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Future Plan of a Heavy Ion Radiation Therapy and Research Facility in Dallas, Texas

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A heavy ion therapy and research facility is being conceptually designed by the UT Southwestern Medical Center (UTSW) in Dallas, TX, USA. It will be the phase three addition to a total of three phase plan that consists of a proton therapy center (phase 1) and a large conventional (photon) center (phase 2). This unified complex of all currently available modalities for radiation therapy systems will be located at the heart of the Dallas metroplex as an integral part of the UTSW medical complex located only a couple of minutes drive from Dallas downtown. The proton center construction started in late 2013 and is expected to treat the first patient in early 2017. The proton center will have a Varian Cyclotron system with four full gantries and one fixed beam room. The second phase includes seven conventional linear accelerators for patient care installed in the first stage and additional six conventional linacs installed in the second stage. The conventional phase is currently in architectural design and the first patient is expected to be treated late 2016. The heavy ion center is envisioned to have an accelerator accelerating ions up to 40Ar^{18+} to energies about 360MeV/nucleon. It will have three clinical treatment rooms and one non-clinical, research bunker with a fixed (non-gantry type) beam. The clinical treatment rooms will have pencil beam scanning capability. The proposed medical complex will serve as a national research and resource center where leading clinical, radiobiological and physics research proposals will be executed.

An introduction of the hosting institution and the status of the facility will be presented.

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