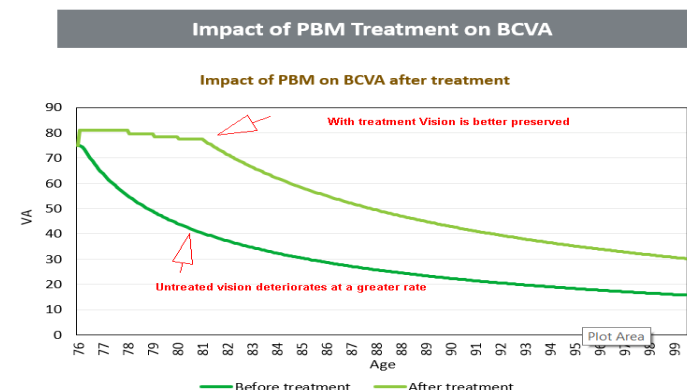


# Photobiomodulation (PBM) Information for Patients with Dry AMD using the Valeda Light Delivery System



## What is Photobiomodulation and the Valeda Light Delivery System?

Photobiomodulation is a low-level light therapy to help cells improve their function. It uses light to improve blood flow, enhance oxygen binding, reduce inflammation, and stimulate cells and energy production within the cells to improve their function. The light produced by the system in the wavelengths 590, 660 and 850 nm addresses independent cellular mechanisms that play a role in age-related macular degeneration (AMD) and diabetic retinopathy. End of visible range is 700nm. PBM has been around for a long time and is used for several different conditions including in physiotherapy, arthritis, wound repair, sports medicine and in many other specialities. The Valeda Light Delivery System uses Photobiomodulation and is the first approved treatment for dry age-related macular degeneration and applies specific wavelengths to the eye to stimulate the cells.

## Who will benefit from the Valeda Light Delivery System?

Firstly, patients will be seen by Mr. Lee to confirm whether they are suitable for treatment and to discuss their options. Valeda is indicated for use in the treatment of dry age-related macular degeneration (AMD) patients with vision impairment. The treatment is most suitable for those patients in the early stages of dry AMD to prevent or delay the progression. This is characterized by pigmentation changes and the development of drusen.

## Who is not suitable for treatment?

If a patient already has lost their central vision from dry AMD, then this treatment is probably not suitable. As a precaution, patients who have a history of light activate central nervous system disorders such as epilepsy or induced migraine from light, should also not receive treatment or those who are on any photosensitising medication.

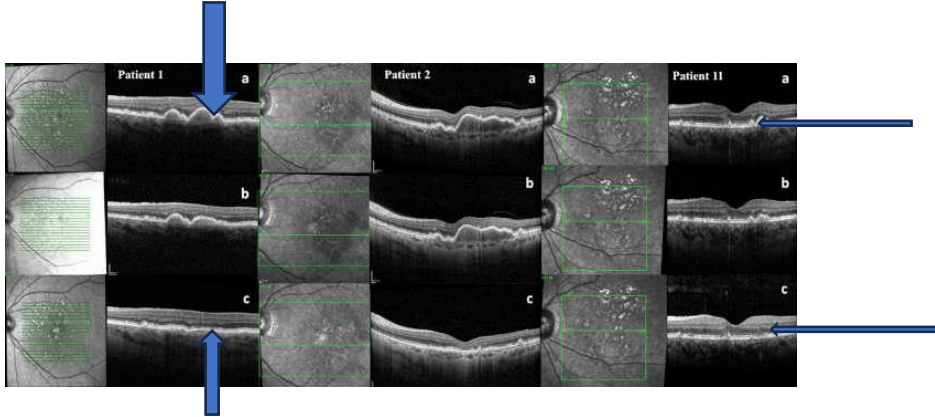
## What is involved?

If you wear glasses or contact lenses, you will be asked to remove them prior to receiving treatment. Your eyes will not be dilated for the light treatment, and you will be seated comfortably at the Valeda Light Delivery System. The person administering the treatment will guide you through each step and generally, it takes no longer than 5 minutes to complete or 10 minutes if both your eyes are being treated.

Treatments consist of 9 treatments carried out within 3 – 4 weeks duration (one week 3 times and 2 treatments per week for the other 3 weeks). You cannot have more than one treatment in a 24-hour period and if you miss a treatment, it is recommended that the session is made up within the 3 – 4 week series. Treatment can be repeated at 4–6-month intervals.

## Benefits

The Lightsite III clinical trial (2022)<sup>1</sup> showed that 50% of patients demonstrated that they could read 5 letters or more on the eye chart following treatment. Patients also reported there was an improvement in contrast sensitivity, so patients reported that images were brighter, there was an improvement in the depth of colour they saw, and they reported they had an increased reading speed. It also reduced central drusen volume. This reduction in drusen was also reported in 2023 Paris study by Manal Benlahbib MD.<sup>2</sup> The image below gives an example from their study on the image findings pre and post treatment.



While some patients may not notice much improvement or any measurable benefits from this treatment it is considered that the PBM can slow down the progression of Dry AMD meaning it should take longer before severe visual loss occurs.




## Side effects of treatment

There are no known side effects for this treatment. However, it is well known that looking at bright light can produce an afterimage. This phenomenon may be seen immediately following the treatment and will recover in a couple of minutes. You will be able to continue with your normal activities following the treatment.

## What if I have other eye conditions?

If you have cataracts, you can still receive PBM. Mr. Lee will discuss with you any other eye conditions and if this would affect your suitability to treatment. It is recommended you continue with your AREDS vitamins for the eyes, or consider starting them.

## Further Reading and references QR codes.

 Ophthalmology Times	 Modern Retina review of Clinical trial	 Paris Institute on Large drusen
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Please discuss with Michele or Mr Lee if you have any further questions.  
Cost of treatment is £1150.00 for one eye and £1300.00 for two eyes.

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