

229MO

Overall survival (OS) of palbociclib (P) plus endocrine therapy (ET) versus capecitabine (CAP) in hormone-receptor+/HER2- metastatic breast cancer (MBC) that progressed on aromatase inhibitors (AIs): Final results of the PEARL study

M. Martin Jimenez¹, C. Zielinski², M. Ruiz-Borrego³, E. Carrasco⁴, E.M. Ciruelos⁵, M. Muñoz⁶, B. Bermejo⁷, M. Margeli⁸, T. Csozsi⁹, A. Anton¹⁰, N. Turner¹¹, M.I. Casas¹², S. Morales¹³, E. Alba¹⁴, L. Calvo¹⁵, J. De La Haba¹⁶, M. Ramos¹⁷, M. Corsaro¹⁸, Z. Kahan¹⁹, M. Gil-Gil²⁰

¹ Servicio de Oncología Médica Department, Hospital General Universitario Gregorio Marañón. GEICAM Breast Cancer Group. CIBERONC-ISCIII, Madrid, Spain, ² Oncology Department, Vienna General Hospital (AKH) - Medizinische Universität Wien, CECOG, Vienna, Austria, ³ Oncology Department, Hospital Universitario Virgen del Rocío, GEICAM Breast Cancer Group, Sevilla, Spain, ⁴ Scientific Department, GEICAM Breast Cancer Group, Madrid, Spain, ⁵ Medical Oncology Department, Hospital Universitario 12 de Octubre. GEICAM Breast Cancer Group. HM Hospitales Madrid. SOLTI., Madrid, Spain, ⁶ Medical Oncology Dept, Hospital Universitari Clinic. GEICAM Breast Cancer Group, Barcelona, Spain, ⁷ Oncology Department, Hospital Clínico Universitario Valencia. Biomedical Research Institute INCLIVA. GEICAM Breast Cancer Group, Valencia, Spain, ⁸ Oncology Department, Badalona Applied Research group in Oncology (ARGO Group), Institut Català d'Oncologia, Hospital Universitari Germans Trias i Pujol. GEICAM Breast Cancer Group, Barcelona, Spain, ⁹ Onkológiai Kozpont, Hetenyi Geza Korhaz, Onkológiai Kozpont. CECOG, Szolnok, Hungary, ¹⁰ Oncology Department, Hospital Universitario Miguel Servet, Instituto de Investigación Sanitaria Aragón-IISA. GEICAM Breast Cancer Group, Zaragoza, Spain, ¹¹ Oncology Department, Institute of Cancer Research and Royal Marsden, London, UK, ¹² Statistical Department, GEICAM Breast Cancer Group, Madrid, Spain, ¹³ Oncology Department, Hospital Universitario Arnau de Vilanova. GEICAM Breast Cancer Group, Lleida, Spain, ¹⁴ Oncology Department, UGCI Medical Oncology, Hospitales Regional y Virgen de la Victoria. IBIMA. GEICAM Breast Cancer Group. CIBERONC-ISCIII, Malaga, Spain, ¹⁵ Oncology Department, Complejo Hospitalario Universitario A Coruña. GEICAM Breast Cancer Group, A Coruña, Spain, ¹⁶ Oncology Department, Instituto Maimonides de Investigación Biomedica, Hospital Reina Sofia Hospital, Universidad de Córdoba. GEICAM Breast Cancer Group, Cordoba, Spain, ¹⁷ Oncology Department, Centro Oncológico de Galicia. GEICAM Breast Cancer Group, A Coruña, Spain, ¹⁸ Oncology Department, Pfizer Inc., Milan, Italy, ¹⁹ Oncology Department, Department of Oncotherapy, University of Szeged. CECOG, Szeged, Hungary, ²⁰ Oncology Department, Institut Català d'Oncologia (ICO) & IDIBELL, L'Hospitalet. GEICAM Breast Cancer Group, Barcelona, Spain

Background

PEARL study did not show superiority in progression-free survival (PFS) with P+ET versus (vs) CAP in patients (pts) with AI-resistant MBC, but P+ET was better tolerated and showed a significant delay in quality of life deterioration. Final OS data are reported here.

Methods

PEARL had two consecutive cohorts: cohort 1 (C1) with 296 pts randomized to P+exemestane vs CAP, and cohort 2 (C2) with 305 pts randomized to P+fulvestrant (F) vs CAP. Secondary endpoints included OS in C2 and in wild-type (wt) ESR1 (measured in ctDNA at baseline) pts (C1+C2). OS analysis was planned when 152 deaths occurred in C2, in order to have an 80% power to detect an increase of 50% in OS from 22 months (m) with CAP to 33 m with P+F or P+ET in wtESR1 pts. Adjusted hazard ratio (aHR) was calculated using a stratified Cox proportional hazard model with treatment arm, stratification factors and number of involved sites as covariates.

Results

At data cut-off (11 Jan 2021), the median follow-up of C2 and wtESR1 pts were 28.0 m and 30.3 m, respectively. Median OS in C2 was 31.1 m with P+F vs 32.8 m with CAP (aHR 1.10, 95% CI, 0.81–1.50; p=0.550). Median OS in wtESR1 pts was 37.2 m with P+ET vs 34.8 m with CAP (aHR 1.06, 95% CI, 0.81-1.37; p=0.683). None of the subgroup analyses showed superiority in OS for P+ET vs CAP. Subsequent therapy was given to 79.8% and 82.9% of pts with P+ET and CAP, respectively. The median number of subsequent lines was 3 (1-10) in the P+ET arm and 3 (1-9) in the CAP arm. First subsequent therapy was CDK4/6 inhibitor+ET in 26.1% of pts in the CAP arm and CAP in 36.1% of pts in the P+ET arm. The median PFS2 defined as time from randomization to the end of first subsequent therapy or death, was similar in both arms either in C2, 18.3 m with P+F vs 17.7 m with CAP (aHR 0.95, 95% CI, 0.73-1.25; p=0.728), and in wtESR1 pts, 18.3 m with P+ET vs 18.2 m with CAP (aHR 1.04, 95% CI, 0.83-1.31; p=0.717). PFS and response did not change in this final analysis. No new safety findings were observed with longer follow-up.

Conclusions

Palbociclib + endocrine therapy did not show a statistically superior OS compared to CAP in MBC pts progressing to AIs.

Clinical trial identification

NCT02028507.

Legal entity responsible for the study

GEICAM Spanish Breast Cancer Group.

Funding

Pfizer and AstraZeneca.

Disclosure

M. Martin Jimenez: Financial Interests, Personal, Advisory Role: AstraZeneca. Amgen, Taiho Oncology, Roche/Genentech, Novartis, PharmaMar, Eli Lilly, PUMA, Taiho Oncology, and Pfizer; Financial Interests, Personal, Speaker's Bureau: AstraZeneca. Amgen, Roche/Genentech, Novartis, Daiichi Sankyo, and Pfizer; contracted research fees from Roche, Novartis, and PUMA; Financial Interests, Institutional, Research Grant: Roche. Novartis. PUMA. C. Zielinski: Financial Interests, Personal, Advisory Role: Roche, Novartis, Bristol Myers Squibb, Merck Sharp & Dohme, Imugene, Ariad, Pfizer, Merrimack, Merck KGaA, Fibrogen, AstraZeneca, Tesaro, Gilead, Servier, Shire, Eli Lilly, and Athenex; Financial Interests, Personal, Speaker's Bureau: Roche, Novartis, Bristol Myers Squibb, Merck Sharp & Dohme, Imugene, Ariad, Pfizer, Merrimack, Merck KGaA, Fibrogen, AstraZeneca, Tesaro, Gilead, Servier, Shire, Eli Lilly, and Athenex; Financial Interests, Institutional, Research Grant: Bristol Myers Squibb, Merck Sharp & Dohme, Pfizer, AstraZeneca, and Merck KGaA. M. Ruiz-Borrego: Financial Interests, Personal, Advisory Role: Pfizer, Novartis, and Lilly; Financial Interests, Personal, Speaker's Bureau: Pfizer, Novartis, and Lilly. E. Carrasco: Financial Interests, Personal, Ownership Interest: Lilly; Financial Interests, Personal, Other, Travel, accommodation support: Roche; Other, Institutional, Research Grant: Roche/Genentech, Bristol Myers Squibb, Novartis, Pfizer, Celgene, AstraZeneca, Merck Sharp & Dohme, Pierre Fabre, and Takeda; Financial Interests, Personal, Advisory Board, Her husband: Bristol Myers Squibb, Novartis, Celgene, Roche Pharma, Janssen, Amgen, Incyte, AbbVie, and Pfizer; Financial Interests, Personal, Research Grant, Her husband's institution: from Celgene, Janssen, Bristol Myers Squibb, Novartis, Celgene, Roche/Genentech, Amgen, Pfizer, and AbbVie. E.M. Ciruelos: Financial Interests, Personal, Advisory Board: Lilly, Novartis, MSD, AstraZeneca, Pfizer and Roche; Financial Interests, Personal, Speaker's Bureau: Roche, Lilly and Pfizer; Financial Interests, Personal, Other, Travel and congress assistance support: Pfizer and Roche. M. Muñoz: Financial Interests, Personal, Other, Travel and Congress assistance support: Roche, Novartis, Pfizer and Eisai. B. Bermejo: Financial Interests, Personal, Advisory Board: Roche, Novartis and MSD; Financial Interests, Personal, Speaker's Bureau: Roche, Novartis, MSD, Pfizer and Pierre Fabre; Financial Interests, Personal, Other, Travel and Congress assistance support: Pfizer. M. Margeli: Financial Interests, Personal, Advisory Board: Roche, Novartis, Pfizer, and Eisai; Financial Interests, Institutional, Funding: Roche, Pfizer, Novartis, Lilly, AstraZeneca, Eisai, and Kern; Financial Interests, Personal, Other, Travel and Congress assistance support: Roche. A. Anton: Financial Interests, Personal, Advisory Board: Bayer. N. Turner: Financial Interests, Personal, Advisory Board: AstraZeneca, Bristol Myers Squibb, Lilly, Merck Sharpe & Dohme, Novartis, Pfizer, Roche/Genentech, Bicycle Therapeutics, Taiho, Zeno pharmaceuticals, Repare therapeutics; Financial Interests, Institutional, Research Grant: AstraZeneca, BioRad, Pfizer, Roche/Genentech, Clovis, Merck Sharpe & Dohme, and Guardant Health. E. Alba: Financial Interests, Personal, Advisory Board: Roche, Novartis, Pfizer, Lilly, Bristol Myers Squibb, Genomic Health, and Nanostring; Financial Interests, Personal, Other, Travel Support: Celgene; Financial Interests, Institutional, Research Grant: Roche, Pfizer, Sysmex, Merck Sharp & Dohme, and Nanostring. J. De La Haba: Financial Interests, Personal, Speaker's Bureau: AstraZeneca, Pfizer, Novartis and Lilly. M. Ramos: Financial Interests, Personal, Speaker's Bureau: Novartis, Roche, and Pfizer. M. Corsaro: Financial Interests, Personal, Stocks/Shares, Employed: Pfizer. Z. Kahan: Financial Interests, Personal, Speaker's Bureau: Pfizer, Roche, AstraZeneca and Novartis; Other, Personal, Funding, Travel Support: Pfizer, Roche, AstraZeneca and Novartis; Financial Interests, Personal, Advisory Board: Pfizer, Roche, AstraZeneca and Novartis. M. Gil-Gil: Financial Interests, Personal, Funding: Pfizer, Ferrer International and Esteve Pharma. All other authors have declared no conflicts of interest.

© European Society for Medical Oncology