77

^{177}Lu-PSMA Radioligand Therapy for Metastatic Castration-Resistant Prostate Cancer: Kuwait experience

Sharjeel Usmani, Sarah Murad*, Abdulredha Esmail, Fareeda Alkandari, Ibrahim Alrekhais, Shatha N Khalaf, Rashid Rasheed.

Department of Nuclear Medicine, Kuwait Cancer Control Centre, Kuwait

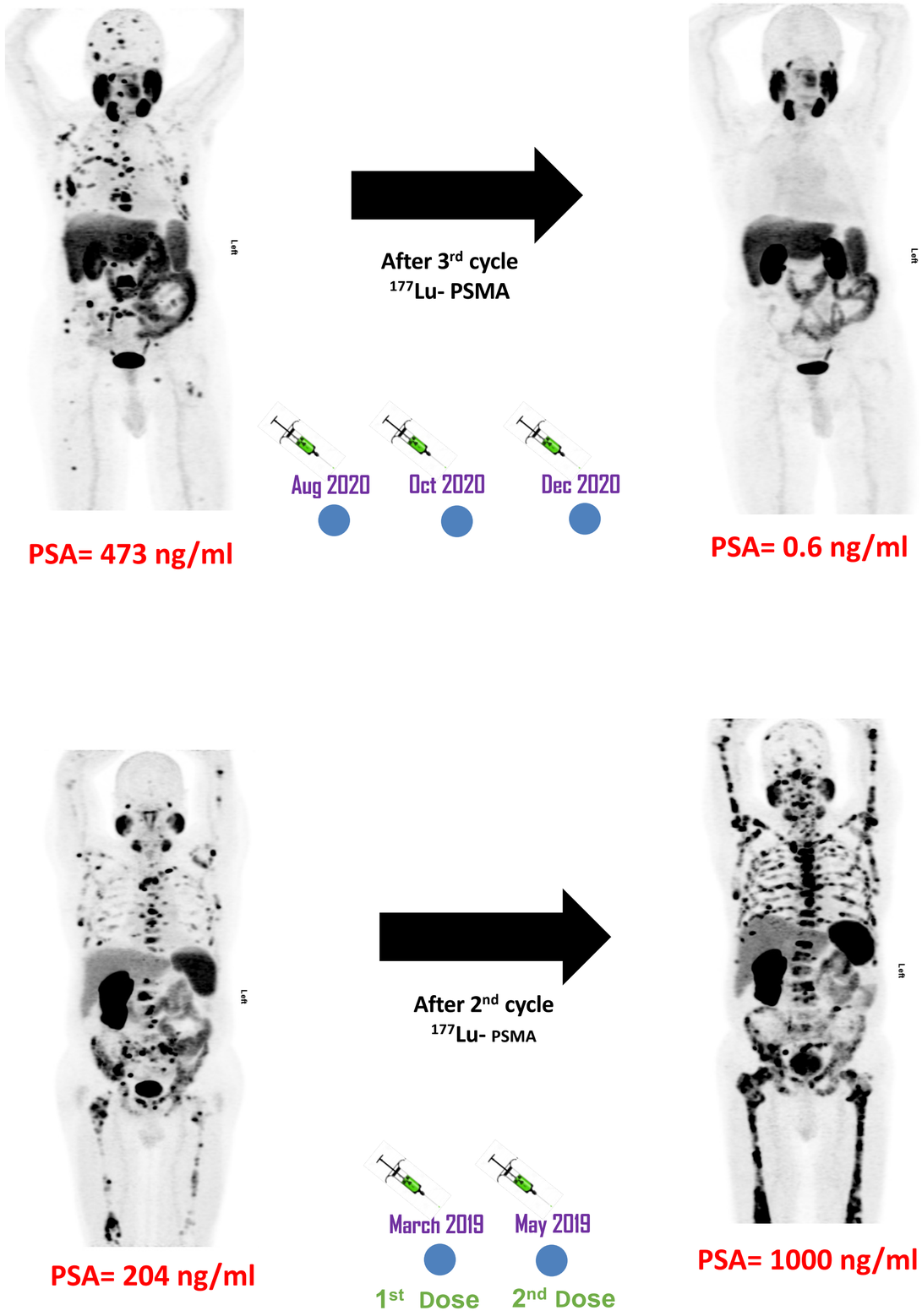
Introduction

^{177}Lu-PSMA radioligand therapy (RLT) is an emerging treatment in metastatic castration-resistant prostate cancer (mCRPC).

The purpose of this study is to present institutional experience of Kuwait, the effectiveness, efficacy and safety data of ^{177}Lu-PSMA RLT in mCRPC.

Methods

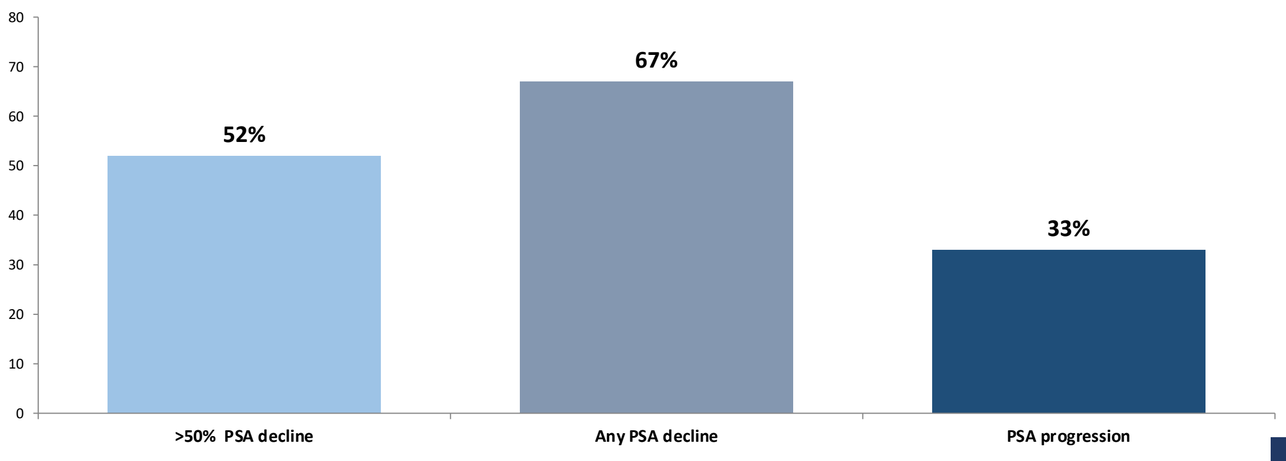
Twenty-one consecutive patients of mean age of 71±10.3years with mCRPC received 2-3 cycles of ^{177}Lu-PSMA after exhausting approved therapy. Patients were treated with Ministry of Health, Kuwait approval (1159/2019). Eligibility criteria include positive ^{68}Ga-PSMA PET uptake above or equal to liver activity. The 4-8GBq with median activity of 7.0GBq/ cycle with 8-week time interval between consecutive cycles. Primary outcomes was to report the PSA response to ^{177}Lu-PSMA RLT. Any PSA level and greater than 50% PSA decline were analyzed. The secondary outcome measures were objective, radiological response, according to PERCIST, and safety. Toxicity was categorized by the Common Terminology Criteria for Adverse Events (version 4.03).



Results

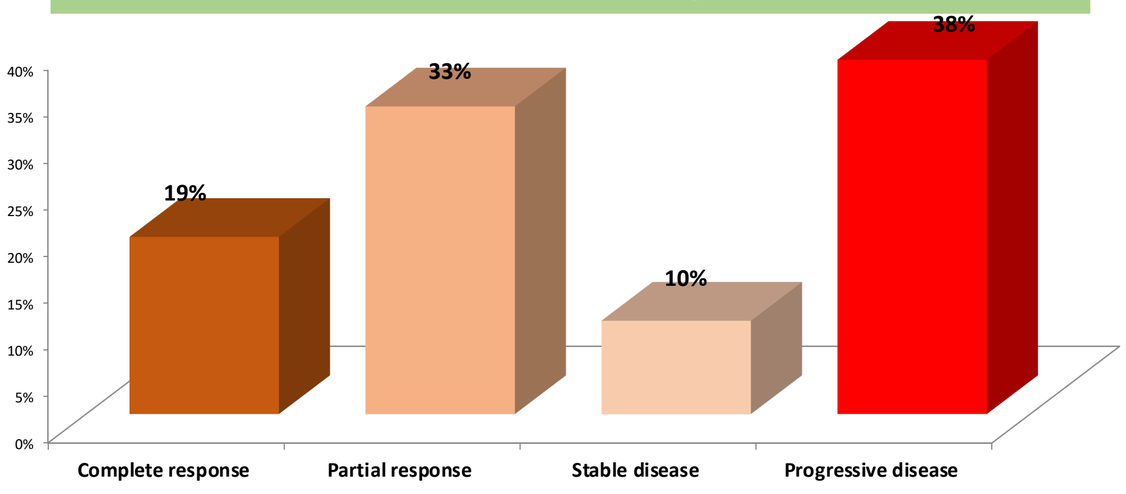
Primary outcome

PSA response



Secondary outcome

^{68}Ga-PSMA PET/CT response



Conclusion

^{177}Lu-PSMA RLT is a safe promising agent with minimal adverse effects in the treatment of patients with mCRPC that has progressed after standard treatment. Improved performance status and biochemical response is seen in more than half of the patients. The results of the present observation indicate that ^{177}Lu-PSMA should be used as part of standard of care in the treatment of mCRPC.

Contact

Dr. Sarah Murad
Nuclear Medicine Specialist
Kuwait Cancer Control Center
dr.smurad@gmail.com