

LBA50
Perioperative nivolumab (NIVO) v placebo (PBO) in patients (pts) with resectable NSCLC: Clinical update from the phase III CheckMate 77T study

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Background

In CheckMate 77T, NIVO showed clinically meaningful improvements in EFS and pCR v PBO in pts with resectable NSCLC. Here, we report updated clinical outcomes from the study, exploratory outcomes by pCR status, and ctDNA analyses.

Methods

Pts with resectable stage IIA–IIIB NSCLC were randomized 1:1 to neoadjuvant (neo) NIVO + chemo Q3W (4 cyc) followed by adjuvant (adj) NIVO Q4W (13 cyc) or neo PBO + chemo Q3W (4 cyc) followed by adj PBO Q4W (13 cyc). Primary endpoint: EFS per BICR. Exploratory analyses: efficacy/safety by pCR status, ctDNA clearance (CL; detectable ctDNA at neo tx start to no detectable ctDNA at neo tx end) and recurrence (no detectable ctDNA at adj tx start to detectable ctDNA at last available adj phase assessment).

Results

At data cutoff (26 Apr 2024; median f/u 33.3 mo), NIVO (n = 229) continued to provide EFS benefit v PBO (n = 232) in all randomized pts (2y EFS rates 65% v 44%; HR [95% CI] 0.59 [0.45–0.79]). BL characteristics, including TN stage, were similar between pts with pCR (NIVO 58; PBO 11) or w/o pCR (98; 148) and between tx arms, except a higher percent of pts with pCR had tumor PD-L1 ≥ 1% (NIVO). Landmark EFS from surgery continued to favor NIVO v PBO in pts with pCR (HR [95% CI] 0.59 [0.12–2.91]) or w/o (0.75 [0.51–1.09]). In ctDNA-evaluable pts (NIVO 76; PBO 64), ctDNA CL rates were higher at the end of neo tx in the NIVO v PBO arm (66% v 38%); pts with ctDNA CL had higher pCR rates (NIVO 50% v PBO 12%) than pts w/o (0% v 2%). In pts with undetectable ctDNA at adj tx start (48; 44), ctDNA recurrence rates were lower in the NIVO v PBO arm (8% v 20%); among pts with pCR (NIVO 26; PBO 5), ctDNA recurrence rates were 4% v 20%, and in pts w/o pCR (22; 39), the rates were 14% v 21%. Grade 3–4 TRAEs were consistent with the previous report (32% v 25%).

Conclusions

In this update, pts treated with NIVO continued to derive clinical benefit v PBO, regardless of pCR status. Exploratory analyses showed greater ctDNA CL in the NIVO v PBO arm, which was associated with pCR benefit. Inversely, ctDNA recurrence, a marker of disease progression, was lower during the adj phase in the NIVO v PBO arm, in pts with or w/o pCR. These data, including comprehensive ctDNA analyses, further support perioperative NIVO as an efficacious tx option in pts with resectable NSCLC.

Clinical trial identification

NCT04025879.

Editorial acknowledgement

Writing and editorial assistance were provided by Chandre Sammy, PhD, Adel Chowdhury, PharmD, and Michele Salernitano of Ashfield MedComms, an Inizio company, funded by Bristol Myers Squibb.

Legal entity responsible for the study

Bristol Myers Squibb.

Funding

Bristol Myers Squibb.

Disclosure

M. Provencio Pulla: Financial Interests, Personal, Advisory Board: BMS, MSD, Bayer, Lilly, Roche, Takeda, Janssen; Financial Interests, Personal, Other, Consulting, support for attending meetings and/or travel, honoraria for lectures, presentations, speakers bureaus, manuscript writing or educational events: BMS, AstraZeneca, MSD, Roche, Takeda, Eli Lilly, F. Hoffman-La Roche, Janssen, Pfizer, Amgen, Boehringer Ingelheim, Pierre Fabre Pharmaceuticals; Financial Interests, Institutional, Coordinating PI: AstraZeneca, BMS, Takeda, MSD, Roche; Non-Financial Interests, Leadership Role, President of Spanish Lung cancer Group: President; Non-Financial Interests, Leadership Role, Instituto Investigación Sanitaria Puerta de Hierro: Director; Non-Financial Interests, Leadership Role, President: Grupo Oncológico para el Tratamiento de las Enfermedades Linfoides. M. 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Cascone: Financial Interests, Personal, Invited Speaker, Speaker Fees/Co-Chair Honorarium: AstraZeneca; Financial Interests, Personal, Invited Speaker, Speaker Fees/Interview Honorarium: Bristol Myers Squibb; Financial Interests, Personal, Advisory Board, Advisory Board Fees: AstraZeneca, Bristol Myers Squibb, Pfizer; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses to Meeting/Conference as Invited Panelist/Co-Chair: AstraZeneca; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses to Advisory Board as Invited Member: Bristol Myers Squibb; Financial Interests, Personal, Invited Speaker, Speaker Fee: Clinical Care Options, Peerview, Physician's Education Resource; Financial Interests, Personal, Invited Speaker, Speaker Fees/Invited Panelist Honoraria: IDEology Health; Financial Interests, Personal, Other, Conference Co-Chair Honorarium: IDEology Health; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses to Meetings as Invited Speaker or Conference Co-Chair: IDEology Health; Financial Interests, Personal, Invited Speaker, Speaker Fee/Panelist Honorarium: Medscape; Financial Interests, Personal, Invited Speaker, Speaker Fees/Panelist Honoraria: OncLive; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses to Meeting as Invited Speaker and Panelist: OncLive; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses to Meeting as Invited Speaker: Physician's Education Resource; Financial Interests, Personal, Other, Grant Reviewer Honorarium: Mark Foundation For Cancer Research; Financial Interests, Personal, Advisory Board, Advisory Board Fee: Merck, Regeneron; Financial Interests, Personal, Other, Travel/Food/Beverage for Advisory Board as Invited Member: Merck; Financial Interests, Personal, Other, Travel Expenses For Conferences as Invited Speaker: ESMO; Financial Interests, Personal, Other, Speaker Fee and Travel Expenses For Conferences as Invited Speaker: SITC; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses For Conferences as Invited Speaker: IASLC; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses for Meeting as Invited Panelist: AATS; Financial Interests, Personal, Other, Travel/Food/Beverage Expenses for Conference as Invited Speaker: Dava Oncology; Financial Interests, Institutional, Coordinating PI, Institutional Clinical Research Funding: AstraZeneca, Bristol Myers Squibb; Financial Interests, Institutional, Research Grant, Institutional Research Grant Funding: Bristol Myers Squibb; Financial Interests, Personal and Institutional, Steering Committee Member, Clinical Research: AstraZeneca; Non-Financial Interests, Leadership Role, The Leading Edge of Cancer Research Symposium Co-chair and Chair (2021 and 2022)Co-Chair, Data and Biospecimen Access Committee (DBAC), 2022 – present: The University of Texas MD Anderson Cancer Center; Non-Financial Interests, Leadership Role, Co-Chair, Neoadjuvant Immunotherapy Session, 36th SITC Annual Meeting, 11/2021: SITC; Non-Financial Interests, Leadership Role, Co-Chair, Texas Lung Cancer Conference 2023, and 2024. Austin, TX 4/2023 and 4/2024: IDEology Health; Non-Financial Interests, Leadership Role, Co-Chair, The Future of immunotherapy in Thoracic Oncology, Educational Session, ESMO Immuno-Oncology Congress, Geneva, Switzerland, 12/6/2023: ESMO; Non-Financial Interests, Leadership Role, Co-Chair, Lung Cancer Summit Post-ESMO Congress 2023, sponsored by AstraZeneca, Madrid, Spain 10/24-10/25/2023: AstraZeneca; Non-Financial Interests, Leadership Role, Chair, Early-Stage NSCLC Session. IASLC Targeted Therapies of Lung Cancer Meeting (TTLC) 2021, Santa Monica, CA, 2/2021Chair, IASLC 2022 World Conference on Lung Cancer, Neoadjuvant and Adjuvant Treatment of NSCLC Session, Vienna, Austria, 8/2022Chair, IASLC 2022 World Conference on Lung Cancer, Immune Landscape and Molecular Profiling of Lung Cancer Session, Vienna, Austria, 8/2022Chair, IASLC 2023 World Conference on Lung Cancer, Pushing the Boundaries: Adjuvant and Neoadjuvant Approaches in Early-Stage Non-small Cell Lung Cancer, Singapore 9/2023: IASLC; Non-Financial Interests, Member: ESMO, ASCO, AACR, SITC, IASLC; Other, Food/Beverage Expenses at Conferences: Genentech, Daiichi Sankyo. J.D. 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center clinical trial: Roche; Financial Interests, Institutional, Coordinating PI, Grant to institution for execution of clinical trial: Merck; Non-Financial Interests, Principal Investigator, Clinical trial chair for IND 242 Neoadjuvant Platform Trial in Patients with Surgically Resectable Non-Small Cell Lung Cancer (NSCLC): Canadian Cancer Trials Group. S. Lu: Financial Interests, Institutional, Research Funding: AstraZeneca, BeiGene, Bristol Myers Squibb, Hansoh, HutchMed, Jiangsu Hengrui; Financial Interests, Personal, Speaker, Consultant, Advisor: AstraZeneca, Boehringer Ingelheim, GenomiCare, Hansoh, HutchMed, InventisBio, Jiangsu Hengrui, Menarini, Pfizer, prIME Oncology, Roche, Simcere, Yuhan, Zai Lab; Financial Interests, Personal, Other, Participation on a Data Safety Monitoring Board or Advisory Board: AstraZeneca, Regeneron, Roche, Xcovery. A. Alexandru: Financial Interests, Personal, Other, Travel support: Johnson & Johnson, Merck, Servier Affaires Medicales. R. Cornelissen: Financial Interests, Personal, Advisory Board: Spectrum, Johnson and Johnson, MSD, Pierre Faber, BMS; Financial Interests, Personal, Invited Speaker: BMS. L.D.O. Koch: Financial Interests, Personal, Other, Congress registration support: Bristol Myers Squibb, Merck Sharp & Dohme. J. Kuzdzal: Financial Interests, Institutional, Research Funding: Bristol Myers Squibb, Lilly, Merck Sharp & Dohme, Roche, Jagiellonian University Medical College; Financial Interests, Personal, Other, Travel support: Bristol Myers Squibb; Financial Interests, Personal, Stocks/Shares: Medycyna Praktyczna Publishing House, Medycyna Praktyczna Education, Technet. P. Hoffknecht: Financial Interests, Personal, Other, Travel support: AstraZeneca, Takeda; Financial Interests, Personal, Other, Participation on a Data Safety Monitoring Board or Advisory Board: AstraZeneca, Bristol Myers Squibb, Merck Sharp & Dohme, Pfizer, Takeda. J.E. Gray: Financial Interests, Personal, Other, Consultant / Advisor: AbbVie, AstraZeneca, Blueprint Medicines, Daiichi Sankyo, Inc, EMD Serono - Merck KGaA, Gilead Sciences, Inc, IDEology Health, Janssen Scientific Affairs, Jazz Pharmaceuticals, Loxo Oncology Inc, Merck & Co, Inc, Novartis, OncoCyte Biotechnology, Regeneron, Spectrum ODAC, Takeda Pharmaceuticals, Triptych Health Partners; Financial Interests, Institutional, Full or part-time Employment: Moffitt Cancer Center; Financial Interests, Institutional, Member of Board of Directors: SWOG; Financial Interests, Research Grant: AstraZeneca, Boehringer Ingelheim, Bristol Myers Squibb, Eli Lilly, EMD Serono - Merck KGaA, Genentech, Gilead Sciences, G1 Therapeutics, Ludwig Institute of Cancer Research, Merck & Co, Inc, Novartis, Panbela Therapeutics, Inc, Pfizer, Regeneron; Non-Financial Interests, Leadership Role, Department Chair, Thoracic Oncology: Moffitt Cancer Center; Non-Financial Interests, Leadership Role, Co-Leader, Molecular Medicine Program: Moffitt Cancer Center; Non-Financial Interests, Leadership Role, Chair, Lung Committee: SWOG; Non-Financial Interests, Member of Board of Directors: IASLC; Non-Financial Interests, Member of Board of Directors, Elected member - service to start on June 4th 2024: ASCO. C. Coronado Erdmann, J. Neely, V. Devas: Financial Interests, Personal, Full or part-time Employment: Bristol Myers Squibb; Financial Interests, Personal, Stocks/Shares: Bristol Myers Squibb. S. Bhatia: Financial Interests, Personal, Other, Travel support: Bristol Myers Squibb; Financial Interests, Personal, Full or part-time Employment: Bristol Myers Squibb; Financial Interests, Personal, Stocks/Shares: Bristol Myers Squibb. F. Tanaka: Financial Interests, Institutional, Research Funding: Chugai, Eli Lilly, Ono, Taiho; Financial Interests, Personal, Speaker, Consultant, Advisor: AstraZeneca, Bristol Myers Squibb, Boehringer Ingelheim, Chugai, Covidien, Eli Lilly, Intuitive, Johnson & Johnson, Kyowa Kirin, Merck Sharp & Dohme, Olympus, Ono, Pfizer, Stryker, Taiho, Takeda. All other authors have declared no conflicts of interest.