Highlights of the NCCN Oncology Research Program

The NCCN Oncology Research Program (ORP) strives to improve the quality of life for patients and reduce cancer-related deaths by advancing cancer therapies through research. Since the program's establishment in 1999, the NCCN ORP has brought millions of dollars in research grants to investigators at NCCN Member Institutions. Research grants are provided to NCCN through collaborations with pharmaceutical and biotechnology companies; these grants are in turn used to support scientifically meritorious cancer research efforts.

NCCN ORP studies typically explore new avenues of clinical investigation and seek answers to important cancer-related questions. All studies are approved and funded through a scientific peer-review process and are overseen by the ORP.

An NCCN study funded through the grant mechanism is highlighted below.

A Multicenter Phase I/II Study of Enzalutamide With and Without Sorafenib in Patients With Advanced Hepatocellular Carcinoma

Principal Investigator: James Harding, MD

Condition: Hepatocellular carcinoma

Institutions: Memorial Sloan Kettering Cancer Center

This is a multicenter, open-label, phase I/II study of enzalutamide with or without sorafenib to define the safety, maximum tolerated dose (MTD), and pharmacokinetic parameters of each regimen in patients with advanced hepatocellular carcinoma (HCC).

The study has 4 parts: an enzalutamide dose escalation (Part 1A), a sorafenib and enzalutamide dose escalation (Part 1B), and dose expansion cohorts for the Part 1A and Part 1B MTDs (Part 2). Dose escalation will occur using a standard 3 + 3 design. For Part 2, the enzalutamide expansion cohort (Part 2A) will enroll 10 patients and is exploratory in nature; however, it will allow for acquisition of additional pharmacokinetic sampling at the MTD for determination of safety and efficacy. The MTD of sorafenib and enzalutamide combination expansions (Part 2B) will be designed using a Simon minimax design to formally evaluate the 4-month progression-free survival (PFS).

Primary Objectives:

- Establish the safety and tolerability of enzalutamide ± sorafenib in patients with advanced HCC
- Establish the MTD of enzalutamide ± sorafenib
- Estimate the 4-month PFS for patients treated with the sorafenib and enzalutamide MTD

Secondary Objectives:

- Assess the impact of enzalutamide on sorafenib steady-state pharmacokinetics
- Estimate PFS
- Estimate time to progression
- Estimate the overall response rate based on RECIST version 1.1
- Estimate overall survival

Exploratory Objectives:

- Estimate the proportion of advanced HCC tumors with androgen receptor (AR) positivity using several methods and explore differential antitumor activity based on pretreatment tumoral AR expression
- Measure the incidence of detectable circulating tumor cells (CTCs) and explore concordance of tumor AR expression using immunohistochemistry with AR expression in CTCs

The goal of the Highlights of the NCCN Oncology Research Program (ORP) is to provide readers with more information on the ORP, including studies currently accruing patients.

For more information on specific trials, including patient selection criteria, please use the contact information listed with each study.

For more information on the NCCN ORP, including a complete detailing of the clinical studies currently underway at NCCN Member Institutions, please access the NCCN ORP pages at NCCN.org/clinical_trials/clinicians.asp.

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- Measure changes in the frequency of CTCs with treatment
- Determine the concentrations of testosterone and dihydrotestosterone in serum samples at baseline and on treatment with enzalutamide

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