

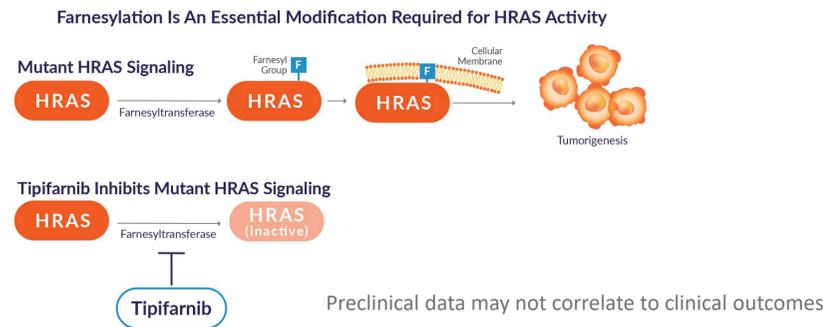
The AIM-HN Study: A registrational-directed study evaluating the efficacy of tipifarnib in patients with recurrent or metastatic head and neck squamous cell carcinoma with *HRAS* mutations

Robert Haddad¹, Douglas Adkins², Lisa Licitra³, Justine Yang Bruce⁴, Maura Gillison⁵, Myung-Ju Ahn⁶, Ching-Yun Hsieh⁷, Hung-Ming Wang⁸, Amanda Psyrris⁹, Jean-Pascal Machiels¹⁰, Binaifer Balsara¹¹, Mollie Leoni¹¹, Kevin Harrington¹², Nabil F. Saba¹³, Alan Ho¹⁴

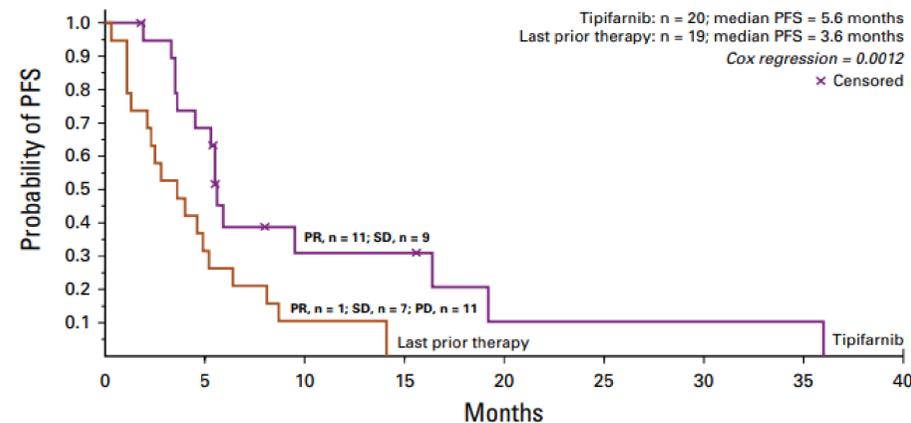
¹Dana Farber Cancer Institute, Harvard Medical School, Boston, MA, USA, ²Washington University and Siteman Cancer Center, St. Louis, MO, USA, ³Fondazione IRCCS - Istituto Nazionale dei Tumori and University of Milan, Milan, Italy, ⁴University of Wisconsin Carbone Cancer Center, Madison, WI, USA, ⁵The University of Texas MD Anderson Cancer Center, Houston, TX, USA, ⁶Samsung Medical Center, Seoul, South Korea, ⁷China Medical University Hospital, Taichung, Taiwan, ⁸Chang Gung Memorial Hospital, Taoyuan, Taiwan, ⁹National Kapodistrian University of Athens, Attikon Hospital, Athens, Greece, ¹⁰Cliniques Universitaires Saint-Luc, Brussels, Belgium, ¹¹Kura Oncology, Boston, MA, USA, ¹²The Royal Marsden//The Institute of Cancer Research NIHR Biomedical Research Centre, London, UK, ¹³Winship Cancer Institute, Emory University, Atlanta, GA, USA, ¹⁴Memorial Sloan-Kettering Cancer Center, New York, NY, USA

BACKGROUND

- HRAS* mutations define a unique molecular subset of ~ 4-8% of head and neck squamous cell carcinoma (HNSCC)¹. Evidence suggests that these tumors respond poorly to standard systemic therapy, and the impact of *HRAS* missense mutations on clinical outcomes is currently being evaluated.
- Tipifarnib is a potent, selective inhibitor of farnesyltransferase, a critical enzyme required for *HRAS* activity².



- Data from a Phase 2 proof of concept study for tipifarnib in *HRAS* mutant HNSCC demonstrated an overall response rate of 55% (95% CI, 31.5 to 76.9), a median progress-free survival of 5.6 months, and a median overall survival of 15.4 months in patients with high variant allele (VAF) frequency (≥20%). These patients had received a median of two prior lines of systemic therapy. The safety profile of tipifarnib was tolerable and manageable in this study³.



No. at risk	0	5	10	15	20	25	30	35	40
Tipifarnib	20	13	4	4	1	1	1	1	0
Last prior therapy	19	6	2	0	0	0	0	0	0

METHODS

An open-label registrational-directed study evaluating the efficacy and safety of tipifarnib in patients with *HRAS*-mutant HNSCC



Tipifarnib Treatment Cohort

Low VAF (<20%)

High VAF (≥20%)

Enrollment based on Key Eligibility Criteria

Tipifarnib Treatment (N=80)
600 mg orally, BID on days 1-7 and 15-21 of 28-day treatment cycles

Key Inclusion Criteria

- Histologically confirmed HNSCC not amenable to local therapy with curative intent
- Documented treatment failure from most recent prior therapy, and from at least one prior platinum-containing regimen, in any treatment setting
- Known tumor missense *HRAS* mutation and VAF value
- Measurable disease by RECIST v1.1
- ECOG performance status of 0-1

Key Exclusion Criteria

- Salivary gland, thyroid, (primary) cutaneous squamous or non-squamous histologies
- Intolerable Grade 2 or ≥ Grade 3 neuropathy or unstable neurological symptoms within 4 weeks of Cycle 1 Day 1
- Active, uncontrolled infections requiring systemic therapy

Primary Objective:

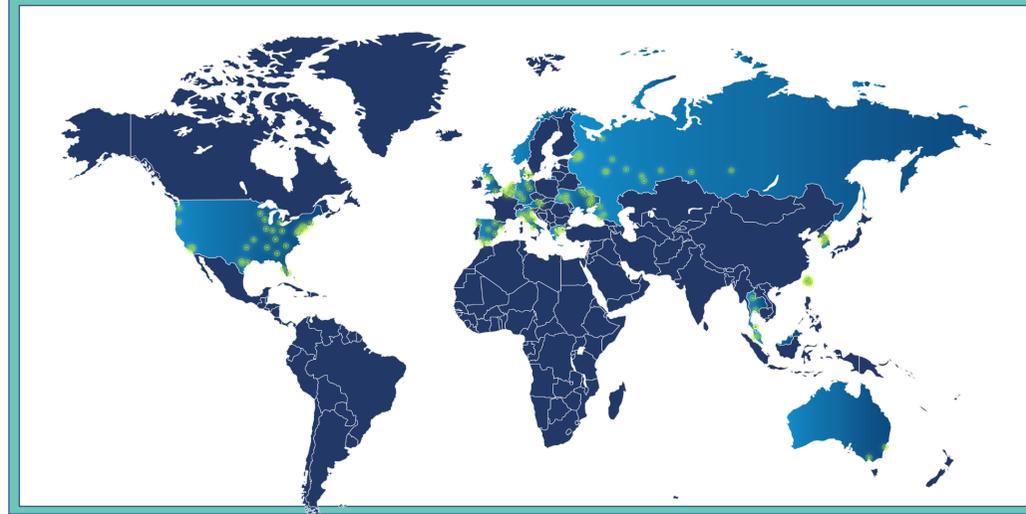
Objective response rate (ORR) in high VAF population, using RECIST v1.1 by Independent Review Facility

Secondary Objectives:

ORR in all VAF population
Duration of response in high and all VAF populations
PFS
OS
Quality of Life
Safety and tolerability
Pharmacokinetics

Participating Sites: 132 sites globally

North America, Europe, Asia Pacific, Russia and Ukraine



Status: Currently enrolling

The Independent Data Monitoring Board last reviewed data in March 2021 and recommended the trial continue as planned.

Study Contacts: Phone: 617-588-3755

E-mail: KO-TIP-007@kuraoncology.com

ClinicalTrials.gov identifier: NCT03719690

REFERENCES

- The Cancer Genome Atlas Network. Comprehensive genomic characterization of head and neck squamous cell carcinomas. *Nature*. 2015;517(7536):576-582.
- Gilardi M, Wang Z, Proietto M, et al. Tipifarnib as a Precision Therapy for *HRAS*-Mutant Head and Neck Squamous Cell Carcinomas. *Mol Cancer Ther*. 2020
- Ho AL, Brana I, Haddad R, et al. Tipifarnib in Head and Neck Squamous Cell Carcinoma With *HRAS* Mutations [published online ahead of print, 2021 Mar 22]. *J Clin Oncol*. 2021