DESCRIPTION:

**Infrared Energy Therapy**

Monochromatic infrared energy (MIRE™) is a therapy that uses pulsed infrared light at a wavelength of 880 nm through pads that contain an array of 60 superluminous infrared diodes. Use of skin contact MIRE has been proposed as a therapy for multiple conditions including cutaneous ulcers, diabetic neuropathy, and musculoskeletal and soft tissue injuries. 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. Several devices have received clearance for marketing from the U.S. Food and Drug Administration (FDA).

**Low-level laser Therapy**

Low-level lasers are also known as cold lasers, soft lasers, non-thermals, or laser acupuncture. Low-level lasers refer to the use of red-beam or near-infrared lasers with a wavelength between 600 and 1,000 nm and Watts from 5 – 500 milliWatts (MW). When applied to the skin, these lasers produce no sensation and do not burn the skin. Because of the low absorption by human skin, it is hypothesized that the laser light can penetrate deeply into the tissues where it may have a photobiostimulative effect. The exact mechanism of its effect on tissue healing is unknown; hypotheses have included improved cellular repair and stimulation of the immune, lymphatic, and vascular systems. Numerous devices have received clearance for marketing from the FDA.

Low-level laser therapy (LLLT), also called photobiomodulation, is being evaluated to treat various conditions, including, among others, oral mucositis, myofascial pain, joint pain, lymphedema, and chronic
One of the primary disorders for which LLLT has been used is cancer therapy–induced oral mucositis in patients treated by radiotherapy and/or chemotherapy and hematopoietic cell transplantation. Oral mucositis describes inflammation of the oral mucosa and typically manifests as erythema or ulcerations that appear 7 to 10 days after initiation of high-dose cancer therapy. Oral mucositis can cause significant pain and increased risk of systemic infection, dependency on total parenteral nutrition, and use of narcotic analgesics. Treatment planning may also need to be modified due to dose-limiting toxicity. There are a number of interventions for oral mucositis that may partially control symptoms, but none is considered a criterion standard treatment. When uncomplicated by infection, oral mucositis is self-limited and usually heals within 2 to 4 weeks after cessation of cytotoxic chemotherapy.

**POSITION STATEMENT:**

Low-level laser therapy meets the definition of medical necessity for prevention of oral mucositis in members undergoing cancer treatment associated with increased risk of oral mucositis, including chemotherapy and/or radiotherapy, and/or hematopoietic stem cell transplantation.

Low-level laser therapy is considered experimental or investigational for all other indications including but not limited to:

- Adhesive capsulitis
- Bell palsy
- Carpal tunnel syndrome
- Fibromyalgia
- Heel pain (ie, Achilles tendinopathy, plantar fasciitis)
- Low back pain
- Lymphedema
- Neck pain
- Osteoarthritic knee pain
- Rheumatoid arthritis
- Subacromial impingement
- Temporomandibular joint pain
- Wound healing.

The evidence is insufficient to determine the effects of the technology on health outcomes.

Skin contact monochromatic infrared energy (MIRE) therapy is considered experimental or investigational for all indications including, but not limited to, treatment of cutaneous ulcers, diabetic neuropathy, and musculoskeletal conditions such as temporomandibular disorders, tendonitis, capsulitis and myofascial pain. The evidence is insufficient to determine the effects of the technology on health outcomes. (This includes the use of a home device.)

**BILLING/CODING INFORMATION:**

**CPT Coding**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>97026</td>
<td>Application of a modality to 1 or more areas; infrared (Investigational)</td>
</tr>
<tr>
<td>0552T</td>
<td>Low-level laser therapy, dynamic photonic and dynamic thermokinetic energies, provided by a physician or other qualified health care professional (Investigational)</td>
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**HCPCS Coding**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>A4639</td>
<td>Replacement pad for infrared heating system, each (Investigational)</td>
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</table>
**REIMBURSEMENT INFORMATION:**
Refer to section entitled **POSITION STATEMENT**.

**PROGRAM EXCEPTIONS:**
Federal Employee Program (FEP): Follow FEP guidelines.

*State Account Organization (SAO):* Follow SAO guidelines.

**Medicare Advantage products:**

The following National Coverage Determination (NCD) was reviewed on the last guideline reviewed date: Infrared Therapy Devices (270.6) located at cms.gov.

The following Durable Medical Equipment Regional Carrier (DMERC) Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Infrared Heating Pad Systems (L33825) located at cgsmedicare.com.

The following Local Coverage Determination (LCD) was reviewed on the last guideline reviewed date: Therapy and Rehabilitation Services (L33413) located at fcso.com.

**DEFINITIONS:**
No guideline specific definitions apply.

**RELATED GUIDELINES:**

*Physical Therapy (PT) and Occupational Therapy (OT), 01-97000-01*

**OTHER:**
None applicable.

**REFERENCES:**
2. Centers for Medicare & Medicaid (CMS), National Coverage Determination (NCD) for Infrared Therapy Devices (270.6), accessed at cms.gov.


8. First Coast Service Options, Inc. (FCSO), Local Coverage Determination (LCD) for Therapy and Rehabilitation Services (L33413), accessed at fcso.com.


19. U.S. Food and Drug Administration (FDA); accessed at fda.gov.

**COMMITTEE APPROVAL:**
This Medical Coverage Guideline (MCG) was approved by the Florida Blue Medical Policy & Coverage Committee on 09/27/18.
**GUIDELINE UPDATE INFORMATION:**

<table>
<thead>
<tr>
<th>Date</th>
<th>Update Information</th>
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<tbody>
<tr>
<td>08/15/03</td>
<td>New Medical Coverage Guideline.</td>
</tr>
<tr>
<td>08/15/04</td>
<td>Scheduled annual review; S8948 added; no change in investigational status.</td>
</tr>
<tr>
<td>08/15/05</td>
<td>Scheduled annual review; no change in investigational status.</td>
</tr>
<tr>
<td>09/15/06</td>
<td>Scheduled annual review; no change in investigational status.</td>
</tr>
<tr>
<td>07/15/07</td>
<td>Scheduled review; investigational status maintained, added CPT code 97026; reformatting guideline, references updated.</td>
</tr>
<tr>
<td>09/15/08</td>
<td>Annual review: position statements maintained, description section and references updated.</td>
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<tr>
<td>08/15/09</td>
<td>Annual review: position statements maintained, description section and references updated.</td>
</tr>
<tr>
<td>06/15/10</td>
<td>Annual review: position statements maintained and references updated.</td>
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<tr>
<td>11/15/11</td>
<td>Revision; added laser therapy position statement and update references.</td>
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<tr>
<td>05/11/14</td>
<td>Revision: Program Exceptions section updated.</td>
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<tr>
<td>05/15/17</td>
<td>Revision: Guideline title, description, position statements, coding, and references updated.</td>
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<tr>
<td>10/15/18</td>
<td>Review; position maintained; investigational position statement updated; coding and references updated.</td>
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<tr>
<td>07/01/19</td>
<td>Quarterly CPT/HCPCS update. Added code 0552T.</td>
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