850PD Benefit of prostate radiotherapy for patients with lymph node only or < 4 bone metastasis and no visceral metastases: Exploratory analyses of metastatic site and number in the STAMPEDE "M1|RT comparison"

S.A. Ali[1], A. Hoyle[2], N.D. James[3], C. Parker[4], C. Brawley[5], G. Attard[6], H. Douis[7], M.D. Mason[8], M.K.B. Parmar[5], M.R. Sydes[5], N.W. Clarke[2]

[1]Genito-Urinary Cancer Research Group, Genito-Urinary Cancer Research Group Manchester Cancer Research Centre The University of Manchester, Manchester, UK, [2]The Departments of Surgery and Urology, The Christie and Salford Royal Hospitals, Manchester, UK, [3]Clinical Trials Unit, Queen Elizabeth-University Hospital Birmingham NHS Foundation Trust, Birmingham, UK, [4]Urology, The Institute of Cancer Research/ Royal Marsden NHS Foundation Trust, Sutton, UK, [5]Institute of Clinical Trials & Methodology, MRC Clinical Trials Unit at UCL, London, UK, [6]Research Department of Oncology, UCL Cancer Institute/Paul O'Gorman Building, London, Surrey, UK, [7]Department of Radiology, University Hospital Birmingham, Birmingham, UK, [8]Division of Cancer & Genetics, Cardiff University, Cardiff, UK

Background: Prostate radiotherapy (PRT) with androgen deprivation therapy (ADT) is now recommended as a first line option for de-novo low burden metastatic prostate cancer. In the STAMPEDE "M1|RT comparison" metastatic burden was a determinant of benefit, based on pre-specified prognostic criteria. We have now performed exploratory analyses of metastases as defined by site and number to improve prediction of treatment benefit from PRT.

Methods: Patients (pts) randomized to the ADT (± docetaxel) vs PRT + ADT (± docetaxel) were studied. Metastatic site, distribution and number were evaluated based on conventional imaging and used to explore treatment effects to refine the metastatic burden definition. Results focused on the trial's key outcome measures: overall (OS) & failure-free survival (FFS), analysed using standard survival analysis methods. HR < 1 indicates benefit associated with PRT + ADT (±docetaxel) over ADT (±docetaxel).

Results: Following exclusions (imaging unavailable for central review, n = 122), 1939 pts randomized in "M1|RT comparison" were included. Of these, 181 pts had only lymph node (LN) mets, 1587 had bone (±LN) mets and 171 had other visceral mets (±bone/LN). Baseline characteristics such as age (median 68 years), PSA (median 98 ng/ml) were balanced between the arms. In LN only pts, PRT improved OS (HR = 0.62, 95%CI 0.35-1.09) & FFS (HR = 0.64, 95%CI 0.43-0.96). In bone (±LN) pts with <4 bone mets regardless of bone met location, PRT improved OS (HR = 0.65, 95% CI 0.47 – 0.92) & FFS (HR = 0.58, 95% CI 0.46 – 0.73). No such evidence of benefit was found in pts with visceral mets (OS: HR = 0.92, 95%CI 0.58 – 1.45) or bone (±LN) pts with ≥4 bone mets (OS: HR = 1.11, 95%CI 0.92 – 1.33). In the refined low met burden subgroup of pts with only LN or < 4 bone mets (±LN), PRT improved OS (HR = 0.62, 95%CI 0.46 – 0.83) & FFS (HR = 0.57, 95%CI 0.47 – 0.70). Within the low met burden subgroup there was no evidence of heterogeneity in OS & FFS (all interaction p-value >0.1) for baseline factors such as age, N stage, Gleason score, RT schedule or docetaxel use.

Conclusions: Prostate RT + ADT (± docetaxel) improved OS & FFS in pts with only LN or < 4 bone mets (±LN) regardless of location.

Clinical trial identification: NCT00268476.

Legal entity responsible for the study: Medical Research Council-Clinical Trials Unit and University of Manchester.

Funding: Has not received any funding.

Disclosure: All authors have declared no conflicts of interest.

Downloaded from https://academic.oup.com/annonc/article-abstract/30/Supplement_5/mdz248.007/5577912 by guest on 17 December 2019