Particle Therapy Co-Operative Group
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Aim:
Social Media has become a significant mode of communication. The use of microblogging sites such as Twitter has grown exponentially. We explored Twitter's role as a medium for information exchange on proton therapy.

Methods:
We used RowFeeder (www.rowfeeder.com), an online Twitter analytic tool, to conduct a Boolean search for "Proton Therapy” and captured 500 consecutive tweets from 13/11/12 to 23/12/12. Data was grouped by frequency of posts, potential views, demographics, tweet type, and content (top keywords and their frequency, content rating, cancer type, substance of tweet)

Results:
Tweet frequency ranged from 1 to 36 tweets per day. 48% of tweets involved information sharing, 31% related personal experience, 16% contained commercial content, and 5% were job advertisements. Subjective tagging of posts found 29% were positive, 7% negative and 64% neutral towards proton therapy. 183 of 500 (37%) tweets mentioned tumor type: 55% pediatric, 22% prostate, 11% multiple, and 12% miscellaneous cancers. 27 of 500 (5%) tweets addressed technology or technical issues: 19% treatment plans, 67% accelerator systems, and 15% miscellaneous. Tweets originated from 298 authors with the two largest contributors each making only 5% of the total. 4 of the top 10 authors focused on pediatric cancer. The maximum potential daily audience for the tweets ranged from 443 on 15/11/12 to 138,485 on 18/12/12, with the peak related to influential authors' comments on the announcement of cancellation of plans to construct a proton center.

Conclusions:
This is the first study of Twitter's role in discourse on proton therapy where it has become a forum for stakeholders to share information, particularly regarding its use in pediatric cancer. Notably, tweets on proton therapy arose from a very diverse group of authors. Most were positive or neutral. This analysis enables charting of activity, attitudes and information, aiding those who seek to influence the global view of particle therapy.