Author's response to reviews

Title: Adaptive and innovative Radiation Treatment FOR improving Cancer treatment outcome (ARTFORCE); a randomized controlled phase II trial for individualized treatment of head and neck cancer.

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Author's response to reviews: see over
Dear ms. Christna Chap,

Please find enclosed our manuscript “Adaptive and innovative Radiation Treatment FOR improving Cancer treatment outcome; a randomized controlled phase II trial for Individualized treatment of head and neck cancer.” by Heukelom et al. We would like to submit this manuscript for publication as a study protocol article in BMC cancer.

In our opinion the ARTFORCE trial might be suitable for your article series on “Cancer Bioinformatics: Bioinformatic Methods, Network Biomarkers and Precision Medicine”. It is a randomized clinical trial which investigates highly precise, individualized medicine in H&N cancer patients.

In the ARTFORCE trial we study two strategies to improve locoregional treatment outcome for head and neck cancer. We believe this is important, because there is a high rate of local recurrences in this group of patients. The first strategy is through tumour specific adaptive radiotherapy, in which the most active part of the tumor is irradiated more vigorously than other parts of the tumor. To our knowledge, no other randomized controlled trials are conducted in H&N cancer patients in which the standard treatment is directly compared to the new individualized treatment. The second aim of our study is to analyze the value of pre-treatment zirconium labeled PET scans in selecting patients for specific treatment regimens. Currently no predictive test is available to determine the effectiveness of a radiation treatment with concurrent Cisplatinum or Cetuximab and guide treatment choice.

The manuscript is original. It has not been published and is not being considered for publication elsewhere in whole or in part. All authors have contributed significantly to the submitted work. All authors have read and approved the manuscript, and approved its submission to BMC Cancer. There are no conflicts of interest.

We would be honoured if you would consider our study protocol for publication.

On behalf of all co-authors,

Yours sincerely,

Jolien Heukelom

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