

**Title of Research**

*Combined Analysis of Age and Race Predicting Clinical Outcomes in Men with Metastatic Castration-Resistant Prostate Cancer (mCRPC)*

**Lead Researcher**

Susan Halabi

**Primary Affiliation**

Duke University, Durham, North Carolina

**Data Sharing Agreement Date**

May 18, 2017

**Summary of Research**

This meta-analysis will explore the role of age and race on clinical outcomes based on pooled data from clinical trials in men with metastatic castration-resistant prostate cancer (mCRPC). The researchers aim to use the data from all phase III clinical trials in patients with mCRPC who were treated with a docetaxel-based regimen. Prognostic models of clinical outcomes will be developed and validated, including the primary endpoint of radiographic progression-free survival (rPFS) and incorporating age and race, as will models of objective response rate and post-therapy changes in prostate specific antigen. Finally, the association between rPFS, progression free survival (PFS) and overall survival (OS) will be tested.

**Study Design**

Trials were identified using PubMed and [www.clinicaltrials.gov](http://www.clinicaltrials.gov) and were selected for inclusion in this analysis based on two criteria. First, all were phase III trials conducted in chemotherapy-naïve metastatic castration-resistant prostate cancer patients where the control arm received docetaxel. Second, the primary outcome of all the trials was overall survival.

Eleven trials met these inclusion criteria. However, in one trial, the sponsor went out of business and the principal investigator (PI) cannot access the data.

Two trials were conducted by OncoGenex. The SYNERGY trial has met its final endpoint; this trial enrolled 1,022 men with mCRPC at more than 130 cancer centers throughout North America, Europe, Israel and South Korea. In the investigational arm of the trial, custirsen was administered as a weekly infusion of 640 mg following three loading doses, in combination with docetaxel and prednisone given as standard 3-week cycles. Patients in the active comparator arm received docetaxel and prednisone without custirsen.<sup>1</sup> The AFFINITY trial was a phase III international, randomized, open-label study designed to evaluate whether custirsen, when combined with cabazitaxel, could improve survival outcomes for patients with mCRPC whose disease has progressed after treatment with docetaxel. This trial enrolled 634 men with metastatic CRPC at 95 sites throughout North America, Europe, Russia and Australia.<sup>2</sup> Patients received cabazitaxel in combination with weekly custirsen or cabazitaxel alone, and treatment continued until disease progression, unacceptable toxicity or completion of 10 cycles. Patients enrolled in the AFFINITY trial are in follow-up.

At least nine trials are expected to be included in this meta-analysis.

**Study Population**

---

<sup>1</sup> <http://ir.oncogenex.com/releasedetail.cfm?ReleaseID=842949>

<sup>2</sup> <http://ir.oncogenex.com/releasedetail.cfm?ReleaseID=984464>

A total of 8,820 patients will be available for this analysis. The patient population consists of men with progressive metastatic disease who had failed both androgen ablation and anti-androgen withdrawal and were enrolled in six clinical trials conducted by the National Cancer Institute (NCI) genitourinary (GU) cooperative groups and private pharmaceutical companies. Participation in these trials was restricted to men with adequate renal, hepatic, clotting and bone marrow functions. With the exception of the pivotal phase III trials (TAX327 and SWOG 9916, where docetaxel was used as the experimental agent), none of the trials demonstrated a prolongation of survival in the experimental arm tested vs. docetaxel.

**Funding Source of Research**

Department of Defense

**Requested Study**

CA180-227 (NCT00744497): A Randomized Double-Blind Phase 3 Trial Comparing Docetaxel Combined With Dasatinib to Docetaxel Combined With Placebo in Castration-Resistant Prostate Cancer