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**Protons** – **The Future of Radiation Therapy**?<sup>1</sup> STEVEN AVERY, University of Pennsylvania

Cancer is the  $2^{nd}$  highest cause of death in the United States. The challenges of controlling this disease remain more difficult as the population lives longer. Proton therapy offers another choice in the management of cancer care. Proton therapy has existed since the late 1950s and the first hospital based center in the United States opened in 1990. Since that time four hospital based proton centers are treating patients with other centers either under construction or under consideration. This talk will focus on an introduction to proton therapy: it's medical advantages over current treatment modalities, accelerators and beam delivery systems, applications to clinical radiation oncology and the future outlook for proton therapy.

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