

1539R0

Amivantamab + pembrolizumab + carboplatin in first-line recurrent/metastatic head and neck squamous cell cancer (1L R/M HNSCC): Results from the phase 1b/2 OrigAMI-4 study

P.L.L. Swiecicki¹, A.K. Bhatia², I.G. Braña³, A. Kawecki⁴, M. Pogorzelski⁵, E. Borcoman⁶, K.J. Harrington⁷, R. Metcalf⁸, A. Sukari⁹, R. Mehra¹⁰, T. Rutkovski¹¹, H. Tanaka¹², C. Even¹³, K. Toyoizumi¹⁴, M. Wade¹⁵, R.B. Verheijen¹⁶, E. Yilmaz¹⁷, S. Shah¹⁵, W. Ince¹⁸

¹ Division of Hematology/Oncology, Department of Internal Medicine, University of Michigan Rogel Cancer Center, Ann Arbor, United States of America, ² Yale Cancer Center, Yale School of Medicine, New Haven, United States of America, ³ Vall d'Hebron University Hospital (VHIO), IIS IR-HUVH, Barcelona, Spain, ⁴ National Research Institute of Oncology, Warsaw, Poland, ⁵ Department of Medical Oncology, West German Cancer Center, University Hospital Essen, Essen, Germany, ⁶ Department of Drug Development and Innovation (D3i), Institut Curie, Paris, France, ⁷ The Institute of Cancer Research/Royal Marsden Hospital, London, United Kingdom, ⁸ The Christie NHS Foundation Trust, Manchester, United Kingdom, ⁹ Karmanos Cancer Institute, Detroit, United States of America, ¹⁰ Marlene and Stewart Greenebaum Comprehensive Cancer Center, University of Maryland, Baltimore, United States of America, ¹¹ Maria Sklodowska-Curie National Research Institute of Oncology Gliwice Branch, Gliwice, Poland, ¹² Department of Otorhinolaryngology, Head and Neck Surgery, Tokyo Medical, Tokyo, Japan, ¹³ Head and Neck Oncology, Gustave Roussy Institute, Villejuif, France, ¹⁴ Johnson & Johnson, Tokyo, Japan, ¹⁵ Johnson & Johnson, Spring House, United States of America, ¹⁶ Johnson & Johnson, Leiden, Netherlands, ¹⁷ Johnson & Johnson, Raritan, United States of America, ¹⁸ Addenbrooke's Hospital, Cambridge, United Kingdom

Background

Pembrolizumab + chemotherapy showed an objective response rate (ORR) of 36% in 1L R/M HNSCC. Amivantamab (EGFR-MET bispecific antibody) showed promising single-agent activity (ORR 42%) in R/M HNSCC after immune checkpoint inhibitor and platinum-based chemotherapy (Burtneiss *JCO* 2026). Amivantamab + pembrolizumab showed an encouraging ORR of 56% in 1L R/M HNSCC (Mehra *MHNC* 2026). We examined a 3-drug combination of amivantamab + pembrolizumab + carboplatin in 1L R/M HNSCC.

Methods

OrigAMI-4 (NCT06385080) Cohort 5 is assessing subcutaneous amivantamab hyaluronidase-lpuj Q3W + pembrolizumab + carboplatin (max. 6 cycles) in participants (pts) with 1L PD-L1 CPS ≥ 1 R/M HNSCC. Primary endpoint is ORR by investigator per RECIST v1.1. ORRs were assessed separately for HPV-unrelated disease (defined as oral cavity, hypopharynx, larynx and p16-negative oropharynx) and HPV+ oropharyngeal squamous cell carcinoma (OPSCC).

Results

30 pts received amivantamab + pembrolizumab + carboplatin (median age, 66 y; 73% male). At clinical cutoff (18-Mar-26), median follow-up was 7.7 mo (range, 3.0–10.3). 29 pts were included in this efficacy analysis (1 pt was deemed ineligible). Among 22 pts with HPV-unrelated disease, 17 achieved a confirmed response (ORR 77%; 95% CI, 55–92), including 3 complete responses and 14 partial responses (PR); 4 pts had stable disease (SD), 1 had progressive disease (PD). At clinical cutoff, 11 of 17 responses (65%) were ongoing. Among 7 pts with HPV+ OPSCC, 2 achieved PR (ORR 29%) with 1 response ongoing; 2 pts had SD, 2 had PD and 1 not evaluable. Safety profile was consistent with the individual agents. Most common adverse events were anemia, hypoalbuminemia, thrombocytopenia, stomatitis and hypomagnesemia. Administration-related reactions due to amivantamab were low (13%; no grade ≥ 3). Updated results with longer follow-up will be presented at the meeting.

Conclusions

Amivantamab + pembrolizumab + carboplatin showed an ORR of 77% in HPV-unrelated 1L R/M HNSCC. The global phase 3 randomized OrigAMI-5 study (NCT07276399) is evaluating this regimen vs pembrolizumab + 5-FU + platinum in HPV-unrelated 1L R/M HNSCC.

Clinical trial identification

NCT06385080.

Editorial acknowledgement

Katharine Fang, PhD (Johnson & Johnson), with support from Lumanity Communications Inc.

Legal entity responsible for the study

This study was funded by Janssen Research & Development, LLC, a Johnson & Johnson Company.

Funding

This study was funded by Janssen Research & Development, LLC, a Johnson & Johnson Company.

Disclosure

P.L.L. Swiecicki: Financial Interests, Personal, Speaker, Consultant, Advisor: Astellas Pharma Inc., CDR Life, Elevar, EMD Serono, GeoVax, Janssen, Prelude, Rapt Therapeutics, Regeneron, Remix, and Rgenta; Financial Interests, Personal, Research Funding: Ascentage Pharma and Summit Therapeutics; Financial Interests, Personal, Royalties: ctDNA detection technology from Bio Rad. A.K. Bhatia: Financial Interests, Personal, Advisory Board, Honoraria: Clinical Care Options and Medscape; Financial Interests, Personal, Advisory Role: Adcendo, Daiichi Sankyo, and Coherus Oncology; Financial Interests, Personal, Research Funding: Boehringer Ingelheim and Genentech. I.G. Braña: Financial Interests, Personal, Advisory Board: Achilles Therapeutics, Bristol Myers Squibb, Cancer Expert Now, eTheRNA Immunotherapies, Merck Serono, Merck Sharp & Dohme (MSD), Rakuten Pharma, Boehringer Ingelheim, PCI Biotech, Guidepoint, Gilead Sciences, Boehringer Ingelheim, Merus, Bicara Therapeutics, Pyxis; Financial Interests, Personal, Invited Speaker: Bristol Myers Squibb, Merck Serono, Merck Sharp & Dohme (MSD), Roche; Financial Interests, Institutional, Local PI: AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, GSK, Gliknik, Incyte, ISA pharmaceuticals, Janssen Oncology, Kura, Merck Serono, Debiopharm, Merck Sharp & Dohme (MSD), Nanobiotix, Novartis, Northern Biologics, Regeneron, Pfizer, Seattle Genetics, Shattuck Labs, VCN Biosciences, Roche, Immunet, MacroGenics, Sanofi, PharmaMar, Odonate Therapeutics, Bicycle Therapeutics, Dragonfly therapeutics, Gilead, Merus, Debiopharm, ISA Therapeutics, AOP Pharma, Aveo Pharmaceuticals, Bicara Therapeutics, Adlay/Nortye, Bayer, Tango Therapeutics, Servier; Non-Financial Interests, Principal Investigator, Basket of baskets: Cancer Core Europe; Non-Financial Interests, Member, Head and Neck Group: EORTC; Non-Financial Interests, Member: SEOM, ASCO. A. Kaweck: Financial Interests, Personal, Other, Honoraria for lectures: Merck, MSD, BMS; Financial Interests, Personal, Advisory Board: MSD, Er-Kim. M. Pogorzelski: Financial Interests, Personal, Other, Honoraria: Amgen, AstraZeneca, Bayer, BMS, Lilly, Merck Healthcare Germany, MSD, Roche, Sanofi Aventis, Servier, Janssen Pharmaceuticals, Onkowsen, Pierre Fabre, Novartis, artTempi; Financial Interests, Personal, Other, Support for attending meetings and/or travel: Amgen, AstraZeneca, Bayer, BMS, Lilly, Merck Healthcare Germany, MSD, Roche, Sanofi Aventis, Servier, Janssen Pharmaceuticals, Onkowsen, Pierre Fabre, Novartis; Financial Interests, Personal, Advisory Board: Amgen, BMS, Merck Healthcare Germany, MSD. E. Borcoman: Financial Interests, Institutional, Research Grant: Egle TX; Financial Interests, Personal, Other, Consulting Fees: Egle TX; Financial Interests, Personal, Advisory Board, Support for attending meetings and/or travel: Daiichi Sankyo Europe GmbH. K.J. Harrington: Financial Interests, Institutional, Advisory Board: Amgen, AstraZeneca, BMS, Boehringer Ingelheim, Merck, MSD, Pfizer, Replimune, Oncolys, Vyriad, Idera, Beigene, GSK, Johnson & Johnson, QBiotech, AbbVie, Nanobiotix; Financial Interests, Institutional, Other, Honoraria for lectures: Amgen, AstraZeneca, BMS, Boehringer Ingelheim; Financial Interests, Institutional, Advisory Board, Advisory board for CD47 assets: Arch Oncology; Financial Interests, Institutional, Advisory Board, Development of DDR assets: ARTIOS; Financial Interests, Institutional, Advisory Board, Development of exosomal STING agonist: Codiak; Financial Interests, Institutional, Advisory Board, Development of oncolytic adenovirus: PsiVac; Financial Interests, Institutional, Advisory Board, Steering committee: ALX Oncology; Financial Interests, Institutional, Advisory Board, Development of preclinical asset: Onchilles; Financial Interests, Personal, Advisory Board, Consultancy: PDS Biotech; Financial Interests, Institutional, Funding, Research: AstraZeneca, Boehringer Ingelheim, MSD; Financial Interests, Institutional, Funding, Development of oncolytic HSV platform.: Replimune; Financial Interests, Institutional, Research Grant, Development of intratumoural therapy: Johnson & Johnson; Non-Financial Interests, Leadership Role, Chair of Steering Committee: ART NET; Non-Financial Interests, Other, Member of Global Steering Committee: MR - Linac. R. Metcalf: Financial Interests, Personal, Advisory Board: Ayala, Bayer, Aptus Clinical, PCI Biotech, Oxsonics, Roche, Achilles Therapeutics, Avacta; Financial Interests, Personal, Other, Honoraria: BMS, MSD, Sanofi. R. Mehra: Financial Interests, Sponsor/Funding: Johnson & Johnson; Financial Interests, Personal, Other, Consulting Fees: Janssen Oncology, Merck KGaA, Merus, Summit; Financial Interests, Stocks/Shares, To spouse: GSK; Financial Interests, Other, Spouse is an employee of this entity: AstraZeneca. T. Rutkowski: Financial Interests, Personal, Other: MSD discussing meeting. K. Toyozumi: Financial Interests, Personal, Full or part-time Employment: Johnson & Johnson; Financial Interests, Personal, Stocks/Shares: Johnson & Johnson. M. Wade: Financial Interests, Personal, Full or part-time Employment: Johnson & Johnson; Financial Interests, Personal, Stocks/Shares: Johnson & Johnson. R.B. Verheijen: Financial Interests, Personal, Full or part-time Employment: Johnson & Johnson; Financial Interests, Personal, Stocks/Shares: Johnson & Johnson. E. Yilmaz: Financial Interests, Personal, Full or part-time Employment: Johnson & Johnson; Financial Interests, Personal, Stocks/Shares: Johnson & Johnson. S. Shah: Financial Interests, Personal, Full or part-time Employment: Johnson & Johnson; Financial Interests, Personal, Stocks/Shares: Johnson & Johnson. W. Ince: Financial Interests, Personal, Other, Honoraria: Ipsen, Recordati, Eisai, Merck Serono, AstraZeneca; Financial Interests, Personal, Advisory Role, Consulting Fees: MSD(Merck), Ipsen, Recordati; Financial Interests, Personal, Research Funding: MSD (Merck); Financial Interests, Personal, Other, Travel: Ipsen, MSD. All other authors have declared no conflicts of interest.