

Ra-223-dichloride therapy in metastatic castration-resistant prostate cancer. How often is the therapy regimen discontinued early and why?

Ashley Surran,

Lifespan/ Rhode Island Hospital School of Medical Providence RI United States

Abstract

Objectives: The purpose of this retrospective review is to evaluate the frequency with which patients being treated with Ra-223-dichloride therapy for castration-resistant prostate cancer (mCRCP) with bone metastases at our institution do not complete the full 6-dose course of therapy and the reasons for the discontinuation. The data obtained will be helpful in identifying patients who are the best candidates for this therapy and will help suggest ways to increase completion rates of Ra-223 therapy in the future.

Methods: Pertinent clinical information was reviewed on all 62 patients who began Ra-223 dichloride therapy at our institution between 01/2013 and the present time, including all patients who had either completed therapy or permanently discontinued therapy by the end of 2017. For patients who had discontinued therapy prior to receiving all 6 doses, we reviewed information in the electronic medical record or sent a survey to the referring physician to ascertain why the therapy was discontinued.

Results: Only 30/62 patients (48.4%) completed the full 6 dose therapy regimen. The 32 patients who did not complete the full regimen were grouped into the following reasons for discontinuation based on the review of the medical record: A) disease progression; B) non-prostate related illness; C) side effects of treatment (other than marrow suppression); D) decreasing blood counts; E) perceived absence of benefit of Ra-223 therapy; and F) Other. Adequate information regarding reasons for discontinuing Ra-223 therapy could not be obtained in five patients. Of the 27 patients who did not complete their treatment regimen and had adequate clinical information to evaluate reasons for discontinuation, 14 (52%) discontinued due to disease progression; 3 (11%) due to non-related illness; 2 (7%) because of non-hematologic side effects of the treatment; 5 (19%) due to dropping blood counts; and 3 (11%) due to lack of perceived benefit of the treatment. **Conclusions:** Only 48.4% of patients who began Ra-223 completed the full 6 dose regimen and of the 51.6% that did not, 52% stopped early due to disease progression. Hematologic and non-hematologic side effects accounted for only 26% of early discontinuations. We hypothesize that starting Ra-223 Dichloride earlier in the treatment plan for patients with mCRPC may increase the number of patients completing and benefiting from the treatment.