

1996P

Long-term outcomes with tepotinib for clinically relevant subgroups of patients (pts) with MET exon 14 (METex14) skipping NSCLC in the VISION study: A \geq 3-year follow-up

<u>F. Griesinger</u>¹, R. Ferrara², E. Felip³, E.F. Smit⁴, R. Veillon⁵, X. Le⁶, J. Mazieres⁷, A.B. Cortot⁸, J. Raskin⁹, M. Thomas¹⁰, N. Reinmuth¹¹, J.C-H. Yang¹², M-J. Ahn¹³, J. Zhao¹⁴, H. Sakai¹⁵, S. Viteri¹⁶, Y-L. Wu¹⁷, R. Bruns¹⁸, A. Johne¹⁹, P.K. Paik²⁰

¹ Pius-Hospital, University Medicine Oldenburg, Department of Hematology and Oncology, University Department Internal Medicine-Oncology, Oldenburg, Germany, ² Fondazione IRCCS Istituto Nazionale dei Tumori di Milano, Milan, Italy; Università Vita-Salute San Raffaele Milano, Milan, Italy, ³ Department of Oncology, Vall d'Hebron Institute of Oncology (VHIO), Barcelona, Spain, ⁴ Department of Pulmonary Diseases, Leiden University Medical Centre, Leiden, Netherlands, ⁵ CHU Bordeaux, Service des Maladies Respiratoires, Bordeaux, France, ⁶ Department of Thoracic Head and Neck Medical Oncology, The University of Texas MD Anderson Cancer Center, Houston, United States of America, ⁷ CHU de Toulouse, Université Paul Sabatier, Toulouse, France, ⁸ Univ. Lille, CHU Lille, CNRS, Inserm, Institut Pasteur de Lille, UMR9020 - UMR-S 1277 - Canther, F- Lille, France, 9 Department of Pulmonology and Thoracic Oncology, Antwerp University Hospital (UZA), Edegem, Belgium, ¹⁰ Department of Thoracic Oncology, Thoraxklinik, Heidelberg University Hospital and National Center for Tumor Diseases (NCT), Heidelberg, Germany; Translational Lung Research Center Heidelberg (TLRC-H), Member of the German Center for Lung Research (DZL), Heidelberg, Germany, ¹¹ Asklepios Clinics Munich-Gauting, Department of Thoracic Oncology, Gauting, Germany, ¹² Department of Medical Oncology, National Taiwan University Cancer Center, Taipei, Taiwan, ¹³ Section of Hematology-Oncology, Department of Medicine, Samsung Medical Center Sungkyunkwan University School of Medicine, Seoul, Republic of Korea, 14 Key Laboratory of Carcinogenesis and Translational Research (Ministry of Education/Beijing), Department of Thoracic Oncology, Peking University Cancer Hospital and Institute, Beijing, China, ¹⁵ Department of Thoracic Oncology, Ageo Central General Hospital, Saitama, Japan, ¹⁶ Instituto Oncológico Dr Rosell, Hospital Universitario Dexeus, Grupo Quiron Salud, Barcelona, Spain, ¹⁷ Guangdong Lung Cancer Institute, Guangdong Provincial People's Hospital & Guangdong Academy of Medical Sciences, Guangzhou, China, ¹⁸ Clinical Measurement Science, Merck Healthcare KGaA, Darmstadt, Germany, ¹⁹ Global Clinical Development, Merck Healthcare KGaA, Darmstadt, Germany²⁰ Thoracic Oncology Service, Memorial Sloan-Kettering Cancer Center, New York, United States of America

Background

Tepotinib, an oral MET tyrosine kinase inhibitor, is approved for the treatment of advanced/metastatic METex14 skipping NSCLC in multiple countries. The VISION study showed robust and durable efficacy and safety of tepotinib in pts with ≥ 3 years follow-up. Here, we report the long-term efficacy of tepotinib in clinically relevant subgroups of pts with ≥ 3 years follow-up (data cut-off: May 20, 2024).

Methods

Pts with advanced/metastatic *MET*ex14 skipping NSCLC, detected by tissue (T+) and/or liquid biopsy (L+), received tepotinib 500 mg (450 mg active moiety) once daily. Primary endpoint was objective response (RECIST v1.1) by IRC. Subgroup analyses were preplanned; exploratory analysis of brain lesions was conducted using RANO-BM criteria.

Results

Of 313 pts (median age 72.0 years), 41.2% were \geq 75 years, 47.6% had history of smoking, and 18.2% had brain metastases at baseline; 208 pts were T+ (first-line [1L]: 111; second-or-later line [2L+]: 97), 178 were L+ (1L: 95; 2L+: 83), and 73 pts were T+/L+. Efficacy outcomes in T+ and L+ pts are presented in the table. L+ pts had shorter time-dependent endpoints, potentially due to a higher baseline disease burden. In pts aged <75 years (n=184), ORR was 55.4% with an mDOR of 19.4 months versus 46.5% and 15.7 months in pts \geq 75 years (n=129). Pts with a history of smoking (n=149) had an ORR of 56.4% with an mDOR of 18.0 months, versus 47.4% and 20.8 months in pts without (n=154). Among 57 pts with baseline brain metastases, systemic ORR was 56.1% with an mDOR of 9.0 months, versus 50.8% and 19.4 months in pts without (n=256). In pts with brain tumors as target lesions evaluable by RANO-BM (n=15), intracranial ORR was 66.7% with a DCR of 86.7%. Table: 1996P

Tepotinib efficacy	y ORR*, %	mDOR*, mo	mPFS*, mo	mOS*, mo
T+ (n=208)	54.8 (47.8, 61.7	17.4 (12.4, 31.7)	13.7 (11.0, 17.1) 22.3 (18.8, 25.9)
1L T+ (n=111)	59.5 (49.7, 68.7	31.7 (15.2, 53.7)	15.9 (11.0, 33.1) 24.6 (18.8, 31.6)
2L+ T+ (n=97)	49.5 (39.2, 59.8	12.4 (8.3, 18.0)	11.5 (8.2, 14.7)	19.7 (17.0, 24.5)
L+ (n=178)	51.7 (44.1, 59.2) 15.2 (9.7, 33.6)	8.9 (7.8, 11.0)	17.6 (12.6, 21.3)
1L L+ (n=95)	58.9 (48.4, 68.9	17.4 (8.3, 46.4)	10.3 (8.0, 16.5)	17.6 (10.4, 23.7)

Tepotinib efficacy ORR*, %	mDOR*, mo	mPFS*, mo	mOS*, mo
2L+ L+ (n=83) 43.4 (32.5, 54.7) 12.4 (8.4, 33.6)	8.2 (5.7, 11.0)	16.2 (12.0, 21.0)

^{*95%} CI values in parentheses. DOR, duration of response; m, median; mo, months; ORR, objective response rate; OS, overall survival; PFS, progression-free survival.

Conclusions

Tepotinib continued to show robust and durable efficacy in pts with ≥ 3 years follow-up, irrespective of T+/L+ status, age, smoking status, or brain metastases at baseline, consistent with previously reported findings of the overall population.

Clinical trial identification

NCT02864992.

Editorial acknowledgement

Medical writing support was provided by Bhartendu K Srivastava, PhD, of Syneos Health, London, UK and funded by Merck.

Legal entity responsible for the study

Merck Healthcare KGaA, Darmstadt, Germany.

Funding

This study was sponsored by Merck (CrossRef Funder ID: 10.13039/100009945).

Disclosure

F. Griesinger: Financial Interests, Personal, Advisory Role: AstraZeneca, Roche/Genentech, Pfizer, Boehringer Ingelheim, MSD, Bristol Myers Squibb, Celgene, Takeda, AbbVie, Novartis, Bayer, Merck; Financial Interests, Personal, Other, Honoraria: Roche/Genentech, Boehringer Ingelheim, Pfizer, AbbVie, MSD, Bristol Myers Squibb, Ipsen, Novartis, AstraZeneca, Merck; Financial Interests, Institutional, Other, Research institute expenses: AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, MSD, Celgene, Lilly, Novartis, Pfizer, Roche, Takeda, R. Ferrara: Financial Interests, Personal, Advisory Board; MSD, BeiGene, E. Felip; Financial Interests, Personal, Advisory Role; Pfizer, Roche, Boehringer Ingelheim, AstraZeneca, BMS, Guardant Health, Novartis, Takeda, AbbVie, Blue Print Medicines, Lilly, Merck, MSD, Janssen, Samsung; Financial Interests, Personal, Other, Speaker's bureau/expert testimony: Pfizer, Roche, AstraZeneca, BMS, Novartis, Takeda, Lilly, MSD, Medscape, prIME Oncology, Touchtime; Financial Interests, Personal, Research Funding: Fundación Merck Salud, a private non-profit institution founded by Merck, S.L.U., Madrid, Spain, an affiliate of Merck KGaA, Grant for Oncology Innovation (GOI); Financial Interests, Personal, Officer: Grifols (Independent Member). E.F. Smit: Financial Interests, Institutional, Advisory Role: Lilly, AstraZeneca, Boehringer Ingelheim, Roche/Genentech, BMS, MSD Oncology, Takeda, Bayer, Regeneron, Novartis, Daiichi Sankyo, Seattle Genetics; Financial Interests, Institutional, Research Funding: Boehringer Ingelheim, Bayer, Roche/Genentech, AstraZeneca, BMS. R. Veillon: Financial Interests, Personal, Research Funding: Merck; Financial Interests, Personal, Other, Consulting fees: Janssen; Financial Interests, Personal, Other, Speaker fees: BMS, Takeda; Financial Interests, Personal, Speaker's Bureau: Amgen, Sanofi, Roche, AstraZeneca; Financial Interests, Personal, Other, Travel fees: Pfizer, Janssen, X. Le: Financial Interests, Personal, Advisory Role: AstraZeneca, Eli Lilly, EMD Serono Research & Development Institute, Inc., Billerica, MA, USA, an affiliate of Merck KGaA, Novartis, Daiichi Sankyo, Hengrui Therapeutics; Financial Interests, Personal, Research Funding: Eli Lilly, Boehringer Ingelheim. J. Mazieres: Financial Interests, Personal, Advisory Board: Roche, BMS, MSD, AstraZeneca, Pfizer, Novartis, Merck, Amgen, Takeda, Daiichi Sankyo; Financial Interests, Institutional, Research Funding: Roche/Genentech, AstraZeneca, Bristol Myers Squibb. A.B. Cortot: Financial Interests, Personal, Research Funding: Novartis, Merck; Financial Interests, Personal, Other, Honoraria: AstraZeneca, BMS, Novartis, MSD, Pfizer, Roche, Takeda; Financial Interests, Personal, Advisory Role: AstraZeneca, BMS, Novartis, Pfizer, Roche, Takeda; Financial Interests, Personal, Other, Travel expenses: AstraZeneca, MSD, Novartis, Pfizer, Roche, Takeda. J. Raskin: Financial Interests, Personal, Advisory Role: Merck, Lilly, AstraZeneca, Pfizer, BMS, Roche. M. Thomas: Financial Interests, Personal, Other, Honoraria for scientific meetings (self): AbbVie, BMS, MSD, AstraZeneca, Novartis, Roche, Takeda, Lilly, Chugai, Celgene, Boehringer Ingelheim, Pfizer, Janssen, GSK, Merck, Sanofi, Amgen; Financial Interests, Personal, Other, Travel expenses: AbbVie, BMS, MSD, AstraZeneca, Novartis, Roche, Takeda, Lilly, Chugai Pharma, Celgene, Boehringer Ingelheim, Pfizer; Financial Interests, Personal, Advisory Board: AbbVie, BMS, MSD, AstraZeneca, Novartis, Roche, Takeda, Lilly, Chugai Pharma, Celgene, Boehringer Ingelheim, Pfizer, Janssen, Daiichi Sankyo, GSK, Merck, Sanofi, Amgen; Financial Interests, Institutional, Research Funding; BMS, AstraZeneca, Roche, Takeda. N. Reinmuth: Financial Interests, Personal, Other, Honoraria for scientific meetings and travel support: BMS, MSD, AstraZeneca, Roche, Takeda, Boehringer Ingelheim, Pfizer; Financial Interests, Personal, Advisory Board: BMS, MSD, AstraZeneca, Roche, Takeda, Boehringer Ingelheim, Pfizer; Financial Interests, Personal, Other, Honoraria for advisory and speaker activities: Amgen, AstraZeneca, Bristol Myers Squibb, Boehringer Ingelheim, Hoffman-La Roche, MSD, Merck, Pfizer, Sanofi, Takeda. J.C. Yang: Financial Interests, Personal, Advisory Role: Amgen, Bayer, Boehringer Ingelheim, BMS, Daiichi Sankyo, MSD, Novartis, Roche/Genentech, Takeda Oncology, Yuhan Pharmaceuticals, Ono Pharmaceuticals, Pfizer. M. Ahn: Financial Interests, Personal, Advisory Role: AstraZeneca, Lilly, Amgen, Merck, MSD,

Takeda, ONO, Pfizer, YUHAN, Alpha-pharmaceuticals, Daiichi Sankyo, Roche. J. Zhao: Financial Interests, Personal, Research Funding: Pfizer; Financial Interests, Personal, Other, Honoraria: AstraZeneca, BMS, Novartis, MSD, Pfizer, Roche, Takeda; Financial Interests, Personal, Advisory Role: AstraZeneca, Novartis, Pfizer, BeiGene. H. Sakai: Financial Interests, Personal, Speaker's Bureau: BMS, Ono Pharmaceutical, MSD K.K., AstraZeneca, Chugai Pharma, Taiho Pharmaceutical, Boehringer Ingelheim. S. Viteri: Financial Interests, Personal, Advisory Role: AbbVie, BMS, Roche, Takeda, AstraZeneca, MSD; Financial Interests, Personal, Speaker's Bureau: BMS, MSD, Roche, AstraZeneca; Financial Interests, Personal, Other, Travel expenses: Roche, OSE Pharma, BMS, MSD, Merck, Puma Biotechnology, Janssen Cilag. Y. Wu: Financial Interests, Institutional, Research Grant: AstraZeneca, Roche, Boehringer Ingelheim; Financial Interests, Personal, Other, Personal fees: AstraZeneca, Roche, Boehringer Ingelheim; Financial Interests, Personal, Stocks/Shares: Merck. P.K. Paik: Financial Interests, Institutional, Other, Grants or contracts (institutional research): EMD Serono Research & Development Institute, Inc., Billerica, MA, USA, an affiliate of Merck KGaA; Financial Interests, Personal, Advisory Board: AstraZeneca, Janssen.

© European Society for Medical Oncology