription medicine a medical professional injects into muscles to prevent headaches in adults with chronic migraine who have 15 or more days each month with headache lasting 4 or more hours each day in people 18 years and older.

It is not known whether BOTOX® is safe or effective to prevent headaches in people with migraine who have 14 or fewer headache days each month (episodic migraine).

Who should not receive BOTOX®?

Do not receive BOTOX® if you are: allergic to any of the ingredients in BOTOX® such as botulinum toxin type A and human serum albumin; had an allergic reaction to another botulinum toxin product such as Myobloc® (rimabotulinumtoxinB), Dysport® (abobotulinumtoxinA), or Xeomin® (incobotulinumtoxinA); or have a skin infection at the planned injection site.

What should I tell my doctor before treatment?

Tell your doctor about all your muscle or nerve conditions, such as amyotrophic lateral sclerosis (Lou Gehrig's disease), myasthenia gravis, or Lambert-Eaton syndrome, as you may be at increased risk of serious side effects.

Tell your doctor if you have or have had breathing problems such as asthma or emphysema; swallowing problems; bleeding issues; plan to or have had surgery; have forehead muscle weakness such as trouble raising your eyebrows; drooping eyelids; or any changes to your face.

Tell your doctor if you are pregnant, plan to become pregnant, are breastfeeding or plan to breast feed. It is not known if BOTOX® (onabotulinumtoxinA) can harm your unborn baby or if BOTOX® passes into breast milk.

What Are Common Side Effects?

The most common side effects include neck pain; headache; migraine; slight or partial facial paralysis; drooping eyebrows; eyelid drooping; bronchitis; musculoskeletal stiffness; muscular weakness; pain in 1 or more muscles, ligaments, tendons, or bones; muscle spasms; injection site pain; and high blood pressure. Other side effects have been reported including allergic reactions e.g. itching, rash, red itchy welts, wheezing, asthma symptoms, or dizziness or feeling faint.

These are not all of the possible side effects. Call your doctor for medical advice if you experience any side effects after treatment with BOTOX®.

What Should I Tell My Doctor About Medicines and Vitamins I Take?

Using BOTOX® with certain other medicines may cause serious side effects. **Do not start any new medicines until you have told your doctor that you have received BOTOX® in the past.** Tell your doctor if you have received an injection with another botulinum toxin product in the last 4 months, such as Myobloc®, Dysport®, or Xeomin®. Be sure your doctor knows which product you received.

Tell your doctor about all prescription and over-the-counter medicines, vitamins and herbal supplements you take; recent antibiotic injections; anticholinergics; muscle relaxants; allergy or cold medicine; sleep medicine; aspirin-like products; and blood thinners. **Ask your doctor if you are not sure whether your medicine is listed above.**

To Learn More

If you would like more information, talk to your doctor and/or go to BotoxChronicMigraine.com for full Product Information.

You may report side effects to the FDA at www.fda.gov/medwatch or call 1-800-FDA-1088.

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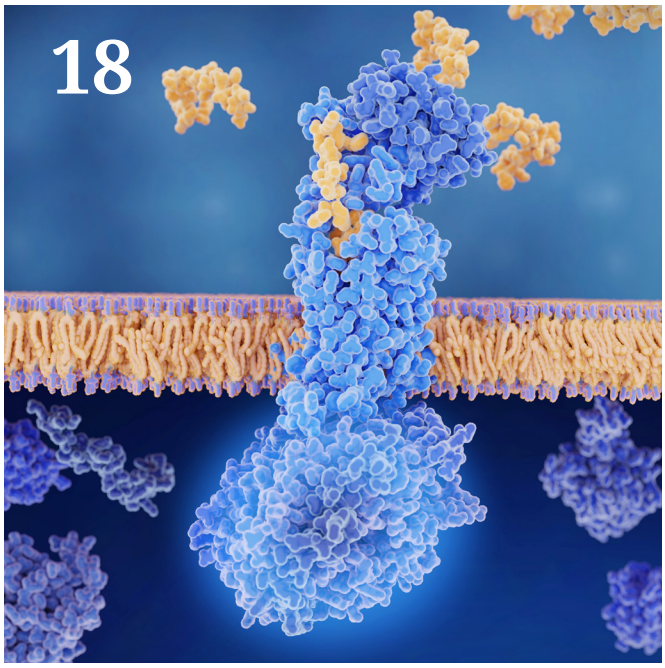
an AbbVie company



Migraineur

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Editor's Note

Dr. Rothrock is director of neurology advanced practice provider training and professor of neurology at Inova Health and the University of Virginia School of Medicine. He has served as editor of ***Migraineur*** *since the magazine's inception in 2016.*

After 6 years this magazine's most frequently downloaded article remains "Migraine 101" from the Fall 2017 issue. While "The Sexual Side of Migraine" from the Spring 2018 issue and "A Migraine Revolution" from the Winter 2020 issue have had many thousands of viewers, they run a distant second and third to "Migraine 101".

In that article we sought to provide the reader with a general introduction to migraine, offering a specific clinical definition of the disorder, a basic understanding of the biologic process which produces migraine and an overview of how migraine can be treated most effectively. In our clinics we routinely refer our new migraine patients to the article before recommending more specific topics relevant to their individual needs, and these patients typically have found its content to be helpful in better understanding the whys and hows of the treatment strategy prescribed.

Given the many advances in migraine therapeutics that have occurred since the publication of "Migraineur 101", we thought it would be appropriate to return to the topic in this, the first issue of the New Year. This time we have included a more detailed description of the biologic circuitry that drives migraine and an explanation of how our knowledge of that circuitry influences therapeutic management. Hopefully the article will prove to be as a popular with our readership – and presumably as helpful – as its 2017 predecessor.

John F. Rothrock

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Stay in the Know

As always, we welcome all interested parties to Migraineur magazine and invite you to become an **electronic subscriber**. It will cost you nothing, and by subscribing you will receive an email notification as soon as a new issue is out and posted on our open-access website as well as access to blogs and special announcements. To subscribe, simply go to our website (migraineurmagazine.com), find "Subscribe", type in your name, email address and zipcode and then hit "Submit".

QULIPTA™ (atogepant) tablets CAN HELP PREVENT MIGRAINE ATTACKS

Migraine attacks? You can't always avoid triggers, like changes in the weather. QULIPTA™ gets right to work to prevent migraine attacks and keeps them away over time.

In a 3-month study, QULIPTA significantly reduced monthly migraine days.

Ask your healthcare provider about QULIPTA.

WHAT IS QULIPTA?

QULIPTA (atogepant) is a prescription medicine used for the preventive treatment of episodic migraine in adults.

IMPORTANT SAFETY INFORMATION

Before taking QULIPTA, tell your healthcare provider about all your medical conditions, including if you:

- Have kidney problems or are on dialysis
- Have liver problems
- Are pregnant or plan to become pregnant. It is not known if QULIPTA will harm your unborn baby
- Are breastfeeding or plan to breastfeed. It is not known if QULIPTA passes into your breast milk. Talk to your healthcare provider about the best way to feed your baby while taking QULIPTA

Please see Brief Summary of the full Patient Information on the next page.

Tell your healthcare provider about all the medicines you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements. QULIPTA may affect the way other medicines work, and other medicines may affect how QULIPTA works. Your healthcare provider may need to change the dose of QULIPTA when taken with certain other medicines.

The most common side effects of QULIPTA are nausea, constipation, and fatigue. These are not all the possible side effects of QULIPTA.

You are encouraged to report negative side effects of prescription drugs to the FDA. Visit www.fda.gov/medwatch or call 1-800-FDA-1088.

If you are having difficulty paying for your medicine, AbbVie may be able to help. Visit AbbVie.com/myAbbVieAssist to learn more.

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QULIPTA™ (atogepant) tablets, for oral use

PROFESSIONAL BRIEF SUMMARY
CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION

INDICATIONS AND USAGE

QULIPTA is indicated for the preventive treatment of episodic migraine in adults.

CONTRAINDICATIONS

None.

DOSAGE AND ADMINISTRATION

Recommended Dosage

The recommended dosage of QULIPTA is 10 mg, 30 mg, or 60 mg taken orally once daily with or without food.

Dosage Modifications

Dosing modifications for concomitant use of specific drugs and for patients with renal impairment are provided in Table 1.

Table 1: Dosage Modifications for Drug Interactions and for Specific Populations

Dosage Modifications	Recommended Once Daily Dosage
Concomitant Drug *[see Drug Interactions]*	
Strong CYP3A4 Inhibitors	10 mg
Strong and Moderate CYP3A4 Inducers	30 mg or 60 mg
OATP Inhibitors	10 mg or 30 mg
Renal Impairment *[see Use in Specific Populations]*	
Severe Renal Impairment and End-Stage Renal Disease (CLcr <30 mL/min)	10 mg

ADVERSE REACTIONS

Clinical Trials Experience

Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared to rates in the clinical trials of another drug and may not reflect the rates observed in practice.

The safety of QULIPTA was evaluated in 1958 patients with migraine who received at least one dose of QULIPTA. Of these, 839 patients were exposed to QULIPTA once daily for at least 6 months, and 487 patients were exposed for 12 months.

In the 12-week, placebo-controlled clinical studies (Study 1 and Study 2), 314 patients received at least one dose of QULIPTA 10 mg once daily, 411 patients received at least one dose of QULIPTA 30 mg once daily, 417 patients received at least one dose of QULIPTA 60 mg once daily, and 408 patients received placebo. Approximately 88% were female, 80% were White, 17% were Black, and 12% were of Hispanic or Latino ethnicity. The mean age at study entry was 41 years (range 18 to 74 years).

The most common adverse reactions (incidence at least 4% and greater than placebo) are nausea, constipation, and fatigue.

Table 2 summarizes the adverse reactions that occurred during Study 1 and Study 2.

Table 2: Adverse Reactions Occurring with an Incidence of At Least 2% for QULIPTA and Greater than Placebo in Studies 1 and 2

	Placebo (N= 408) %	QULIPTA 10 mg (N=314) %	QULIPTA 30 mg (N=411) %	QULIPTA 60 mg (N=417) %
Nausea	3	5	6	9
Constipation	1	6	6	6
Fatigue/Somnolence	3	4	4	6
Decreased Appetite	<1	2	1	2

The adverse reactions that most commonly led to discontinuation in Studies 1 and 2 were constipation (0.5%), nausea (0.5%), and fatigue/somnolence (0.5%).

Liver Enzyme Elevations

In Study 1 and Study 2, the rate of transaminase elevations over 3 times the upper limit of normal was similar between patients treated with QULIPTA (1.0%) and those treated with placebo (1.8%). However, there were cases with transaminase elevations over 3 times the upper limit of normal that were temporally associated with QULIPTA treatment; these were asymptomatic, and resolved within 8 weeks of discontinuation. There were no cases of severe liver injury or jaundice.

Decreases in Body Weight

In Studies 1 and 2, the proportion of patients with a weight decrease of at least 7% at any point was 2.8% for placebo, 3.8% for QULIPTA 10 mg, 3.2% for QULIPTA 30 mg, and 4.9% for QULIPTA 60 mg.

DRUG INTERACTIONS

CYP3A4 Inhibitors

Coadministration of QULIPTA with itraconazole, a strong CYP3A4 inhibitor, resulted in a significant increase in exposure of atogepant in healthy subjects. The recommended dosage of QULIPTA with concomitant use of strong CYP3A4 inhibitors (e.g., ketoconazole, itraconazole, clarithromycin) is 10 mg once daily. No dosage adjustment of QULIPTA is needed with concomitant use of moderate or weak CYP3A4 inhibitors.

CYP3A4 Inducers

Coadministration of QULIPTA with steady state rifampin, a strong CYP3A4 inducer, resulted in a significant decrease in exposure of atogepant in healthy subjects. Concomitant administration of QULIPTA with moderate inducers of CYP3A4 can also result in decreased exposure of atogepant. The recommended dosage of QULIPTA with concomitant use of strong or moderate CYP3A4 inducers (e.g., rifampin, carbamazepine, phenytoin, St. John's wort, efavirenz, etravirine) is 30 mg or 60 mg once daily. No dosage adjustment of QULIPTA is needed with concomitant use of weak CYP3A4 inducers.

OATP Inhibitors

Coadministration of QULIPTA with single dose rifampin, an OATP inhibitor, resulted in a significant increase in exposure of atogepant in healthy subjects. The recommended dosage of QULIPTA with concomitant use of OATP inhibitors (e.g., cyclosporine) is 10 mg or 30 mg once daily.

USE IN SPECIFIC POPULATIONS

Pregnancy

Risk Summary

There are no adequate data on the developmental risk associated with the use of QULIPTA in pregnant women. In animal studies, oral administration of atogepant during the period of organogenesis (rats and rabbits) or throughout pregnancy and lactation (rats) resulted in adverse developmental effects (decreased fetal and offspring body weight in rats; increased incidence of fetal structural variations in rabbits) at exposures greater than those used clinically *[see* Data*]*.

In the U.S. general population, the estimated background risk of major birth defects and miscarriages in clinically recognized pregnancies is 2-4% and 15-20%, respectively. The estimated rate of major birth defects (2.2%-2.9%) and miscarriage (17%) among deliveries to women with migraine are similar to rates reported in women without migraine.

Clinical Considerations

Disease-Associated Maternal and/or Embryo/Fetal Risk

Published data have suggested that women with migraine may be at increased risk of preeclampsia and gestational hypertension during pregnancy.

Data

Animal Data

Oral administration of atogepant (0, 5, 15, 125, or 750 mg/kg/day) to pregnant rats during the period of organogenesis resulted in decreases in fetal body weight and in skeletal ossification at the two highest doses tested (125 and 750 mg/kg), which were not associated with maternal toxicity. At the no-effect dose (15 mg/kg/day) for adverse effects on embryofetal development, plasma exposure (AUC) was approximately 4 times that in humans at the maximum recommended human dose (MRHD) of 60 mg/day.

Oral administration of atogepant (0, 30, 90, or 130 mg/kg/day) to pregnant rabbits during the period of organogenesis resulted in an increase in fetal visceral and skeletal variations at the highest dose tested (130 mg/kg/day), which was associated with minimal maternal toxicity. At the no-effect dose (90 mg/kg/day) for adverse effects on embryofetal development, plasma exposure (AUC) was approximately 3 times that in humans at the MRHD.

Oral administration of atogepant (0, 15, 45, or 125 mg/kg/day) to rats throughout gestation and lactation resulted in decreased pup body weight at the highest dose tested (125 mg/kg/day), which persisted into adulthood. At the no-effect dose (45 mg/kg/day) for adverse effects on pre- and postnatal development, plasma exposure (AUC) was approximately 5 times that in humans at the MRHD.

Lactation

There are no data on the presence of atogepant in human milk, the effects of atogepant on the breastfed infant, or the effects of atogepant on milk production. In lactating rats, oral dosing with atogepant resulted in levels of atogepant in milk approximately 2-fold higher than that in maternal plasma. The developmental and health benefits of breastfeeding should be considered along with the mother's clinical need for QULIPTA and any potential adverse effects on the breastfed infant from QULIPTA or from the underlying maternal condition.

Pediatric Use

Safety and effectiveness in pediatric patients have not been established.

Geriatric Use

Population pharmacokinetic modeling suggests no clinically significant pharmacokinetic differences between elderly and younger subjects. Clinical studies of QULIPTA did not include sufficient numbers of patients aged 65 years and over to determine whether they respond differently from younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or other drug therapy.

Renal Impairment

The renal route of elimination plays a minor role in the clearance of atogepant. In patients with severe renal impairment (CLcr 15-29 mL/min), and in patients with end-stage renal disease (ESRD) (CLcr <15 mL/min), the recommended dosage of QULIPTA is 10 mg once daily. For patients with ESRD undergoing intermittent dialysis, QULIPTA should preferably be taken after dialysis. No dose adjustment is recommended for patients with mild or moderate renal impairment.

Hepatic Impairment

No dose adjustment of QULIPTA is recommended for patients with mild or moderate hepatic impairment. Avoid use of QULIPTA in patients with severe hepatic impairment *[see Adverse Reactions]*.

NONCLINICAL TOXICOLOGY

Carcinogenesis, Mutagenesis, Impairment of Fertility

Carcinogenicity

Atogepant was administered orally to mice (0, 5, 20, or 75 mg/kg/day in males; 0, 5, 30, 160 mg/kg/day in females) and rats (0, 10, 20, or 100 mg/kg in males; 0, 25, 65, or 200 mg/kg in females) for up to 2 years. There was no evidence of drug-related tumors in either species. Plasma exposures at the highest doses tested in mice and rats were approximately 8 and 20-35 times, respectively, that in humans at the maximum recommended human dose (MRHD) of 60 mg/day.

Mutagenicity

Atogepant was negative in in vitro (Ames, chromosomal aberration test in Chinese Hamster Ovary cells) and in vivo (rat bone marrow micronucleus) assays.

Impairment of Fertility

Oral administration of atogepant (0, 5, 20, or 125 mg/kg/day) to male and female rats prior to and during mating and continuing in females to Gestation Day 7 resulted in no adverse effects on fertility or reproductive performance. Plasma exposures (AUC) at the highest dose tested are approximately 15 times that in humans at the MRHD.

PATIENT COUNSELING INFORMATION

Advise the patient to read the FDA-approved patient labeling (Patient Information).

Drug Interactions

Inform patients that QULIPTA may interact with certain other drugs, and that dosage modifications of QULIPTA may be recommended when used with some other drugs. Advise patients to report to their healthcare provider the use of any other prescription medications, over-the-counter medications, herbal products, or grapefruit juice *[see Drug Interactions]*.

Manufactured by:
Forest Laboratories Ireland Ltd.
Dublin, Ireland

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Meet the Migraineur team

Since 2020, Los Angeles-based Mindy Yuan has served as production editor for ***Migraineur***. As such, in preparation for every issue the advertisers and her editor electronically dump into her lap a disorganized and unpolished mountain of content that she then magically weaves into a coherent and visually appealing product. Put simply, without her unwavering patience, amiability, competence and creativity this magazine could not exist. Ms. Yuan is experienced in graphic design, illustration and motion graphics.

When not busy designing and producing, Mindy relaxes by taking pictures of her extraordinarily fortunate cat, tending to her house-plants or listening to live music.

Diane Andress-Rothrock has served as ***Migraineur***'s managing editor since the magazine's inception in 2016. Her extensive background in headache medicine and medical publishing includes 5 years spent as managing editor for ***Headache***, the official journal of the American Headache Society, and 12 years in that position for the ***Journal of Ophthalmic Plastic and Reconstructive Surgery***. She also has worked extensively as a headache medicine educator for patients and medical providers and as a clinical research associate for projects involving the neurosciences.

In her "other life" Ms. Andress-Rothrock enjoys choreography and teaching both dance and barre.

Dr. John Rothrock has served as editor-in-chief of ***Migraineur*** since 2016. After receiving his MD from the University of Virginia and completing his neurology residency training at the University of Arizona, he moved to San Diego to develop and direct the University of California San Diego (UCSD) Stroke Center and, subsequently, the UCSD Headache Center. He currently serves as a professor of neurology and director of APP neurology training for Inova Health/University of Virginia School of Medicine.

His primary research interests have involved the areas of stroke, headache (chiefly migraine) and new paradigms for healthcare delivery. He has assisted in the development of various new therapies for stroke prevention, acute stroke treatment, migraine prevention and acute migraine treatment.

From 2001-2013 Dr. Rothrock served as editor-in-chief of ***Headache***.
He is president of the World Headache Society.
Dr. Rothrock lives in Bethesda, Maryland with his wife and family. He enjoys creative writing and virtually any sport involving water.