

Editorial

Commentary on local therapy in men who present with a metastatic prostate cancer from special issue senior guest editor

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In contrast to localized disease, there is no effective cure for men who present with metastatic prostate cancer (mPCa) as the 5-year relative survival rate is only 28% [1]. More importantly, it has been reported that the outcome in men who present with mPCa has not improved over the last two decades [2]. Given such dismal prognosis of mPCa, new ideas and novel approaches must be explored. In this regard, recently emerging data suggest that local tumor control may enhance survival in men with mPCa [3-7]. In this special issue, we have attempted to review the latest science as well as the evidence for local therapy in men who present with a mPCa.

Prostate cancer (PCa) is the most common non-skin cancer diagnosed and the second leading cause of cancer deaths among men in the United States [8]. Although radiation and surgery are quite effective for localized disease, there is no effective cure for men with a metastatic disease. In these patients with mPCa, the NCCN Prostate Cancer Guideline states that ADT ± docetaxel is the standard of care [9]. The combination of ADT and docetaxel has also been shown to be effective especially in men with a high metastatic burden by multiple investigators [10, 11]. Most recently, a series of retrospective studies have reported that local tumor control may be beneficial in men with mPCa [12-15].

Combining cytoreduction with systemic therapies has been shown to improve survival in

renal cell carcinoma, colon cancer, and ovarian cancer [16-18]. However, surgery or local therapy is not part of the standard treatment armamentarium in men with mPCa. Nevertheless, in 2006, Swanson et al have proposed that local therapy (radical prostatectomy) may be beneficial in men with mPCa due to tumor debulking, enhanced anti-tumor immunity, removing the primary site of tumor shedding, blocking paraneoplastic effects, and disrupting tumor production of hormones [19]. Since then, a body of evidence has accumulated supporting the hypothesis that treating the primary tumor improves outcome in PCa patients with clinical evidence of metastasis. First, analysis of the SEER database demonstrated that local tumor control, especially surgery, resulted in a significantly better overall survival and cancer-specific mortality in men with stage IV prostate cancer (M1a-c) [12, 14]. However, only 2.99% of eligible patients underwent surgery (245 out of 8185) [20]. Second, in patients found to have lymph node metastasis at the time of surgery, completing radical prostatectomy is associated with improved cancer-specific and overall survival [4, 5]. Third, primary PCa debulking has been shown to improve the effectiveness of ADT [6]. Since these studies are entirely retrospective, a well-designed and executed randomized clinical trials are necessary to determine whether local therapy should be incorporated into the armamentarium against mPCa. Herein, we have reviewed currently open clinical trials on this topic as well as potential systemic treatment that may be combined with local

therapies to improve the outcome in men who have metastatic PCa on presentation.

Disclosure of conflict of interest

None.

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