PHOTOBIOMODULATION THERAPY FOR DRY AGE-RELATED MACULAR DEGENERATION

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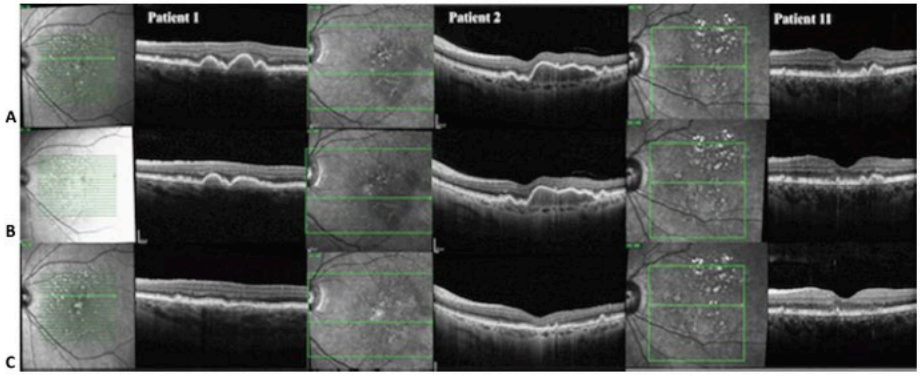
Photobiomodulation (PBM) therapy is an emerging, non-invasive FDA approved treatment approach for patients with dry age-related macular degeneration (AMD), particularly in the early to intermediate stages. PBM uses specific wavelengths of visible to near-infrared light to stimulate mitochondrial function within retinal cells. The therapy is designed to enhance cellular energy production (ATP synthesis), reduce oxidative stress, and modulate inflammatory pathways, key contributors to retinal pigment epithelium (RPE) dysfunction and photoreceptor degeneration in dry AMD. By supporting RPE health and photoreceptor survival, PBM aims to preserve visual function and potentially slow disease progression.

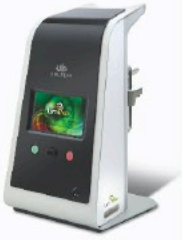
The safety and efficacy of PBM therapy via the Valeda Light Delivery System was investigated in LIGHTSITE III clinical trial. This prospective, randomized, double-masked, sham-controlled, multicenter trial demonstrated a statistically significant improvement in best-corrected visual acuity (BCVA) in PBM-treated eyes compared with sham, with mean gains of approximately 5 ETDRS letters in the treatment arm. Longer-term follow-up at 24 months and in extension analyses also showed that visual gains with PBM were sustained and that a high proportion of treated eyes maintained improved visual acuity over time. Safety outcomes were favorable, with no significant device-related serious adverse events or evidence of phototoxicity. Overall, LIGHTSITE III supports PBM as a non-invasive therapeutic option that may provide functional visual benefit and potentially slow disease progression in selected patients with intermediate dry AMD.



B-scan OCT demonstrating drusen reduction in dry AMD treated by Valeda. Baseline (A) imaging showing large macular drusenoid pigment epithelial detachment (PED) in patients 1 and 2 and soft drusen in patient 11. Week 5 (B) B-scan SD-OCT showing drusen volume evolution with a main reduction at the time points between week 5 and month 6. Month 6 (C) imaging illustrates the complete reduction of the drusenoid PED and soft drusen after a series of 10 Valeda treatments.

At Retina Group of New England (RGNE), we are proud to deliver state-of-the-art care for patients with AMD through a combination of advanced diagnostics, clinical research leadership, and early adoption of innovative therapies. In January 2026, RGNE became the first practice in Connecticut to offer PBM therapy, underscoring our role as a regional leader in advanced retinal care. Through comprehensive imaging, evidence-based protocols, active participation in clinical trials, and early access to emerging technologies, RGNE continues to set the standard for cutting-edge AMD management in the state of Connecticut and beyond.

Valeda® Light Delivery System



RGNE was the first site in CT to perform Photobiomodulation for dry Age-Related Macular Degeneration