MEDICAL POLICY

POLICY TITLE	SKIN CONTACT MONOCHROMATIC INFRARED ENERGY FOR THE TREATMENT OF CUTANEOUS ULCERS, DIABETIC NEUROPATHY, AND OTHER MISCELLANEOUS MUSCULOSKELETAL CONDITIONS
POLICY NUMBER	MP 1.094

Effective Date:	4/1/2023

I. POLICY

Skin contact monochromatic infrared energy is considered **investigational** as a technique to treat cutaneous ulcers, diabetic neuropathy, and musculoskeletal conditions, including but not limited to temporomandibular disorders, tendonitis, capsulitis, and myofascial pain. There is insufficient evidence to support a general conclusion concerning the health outcomes or benefits associated with this procedure.

Cross-reference:

MP 1.097 Low Level Laser Therapy

II. PRODUCT VARIATIONS

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This policy is only applicable to certain programs and products administered by Capital Blue Cross and subject to benefit variations as discussed in Section VI. Please see additional information below.

FEP PPO - Refer to FEP Medical Policy Manual. The FEP Medical Policy manual can be found at:
https://www.fepblue.org/benefit-plans/medical-policies-and-utilization-management-guidelines/medical-policies

III. DESCRIPTION/BACKGROUND

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Monochromatic infrared energy treatment (MIRE™) is a therapy that uses infrared light therapy through contact with the skin for potential use in multiple conditions including cutaneous ulcers, diabetic neuropathy, and musculoskeletal and soft tissue injuries.

Monochromatic infrared energy (MIRE) refers to light at a wavelength of 880 nm. MIRE can be delivered through pads containing an array of 60 superluminous infrared diodes emitting pulsed near-infrared irradiation. The pads can be placed on the skin, and the infrared energy is delivered in a homogeneous manner in a session lasting from 30 to 45 minutes.

MIRE devices have been investigated as a treatment of multiple conditions including cutaneous ulcers, diabetic neuropathy, Bell's palsy, musculoskeletal and soft tissue injuries, including temporomandibular disorders, tendonitis, capsulitis, and myofascial pain. MIRE devices are also being developed for the treatment of baldness and snoring. The proposed mechanism of action is not known, although some sort of photobiostimulation has been proposed, as well as increased circulation related to an increase in plasma of the potent vasodilator nitric oxide.

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IV. RATIONALE

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Summary of Evidence

The available literature regarding skin contact monochromatic infrared energy (MIRE) as a technique to treat various cutaneous conditions consists of small controlled trials and observational studies. MIRE has also been investigated for knee osteoarthritis. The current evidence from the studies with the strongest methodology, i.e., sham-controlled trials with a between-group design, shows no improvement in outcomes for patients treated with MIRE. This evidence does not support the efficacy of this technology. Well designed, prospective, randomized controlled trials with larger subject numbers are needed to determine with certainty whether MIRE is an effective treatment for cutaneous conditions. Similarly, MIRE therapy has been studied as a treatment for Bell's palsy. Results of case studies did not demonstrate any effectiveness as this therapy in managing Bell's palsy. As a result, this technology is considered investigational.

V. DEFINITIONS

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PHOTOBIOSTIMULATION refers to a process associated with low-level laser therapy, which activates enzymatic processes in the cells, which increase cellular metabolism.

VI. BENEFIT VARIATIONS

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The existence of this medical policy does not mean that this service is a covered benefit under the member's health benefit plan. Benefit determinations should be based in all cases on the applicable health benefit plan language. Medical policies do not constitute a description of benefits. A member's health benefit plan governs which services are covered, which are excluded, which are subject to benefit limits and which require preauthorization. There are different benefit plan designs in each product administered by Capital Blue Cross. Members and providers should consult the member's health benefit plan for information or contact Capital Blue Cross for benefit information.

VII. DISCLAIMER

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Capital Blue Cross's medical policies are developed to assist in administering a member's benefits, do not constitute medical advice and are subject to change. Treating providers are solely responsible for medical advice and treatment of members. Members should discuss any medical policy related to their coverage or condition with their provider and consult their benefit information to determine if the service is covered. If there is a discrepancy between this medical policy and a member's benefit information, the benefit information will govern. If a provider or a member has a question concerning the application of this medical policy to a specific member's plan of benefits, please contact Capital Blue Cross' Provider Services or Member Services. Capital Blue Cross considers the information contained in this medical policy to be proprietary and it may only be disseminated as permitted by law.

VIII. CODING INFORMATION

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Note: This list of codes may not be all-inclusive, and codes are subject to change at any time. The identification of a code in this section does not denote coverage as coverage is determined by the terms of member benefit information. In addition, not all covered services are eligible for separate reimbursement.

Investigational; therefore, not covered;

Procedure Codes®								
A4639	E0221	97026						

IX. REFERENCES

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15. *Association for the Advancement of Wound Care. Association for the Advancement of Wound Care Guideline of Pressure Ulcer Guidelines*
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17. *Robinson CC, Klahr PDS, Stein C, Falavigna M, Sbruzzi G, Della MéaPlentz R. Effects of monochromatic infrared phototherapy in patients with diabetic peripheral neuropathy: a systematic review and meta-analysis of randomized controlled trials. Braz J Phys Ther. 2017 Jul-Aug; 21(4): 233–243. PMID: 28571697*
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X. POLICY HISTORY

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MP 1.094	**6/19/2020 Consensus review.** Policy statement unchanged. Product variation, benefit variation, and disclaimer updated. Coding and references reviewed.
	7/6/2021 Consensus review. No change to policy statement. Product variation updated. References and coding reviewed.
	1/7/2022 Consensus Review. No change to policy statement. References updated.

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	1/11/2023 Consensus Review. No change to policy statement. Update to background, and rationale. Updated references.

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