Title

FID-007 in combination with cetuximab in recurrent or metastatic (R/M) head and neck squamous cell carcinoma (HNSCC)

Guilherme Rabinowits[1], Christine H. Chung[1], Aditya Shreenivas[3], Eric S. Nadler[4], Donald A. Richards[5], Nabil F. Saba[6], Ray Yin[7], Jorge J. Nieva[2], Jacob S. Thomas.[2]

[1]Moffitt Cancer Center, Tampa, FL. [2]Norris Comprehensive Cancer Center, University of Southern California, Los Angeles, CA. [3]City of Hope Comprehensive Cancer Center, Duarte, CA. [4]Texas Oncology, Dallas, TX. [5]Texas Oncology, Tyler, TX. [6]Winship Cancer Institute, Emory University, Atlanta, GA. [7]Fulgent Pharma, El Monte, CA.

Contact: Guilherme.Rabinowits@moffitt.org.

Purpose/Objectives

Paclitaxel is commonly used to treat HNSCC but is associated with infusion-related reactions and peripheral neuropathy (PN). Historically, the median progression-free survival (PFS) of standard of care, second-line therapy for metastatic HNSCC is 2-3 months (mo). FID-007 is a novel nanoencapsulated paclitaxel utilizing a proprietary poly(2-ethyl-2-oxazoline) polymer excipient. This formulation overcomes the limited water solubility and pharmacodynamics of paclitaxel, enhancing both tumor penetration and retention.

Materials/Methods

FID-007-003 is an ongoing phase 2, randomized, multicenter, open-label study. Patients must have progressed after anti-PD1/PD-L1 therapy and have not received >1 line of prior therapy for R/M HNSCC. Prior cetuximab or taxane in the R/M setting were not allowed.

Patients were stratified by p16 status and prior taxane exposure, and randomized 1:1 to one of two doses of FID-007 (Arm A: 75 mg/m^2; Arm B: 125 mg/m^2) IV on days 1, 8, and 15 in combination with cetuximab 500 mg/m^2 IV on days 1 and 15 every 28 days starting with Cycle 2.

The primary endpoint was investigator-assessed objective response rate (ORR) by RECIST 1.1.

Results

As of the preliminary data cut-off date of 20DEC2025, 45 patients were randomized and received ≥ 1 dose of FID-007; 42 patients were efficacy-evaluable (19 in Arm A, 23 in Arm B). Median age was 65 years (range 45-81), 62% (28/45) received prior platinum-based therapy and 67% (30/45) received 1 prior systemic therapy for R/M disease. The median

cumulative dose of FID-007 was 825 mg/m^2 in Arm A and 1,450 mg/m^2 in Arm B. The median duration of treatment was 4 mo in Arm A and 4.3 mo in Arm B, with a median follow-up of 4.2 mo.

The ORR/complete response (CR) rate was 60%/17% (58%/11% in Arm A, 61%/22% in Arm B), and the median PFS was 7.2 mo [6.7 mo in Arm A (2.0-12.8), and 7.2 mo in Arm B (4.0-NR)]. The median duration of response was 7.4 mo (7.4 mo in Arm A, NR in Arm B) with 56% (14/25) of responders continuing to respond at the time of data cut-off. The overall survival data are immature at present.

Treatment-related adverse events (TRAEs) were mostly of grade 1-2. Grade 3-4 TRAEs occurring in ≥ 2 patients included neutropenia (3 in Arm A, 5 in Arm B), anemia (2 in Arm A, 4 in Arm B), leukopenia (3 in Arm B), acneiform dermatitis (2 in Arm A), maculo-papular rash and other rash (2 in Arm B). There was 1 Grade 5 TRAE: pneumonia (Arm B).

Conclusion

FID-007, administered in combination with cetuximab, demonstrated clinically encouraging and durable anticancer activity at both doses tested in this population of pre-treated R/M HNSCC. Notably, the absence of infusion-related reactions and the lack of grade ≥ 3 PN, along with a tolerable safety profile potentially compares favorably with other taxanes, which may ultimately enable a longer treatment duration and lead to improved therapeutic outcomes.