



Photobiomodulation (PBM) and Eye Safety: Clinical Summary

☒ General Eye Safety in PBM

Photobiomodulation (PBM) can be safe around the eyes when used correctly. However, direct ocular exposure to light sources must be avoided unless the treatment is specifically designed for ophthalmic use.

- Avoid shining the light directly into the eyes.
- Protective goggles are recommended when treating near the face.
- Wavelengths (600–1000 nm) can penetrate ocular tissues, so care is essential to prevent retinal damage.

PBM in Ophthalmology (Specialized Use)

PBM is being studied and applied in controlled settings for eye diseases using specialized devices.

Condition	Research Status	Device Type
Age-Related Macular Degeneration (AMD)	Promising results	Specialized retinal PBM devices
Diabetic Retinopathy	Early-stage studies	Controlled light delivery systems
Dry Eye Disease	Used for inflammation reduction	Clinically approved eye-safe devices

When PBM Can Be Dangerous for Eyes

- Using non-ophthalmic PBM devices directly on or near open eyes.
- Failing to use eye protection during facial treatments.
- Using high-powered lasers or LEDs not intended for eye therapy.

☒ Summary: PBM Eye Safety Guidelines

Use Case	Safe?	Notes
General PBM therapy	Yes, with eye protection	Never shine into eyes

(face, joints, muscles)		
PBM devices for eye therapy	Yes, under supervision	Limited to specialized devices only
Cosmetic/Wellness devices near eyes	Use with caution	Wear goggles or eye shields
Direct light into open eyes	✗ No	Risk of retinal injury

Final Word

PBM is not inherently dangerous to the eyes but direct, unprotected exposure should be strictly avoided. Use protective eyewear during treatments involving the face and follow all device instructions. Ophthalmic PBM should only be conducted using devices specifically designed for eye treatment under professional supervision.

Use of PBM Healing International Devices Near the Eyes

The SPRB (Small Photobiomodulation Red Box) and GPRB (General Photobiomodulation Red Box) wellness devices by PBM Healing International may be applied around the eye region—such as the temples, forehead, and periorbital muscles—to relieve tension, improve local circulation, and reduce inflammation. These devices are not intended for direct ocular therapy but can offer supportive benefits when used with eye protection and by avoiding direct exposure to the eyes.

Applications include:

- Eye fatigue (indirect)
- Sinus pressure and inflammation
- Tension headaches
- TMJ-related facial discomfort

Caution: Always use protective goggles, maintain a safe distance from the globe of the eye, and consult a clinician before use.

Clinical Integration of SPRB and GPRB for Ocular and Periocular Applications

Device	Application Area	Safety Notes	Clinical Benefit
SPRB	Periocular muscles, forehead, temples	Use with protective eyewear	Reduces local inflammation, muscle fatigue, and tension headaches
GPRB	Larger facial regions, temporal	Use at safe distance from eyes	Enhances circulation, may

	zones		relieve eye strain via nearby stimulation
Not for Use	Direct exposure over eyelid or open eye	✗ Contraindicated	Risk of retinal or corneal damage

Disclaimer

WARNING: Photobiomodulation (PBM) devices emit red and near-infrared light that may pose a risk of retinal or ocular tissue damage if used improperly or for prolonged periods near the eyes. **Do not direct the light source into the eyes or apply PBM over the closed eyelids unless using a device specifically designed and approved for ophthalmic use.**

Always wear **protective eyewear** when treating the facial or periocular area and ensure that treatment parameters (intensity, wavelength, duration) are within safe limits.

Consult with a licensed healthcare professional before using PBM devices, especially if you have existing eye conditions, are under medical treatment, or are using the device near sensitive areas such as the face or temples.