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HEALTH SMARTS

What to expect: Macular degeneration and aging

TREATMENT SMARTS

Learn about available options



WET AGE-RELATED MACULAR DEGENERATION (WET AMD)

KEEP LIVING LIFE THROUGH YOUR EYES

TAKE CONTROL OF YOUR SIGHT WITH EYLEA

If Wet AMD has impacted your eyes—and how you see life—fight back with EYLEA.



EYLEA can help improve vision—which may help you **read letters** and **see** details more clearly



EYLEA helped maintain vision improvements for up to 4 years

with continued treatments in a clinical study

INDICATIONS

EYLEA® (aflibercept) Injection 2 mg (0.05 mL) is a prescription medicine approved for the treatment of patients with Wet Age-related Macular Degeneration (AMD), Macular Edema following Retinal Vein Occlusion (RVO), Diabetic Macular Edema (DME), and Diabetic Retinopathy (DR).

IMPORTANT SAFETY INFORMATION

EYLEA® (aflibercept) Injection is a prescription medicine administered by injection into the eye. You should not use EYLEA if you have an infection in or around the eye, eye pain or redness, or known allergies to any of the ingredients in EYLEA, including aflibercept.

Injections into the eye with EYLEA can result in an infection in the eye and retinal detachment (separation of retina from back of the eye) can occur. Inflammation in the eye has been reported with the use of EYLEA.

In some patients, injections with EYLEA may cause a temporary increase in eye pressure within 1 hour of the injection. Sustained increases in eye pressure have been reported with repeated injections, and your doctor may monitor this after each injection.

There is a potential but rare risk of serious and sometimes fatal side effects, related to blood clots, leading to heart attack or stroke in patients receiving EYLEA.



FDA-APPROVED treatment in its class for patients with Wet AMD*

The most common side effects reported in patients receiving EYLEA were increased redness in the eye, eye pain, cataract, vitreous (gel-like substance) detachment, vitreous floaters, moving spots in the field of vision, and increased pressure in the eye.

You may experience temporary visual changes after an EYLEA injection and associated eye exams; do not drive or use machinery until your vision recovers sufficiently.

Contact your doctor right away if you think you might be experiencing any side effects, including eye pain or redness, light sensitivity, or blurring of vision, after an injection.

For additional safety information, please talk to your doctor and see the full Prescribing Information for EYLÉA.

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 the Consumer Brief Summary on the adjacent page.

*IQVIA Medical claims: Number of injections administered Q1 – Q4 2020; Data on File.

FYI .22.04.0021



(Pronounced: eve-lee-ah)

Consumer Brief Summary

This summary contains risk and safety information for patients about EYLEA. It does not include all the information about EYLEA and does not take the place of talking to your eye doctor about your medical condition or treatment.

What is EYLEA?

EYLEA is a prescription medicine that works by blocking vascular endothelial growth factor (VEGF). VEGF can cause fluid to leak into the macula (the light-sensitive tissue at the back of the eye responsible for sharp central vision). Blocking VEGF helps reduce fluid from leaking into the

What is EYLEA used for?

EYLEA is indicated for the treatment of patients with:

- Neovascular (Wet) Age-Related Macular Degeneration (AMD)
- Macular Edema Following Retinal Vein Occlusion (RVO)
- Diabetic Macular Edema (DME)
- Diabetic Retinopathy (DR)

How is EYLEA given?

EYLEA is an injection administered by your eye doctor into the eye. Depending on your condition, EYLEA injections are given on different schedules. Consult with your eye doctor to confirm which EYLEA schedule is appropriate for you.

Who should not use EYLEA?

Do not use EYLEA if you have an infection in or around the eye, eye pain or redness, inflammation in the eye, or are allergic to aflibercept and/or any other ingredients in EYLEA.

What is the most important information I should know about EYLEA?

- EYLEA must only be administered by a qualified eye doctor. Injection into the eye with EYLEA can result in an infection in the eye and retinal detachment (separation of retina from back of the eye) can occur. Inflammation in the eye has been reported with the use of EYLEA. If your eye becomes red, sensitive to light, painful, or develops a change in vision, seek immediate care from an eye doctor
- In some patients, injections with EYLEA may cause a temporary increase in eye pressure within 1 hour of the injection. Sustained increases in eye pressure have been reported with repeated injections, and your eye doctor may monitor this after each injection
- There is a potential but rare risk of serious and sometimes fatal side effects related to blood clots, leading to heart attack or stroke in patients receiving EYLEA
- Serious side effects related to the injection procedure with EYLEA are rare but can occur including infection inside the eye and retinal detachment
- You may experience temporary visual changes after an EYLEA injection and associated eye exams; do not drive or use machinery until your vision recovers sufficiently
- · Because EYLEA is composed of large molecules, your body may react to it; therefore, there is a potential for an immune response (allergylike) in patients treated with EYLEA

What are possible side effects of EYLEA?

EYLEA can cause serious side effects, including

 See important safety information listed under "What is the most important information I should know about EYLEA?"

The most common side effects include

- Increased redness in the eye
- Eye pain
- Cataract
- · Vitreous (gel-like substance) detachment
- Vitreous floaters
- Moving spots in the field of vision
- Increased pressure in the eye

There are other possible side effects of EYLEA. For more information, ask your eye doctor.

It is important that you contact your doctor right away if you think you might be experiencing any side effects, including eye pain or redness, light sensitivity, or blurring of vision, after an

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

What should I tell my eye doctor before receiving EYLEA?

- Tell your eye doctor if you have any medical conditions
- Tell your eye doctor if you are pregnant or are planning to become pregnant. It is not known if EYLEA may harm your unborn baby
- Tell your eye doctor if you are breastfeeding. It is not known if EYLEA may harm your baby. You and your eye doctor should decide whether you should be treated with EYLEA or breastfeed, but you should not do both

How is EYLEA supplied?

EYLEA is supplied in a clear, colorless to pale yellow solution. It is provided in a pre-filled glass syringe or glass vial containing the amount of product required for a single injection into the eye, which is 0.05 mL (or 2 mg of the medicine product).

Where can I learn more about EYLEA?

For a more comprehensive review of EYLEA safety and risk information, talk to your health care provider and see the full Prescribing Information at EYLEA.com.

REGENERON

Manufactured by:

Regeneron Pharmaceuticals, Inc. 777 Old Saw Mill River Road Tarrytown, NY 10591

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based on the August 2019 EYLEA® (aflibercept) injection full Prescribing information.

LISTEN TO THIS!

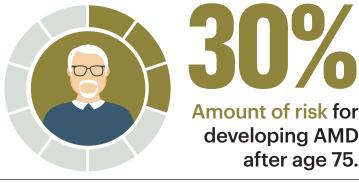
STATS & FACTS

By Sonya Collins

Reviewed by Brunilda Nazario, MD. WebMD Chief Physician Editor, Medical Affairs

Estimated number of people in the U.S. who have AMD—either wet or dry.





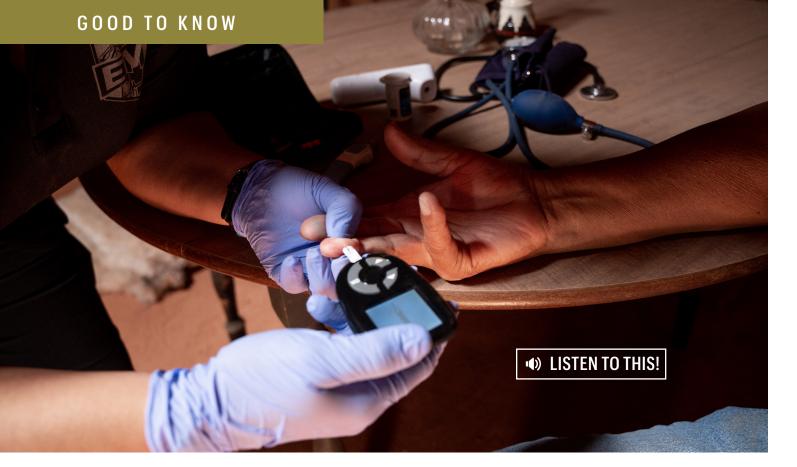


Expected increase in U.S. cases of AMD—either wet or dry—by 2050.

Amount of AMD-related legal blindness cases caused by the "wet" form.

Amount of risk for developing **AMD** between ages 50 and 59.

SOURCE: BrightFocus Foundation



DIABETIC **MACULAR EDEMA** AND WET AMD

UNDERSTANDING THE DIFFERENCE BETWEEN THE TWO CONDITIONS

By Kendall K. Morgan Reviewed by Whitney Seltman, OD, WebMD Medical Reviewer

When you have wet age-related macular degeneration (AMD), you'll have a lot to learn about your condition and

what it means for you. You may have heard or seen something about another condition, called diabetic macular edema (DME)—maybe in your doctor's office or from someone vou know. Both have that word "macular" in them. That's because they affect the macula in the center of your retina. So what's the difference?

"DME is a disease that can occur in patients [with diabetes] of all ages," says Melissa Neuwelt, MD, an ophthalmologist at the University of California San Francisco

Health. "It can cause subtle changes in vision that gradually progress over time. In contrast, wet AMD is almost exclusively in patients who are seniors, in their 60s or older."

COMPARE AND CONTRAST

While the precise reason people get AMD isn't known, in DME, high blood sugar is the obvious cause. Both conditions involve the accumulation of fluid in your macula from damaged and leaky blood vessels in your eves. And both can lead to loss of central vision. They can appear similar enough at first that an eye doctor may need to look closely to tell them apart, especially in an older person with diabetes, Neuwelt says.

Medicines for wet AMD block a signal that makes blood vessels in your eye

grow too much. And it turns out, despite their differences, these same medicines also are a mainstay for treating DME.

"In DME, we take a two-pronged approach," Neuwelt says. "We'll manage the diabetes and high blood pressure systemically, along with targeted treatment to the eye."

There are other important distinctions. For one, once the diabetes and eye symptoms are under control in DME, active treatment for DME usually stops. For wet AMD, though, you're in it for the long haul.

"We expect with current treatment that you'll need indefinite treatment for the rest of your life," she says. "In certain rare cases. wet AMD can become inactive, but that's the exception."

VISION CHECK

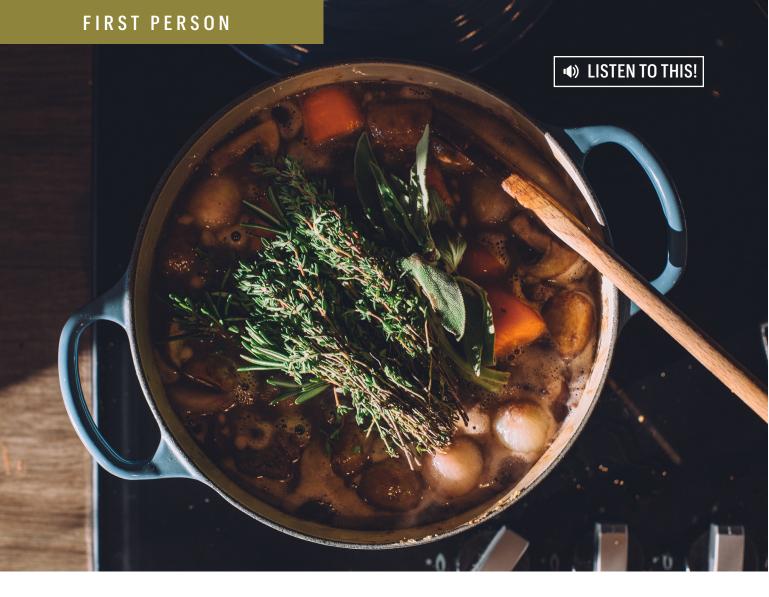
And your sight?

A concern patients always have is whether this condition is going to make them go blind, Neuwelt says. Both conditions affect central vision only. That's because the damage happens in your macula, found at the center of your retina. But your peripheral vision will be spared. Treatment also helps.

"I always emphasize to patients that they are fortunate to have highly effective treatment [today]," she says. "With treatment, the majority can preserve vision or treatment can allow vision to improve."

In either case, new, more durable, and longer-lasting medicines also mean you'll need treatment less often now than in the past.

"It's allowing us to give treatment less frequently and still control the disease," Neuwelt says.



LIVING WITH

MY 25-YEAR EXPERIENCE WITH WET AMD

By Jim Gilliam Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

In the late '90s, I was at my annual checkup with my optometrist when I learned some of the cells in my macula were beginning to dete-

riorate. It was unexpected news because I wasn't having any vision problems. Other than needing glasses to read, nothing seemed off with my sight. But I knew my genetic risk was high: Every member of my family on my father's side who lived past 60 had

developed macular degeneration.

I started taking eye vitamins. Things continued to appear normal to me, but the doctors could see that the cells in my macula were becoming more and more involved. I was diagnosed with diabetes around

that time, and so they also stressed the importance of keeping my blood sugar levels low as another way to protect my eyes from getting worse.

It wasn't until a few vears later that I suddenly realized while driving one day that I had no depth perception. I had finally lost the central vision in my right eye. I began getting injections in that eye—a stopgap measure to prevent all the cells from dying and to keep fluid from developing behind the retina.

Despite how they sound, eye injections aren't that bad. They deaden the nerves in your eye with lidocaine, so you don't feel it. The worst part is really just going in your eye. Dealing with symptoms can be harder. Once my second eye lost central vision, I couldn't read, I

couldn't watch TV very well, and worst of all, I couldn't see faces, which meant I couldn't recognize people I knew.

When I was 82, I was diagnosed as legally blind. The macular cells had finally given up. I figured since I couldn't see anymore, I'd quit taking vitamins. But once I did, my peripheral vision started going away. Colors started fading. So I started taking them again. And now I can see colors. They're not vivid, but I can see what's red and green and blue.

Even though I lived for years with the disease, I'm still trying to come to grips with my loss of central vision. the thought of a needle But I'm not completely blind. I have peripheral vision. I can cook. wash clothes, clean the house, and help my wife. This is a very slow progressive dis-



JIM'S TIPS

Take eye vitamins. As soon as you're diagnosed, start treatment, even if you don't have symptoms.

See a retina specialist. It's important to go every 6 months.

Find resources. Organizations for vision impairment can help you with visual aids and connect you to others going through the same thing.

ease, and treatments have helped reduce the fluid buildup behind the retina so I can do these things.

ALEX WALKER/VIA GETTY IMAGES



MACULAR DEGENERATION AND AGING

WHAT TO EXPECT

By Rachel Reiff Ellis Reviewed by Brunilda Nazario, MD, WebMD Chief Physician Editor, Medical Affairs

Like the name says, age plays a key role in bringing on age-related macular degeneration (AMD). It happens when aging causes damage to your macula—the part of

the eye that controls sharp, straight-ahead vision.

The macula is part of your retina, and has some of the most metabolically active cells in your body. Over time, wear and tear can lead to the symptoms of the disease.

"As the retina is churning out all this energy and turning light into a signal that our brain can use, unfortunately there's going to be breakdown of those components," says Peter Krall, MD, ophthalmologist at Scripps Clinic in Oceanside, CA.

WHY IT HAPPENS

Macular degeneration is the most common cause of vision loss of people ages 50 and older. Besides age, other factors can raise your risk of it, such as:

- Family history
- Exposure to ultraviolet light
- High-fat diet
- **Smoking**
- · High blood pressure

"In the aging eye, it's the combination of increased exposure to stresses and compromised defense systems that is thought to lead to the development of AMD," says Akrit Sodhi, MD, PhD, associate professor of ophthalmology at the Johns Hopkins Wilmer Eye Institute in Columbia, MD.

WHAT YOU CAN DO **ABOUT IT**

Over time you may have trouble with daily activities such as driving and reading, and may need certain tools to help you see. But Krall says catching it early is the key to holding off symptoms.

"There are really effective medications that can reduce the fluid buildup in the

Peter Krall, MD, offers tips for life with wet AMD.

Get to know your doctor. You'll be at the doctor's office quite a bit. But if you stick with it, it really can either improve your vision or keep it from getting worse.

Use vision aids. Magnification is your friend.

Know the scope. Having AMD doesn't mean you'll go blind.

If you're in the early stages of AMD, your doctor won't treat it. Instead, you'll go in regularly for eye exams to keep tabs on your condition.

The main treatment for wet AMD is a medication called anti-VEGF. You get it through injection into your (numbed) eye. VEGF stands for vascular endothelial growth factor, which helps new blood vessels

grow. These new blood vessels cause most of the symptoms of wet AMD. By blocking their growth, you halt the progression of the disease.

Sometimes doctors use a laser treatment called photodynamic therapy (PDT) along with anti-VEGF injections.

Sodhi says these therapies seem to work well for wet AMD and continue to improve.

"With early treatment, most patients with wet AMD maintain good vision," he

says. "Researchers around the world are currently developing new treatments for advanced AMD with the goal of improving upon current treatments for wet AMD and preserving or improving vision in patients with advanced dry AMD."

WATCH OUT

Pay attention to these symptoms specific to macular degeneration:

- + Blurry, blank, or distorted spots (instead of general blur)
- + Normal peripheral vision, but problems with front focus
- + Missing details of faces or letters in words
- + Straight lines appearing wavy



WHAT IS BEST FOR YOU?

LEARN ABOUT YOUR TREATMENT OPTIONS

By Rachel Reiff Ellis Reviewed by Whitney Seltman, OD, WebMD Medical Reviewer

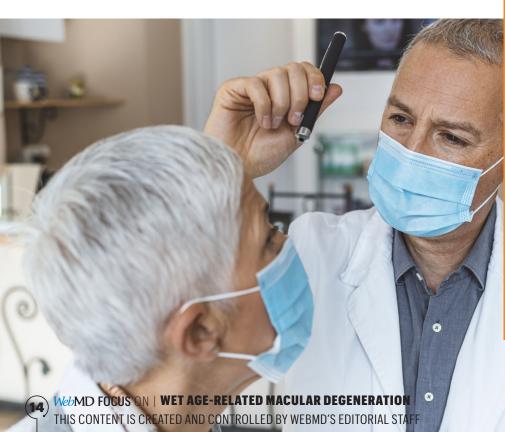
Wet age-related macular degeneration doesn't have a cure, but treatments can help preserve the vision you have and slow further vision loss. If you start treatment early, you may even restore some of your eyesight.

INJECTED MEDICATIONS

Wet AMD causes your retina to release too much of a protein called VEGF (vascular endothelial growth factor). This makes abnormal blood vessels grow in your eye. These vessels leak and damage your retina. Anti-VEGF drugs block VEGF.

During a clinic visit, a doctor numbs your eye and cleans it with iodine before injecting the drug into the clear gel between your eye's lens and retina (the vitreous space). Injections start out once a month and then space out to every 4 to 12 weeks.

"These injections take only a few seconds to perform," says Christopher Toomey, MD, PhD, assistant professor of clinical oph-





thalmology at the University of California San Diego and an ophthalmologist in the retina division at Shiley Eye Institute at U.C. San Diego Health.

Toomey says the medications are very safe, although there are some rare risks such as infection and retinal detachments.

"It's important to monitor yourself for severe eye pain or new 'floaters' or 'curtain' over your vision after your injection," he says.

NUTRITIONAL **SUPPLEMENTS**

If you have intermediate AMD, a dietary supplement called AREDS2 could lower

your chances of progressing to late-stage AMD. These vitamins have vitamin C, vitamin E, lutein, zeaxanthin, zinc, and copper, which are antioxidants and retinal carotenoids that boost eye health. You take them in tablet form by mouth twice a day. They work best if you have AMD in one eye and are working to prevent it in the other.

"If you have wet AMD in one eye and intermediate AMD in your 'good' eye, you should take the AREDS supplement to slow down the progression in your 'good' eye," Toomey says.

LASER (PHOTODYNAMIC) THERAPY

Your doctor may add

this option to your anti-VEGF treatment if injections alone aren't working or you have a specific subtype of wet AMD.

A doctor injects a light-sensitive compound into your arm and then uses a lowenergy laser on your eye. "The laser activates the compound and treats the abnormal blood vessel growth," Toomey says.

LOW-VISION THERAPY

Vision rehabilitation specialists can help you find ways to adapt to your vision changes. They use a variety of tools including magnifiers, electronics, and adaptive equipment to strengthen the vision you do have outside of your fading central vision.

"Low-vision therapy helps patients maximize their available vision to accomplish their activities of daily living," Toomey says.