2021 ESMO congress

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Results of KEYNOTE-122: A phase III study of pembrolizumab (pembro) monotherapy vs chemotherapy (chemo) for platinum-pretreated, recurrent or metastatic (R/M) nasopharyngeal carcinoma (NPC)

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Background

Treatment options for R/M NPC are limited. In the phase Ib KEYNOTE-028 trial, pembro showed antitumor activity and manageable safety in a cohort of 27 patients (pts) with R/M NPC. KEYNOTE-122 (NCT02611960) is a multicenter, open-label, randomized phase III study to evaluate the efficacy and safety of pembro monotherapy vs chemo in pts with platinum-pretreated, R/M NPC.

Methods

Pts with histologically confirmed non-keratinizing differentiated (WHO Class II) or undifferentiated (WHO Class III), platinum-pretreated, Epstein-Barr Virus positive R/M NPC, ECOG PS 0-1, and measurable disease per RECIST v1.1 were randomized 1:1 to pembro 200 mg Q3W for up to 35 cycles or investigator's choice of standard doses of chemo (capecitabine [C], gemcitabine [G], or docetaxel [D]). Primary endpoint was OS (overall significance threshold: 0.025, one-sided). Secondary endpoints included PFS, ORR, and DOR (all per RECIST v1.1 by BICR).

Results

Between May 5, 2016 and May 28, 2018, 233 pts were randomized to pembro (N=117) or chemo (N=116; C: n=39; G, n=46; D, n=31). 74.4% pts in the pembro arm and 62.9% in the chemo arm had PD-L1 CPS≥1. Median time from the first dose to data cutoff (Nov 30, 2020) was 45.1 (range, 30.2-54.8) mo. In the ITT population, median OS was 17.2 months (95% CI, 11.7–22.9) with pembro and 15.3 months (10.9–18.1) with chemo (HR, 0.90; 95% CI, 0.67-1.19; *P*=0.2262; significance threshold for final analysis: 0.0187); OS rate at 24 months was 40.2% with pembro vs 32.2% with chemo. Other key efficacy outcomes are summarized in the table. Biomarker analyses are ongoing. Treatment-related AEs incidence was 61.2% with pembro and 87.5% with chemo (grade 3-5, 10.3% vs 43.8%).

Conclusions

Pembro monotherapy did not improve OS vs chemo in pts with platinum-pretreated R/M NPC. PD-L1 CPS ≥1 did not enrich for OS or ORR for pembro. Pembro showed manageable safety and a lower incidence of treatment-related AEs vs chemo.Table: 858O

ITT population	Pembro N=117	Chemo N=116
OS, median (95% CI), mo	17.2 (11.7–22.9)	15.3 (10.9–18.1)
HR (95% CI)	0.90 (0.67-1.19); *P*=0.2262	

ITT population	Pembro N=117	Chemo N=116
PFS, median (95% CI), mo	4.1 (2.1-5.6)	5.5 (4.0-8.1)
HR (95% CI)	1.28 (0.94-1.75)	
ORR, % (95% CI)	21.4 (14.3-29.9)	23.3 (15.9-32.0)
DCR (CR+PR+SD), % (95% CI)	50.4 (41.0-59.8)	63.8 (54.4-72.5)
DOR, median (range), mo	12.0 (1.7+-49.7+)	13.1 (2.6-49.3+)
Patients with PD-L1 CPS≥1	n=87	n=73
OS, median (95% CI), mo	17.2 (10.0-27.0)	18.0 (12.1-23.9)
ORR, % (95% CI)	23.0 (14.6-33.2)	26.0 (16.5-37.6)

Clinical trial identification

NCT02611960.

Editorial acknowledgement

Medical writing assistance was provided by Yue Liu of Merck & Co., Inc., Kenilworth, NJ, USA.

Legal entity responsible for the study

Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

Funding

Merck Sharp & Dohme Corp., a subsidiary of Merck & Co., Inc., Kenilworth, NJ, USA.

Disclosure

A.T.C.T.C. Chan: Financial Interests, Institutional, Research Grant: Merck Serono, Merck Sharp & Dohme, Novartis, Pfizer, Eli Lilly, ; Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Advisory Role: Merck Sharp & Dohme, Merck Serono, Cullinan Management Inc., Beigene, Springer, Pfizer, ; Financial Interests, Personal, Other, Travel: Bristol Myers Squibb, Merck Sharp & Dohme, Pfizer, Roche, Novartis, AstraZeneca; Financial Interests, Personal, Advisory Board: Merck Sharp & Dohme, Tessa Therapeutics Ltd; Non-Financial Interests, Personal, Other: Immunomic Therpeutics, Inc Angene Biotechnology, Owlstone Medical Limited. V.H.F. Lee: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Research Grant: Merck Sharp & Dohme; Financial Interests, Personal, Advisory Role: Merck Sharp & Dohme. R. Hong: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Institutional, Research Grant: Merck Sharp & Dohme. M. Ahn: Financial Interests, Personal, Other, Honoraria: AstraZeneca, Takeda, Merck Sharp & Dohme, Ono, Bristol Myers Squibb, Lilly, Amgen, Merck, Roche; Financial Interests, Personal, Advisory Role: AstraZeneca, Takeda, Merck Sharp & Dohme, Ono, Bristol Myers Squibb, Lilly, Amgen, Merck, Roche, Alpha Pharmaceuticals; Financial Interests, Personal, Research Grant: AstraZeneca, Roche, Merck Sharp & Dohme. W.Q. Chong: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Other, Travel payment: Merck Sharp & Dohme, Amgen. S. Kim: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Institutional, Research Grant: Novartis, Sanofi Aventis, Dongkook Pharm Co; Financial Interests, Personal, Advisory Role: Novartis, AstraZeneca, Lilly, DaeHwa Pharma Co.,Ltd, ISU Abix, Daiichi-Sankyo; Financial Interests, Personal, Stocks/Shares: Genopeaks, Neogene TC. H. Gwo Fuang: Financial Interests, Institutional, Research Grant: Merck Sharp & Dohme, AstraZenenca, Eli Lily, Arcus Biosciences, Inc., Pfizer, INEX EpiTherapeutics Pte. Ltd., Roche, Astella, Novartis, Tessa Therapeutics, Regeneron, Samsung Bioepis; Financial Interests, Personal, Invited Speaker: Eli Lily, Merck, Pfizer; Financial Interests, Personal, Other, Travel Expenses: AstraZenenca, Bristol-Myers Squibb Pte Ltd; Financial Interests, Personal, Advisory Board: Pfizer, Boehringer ingelheim, AstraZenenca, MIMS, Merck Sharp & Dohme, Eli Lily. P.B. Caguioa: Financial Interests, Personal, Other, honoraria: Roche, AstraZeneca, Novartis, Merck Sharp & Dohme; Financial Interests, Institutional, Funding: Merck Sharp & Dohme. N. Ngamphaiboon: Financial Interests, Institutional, Research Grant: Merck Sharp & Dohme, Roche, Exelixis, RAPT therapeutics, BeiGene, Pfizer; Financial Interests, Personal, Other, Honoraria: Roche, AstraZeneca, Amgen, Merck Sharp & Dohme, Taiho; Financial Interests, Personal, Advisory Board: Merck Sharp & Dohme, Amgen, Novartis, Bayer, AstraZeneca, Claris, Elli-Lilly. C. Ho: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Research Grant: AstraZeneca , Roche; Financial Interests, Personal, Other, Honoraria: AstraZeneca, Bristol Myers Squibb, Boehringer Ingelheim, Bayer, Eisai, EMD Serono, Merck, Novartis, Roche; Financial Interests, Personal, Other, Travel Payments: Roche. M.A.S. Abdul Aziz: Financial Interests, Institutional, Funding: Merck Sharp & Dohme. Q.S. Ng: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Other, Travel: Merck Sharp & Dohme; Financial Interests, Personal, Advisory Board: Merck Sharp & Dohme. C. Yen: Financial Interests, Institutional, Funding: Merck Sharp & Dohme. N. Soparattanapaisarn: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Research Grant: Merck Sharp & Dohme ; Financial Interests, Personal, Research Grant: AstraZeneca ; Financial Interests, Personal, Research Grant: Roche ; Financial Interests, Personal, Research Grant: Bristol Myers Squibb. K.C.R. Ngan: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Advisory Role: Pfizer, Novartis, Sanofi, AstraZeneca, Lilly, Merck Sharp & Dohme, Zai Lab, Roche, Eisai; Financial Interests, Personal, Other, Honoraria:

Novartis, AstraZeneca, Sanofi, Pfizer, Zai Lab, Eisai, Lilly, Merck Sharp & Dohme; Financial Interests, Personal, Other, Travel payments: Pfizer, Astellas, Novartis, Merck Sharp & Dohme, Roche, Esiai, Merck, Sanofi, Bristol Myers Squibb, Zai Lab; Financial Interests, Personal, Advisory Board: Nuance Biotech (Shenzhen, China); Financial Interests, Personal, Leadership Role: President, Hong Kong Breast Oncology Group. S.K. Kho: Financial Interests, Institutional, Funding: Merck Sharp & Dohme. R. Swaby: Financial Interests, Personal, Full or part-time Employment: Merck & Co., Inc.; Financial Interests, Personal, Stocks/Shares: Merck & Co., Inc. S. Saraf: Financial Interests, Personal, Full or part-time Employment: Merck & Co., Inc.; Financial Interests, Personal, Stocks/Shares: Merck & Co., Inc. J. Ge: Financial Interests, Personal, Full or part-time Employment: Merck & Co., Inc.; Financial Interests, Personal, Stocks/Shares: Merck & Co., Inc. L.L. Siu: Financial Interests, Institutional, Funding: Merck Sharp & Dohme; Financial Interests, Personal, Advisory Board: Merck Sharp & Dohme; Financial Interests, Institutional, Funding: Novartis; Financial Interests, Institutional, Funding: Bristol Myers Squibb; Financial Interests, Institutional, Funding: Pfizer; Financial Interests, Institutional, Funding: Boerhinger-Ingelheim; Financial Interests, Institutional, Funding: GlaxoSmithKline; Financial Interests, Institutional, Funding: Roche/Genentech; Financial Interests, Institutional, Funding: Karyopharm; Financial Interests, Institutional, Funding: AstraZeneca; Financial Interests, Institutional, Funding: Astellas; Financial Interests, Institutional, Funding: Bayer; Financial Interests, Institutional, Funding: Abbvie; Financial Interests, Institutional, Funding: Amgen; Financial Interests, Institutional, Funding: Symphogen; Financial Interests, Institutional, Funding: Intensity Therapeutics; Financial Interests, Institutional, Funding: Mirati; Financial Interests, Institutional, Funding: Shattucks; Financial Interests, Institutional, Funding: Avid; Financial Interests, Personal, Advisory Role: Pfizer; Financial Interests, Personal, Advisory Role: Celgene; Financial Interests, Personal, Advisory Role: Morphosys; Financial Interests, Personal, Advisory Role: Roche; Financial Interests, Personal, Advisory Role: Oncorus; Financial Interests, Personal, Advisory Role: Symphogen; Financial Interests, Personal, Advisory Role: Seattle Genetics; Financial Interests, Personal, Advisory Role: GlaxoSmithKline; Financial Interests, Personal, Advisory Role: Voronoi; Financial Interests, Personal, Advisory Role: Treadwell Therapeutics; Financial Interests, Personal, Advisory Role: Arvinas; Financial Interests, Personal, Advisory Role: Tessa; Financial Interests, Personal, Advisory Role: Navire; Financial Interests, Personal, Advisory Role: Relay; Financial Interests, Personal, Advisory Role: Rubius; Financial Interests, Personal, Advisory Role: Daiichi Sankyo; Financial Interests, Personal, Advisory Role: Janpix.