PROTON THERAPY

A BETTER OPTION FOR CANCER PATIENTS

WHY OKLAHOMA PROTON CENTER?

Proton therapy is the treatment of choice for many solid cancers at the country's top cancer centers. Protons reduce radiation to healthy tissue which decreases the risk of side effects compared to other types of radiation treatment. (Clinical Data provided on the back.)

Oklahoma Proton Center is one of just two proton centers in Oklahoma. It has an experienced clinical team having treated over 5,000 patients since opening. The clinicians at the center provide a comprehensive approach to care, working collaboratively with different specialists to optimize treatment regimens for patients.







ALL STUDIES COMPARE PROTON THERAPY TO PHOTON BASED RADIATION (E.G. IMRT)

PROSTATE¹

91% Reduction in second cancer rates at 10+ years (10.9% vs. 1.0%)

12% increase in overall survival rate at 10 years (80.2% vs. 71.3%)

HEAD & NECK 5,6,7

58% reduction in 2nd cancers

59 - 83% reduction in rate of feeding tubes (various sites)

LUNG 2,3

75% reduction in Grade 3+ pneumonitis (Stage III)

37% increase in 5-year survival (Stage II and III)

ESOPHAGEAL^{9,10}

56% reduction in total toxicity burden (multiple side effects)

79% reduction in post-op mortality

BREAST 5

38% reduction in 2nd cancers at 5+ years

Significant (up to 95%) reduction in radiation to the heart

MULTIPLE CANCERS 4,5

69% reduction in Grade 3+ adverse events with concurrent chemo

69% reduction in 2nd cancers (450k patients; 5.1 yr. median follow up)

1) Liu et al. "Overall Survival After Treatment..." Clinical Genitourinary Cancer Vol. 19, No. 3, 255-66, Aug 2020, 2) Yu et al. "Cardiopulmonary Toxicity Following..." Clinical Lung Cancer, Vol. 23, No. 8, 526-535. Dec 2022. 3) Higgins et al. "National Cancer Database Analysis..." Int J Radiat Oncol Biol Phys. Vol. 97, No. 1, 128-137. Jan 2017. 4) Baumann et al. "Comparative Effectiveness of Proton vs. Photon Therapy..." JAMA. Vol 6, No. 2, 237-246. Dec 2019. 5) Xiang et al. "Second Cancer Risk After Primary Cancer..." CANCER. Vol. 126, No. 15, 3560-3568. Aug 2020. 6) Holliday et al. "Proton Therapy. "JAMA Vol 6, No. 2, 237-246. Dec 2019. 5) Xiang et al. "Second Cancer Risk After Primary Cancer..." CANCER. Vol. 126, No. 15, 3560-3568. Aug 2020. 6) Holliday et al. "Proton Therapy." JAMA. Vol 6, No. 2, 237-246. Dec 2019. 5) Xiang et al. "Second Cancer Risk After Primary Cancer..." CANCER. Vol. 126, No. 1, 218-26. 2015.7) Frank et al. "Gastrostomy tubes decrease..." Int J Radiat Oncol Biol Phys. Vol 2, No. 1, 191-28. 2015.7) Frank et al. "Gastrostomy tubes decrease..." Int J Radiat Oncol Biol Phys. Vol 2, No. 1, 411-421. May 2016. 9) Lin et al. "Randomized Phase IIB Trial of Proton..." Journal of Clin Oncol. Vol. 38, No. 14, 1569-1579. May 2020. 10) Lin et al. "Multi-institutional analysis..." Radiother Oncol. Vol 123, No. 3, 376-381. Jun 2017.