

# Southampton experience of prostate specific membrane antigen therapy for metastatic prostate cancer

Sundram <sup>1</sup>, Z. Saad <sup>1</sup>, J. Wilkins <sup>1</sup>, C. Longstaff <sup>1</sup>

(1) University Hospitals Southampton NHS Foundation Trust - United Kingdom

## Objective:

Prostate specific membrane antigen (PSMA) therapy involves the administration of the radiopharmaceutical Lutetium-PSMA, which targets PSMA avid bone and soft tissue metastases in advanced prostate cancer patients. PSMA therapy consists of 6 cycles of IV Lutetium PSMA, delivered in 6 weekly intervals.

## Methods:

Following participation in clinical trials and early access program, UHS set up a private PSMA therapy service in November 2021. Over a 30-month period, 10 patients referred from the South of England received PSMA therapy at UHS. These patients had disease progression following a range of prior therapies including prostatectomy, Radiotherapy, chemotherapy, enzalutamide and arbiraterone.

## Results:

Mean age of patients was 73 years (range 48 – 84 years). Of the 10 patients commencing PSMA therapy, 3 have completed the recommended 6 cycles of treatment. All 10 patients initially responded to treatment with a PSA drop. Of the 3 patients who completed all 6 cycles of PSMA therapy the mean average PSA prior to treatment was 117.75 (Range 5.5 - 230) and mean average PSA at the end of treatment was 180 (range 4.7 – 340). To date, 39 treatment cycles have been administered. However, some patients had disease progression whilst on treatment and therefore stopped before completing all 6 cycles. 7 patients have subsequently passed away. The mean average number of cycles completed was 3.9. The mean average time between date of cycle 1 treatment and date of death was 253 days.

## Conclusions:

From our experience, PSMA is simple to administer, well tolerated with minimal side effects. Our current patient cohort have demonstrated a positive response to therapy with improving PSA and post therapy imaging. (Example of cycle 1 / 6 images to be included in poster)

**Abstract Code: IUC20718-83**