

ARTICLE NAVIGATION

ORAL PRESENTATIONS - PROFFERED ABSTRACTS | MAY 22 2025

Abstract CT019: Preliminary safety and antitumor activity of zoldonrasib (RMC-9805), an oral, RAS(ON) G12D-selective, tri-complex inhibitor in patients with KRAS G12D non-small cell lung cancer (NSCLC) from a phase 1 study in advanced solid tumors FREE

Kathryn C. Arbour; Tanvetyanon Tawee; Rona Yaeger; Aparna R. Parikh; Paul Oberstein; Kyriakos P. Papadopoulos; John Strickler; Alexander Spira; John Powderly; Minal Barve; Judy Wang; Jia Luo; Nilofer Saba Hazad; Alexander Starodub; Patricia LoRusso; Avantika Elgin; Michelle Yang; Walter Yu; Mark McClelland; Satwant Lally; Sophia Sohoni; David S. Hong

[+ Author & Article Information](#)

Cancer Res (2025) 85 (8_Supplement_2): CT019.

<https://doi.org/10.1158/1538-7445.AM2025-CT019>



Split-Screen



Share ▾



Tools ▾



Versions ▾

Abstract

Background:

Patients with previously treated NSCLC have a high unmet medical need, with a median reported overall survival (OS) of <1 year. In NSCLC, KRAS G12D oncogenic mutations occur in approximately 4% of patients, but there are currently no RAS-targeted therapies approved for this population. Zoldonrasib (RMC-9805) is a potent, oral, RAS(ON) G12D-selective, covalent, tri-complex inhibitor targeting the active, GTP-bound state of oncogenic RAS G12D isoforms.

Methods:

In this Phase 1 study (NCT06040541), patients with previously treated, advanced KRAS G12D solid tumors received escalating zoldonrasib doses (150-1200 mg once daily [QD] or 300-600 mg twice daily [BID]). Antitumor activity was assessed every 6 weeks for the first 24 weeks then every 9 weeks. Additional patients were enrolled at doses that cleared the dose-limiting toxicity (DLT) evaluation to further characterize pharmacokinetics, safety, and antitumor activity of zoldonrasib.

Results:

[Skip to Main Content](#)

As of a December 2, 2024 data cutoff, 211 patients with KRAS G12D solid tumors received 5 escalating dose levels of zoldonrasib monotherapy (150-1200 mg daily). No DLTs or Grade 4 or 5 treatment-related adverse events (TRAEs) were reported, and the maximum tolerated dose

was not reached. Among patients who received a candidate recommended Phase 2 dose (RP2D) of 1200 mg QD (n=90), the most common ($\geq 10\%$ of patients) TRAEs were nausea (39%), diarrhea (24%), vomiting (18%), and rash (12%). TRAEs were primarily Grade 1 or 2 in severity with the exception of 1 patient with Grade 3 diarrhea and 1 patient with Grade 3 ALT elevation. Both Grade 3 TRAEs resolved following dose interruption. Among patients who received 1200 mg QD, 1 patient (1%) discontinued treatment, 4 patients (4%) had dose reductions, and 8 patients (9%) had dose interruptions due to a TRAE. At daily doses ≥ 600 mg, exposures to zoldonrasib were within the range of preclinical exposures that induced tumor regressions in mice. In patients with NSCLC (n=18) receiving 1200 mg QD zoldonrasib who enrolled at least 8 weeks prior to the data cutoff, the objective response rate (confirmed response or pending confirmation) was 61% (95% CI: 36, 83). Median time to onset of initial response was 1.4 months (range, 1.2-2.8) and the disease control rate was 89% (95% CI: 65, 99).

Conclusions:

Zoldonrasib showed encouraging initial antitumor activity in patients with KRAS G12D NSCLC. Tolerability was manageable across all dose levels in the Phase 1 study, which enrolled various tumor types. This overall safety profile and antitumor activity support continued evaluation as monotherapy in patients with KRAS G12D NSCLC, and in combination with immunotherapy, chemotherapy, and targeted therapies (NCT06162221).

Citation Format:

Kathryn C. Arbour, Tanvetyanon Tawee, Rona Yaeger, Aparna R. Parikh, Paul Oberstein, Kyriakos P. Papadopoulos, John Strickler, Alexander Spira, John Powderly, Minal Barve, Judy Wang, Jia Luo, Nilofer Saba Hazad, Alexander Starodub, Patricia LoRusso, Avantika Elgin, Michelle Yang, Walter Yu, Mark McClelland, Satwant Lally, Sophia Sohoni, David S. Hong. Preliminary safety and antitumor activity of zoldonrasib (RMC-9805), an oral, RAS(ON) G12D-selective, tri-complex inhibitor in patients with KRAS G12D non-small cell lung cancer (NSCLC) from a phase 1 study in advanced solid tumors [abstract]. In: Proceedings of the American Association for Cancer Research Annual Meeting 2025; Part 2 (Late-Breaking, Clinical Trial, and Invited Abstracts); 2025 Apr 25-30; Chicago, IL. Philadelphia (PA): AACR; Cancer Res 2025;85(8_Suppl_2):Abstract nr CT019.

©2025 American Association for Cancer Research

Advertisement

[Skip to Main Content](#)

[View Metrics](#)

Citing Articles Via

[Google Scholar](#)

Email Alerts

[Article Activity Alert](#)

[eTOC Alert](#)

Latest News

[Deploying AI to Better Suss Out HER2 Status](#)

[New Ovarian Cancer Combo Shows Wider Promise](#)

[“Brain Fog” after CAR T May Be Reversible](#)

[View more recent articles >](#)

[Skip to Main Content](#)

Breaking

[PI3K Inhibitor Delays Chemotherapy Start](#)

Drug Combo Boosts Lung Cancer Survival

Genentech, Orionis to Stick Together with Deal on Glues

View more recent articles >

Research Watch

Ferroptosis Is Induced by Lysosomal Iron Activation in Cancer Cells

Common Blood Tests Predict CAR T-cell Therapy Response in Non-Hodgkin Lymphoma

Frequent Blood Donation Influences DNMT3A-Driven Clonal Hematopoiesis

View more recent articles >

Advertisement

Issues

Online First

Collections

News

Twitter

Online ISSN 1538-7445

Print ISSN 0008-5472

AACR Journals

Blood Cancer
Discovery

Cancer Discovery

Cancer
Epidemiology,
Biomarkers &
Prevention

[Skip to Main Content](#)

Cancer Immunology
Research

Cancer Prevention
Research

Cancer Research

Cancer Research
Communications

Clinical Cancer
Research

Molecular Cancer
Research

Molecular Cancer
Therapeutics



[Information on
Advertising & Reprints](#)

[Information for
Institutions/Librarians](#)

[RSS Feeds](#)

[Privacy Policy](#)

Copyright © 2025 by the American Association for Cancer Research.