

## PHOTOBIOMODULATION FOR DRY AMD

Photobiomodulation (PBM) is a form of light therapy showing promise in the control of dry AMD. Sapphire Eyecare offers treatment with the Valeda system from LumiThera, at Sapphire, Highcliffe Medical Centre, Dorset and Sapphire Romsey, Hampshire.



IMPROVES VISUAL ACUITY

IMPROVES CONTRAST SENSITIVITY

REDUCES CENTRAL DRUSEN VOLUME

Dry AMD has remained frustratingly resistant to treatment in spite of extensive research. Nutritional supplements have offered only marginal benefit, and a trial of antibody injections has produced disappointing results.

Light therapy, primarily red and infrared, can help treat numerous conditions throughout the body. The science of PBM is developing rapidly, with research showing potential short-term results in the earlier stages of dry AMD. This works best for those with drusen (yellowish blobs beneath the retina) rather than atrophy (loss of tissue).

## PBM IS THOUGHT TO WORK IN A NUMBER OF WAYS:

- Improving blood flow to the retina and its supporting layers
- Stimulating nitric oxide, a chemical important to the health of blood vessels
- Activating mitochondria, the tiny particles within cells that produce energy.

Ideal patients are those showing signs of early dry AMD (the grades currently considered suitable for nutritional supplements), and a visual acuity of 6/36 or better.

A treatment course consists of nine sessions over a three-week period, each of which lasts just a few minutes. Three separate colours are used with no discomfort or potential side effects for the patient. Therapy can be offered to one or both eyes, depending on clinical findings and patient preference.

FIRST APPROVED TREATMENT FOR DRY AGE-RELATED MACULAR DEGENERATION (AMD) USING PHOTOBIOMODULATION

Initial studies show a significant effect with a benefit maintained over six months. A second treatment at that point appeared once again to deliver a positive result, but no longer-term data is available as yet.

Further clinical trials are in progress but, given the weight of evidence and the current lack of any other effective treatment, this minimally invasive and very low-risk treatment appeals to some sufferers.

## POTENTIAL BENEFITS OF PBM TREATMENT:

- Slow the degeneration of dry AMD
- Stabilise or improve vision
- Reduce the risk of progression to wet AMD