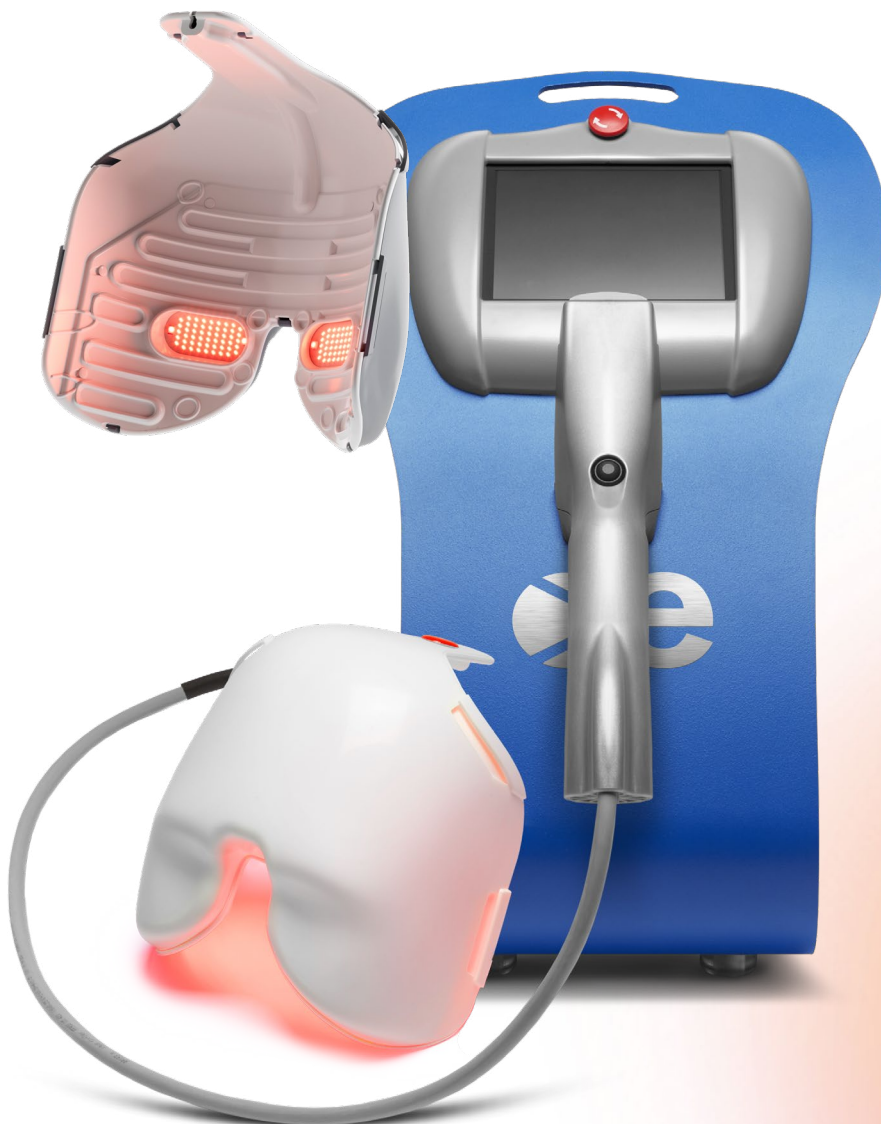


eye-light®

From the front to the back of the eye,
an all-in-one powerhouse for eye care.





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Blocco 27, Via Degli Orefici 152
Centergross, Funo (BO)
40050, Italy

VAT NUMBER: IT 00707821203
TAX CODE: 00874760408

www.espansionegroup.it

① Espansione Group

— WHY WE'RE HERE

Helping people,
through science.
That's the privilege
we take pride in.

We have the ambition to establish new paradigms in ophthalmology and dermatology, driven by our desire to provide our customers and their patients with the best, certified medical technologies.



Not all solutions and use cases available in all countries. Every piece of information shown ought to be considered as fact-based evidence deriving from publicly available literature, for the sole purpose of scientific exchange.

— WHERE WE ARE

56⁺

Scientific Papers

Enabling progress through science for the betterment of all isn't an easy purpose to work towards—yet it's our north star, the guiding principle of all our actions.

50⁺

Countries

That's what guided us for over four decades. That's what moved us to become the one and only company to develop, patent and certify Light Modulation™ LLLT, a unique photobiomodulation (PBM) technology.

With a strong focus on anterior segment care, we challenge the status quo in ophthalmology, innovate with care and ingenuity, and believe in the power of our people.

— WHERE WE'RE GOING

Our ambition is
to become the leading
innovator in diagnosing
and treating eye
conditions.

With decades of expertise in photobiomodulation (PBM) technology, we are focused on revolutionizing the management Anterior and Posterior Segment conditions.

By delivering cutting-edge, light-based solutions, we aim to redefine treatment approaches and set new benchmarks for innovation in the field.



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eye-light®



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eye-light®

Welcome to the world of eye-light®, where innovation meets opportunity.

Join us as we continue to challenge the status quo and innovate for the betterment of ocular health.



Elevate Your Practice

Incorporate Light Modulation™ LLLT (PBM) technology into your treatment portfolio, enhancing your practice's capabilities with a state-of-the-art solution that sets new standards in ocular care.



Enhance Patient Care

Offer patients a non-invasive, scientifically advanced solution to different ocular conditions, from the front to the back of the eye.



Increase Revenue

Leverage eye-light® to introduce high-value, in-demand treatments that attract new patients, improve retention, and maximize practice profitability.



Lead in Ophthalmology Innovation

Adopt a transformative technology that positions your practice at the forefront of modern ophthalmology, ensuring you remain a leader in delivering cutting-edge care.



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eye-light®

All-in-One Powerhouse



eye-light®, with its patented LM™ LLLT (PBM) and OPE™ IPL technologies offers optimal, non-invasive treatments for both Anterior and Posterior Segment conditions.

Harnessing the power of both LM™ LLLT (PBM) and OPE™ IPL technologies, this solution effectively targets Anterior Segment conditions, including DED, Blepharitis, Chalazia, and Sjögren's Syndrome and more.

Beyond that, LM™ LLLT (PBM) is raising the bar in Posterior Segment care, setting new standards for treating dry Age-related Macular Degeneration (AMD).



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OPE™ IPL is our patented Intense Pulsed Light technology, calibrated for optimal safety and effectiveness through software-controlled thermal impulses.



OPE™ IPL

Available only for Anterior Segment Applications

- > Closes abnormal vessels and prevents from local release of inflammatory factors
- > Softens meibum and melts pathologically dysfunctional secretions in patients with MGD

SOURCE: LIU R ET AL. ANALYSIS OF CYTOKINE LEVELS IN TEARS AND CLINICAL CORRELATIONS AFTER INTENSE PULSED LIGHT TREATING MEIBOMIAN GLAND DYSFUNCTION. AM J OPHTHALMOL. 2017. VORA GK ET AL. INTENSE PULSED LIGHT THERAPY FOR THE TREATMENT OF EVAPORATIVE DRY EYE DISEASE. CURR OPIN OPHTHALMOL 2015. CRAIG JP, ET AL. PROSPECTIVE TRIAL OF INTENSE PULSED LIGHT FOR THE TREATMENT OF MEIBOMIAN GLAND DYSFUNCTION. INVEST OPHTHALMOL VIS SCI 2015. GUPTAPK ET AL. OUTCOMES OF INTENSE PULSED LIGHT THERAPY FOR TREATMENT OF EVAPORATIVE DRY EYE DISEASE. CAN J OPHTHALMOL 2016.



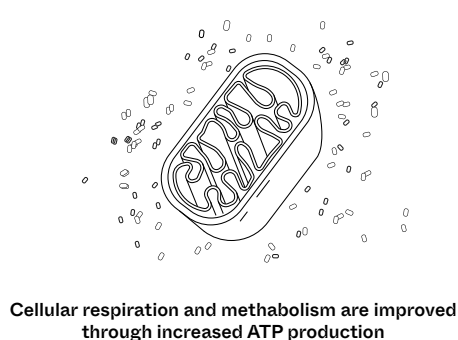
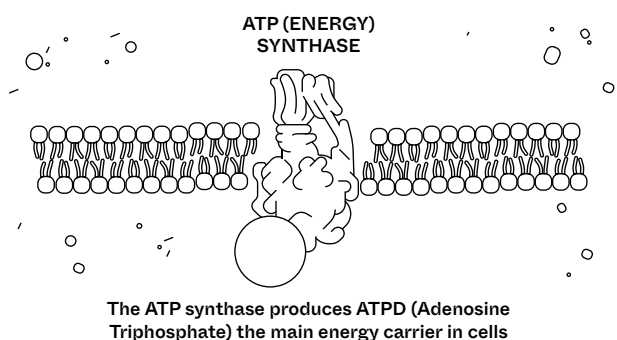
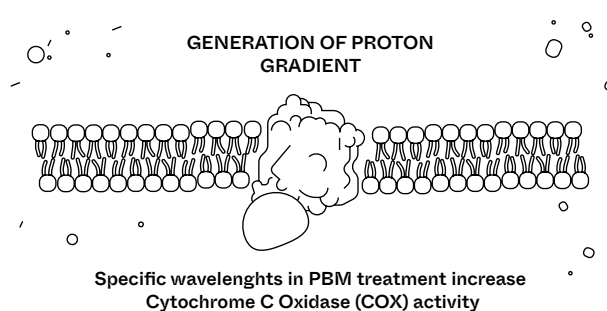
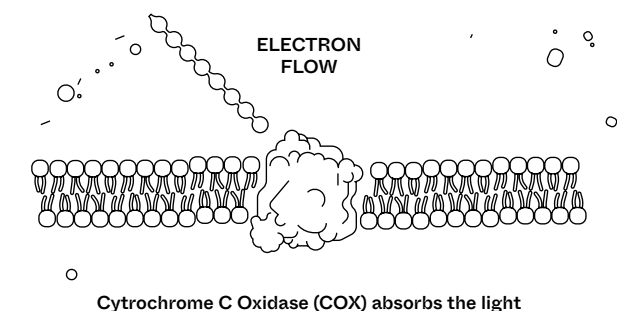
Not all solutions and use cases available in all countries. Every piece of information shown ought to be considered as fact-based evidence deriving from publicly available literature, for the sole purpose of scientific exchange.

At the heart of our ecosystem lies Light Modulation™ LLLT, our innovative, patented photobiomodulation (PBM) technology.

Photobiostimulation therapy is a unique kind of near-infrared light therapy (NILT) completely painless for the patient—yet extremely effective in managing a vast number of eye conditions, from the front to the back of the eye.

Utilizing powerful LEDs, LM™ LLLT (PBM) stimulates ATP production in cells, promoting healing and regeneration at the biological level.

SOURCE: VALTER, K. ET AL. PHOTOBIO-MODULATION USE IN OPHTHALMOLOGY - AN OVERVIEW OF TRANSLATIONAL RESEARCH FROM BENCH TO BEDSIDE. FRONTIERS IN OPHTHALMOLOGY, 4, 1388602. 2024. DE FREITAS LF, ET AL. PROPOSED MECHANISMS OF PHOTOBIO-MODULATION OR LOW-LEVEL LIGHT THERAPY. IEEE J SEL TOP QUANTUM ELECTRON. 2016.



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The degree of simplicity offered by LM™ LLLT technology to the operator and the convenience hence provided to the patient benefiting from its therapy is, put simply, unmatched.

These benefits are complemented by LM™ LLLT exceptional efficacy in treating a spectrum of conditions.



eye-light®

Maximum
convenience,
exceptional value.

LM™ LLLT (PBM) – Anterior Segment Applications



In the treatment of Anterior Segment conditions, LM™ LLLT (PBM) goes beyond MGD, effectively addressing Chalazia, Blepharitis, Demodex, Sjögren's Syndrome-induced DED, iatrogenic DED from cataract and refractive surgeries, and more.

LM™ LLLT (PBM) – Posterior Segment Applications



LM™ LLLT (PBM) offers promising treatment for dry AMD, specifically AREDS 2 and 3 stages. It addresses management gaps with an innovative approach, that slows disease progression, preserve vision and enhance patients' quality of life.

A Technology Like No Other

- > Fast
- > Easy & Safe
- > Painless
- > Plug & Play



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②
LM™ LLLT (PBM)
on eye-light®:
Anterior Segment
Applications



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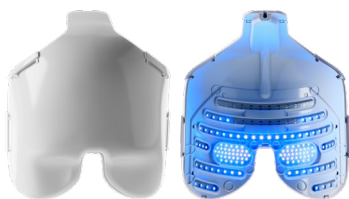
LM™ LLLT (PBM) on eye-light® > ANTERIOR SEGMENT APPLICATIONS

In Anterior Segment, LM™ LLLT (PBM) can be leveraged employing three different light frequencies—each with its own unique benefits and use cases.



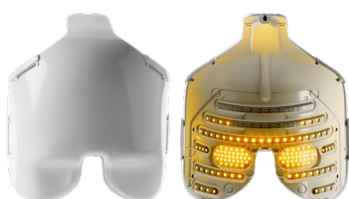
LM™ LLLT Red

- > Improved cellular metabolism
- > Inflammation reduction
- > Transcription factor activation



LM™ LLLT Blue

- > Enhanced photosensitization process
- > Antibacterial action
- > Singlet oxygen production



LM™ LLLT Yellow

- > Enhanced ATP production
- > Nitric Oxide release facilitation
- > Inflammation & edema reduction

SOURCE: HAMBLIN MR. MECHANISMS AND MITOCHONDRIAL REDOX SIGNALING IN PHOTOBIO-MODULATION. PHOTOCHEM PHOTOBIO. 2018. GARZA, Z.C.F., ET AL. VISIBLE BLUE LIGHT THERAPY: MOLECULAR MECHANISMS AND THERAPEUTIC OPPORTUNITIES. CURR. MED. CHEM. 2019. DUNDEL, P. ET AL. ILLUMINATION WITH BLUE LIGHT REACTIVATES RESPIRATORY ACTIVITY OF MITOCHONDRIA INHIBITED BY NITRIC OXIDE, BUT NOT BY GLYCEROL TRINITRATE. ARCH. BIOCHEM. BIOPHYS. 2008. DAI, X. ET AL. 590 NM LED IRRADIATION IMPROVED ERYTHEMA THROUGH INHIBITING ANGIOGENESIS OF HUMAN MICROVASCULAR ENDOTHELIAL CELLS AND AMELIORATED PIGMENTATION IN MELASMA. CELLS 2022. KASHIWAGI S, ET AL. PHOTOBIO-MODULATION AND NITRIC OXIDE SIGNALING. NITRIC OXIDE. 2023



➤ REQUEST
ANTERIOR SEGMENT
PROTOCOL

[Request Protocols](#)

Get in touch with Medical Affairs
to request Anterior Segment Protocols



Not all solutions and use cases available in all countries. Every piece of information shown ought to be considered as fact-based evidence deriving from publicly available literature, for the sole purpose of scientific exchange.

Anterior Segment Conditions



CE (MDR) APPROVED

- | | |
|-------------------------|----------------------------|
| > DED/MGD | > Rosacea & Telangiectasia |
| > Blepharitis & Demodex | > Blepharoplasty |
| > Sjögren's Syndrome | > Iatrogenic DED–Cataract |
| > Chalazion & Stye | > & Refractive Surgery |



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③ LM™ LLLT (PBM) on eye-light®: Posterior Segment Applications



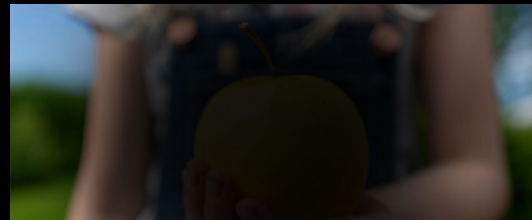
Not all solutions and use cases available in all countries. Every piece of information shown ought to be considered as fact-based evidence deriving from publicly available literature, for the sole purpose of scientific exchange.

“ Age-related Macular Degeneration (AMD) is a progressive retinal disease that irreversibly impairs vision by damaging the macula, primarily affecting photoreceptors and the retinal pigment epithelium (RPE).

SOURCE: SCHULTZ NM, ET AL. "GLOBAL BURDEN OF DRY AGE-RELATED MACULAR DEGENERATION: A TARGETED LITERATURE REVIEW." CLIN THER. 2021;43(10):1792-1818.



NORMAL VISION



MACULAR DEGENERATION

“ Estimates suggest that by 2040, +280 million people worldwide will be affected by AMD.

SOURCE: GRAND VIEW RESEARCH | FLECKENSTEIN M, SCHMITZ-VALCKENBERG S, CHAKRAVARTHY U. AGE-RELATED MACULAR DEGENERATION: A REVIEW. JAMA. 2024;331(2):147-157.

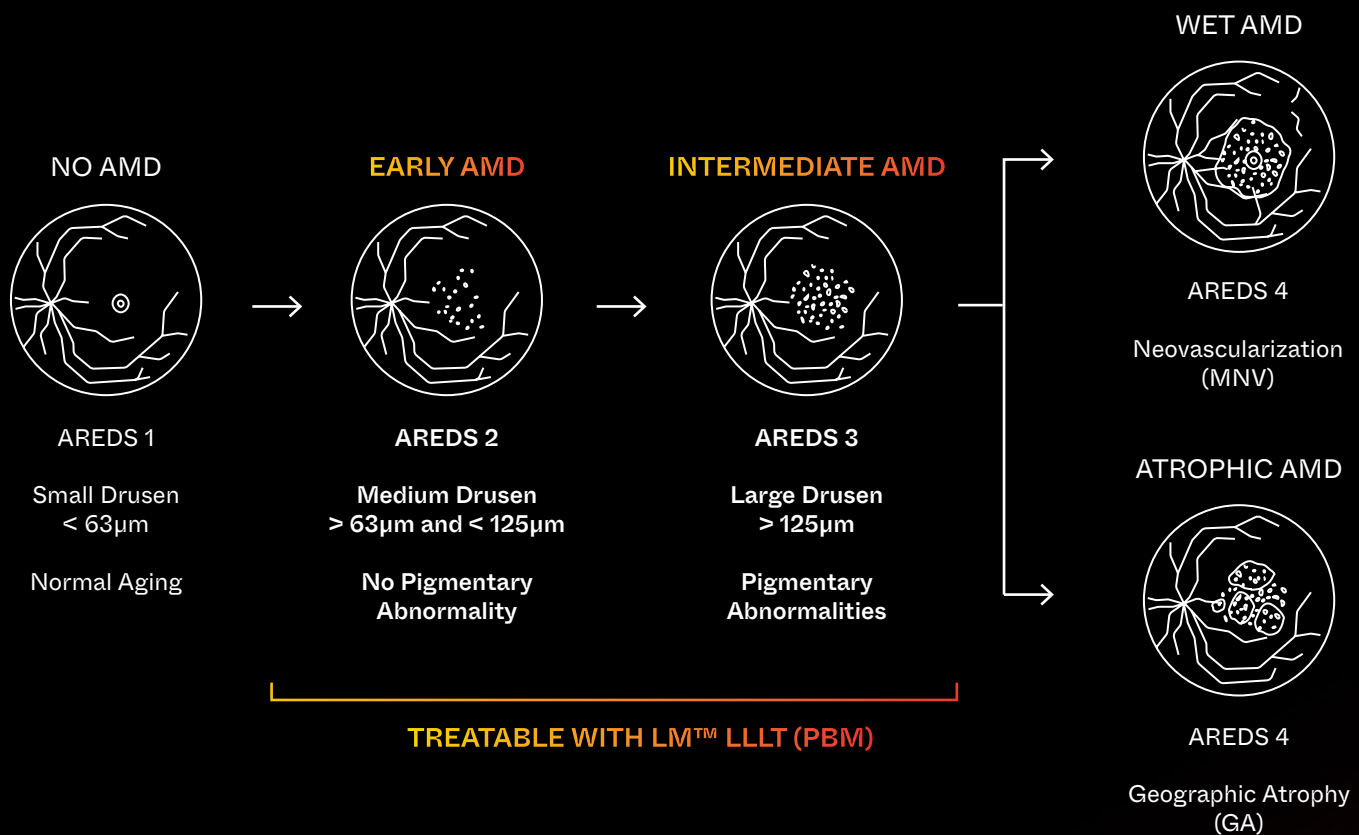
“ The primary strategy to delay early and intermediate AMD progression includes maintaining a healthy lifestyle and taking oral nutritional supplements.

SOURCE: BORRELLI, ENRICO, ET. AL. "SAFETY, TOLERABILITY, AND SHORT-TERM EFFICACY OF LM™ LLLT (PBM) FOR DAMD". OPHTHALMOLOGY & THERAPY, 2024

Until now.

PBM addresses current management gaps, offering an innovative method to manage disease progression, preserve vision, and improve the quality of life for patients.

This groundbreaking technology uses light therapy to promote cellular repair and regeneration, providing a promising new guideline for treating dry AMD, specifically AREDS 2 and 3 stages.



SOURCE: HAMBLIN MR. MECHANISMS AND MITOCHONDRIAL REDOX SIGNALING IN PHOTOBIO-MODULATION. PHOTOCHEM PHOTOBIO. 2018. CAMELO S, ET AL. BEYOND AREDS FORMULATIONS, WHAT IS NEXT FOR INTERMEDIATE AGE-RELATED MACULAR DEGENERATION (IAMD) TREATMENT? POTENTIAL BENEFITS OF ANTIOXIDANT AND ANTI-INFLAMMATORY APOCAROTENOID AS NEUROPROTECTORS. OXIDATIVE MEDICINE AND CELLULAR LONGEVITY. 2020. DAI, X. ET AL. 690 NM LED IRRADIATION IMPROVED ERYTHEMA THROUGH INHIBITING ANGIOGENESIS OF HUMAN MICROVASCULAR ENDOTHELIAL CELLS AND AMELIORATED PIGMENTATION IN MELASMA. CELLS 2022. KASHIWAGI S, ET AL. PHOTOBIO-MODULATION AND NITRIC OXIDE SIGNALING. NITRIC OXIDE. 2023

LM™ LLLT (PBM) on eye-light® > POSTERIOR SEGMENT APPLICATIONS

In Posterior Segment, LM™ LLLT (PBM) targets mitochondrial dysfunction, addressing independent cellular mechanisms that are important in Age-related Macular Degeneration and supporting retinal health.



LM™ LLLT Yellow

- > Oxidative stress reduction
- > VEGF inhibition
- > Edema reduction & drainage



LM™ LLLT Red

- > HIF-1α factor stimulus
- > Inflammatory biomarkers reduction
- > ATP stimulus

SOURCE: HAMBLIN MR. MECHANISMS AND MITOCHONDRIAL REDOX SIGNALING IN PHOTOBIO-MODULATION. PHOTOCHEM PHOTOBIO. 2018. CAMELO S, ET AL. BEYOND AREDS FORMULATIONS, WHAT IS NEXT FOR INTERMEDIATE AGE-RELATED MACULAR DEGENERATION (IAMD) TREATMENT? POTENTIAL BENEFITS OF ANTIOXIDANT AND ANTI-INFLAMMATORY APOCAROTENONDS AS NEUROPROTECTORS. OXIDATIVE MEDICINE AND CELLULAR LONGEVITY, 2020. DAI, X. ET AL. 590 NM LED IRRADIATION IMPROVED ERYTHEMA THROUGH INHIBITING ANGIOGENESIS OF HUMAN MICROVASCULAR ENDOTHELIAL CELLS AND AMELIORATED PIGMENTATION IN MELASMA. CELLS 2022. KASHIWAGI S, ET AL. PHOTOBIO-MODULATION AND NITRIC OXIDE SIGNALING. NITRIC OXIDE. 2023



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POSTERIOR SEGMENT
PROTOCOL

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Get in touch with Medical Affairs
to request Posterior Segment Protocol



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LIGHTWAVE I > RESULTS

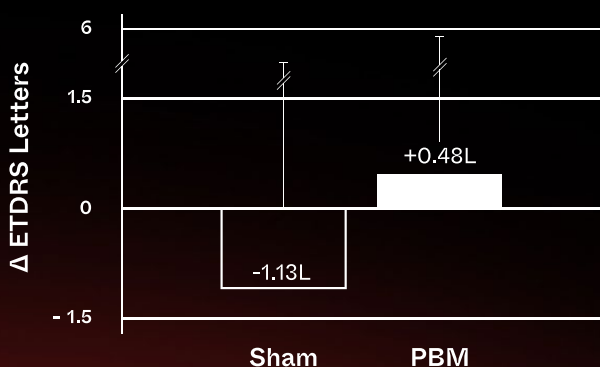
LightWave I is a longitudinal, multi-centric clinical trial that validates LM™ LLLT (PBM) on eye-light® as a safe and effective breakthrough for dAMD management.

LM™ LLLT (PBM) technology targets cells to effectively slow the progression of early-and mid-stage dAMD.

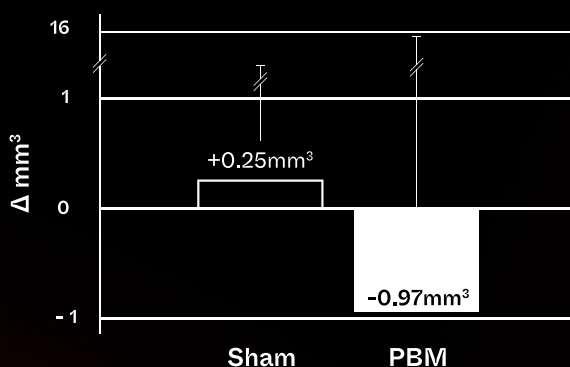
It has been proven that it can potentially reduce drusen volume and improve BCVA without causing atrophy, improve contrast sensitivity and fasten dark adaptation.

152^{EYES} 7^{UNIVERSITY HOSPITALS}

BCVA Change $p=0.0026$



Mean Drusen Volume Change $p=0.013$



“ Stratified analysis showed that a **significantly higher** percentage of patients in the PBM group gained **5 or more letters** (one-line improvement or better) compared to the sham group (20.3% vs. 8.9%, respectively; $p=0.043$).

“ The **significant drusen reduction** in association with functional improvement is particularly compelling. Although drusen formation and regression are in constant process of change, it is known that the drusen area tends to increase even during a short period of time.

BORRELLI, ENRICO, ET. AL., SAFETY, TOLERABILITY, AND SHORT TERM EFFICACY OF LM™ LLLT (PBM) FOR DAMD, OPHTHALMOLOGY & THERAPY JOURNAL, 2024.



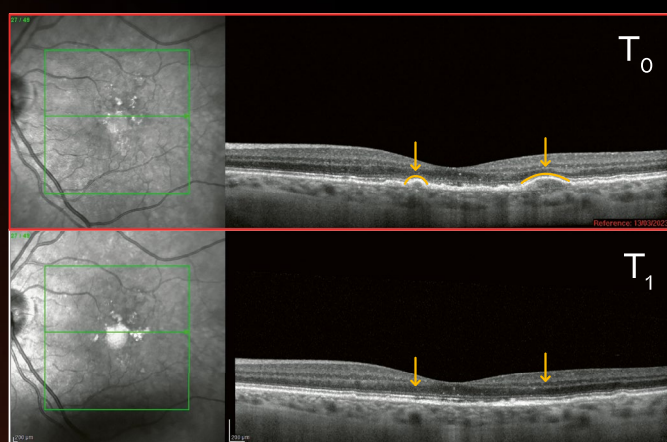
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LIGHTWAVE I > CASES

Some examples from the clinical trial LightWave I about the results obtained with our photobiomodulation therapy:

CASE #1 > 68 Y/O FEMALE

Dry AMD, Age-Related Eye Disease Study (AREDS) grade 3

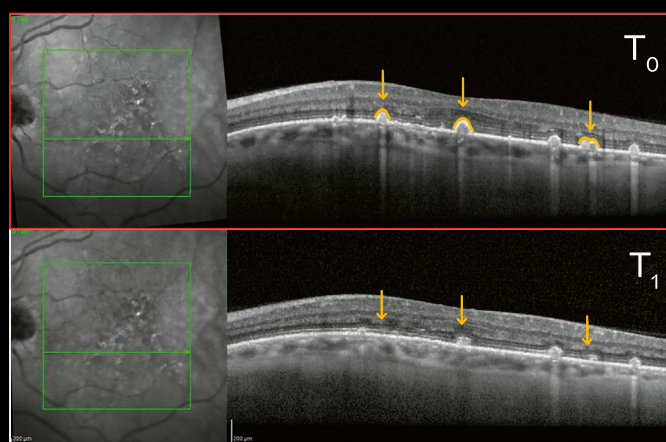


T₀: BCVA: 50 ETDRS

T₁: BCVA: 55 ETDRS letters

CASE #2 > 72 Y/O FEMALE

Dry AMD, Age-Related Eye Disease Study (AREDS) grade 3



T₀: BCVA: 52 ETDRS

T₁: BCVA: 56 ETDRS letters

LIGHT MODULATION™ LLLT (PBM) > BENEFITS

dAMD remains a degenerative condition with no cure, but LM™ LLLT (PBM) potentially offers:

- ① Visual Acuity Improvement
- ② Contrast Sensitivity Improvement
- ③ Central Drusen Volume Reduction
- ④ Completely Painless Therapy



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eye-light®

Innovative and dynamic, eye-light® stands as a testament to the cutting edge advancements in Light Modulation™ LLLT (PBM) technology, providing comprehensive solutions for both Anterior and Posterior Segment care.



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Science told us.
It just works.

Numerous clinical studies
validate the effectiveness
of LMTM LLLT in ophthalmology
for a wide array of ocular
conditions.

> POSTERIOR
SEGMENT

dAMD

5⁺

> ANTERIOR
SEGMENT

DED
(MGD, CLD, ...)

35⁺

Scientific
Papers + Articles

CHALAZION

3⁺

Scientific
Articles

SJÖGREN'S
SYNDROME

2⁺

Scientific
Papers

BLEPHARITIS

2⁺

Scientific
Papers

DEMODEX

4⁺

Scientific
Papers

IATROGENIC DED
(CATARACT & REFRACTIVE SURGERY)

5⁺

Scientific
Papers

Note: The counter refers
to scientific papers, articles
and abstracts published
and under submission.



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Advancing Eye Care Through Science

A growing community of leading experts and researchers supports our mission to advance eye care with our groundbreaking light-based technologies. These innovations are transforming the treatment of both anterior and posterior segment eye conditions.

Over the years, our **Scientific Community** has published extensive peer-reviewed research and clinical studies, demonstrating the effectiveness and versatility of our technologies.

To explore this work, we've created a **Scientific Compendium**—a concise summary of key studies and their applications in eye care.

Discover a selection of these key publications in the table on the following pages.



For a deeper dive into the clinical evidence, get in touch with our Medical Affairs to request our **Scientific Compendium** or explore the full **Bibliography**.



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Have a practitioner-to-practitioner conversation

[Medical Affairs](#)



➤ **REQUEST BIBLIOGRAPHY**
via Medical Affairs

[Medical Affairs](#)



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Author	Study Name	Disease	Sample Size	Technology	Protocol
Antwi et al. 2024	Effect of low level light therapy in individuals with dry eye disease	DED (MGD)	30 patients (60 eyes)	LLLT	3 treatments 1 week apart
Borrelli et al. 2024	Safety, Tolerability, and Short-Term Efficacy of Low-Level Light Therapy for Dry Age-Related Macular Degeneration	dAMD	76 patients (152 eyes)	LLLT	2 treatments per week for 4 weeks
Cayatopa et al. 2023	Low level light therapy plus compression of meibomian glands for the treatment of evaporative dry eye	DED (MGD)	39 patients (78 eyes)	LLLT	4 treatments 2 weeks apart
D' Souza et al. 2023	A randomized controlled study evaluating outcomes of intense pulsed light and low-level light therapy for treating meibomian gland dysfunction and evaporative dry eye	DED (MGD)	200 eyes (100 patients)	IPL + LLLT	3 treatments 2 weeks apart
Castro et al. 2023	Comparison of Light-Based Devices in the Treatment of Meibomian Gland Dysfunction	DED (MGD)	88 patients (176 eyes)	IPL+LLLT vs other IPL	3 treatments 7/15/30 days apart



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Outcomes		Timeline	Groups	Results	p value
NIKBUT	TMH	Post Treatment 3 Weeks		8.7±5.6(BL);11.2±5.6(Post)	0,05
	Lipid Layer Thickness			0.37±0.10(BL);0.43±0.13(Post)	0,002
	OSDI			59.9±16.0(BL);72.8±22.4(Post)	0,01
				20.7±17.3(BL);10.5±10.4(Post)	<0.001
Safety	BVCA	4 Months	Sham	No signs of retinal phototoxicity were observed	
			Treatment		
	Mean Drusen Volume (MDV)	4 Months	Sham	Δ = -1.13±5.0	0,071
			Treatment	Δ = 0.48±5.31	0,184
		4 Months	Sham	Δ = 0.25±5.20	0,048
			Treatment	Δ = -0.97±16.74	0,1
NIKBUT	TMH	Post Treatment 1 Month		3.93±1.61(BL); 13.57±4.31(Post)	<0.001
		Post Treatment 6 Months		3.93±1.61(BL); 17.96±4.07(Post)	<0.001
		Post Treatment 8 Months		3.93±1.61(BL); 19.36±3.32(Post)	<0.001
	OSDI	Post Treatment 1 Month		0.19±0.02(BL); 0.30±0.05(Post)	<0.001
		Post Treatment 6 Months		0.19±0.02(BL); 0.32±0.04(Post)	<0.001
		Post Treatment 8 Months		0.19±0.02(BL); 0.28±0.06(Post)	
		Post Treatment 1 Month		38.85±8.02(BL);13.03±5.77(Post)	<0.001
		Post Treatment 6 Months		38.85±8.02(BL);12.64±3.02(Post)	<0.001
		Post Treatment 8 Months		38.85±8.02(BL);17.59±10.31(Post)	
OSDI	1 Month	Treatment			<0.0001
			Control		
		3 Months	Treatment		<0.0001
			Control		
	3 Months	Treatment			<0.005
			Control		
		3 Months	Treatment		<0.005
			Control		
OSDI	3 Weeks	IPL+LLLT		44±22 (BL); 22±17(3W)	<0.001
			E>Eye®	43±24(BL); 19±18(3W)	<0.001
			Thermaeye Plus®	44±25(BL); 24±19(3W)	<0.001
		6 Months	IPL+LLLT	22±17(3W); 8±10 (6M)	0,001
			E>Eye®	19±18(3W); 24±21(6M)	0,078
			Thermaeye Plus®	24±19(3W); 29±20(6M)	0,044
	6 Months	IPL+LLLT		47±25 (BL); 80±21(3W)	<0.001
			E>Eye®	62±29(BL); 80±26(3W)	<0.001
			Thermaeye Plus®	74±26(BL); 85±18(3W)	No change over time
		6 Months	IPL+LLLT	80±21(3W); 88±12(6M)	0,007
			E>Eye®	80±26(3W); 84±17(6M)	0,091
			Thermaeye Plus®	85±18(3W); 81±22(6M)	No change over time
	6 Months	IPL+LLLT		0.33±0.16 (BL); 0.29±0.17(3W)	0,004
			E>Eye®	0.26±0.11(BL); 0.33±0.29(3W)	No change over time
			Thermaeye Plus®	0.32±0.19(BL); 0.28±0.19(3W)	0,055
		6 Months	IPL+LLLT	0.29±0.17(3W); 0.32±0.26(6M)	0,34
			E>Eye®	0.33±0.29(3W); 0.28±0.15(6M)	No change over time
			Thermaeye Plus®	0.28±0.19(3W); 0.29±0.23(6M)	0,544



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Author	Study Name	Disease	Sample Size	Technology	Protocol
Meduri et al. 2023	Combined intense pulsed light and low level light therapy for the treatment of refractory Meibomian gland dysfunction	DED (MGD)	70 patients (140 eyes)	IPL + LLLT	3 treatments 2 weeks apart
Giannaccare et al. 2023	Outcomes of low level light therapy before and after cataract surgery for the prophylaxis of postoperative dry eye: a prospective randomised double-masked controlled clinical trial	Iatrogenic DED	153 patients (306 eyes)	LLLT	1 treatment 1 week before the surgery and 1 treatment 1 week after the surgery
Giannaccare et al. 2022	Low-Level Light Therapy Versus Intense Pulsed Light for the Treatment of Meibomian Gland Dysfunction: Preliminary Results From a Prospective Randomized Comparative Study	DED (MGD)	40 patients (80 eyes)	IPL vs LLLT	4 treatments 1 week apart
Pérez-Silguero et al. 2021	Combined Intense Pulsed Light and Low-Level Light Therapy for the Treatment of Dry Eye: A Retrospective Before-After Study with One-Year Follow-Up	DED (MGD)	156 patients (312 eyes)	IPL + LLLT	4 sessions over 3 months (weeks 0, 1, 4 and 12)
Stonecipher et al. 2019	Combined low level light therapy and intense pulsed light therapy for the treatment of meibomian gland dysfunction	DED (MGD)	230 patients (460 eyes)	IPL + LLLT	2-4 treatments 1-2 weeks apart



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Outcomes	Timeline	Groups	Results	p value
OSDI	3 Months	Treatment	35.4±6.6(BL); 27.5 ±3.9(Post)	0,07
		ATPF	36.2±7.3(BL); 32.5±4.5(Post)	0,12
	6 Months	Treatment	35.4±6.6(BL); 25.6±4.2(Post)	0,03
		ATPF	36.2±7.3(BL); 31.3±4.5(Post)	0,09
	NIBUT	Treatment	6.8±5.6(BL); 8.4±4.9(Post)	0,005
		ATPF	7.1±4.9(BL); 7.3±5.2(Post)	0,2
	6 Months	Treatment	6.8±5.6(BL); 12.1±5.9(Post)	<0.0001
		ATPF	7.1±4.9(BL); 8.2±6.1(Post)	0,04
	OSDI	Treatment	21.2±16.1(BL); 7.2±8.8(Post)	<0.001
		Sham	19.7±14.0(BL); 14.8±13.0(Post)	
	1 Month	Treatment	21.2±16.1(BL); 9.0±9.0(Post)	<0.001
		Sham	19.7±14.0(BL); 18.2±17.9(Post)	
NIBUT	1 Week	Treatment	9.7±7.2(BL); 11.1±7.1(Post)	0.126
		Sham	10.4±7.1(BL); 9.1±7.5(Post)	
	1 Month	Treatment	9.7±7.2(BL); 12.5±6.6(Post)	0.007
		Sham	10.4±7.1(BL); 9.0±7.8(Post)	
SPEED	2 Weeks	IPL	16.4±3.2(BL); 9.7±4.1(Post)	<0.001
		LLLT	16.8±4.6(BL); 6.9±3.2(Post)	<0.001
	TMH	IPL	0.26±0.11(BL); 0.25±0.9(Post)	0.948
		LLLT	0.27±0.12(BL); 0.33±0.10(Post)	0.003
OSDI	Post Treatment 3 Months		58.29±26.08(BL); 14.22±6.28(3M)	<0.001
	Post Treatment 15 Months		58.29±26.08(BL); 28.19±12.54(15M)	<0.001
	NIBUT	Post Treatment 3 Months	3.70±1.77; 8.85±4.02	<0.001
		Post Treatment 15 Months	3.70±1.77; 7.34±3.25	<0.001
	Osmolarity	Post Treatment 3 Months	331.83±21.61; 278.96±17.66	<0.001
		Post Treatment 15 Months	331.83±21.61; 304.25±18.02	<0.001
	Tear Meniscus Height	Post Treatment 3 Months	0.12±0.03; 0.21±0.05	<0.001
		Post Treatment 15 Months	0.12±0.03; 0.15±0.03	<0.001
OSDI	Post Treatment 1-3 Months		42.2±18.8(BL); 24.2±15.9(Post)	<0.001
			69.6% of eyes reduced MGD grading by 1 or more	<0.001
			4.4±2.1(BL); 8.0±3.0(Post)	<0.01



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