

# PROTON THERAPY

## Proven Effective & Life-Changing



We must expand patient access to innovative radiation therapy.

Proton therapy is a life-saving cancer treatment that delivers hope to patients around the world. Backed by decades of science and delivered by proven technology, proton therapy is ultra-precise, effective, and one of the most innovative cancer treatments available today.

### What is Proton Therapy?

Proton therapy delivers high doses of radiation directly to a tumor, sparing nearby healthy tissue. This pinpoint accuracy has been shown across multiple disease sites to improve overall survival – either by reducing life-threatening toxicities, being more biologically potent at tumor killing, or allowing for more targeted and escalated doses of radiation.

- Unlike conventional X-ray radiation, proton therapy is more targeted – better sparing patients from debilitating and costly side effects.<sup>1</sup>
- Because of its reduced toxicity to healthy tissue, proton therapy is ideal for tumors close to critical organs or when combined with other treatments like chemotherapy and immunotherapy.
- Proton therapy is the optimal treatment option for children with cancer as it limits radiation exposure to healthy, growing tissue.

With cancer survivorship at an all-time high, reducing side effects, hospitalizations, and secondary cancers is critical in supporting cancer patients and their caregivers. Targeted therapies – like proton therapy – allow radiation oncologists to deliver gentler treatments that also give patients the best short and long-term outcomes.

### Proven Effectiveness

The nation's top NCI-designated and NCCN Comprehensive Cancer Centers value the use of proton therapy and participate in multi-institutional research efforts demonstrating that this treatment improves outcomes for patients. As a result, more than 900 publications have validated the efficacy of proton therapy – showing lower tumor recurrence rates, higher survival rates, fewer short-term and late toxicities, and better preservation of patient quality-of-life both during and after treatment.

#### For example, proton therapy results in a:

- 31% increase in disease control for aggressive tumors at base of skull at five years.<sup>2</sup>
- 30.5% increase in overall survival at 2 years for patients with hepatocellular carcinoma.<sup>3</sup>
- 24.6% increase in overall survival at 5 years in patients with head and neck paranasal sinus and nasal cavity cancer.<sup>4</sup>
- 10% increase in overall survival at 5 years in stage I-III esophageal cancer.<sup>5</sup>
- 9% increase in overall survival at 5 years in stage II-III non-small cell lung cancer.<sup>6</sup>
- 5% higher 5-year overall survival rate for intermediate-risk prostate cancer patients.<sup>7</sup>
- 2/3 reduction in acute side effects for patients treated with chemotherapy and radiation therapy together.<sup>8</sup>



## Overcoming Barriers to Care

Proton therapy is a proven treatment that must be made available to patients who need it most. Unfortunately, many payers are slow to accept research that supports the use of higher reimbursed treatments. It is also difficult to get insurance approval for patients enrolled in clinical studies to further demonstrate treatment efficacy. Resistance from payers slows research and thwarts advances in treatment. This leads to reduced patient access to the most advanced treatments.

While proton therapy currently has higher upfront costs and corresponding reimbursement, it has been shown to reduce overall treatment costs by reducing the toxic side effects that cause adverse events like costly hospitalizations.<sup>9</sup> Many patients receiving proton therapy resume physical activity and return to work more quickly than those receiving traditional radiation.<sup>10</sup>

Delays in treatment initiation due to insurance denials reduces the chance of patients being cured, particularly those with aggressive forms of cancer. Despite this, 70% of initial requests for proton therapy are denied by payers, with a median of 14-days from inquiry to determination.<sup>11</sup> Of patients initially denied coverage for proton therapy, 68% had their denials overturned, averaging 21 days from initial inquiry.<sup>12</sup>

For patients, navigating insurance coverage is an overwhelmingly difficult process and major barrier to treatment. Payers must recognize the proven value of proton therapy and increase patient access to this life-changing treatment. Therefore, NAPT is asking payers and policymakers to:

- Ensure payment reform and future value-based models are thoughtfully and strategically designed to adequately reimburse advanced radiotherapy, like proton therapy, that are more costly for centers to deliver than traditional radiotherapy.
- Support reducing the burden of the prior authorization process that restricts patient access to advanced cancer treatments and delays cancer treatment.

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- 2 Ares C, et al. IJROBP. 2009;75(4):1111-1118.
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- 7 Arimura T, et al. Cancers. 2018;10(4):116.
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**The National Association for Proton Therapy (NAPT) and its members support cancer research and treatment innovation and are committed to raising awareness about the value of proton therapy among policymakers, insurers, caregivers and patients to ensure that this advanced treatment modality is affordable and available in communities across the country.**

**LEARN MORE: [PROTON-THERAPY.ORG](http://PROTON-THERAPY.ORG)**



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