Investigational Exarafenib Treatment in Patients With Cancers That Have Changes in BRAF or NRAS Genes: Initial Results From a Clinical Trial¹

Summary of: A Phase 1 Clinical Trial Evaluating Monotherapy With Exarafenib (KIN-2787), a Highly Selective Pan-RAF Inhibitor in BRAF-Altered Solid Tumors and NRAS-Mutant Melanoma

Presented by Dr. Alexander Spira at the American Association for Cancer Research (AACR) Annual Meeting 2023 (Presentation CT032) ClinicalTrials.gov Identifier: NCT04913285

What is the purpose of this trial?

The goal of this clinical trial (or trial for short) is to determine a safe dose of a medicine called exarafenib to be used for treating patients who have solid cancerous tumors with specific genetic changes.

How does exarafenib work?

When mutations occur in the BRAF gene, the BRAF protein can send signals for cells to grow. If this happens at the wrong time or place, a cancerous tumor can form.





SIGNAL

Exarafenib can potentially stop tumor growth by blocking the BRAF protein in cancers that have these changes in the *BRAF* gene.

There are 3 different types of changes in the BRAF gene that can lead to cancer. Existing medicines can treat patients with the first type of change (Class 1), but there are no approved therapies that target the other 2 types of BRAF changes. These Class 2 or 3 changes in BRAF occur in more than half of patients with cancers that have BRAF genetic changes.²

~ 5 in 9 Patients Have BRAF Class 2 or 3 Changes





Exarafenib was designed to block BRAF proteins in patients with any of the 3 types of BRAF genetic changes.

Who participated in this trial?

The 60 patients who took part in this trial so far had many different types of cancers, such as lung cancer, melanoma, and colorectal cancer, that were advanced or had spread throughout the body. Their cancers had genetic mutations in the BRAF gene (Class 1, 2, or 3) or mutations in another gene (NRAS) that can activate the BRAF protein in patients with melanoma.



What did the results of the trial show?

This trial identified a dose of exarafenib that was safe for testing in follow-up trials. Exarafenib treatment had early promising effects on blocking cancer growth in patients with cancers that had genetic changes in BRAF or NRAS.

What's next?

The second part of the trial is currently enrolling patients with specific cancers that have changes in the **BRAF** gene.



These patients will be treated with exarafenib taken by mouth twice a day at the dose identified in the first part of the trial.



The goal will be to determine if exarafenib treatment causes their cancers to shrink or stop growing.

Travel services related to trial visits are provided for the patient and one caregiver at select trial locations.

Exarafenib dosing

This trial tested 6 different doses of twice-daily exarafenib taken by mouth. At the highest dose (400 mg), 2 of 6 participants developed rashes that limited their ability to take the medication. Therefore, 300 mg was determined to be the dose for follow-up trials.



Safety and tolerability of exarafenib

Most side effects were not severe, and a majority of patients were able to continue exarafenib treatment. Approximately three-quarters of patients experienced side effects related to exarafenib, but only 2 of 60 participants had to stop treatment due to side effects. On average, participants received 97% of their expected doses.

The most common side effects were different types of rashes, nausea, and changes in laboratory tests related to liver function.



How well did exarafenib work?

Of the 26 participants treated with the exarafenib dose that patients will receive in future trials (300 mg) who were evaluable for response, 12 had their tumors shrink or stop growing. These patients had many different types of cancers, as well as different types of *BRAF* and *NRAS* changes. Across all doses, 5 of 7 patients with *BRAF* Class 2 changes and 5 of 8 with *NRAS* changes had their tumors shrink. Two patients had received treatment with exarafenib for more than 56 weeks at the time of this analysis, showing the potential for long-term treatment with this medication.

Effects of Treatment on Cancer Growth Among 26 Patients Treated With 300 mg Exarafenib⁺







TUMOR SHRANK

TUMOR STOPPED GROWING

TUMOR GREW

Some participants also had other benefits with exarafenib treatment, including one patient with lung cancer whose tumor stopped growing and who no longer required supplemental oxygen after 2 weeks of treatment.



Kinnate Biopharma Inc., the sponsor of this trial, would like to acknowledge the patients who participated in this trial and the caregivers who provided support to the participants during the trial.

Medical writing and editorial support was funded by Kinnate Biopharma Inc. and provided by Melanie Styers, PhD, and Sandra Dedrick, PhD, of BluPrint Oncology Concepts, LLC.



* Results reported in this summary are based on a February 28, 2023, data cutoff.

[†] Of the 26 patients treated with 300 mg exarafenib, 4 patients had tumor shrinkage, 8 had tumors stop growing, and 14 had tumor growth.

Abbreviations: BRAF, B-Raf serine/threonine protein kinase; NRAS, neuroblastoma ras viral oncogene homolog
References: 1. Spira AI, et al. Presented at: 2023 AACR Annual Meeting; April 14–19; Orlando, FL. Abstract CT032.
Severson P, et al. Poster presented at: 2022 AACR Annual Meeting; April 8–13; New Orleans, LA. Abstract 4122.

For additional information about this trial or to learn more about the next part of the trial, please email clinicaltrials@kinnate.com or visit www.kinnate.com/patients/



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