The primary end points are SSE-free survival, with a key secondary end point of OS. In order to determine safety and OS, the long-term follow up consisted of a phone call every 6 months until 7 years after the last dose of radium-223 or death.

During the study, patients will be evaluated at each treatment visit for efficacy, safety, and health-related quality of life. Disease progression and long-term safety will also be assessed every 3 months. Upon completion of radium-223 treatment, all subjects will continue to receive abiraterone plus prednisone until occurrence of an SSE or death.

This trial is currently recruiting participants, with 74 enrolled as of September 5, 2014, concluded Dr Smith.

Enzalutamide Plus Radiation Therapy for High-Risk Localized Prostate Cancer

Written by Maria Vinall

Adjuvant androgen deprivation therapy (ADT), including a luteinizing hormone-releasing hormone analogue (LHRHA) for 2 to 3 years, is the standard of care before, during, and after radiotherapy for patients with localized prostate cancer at high risk of recurrence. Although outcomes in patients receiving long-term ADT (18 to 36 months) are superior to those seen in patients receiving 6 months of treatment, the optimal regimen remains unclear.

Scott Williams, PhD, Peter MacCallum Cancer Centre, Melbourne, Victoria, Australia, presented the design and objectives for a phase 3 trial of Enzalutamide in Androgen Deprivation Therapy with Radiation Therapy for High Risk, Clinically Localized, Prostate Cancer [ENZARAD; Australian New Zealand Clinical Trials Registry ACTRN12614000126617; Williams S et al. *Ann Oncol.* 2014], which is currently enrolling patients.

Enzalutamide is a new second-generation androgen receptor inhibitor that improves survival in metastatic castration-resistant prostate cancer; it is more potent and binds with a higher affinity to androgen receptors than do conventional nonsteroidal antiandrogens (NSAAs).

ENZARAD is an open-label intergroup trial open to adult men who have localized prostate cancer that is of high risk of recurrence and who are suitable for external beam radiation therapy (EBRT) with the intent to cure. Participants are stratified by Gleason score (7 vs 8 to 10), clinical stage (T1 to T2 vs T3 to T4), prostate-specific antigen (PSA) levels ≥10 ng/mL or ≥20 ng/mL, and study site. Patients are then randomized 1:1 to either enzalutamide (160 mg, daily) for 24 months or conventional NSAAs for 6 months. All participants will receive LHRHA for 24 months and EBRT (78 Gy/39 F) starting after week 16.

The primary study end point is overall survival. Secondary end points include cause-specific survival, PSA progression-free survival, clinical progression-free survival, time to subsequent hormonal therapy, health-related quality of life, adverse events, and health outcomes relative to cost. A tertiary objective is to identify biomarkers that are prognostic or predictive of response to treatment. Study assessments will be conducted at baseline; weeks 4, 12, 16, 20, and 24; then every 3 to 4 months until year 5, every 6 months until year 7, and annually thereafter. Computed tomography and magnetic resonance imaging and bone scan will be performed at baseline, then as clinically indicated. The tertiary objective will be assessed through archival tumor tissue and data from fasting blood collected at baseline, 24 weeks, 5 years, and first evidence of progression.

This study opened for recruitment in March 2014, with a planned duration of recruitment of 2 years. As of September 27, 2014, 9 sites were open to recruitment; 84 patients had been screened; and 20 patients had been randomized to treatment. Sites continue to be opened for recruitment in Australia, New Zealand, Ireland, the United Kingdom, and Europe.

Additional information on this study is available by e-mail (enzarad@ctc.usyd.edu.au) or from the study website: http://www.anzup.org.au/.

RAM Fails to Improve OS as Second-Line Treatment for Hepatocellular Cancer

Written by Wayne Kuznar

As second-line therapy for hepatocellular carcinoma (HCC), ramucirumab (RAM) did not improve overall survival (OS) compared with placebo (PBO) in a phase 3 randomized study, but benefit was observed in a selected population with an elevated baseline level of alpha-fetoprotein (AFP). The results of the randomized, phase 3 Ramucirumab Second-Line Treatment in Patients With Hepatocellular Carcinoma After First-Line Therapy With Sorafenib study [REACH; NCT01140347] were presented by Andrew X. Zhu, MD, Massachusetts General Hospital Cancer Center, Boston, Massachusetts, USA.

Currently, no treatment has demonstrated a survival benefit in a second-line setting (after sorafenib) in HCC [Zhu AX et al. *JAMA*. 2014; Llovet JM et al. *J Clin Oncol.* 2013]. Vascular endothelial growth factor (VEGF)