World Academy of Science, Engineering and Technology International Journal of Mathematical and Computational Sciences Vol:14, No:12, 2020

E-Survey: Cancer Treatment with Proton Beam Therapy in USA

Authors: Auj-E Tagaddas

Abstract : The use of proton beam therapy is increasing globally. It seems to offer dosimetric advantages, especially in paediatric central nervous system (CNS) and brain tumours. A short E-survey was conducted to assess the clinical, technical, and educational resources and strategies employed in the state of the art proton beam therapy (PBT) centres in the USA to determine the current status of proton beam therapy. The study also aimed at finding out which PBT skills are in demand as well as what improvements are needed to ensure efficient treatment planning, delivery, and dosimetry. The study resulted in identifying areas for future research and development and in identifying cancers for which PBT is most suitable compared to other modalities to facilitate the implementation and use of PBT in clinical settings for cancer treatment.

Keywords: cancer, intensity modulated proton therapy, proton beam therapy, single field uniform scanning

Conference Title: ICSRD 2020: International Conference on Scientific Research and Development

Conference Location : Chicago, United States **Conference Dates :** December 12-13, 2020