Optimal timing of sipuleucel-T treatment in metastatic castration-resistant prostate cancer.

Crawford ED, Petrylak DP, Higano CS, Kibel AS, Kantoff PW, Small EJ, Shore ND, Ferrari A.

Abstract

Numerous treatments are approved for metastatic castration-resistant prostate cancer (mCRPC), including sipuleucel-T, an FDA-approved immunotherapy.

MATERIALS AND METHODS: In this paper we review recent data providing insights into the mechanism of action of sipuleucel-T which suggests sipuleucel-T may be most effective when administered to mCRPC patients with a low burden of disease. Published and presented data from the sipuleucel-T clinical trials NeoACT (NCT00715104), IMPACT (NCT00065442), ProACT (NCT00715078), PROTECT (NCT00779402), OpenACT (NCT00901342), STAMP (NCT01487863) and STAND (NCT01431391), individually or across trials, were included in this review.

RESULTS: Overall, a growing body of evidence supports the concept that sipuleucel-T, like some other immunotherapies, has long term effects that result in an overall survival benefit. mCRPC patients with a low tumor burden may derive a greater therapeutic benefit, since the immune response may be more robust when the disease is less advanced and immunosuppressive effects from the tumor or traditional therapies may be less marked. In addition, treatment with sipuleucel-T in early mCRPC does not preclude subsequent treatment with other approved mCRPC therapies.

CONCLUSIONS: Collectively, clinical data to date suggest the optimal timing for sipuleucel-T treatment may be early in the mCRPC treatment paradigm.

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