

# Start your journey towards better vision today

Canada's 1st Clinically Proven & Approved Treatment For Dry Age-Related Macular Degeneration.

macumira.com

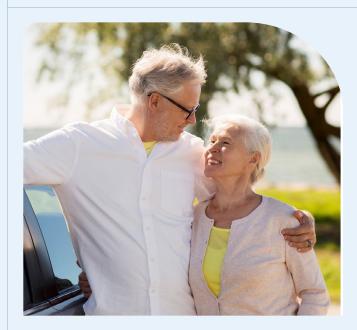




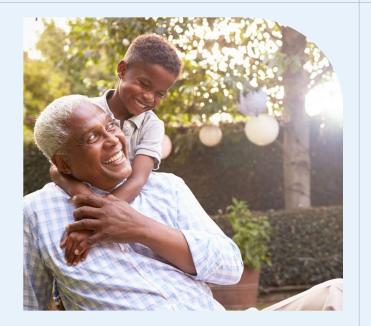
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01–02 \*In progress

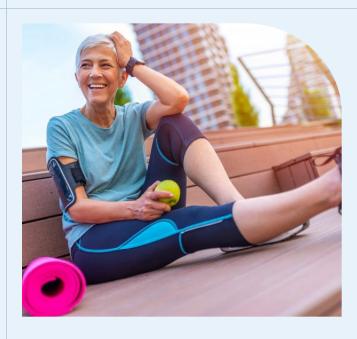
# Discover the benefits of MacuMira



**O1.** With MacuMira you can restore your vision and renew your life



**02.** Our treatment is safe, pain-free, and administered by your local eye-care professionals

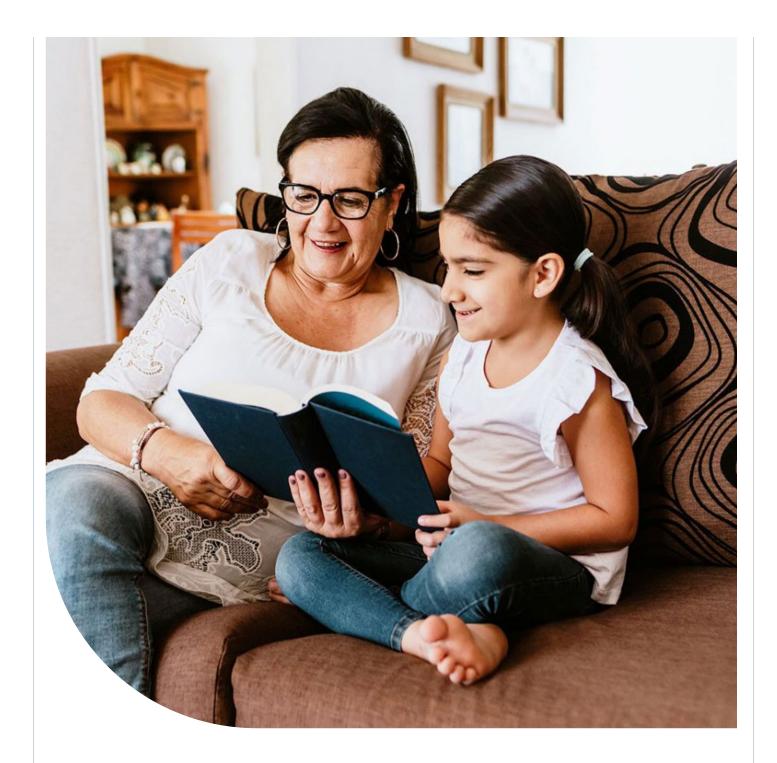


**03.** Improve your vision with short and easy treatments

5

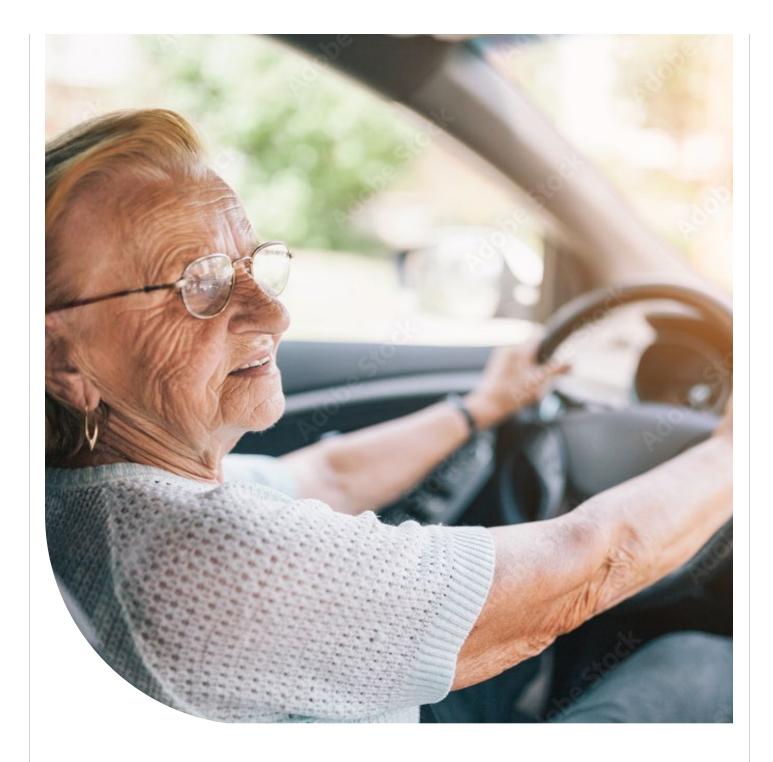
### Our pain free, non-invasive treatments are helping people with AMD see again

- After the age of 45, 9% of the population will suffer from vision loss from Age-related Macular Degeneration
- Over time your vision gets worse and you lose the ability to work, drive, play sports, spend time with loved ones and do things on your own
- Treatments used included taking pills and eye injections to slow down the process
- Age-Related Macular Degeneration (AMD) is the leading cause of adult blindness
- Macumira is the first real option to stop and save your vision in Canada
- We are a Safe, Easy, and Effective way to improve your vision



Discover the breakthrough treatment of Canada's first clinically proven and approved treatment for Dry Age-Related Macular Degeneration

MacuMira offers a revolutionary solution that allows you to restore your vision and renew your life, providing a brighter outlook on the world. Our treatment is designed with your safety and comfort in mind, ensuring a pain-free experience under the care of your local eye-care professionals. With short and easy treatments, you'll witness a significant improvement in your vision. Don't wait any longer to regain your sight – book an appointment with your doctor or send them information on MacuMira today, and take the first step towards a clearer future.



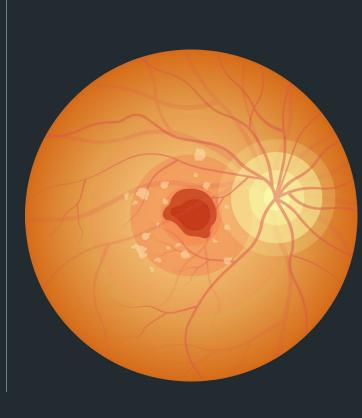
"I can get my drivers license again!!!"

- Patient

### Age-related macular degeneration (AMD) Affects 2.3M Canadians

#### Dry AMD

- 85-90% of AMD
- Patients who suffer from this condition are advised to improve their lifestyle habits and take dietary supplements that may slow down the progression of the disease
- Prescribed dietary supplements provide No recovery of lost visual acuity
- Despite poor quality control and modest efficacy, over \$2.5B of Eye Health Supplements sold Globally/yr



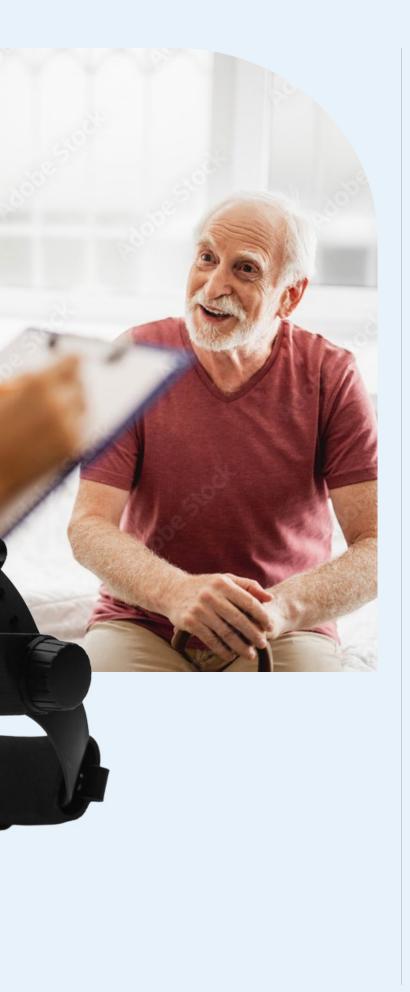
#### Wet AMD

- 10-15% of AMD (more severe cases)
- Most people with Wet AMD have progressed over time from Dry AMD
- Treated by intraocular injections every 4-6 weeks for rest of the patient's life only to "slow down the progress" (not a cure)
- Annual cost of injections in US/ Canada varies depending on Plans/Coverage \$1,200-\$3,000/ treatment

# Non-invasive eyelid surface neurostimulation

- Administered in Eye-care Clinics
- Easy, Safe & Effective
- Immediate visual improvement
- Treatment Protocol:
- Loading Phase: 4x Week 1
- Maintenance: 1x every 2-3 months

MacuMira System I - Headset Model: MMSYS-HDSET P/N: 100173-000-102 SN: x002 - Rev: A Ned operators manual before use se cleaning procedures before each treatment est for more than 4 on the set of th



#### How it Works

## Our process is easy and sustainable. You can change your life with MacuMira.

MacuMira focuses on client comfort and sustainability. You know that your vision therapy is administered by certified professionals, the results are immediate. The therapy requires one appointment every 2-3 months and is affordable. Furthermore, scheduling appointments is easy and hassle free.



### **01.** Micro current

Painlessly delivered across closed eyelids with no injections, systemic drugs, or adverse side effects.

### **02.** Patented waveform

Developed to maximize efficacy while leaving the delicate structures of the eye undamaged.

### **03.** Patented delivery system

That is simple to use and easily administered by a certified Eye-care Practitioner or Ophthalmic Technician.

#### **04. Immediate results** And optimal visual improvement reached after initial treatment schedule of four 32 minute treatments over 10 days

### **05.** Visual improvements

Maintained with 1x treatment every 2-3 months.

### **06.** Mechanism of Action

Stimulated Retinal Pigment Epithelium (RPE) cells enhanced Mitochondrial ATP formation leads to improved cellular function and clearing of drusen and other macular waste byproductsl.

### 60 patients enrolled in the trial with 40 in the treatment group and 20 in the placebo group

#### Treatment group:

- 48%, of the patients improved by at least 10 letters on the EDTRS acuity chart
- All patients in the treatment group showed improved vision
- Improved by an average of 8.8 EDTRS letters along with a 25% average increase in EDTRS acuity with no adverse effects
- Treated patients maintained their visual improvements for the duration of the trial

#### Placebo group

• Patient's visual acuity down by 2% on average

**Future Trials & Studies:** Protocols and applications underway to study expanded Indications for Diabetic Retinopathy, DME, Wet AMD, Geographic Atrophy.



# What is Age-Related Macular Degeneration?

#### Overview of Age-Related Macular Degeneration (AMD)

Age-Related Macular Degeneration (AMD) is a disease of the eye, and the leading cause of vision loss in older adults. It's estimated 2.5 million Canadians suffer from some form of AMD.<sup>1</sup>

It begins when a part of your retina called the macula becomes damaged. The macula is part of the retina at the back of the eye. It is responsible for our central vision, most of our colour vision and the fine detail of what we see.<sup>2</sup>

AMD can progress slowly in some people, and its early stages almost always have no noticeable symptoms.<sup>3</sup> However, it can also progress rapidly. AMD tends to affect older people<sup>4</sup>, though there are rare cases when younger people are affected—usually related to an underlying condition.

#### What are the symptoms of Age-Related Macular Degeneration?

In early-stage AMD, you often will have no recognizable symptoms. However, AMD is a progressive disease, meaning it gets worse over time. The early noticeable symptoms tend to be slight blurring in your central vision, straight lines appearing slightly blurry, and trouble performing tasks like reading or driving in low light.

In its later stages AMD, central vision can become very blurry or completely dark. Straight lines become very wavy and tasks like reading and recognizing faces becomes difficult<sup>5</sup>.

AMD does not necessarily affect both eyes; it can also affect one, or both at different rates of progression.

Because AM affects central vision, it does not lead to total blindness. However, in advanced stages it can significantly compromise quality-of-life.

# What factors put people at risk for AMD?

It is not known exactly what causes AMD, but there are known factors that put people at risk.

#### Risk factors for Age-Related Macular Degeneration<sup>6</sup>

- Increased age
- Extensive UV light exposure
- Cardiovascular disease
- A diet high in saturated fat (foods like butter, fatty meat, and cakes)
- Smoking

Additionally, studies show that Caucasian people and people with a family history of AMD are also at higher risk.



### What is the difference between Dry and Wet Age-Related Macular Degeneration?

#### Dry AMD

Dry AMD is the more common form, accounting for 85–90% of AMD cases. Dry age-related macular degeneration (AMD) is a gradual deterioration of the macula as the retinal cells die off and are not renewed<sup>7</sup>. Because dry AMD happens due to gradual thinning, it begins as early-stage and progresses. While early thinning doesn't cause any symptoms, intermediateand late-stage AMD causes blurring or blank spaces in central vision, dulling of colours and trouble seeing in low light.

#### Wet AMD

This form is less common but much more serious. Wet AMD is when new, abnormal blood vessels grow under the retina. These vessels may leak blood or other fluids, causing scarring of the macula. You lose vision faster with wet AMD than with dry AMD8. The presence of blood or fluid is why it is known as "wet" AMD. Wet AMD develops from the dry form, and it can develop at any point in the progression of dry AMD — from early to late.

### How is AMD diagnosed?

An eye doctor can perform a simple test to determine if you have AMD. If you believe you may be at risk, the good news is that a test can identify AMD before there are noticeable symptoms. So, it's important to get your eyes examined regularly — especially if you have risk factors.

Before a test, the doctor will ask about family history, risk factors, and other information.

During an eye exam, your ophthalmologist may ask you to look at an Amsler grid. This grid helps you notice any blurry, distorted, or blank spots in your field of vision. They will also look inside your eye through a special lens, which will help them see if there are changes in the retina and macula<sup>9</sup>. Optical coherence tomography (OCT) is another way to look closely at the retina. A machine scans the retina and provides very detailed images of the retina and macula.

Your doctor may do fluorescein angiography to see what is happening with your retina. Yellow dye (called fluorescein) is injected into a vein, usually in your arm. The dye travels through your blood vessels. A special camera takes photos of the retina as the dye travels throughout its blood vessels. This shows if abnormal new blood vessels are growing under the retina<sup>10</sup>.

"I can see the clock on the wall and tell time again, I can sew again which I have not done in years. This has been life-changing"

- Patient



### Symptoms of Age-related Macular Degeneration



### **01.** Early-stage

 The early stages of AMD have no noticeable symptoms, though a health-care professional can help detect it with testing

### **02.** Intermediate-stage

- Sometimes, people with more advanced thinning of the macula are asymptomatic
- Slight blurriness in the centre of your vision
- Difficulty seeing in low light

### **03.** Late-stage

- Significant blurring or dark spots in central vision
- Straight lines can appear very wavy
- Dulling of colours

"I can see the streetsigns when I drive now, they are much clearer and brighter" - Patient

### MacuMira-Treatment for Dry Age-Related Macular Degeneration

#### What is MacuMira?

MacuMira is the first and only treatment for dry age-related macular degeneration (AMD) in Canada and North America. Released in Canada in February 2023, MacuMira is approved by Health Canada and is safe and effective. There are no medicines currently available for dry AMD. Currently, typical treatment includes recommended lifestyle changes and supplementation with vitamins and minerals.

MacuMira is a non-invasive treatment, meaning it involves no injections or surgeries.

#### How does Age-Related Macular Degeneration Treatment with MacuMira work?

MacuMira is a device that delivers a patented microcurrent through your closed eyes. The current treatment regimen is four 32-minute sessions in your first week, followed every 2–3 months by additional 32-minute sessions. Treatment with MacuMira for dry age-related macular degeneration is painless. The eye treatment is also simple, and is typically delivered right in the clinic of your eye care specialist.



# The patented microcurrent

As some people age, they can accumulate buildups of waste in their retina. Among the most common are drusen and lipofuscin. Drusen are yellow deposits — and while the exact relationship between drusen and age-related macular degeneration is not fully clear, drusen increases the risk of AMD — particularly more advanced forms.

Lipofuscin is a pigment that is understood to be a product of oxidization in your cells, and can accumulate as you age in many parts of the body, including your retina. It is believed to contribute to dry AMD as well.

The microcurrent delivered by MacuMira stimulates the Retinal Pigment Epithelium (RPE) cells in your eye, which enhances mitochondrial ATP formation. ATP is the main energy source for most biochemical process. In turn, this helps your eyes clear drusen and lipofuscin.

#### Is MacuMira effective?

MacuMira has been proven effective in its landmark clinical trial, and has been approved as a treatment for dry, age-related macular degeneration.

In the trial, the vision of all 40 patients treated with MacuMira improved. Nearly half of those patients improved by 10 or more letters on the ETDRS chart (the letter chart you are likely familiar with from eye exams). Improvement in vision was maintained through the duration of the trial.

Some improvement is also immediate, right after the first treatment. And optimal results were achieved after only four treatments.

## How is MacuMira treatment delivered?

MacuMira is a device that resembles one you may have looked into as part of an eye examination. Before you begin, the technician will place two sticker-like electrode pads to each side of your head. You'll also be given a disposable head cap and gloves to help ensure a hygienic environment for all. The treatment will last about half an hour. Afterwards, the technician will remove the electrode pads, and clean any residue. The device is fully cleaned and sanitized after each use.

Some clinics can provide music and other features to make treatment sessions more relaxing.



### What are other treatments for agerelated macular degeneration?

#### **Dry AMD**

There are currently no other approved treatments for early, dry AMD. Doctors recommend lifestyle changes such as healthy eating, quitting smoking, and regular exercise to potentially slow the advance of dry, age-related macular degeneration. They will also regularly monitor your eye health to keep track of any progression.

For more advanced dry AMD, typical treatment is dietary supplements, such as vitamins and minerals. These may slow the progression of the disease.



#### Wet AMD

For wet AMD, there are treatments which may be able to slow or prevent further deterioration of your vision. One type is an injection into your eye of an anti-VEGF drug. VEGF is a protein that promotes the growth of new blood vessels, which grow abnormally in cases of wet AMD.

A less common form of treatment for wet AMD is photodynamic therapy (PDT). In PDT, a light-sensitive is injected into your arm. When it has travelled to your retina, it is activated with a special laser.

MacuMira is currently not indicated for treatment of wet AMD. Because dry AMD can turn into wet AMD at any stage — not just from late-stage AMD — it is important to have your eyes checked regularly and to discuss treatment options with your health-care provider.

# Who is eye treatment with MacuMira for?

MacuMira is indicated for use in patients with dry, age-related macular degeneration in any stage. This includes early stages, in which vision loss might not be detectable, as well as stages with more advanced vision loss that has not developed into wet AMD. As with all treatments, be sure to discuss your options with your eyecare professional.



# Start your journey towards better vision today

Book with your doctor or visit Macumira's website to learn more about Technology updates, New Clinical Trials, expanding indications, and Community Insights.

Info@macumira.com macumira.com



#### Sources

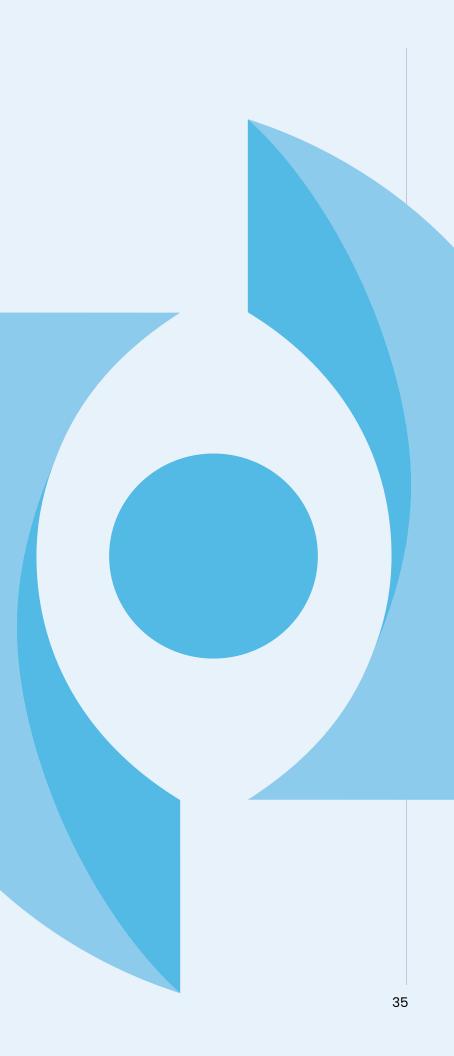
<sup>1, 3</sup>https://www.fightingblindness.ca/eyehealth/eye-diseases/age-related-macular-degeneration/ <sup>2</sup>https://www.macularsociety.org/macular-disease/macula/

<sup>4</sup>https://www.macularsociety.org/macular-disease/macular-conditions/age-related-maculardegeneration/

<sup>5, 6</sup>https://opto.ca/eye-health-library/age-related-macular-degeneration-amd

<sup>7</sup>https://www.macularsociety.org/macular-disease/macular-conditions/

<sup>8,9,10</sup>https://www.aao.org/eye-health/diseases/amd-macular-degeneration





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