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212P Real-world progression-free survival 2 with CDK4/6 inhibitors plus endocrine therapy and subsequent line: Results from the multicenter SISTER study

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Background: CDK4/6 inhibitors (CDK4/6i) combined with endocrine therapy (ET) are the established first-line (1L) therapy for patients (pts) with hormone receptor (HR)-positive/HER2-negative (HR+/HER2-) metastatic breast cancer (mBC). Data supporting the best treatment choice at progression on CDK4/6i+ET is limited.

Methods: We collected data from pts with HR+/HER2- mBC who received treatment after progression to CDK4/6i+ET in five Italian Institutions. Progression-free survival 2 (PFS2), the primary endpoint, was calculated from initiation of CDK4/6i to disease progression (PD) on subsequent line of therapy or patient death. The PFS2-PFS1 difference and PFS2/PFS1 ratio were also estimated. We compared outcomes between pts receiving chemotherapy (CT)- or ET-based regimens immediately after CDK4/6i+ET.

Results: As of January 2023, 511 pts were included. Median patient age was 59 years, 26.2% had *de-novo* mBC. CDK4/6i were administered mostly in the 1L (62.8%) or 2L (24.5%) settings. Most pts received palbociclib (69.3%), followed by ribociclib (22.5%) and abemaciclib (8.2%). At PD, more pts received CT (60.7%) than ET (39.3%). There was a significant imbalance between the two groups in terms of visceral involvement (61.2% versus 43.8% of pts treated with CT and ET at PD, respectively; p=0.0001) and prior lines of therapy (CDK4/6i+ET was given 1L to 71% of pts who subsequently received ET and to 55.8% of pts who received CT; p=0.004). Median follow-up was 33 months (mo). After adjusting for evidence of visceral metastasis and prior therapy, mPFS2 was 23.5 mo and 18.5 mo in pts receiving ET and CT, respectively (adjusted HR 0.69, 95% CI 0.55-0.86, p=0.001). Median OS was longer in pts receiving ET than CT (58.1 vs 39.7 mo, adjusted HR 0.52, 95% CI 0.38-0.70, p<0.0001). However, PFS2-PFS1 curves did not differ between the two groups (p=0.594), and more pts receiving CT had a PFS2/PFS1 ratio≥1.3 (78.7 vs 54.3%, p<0.0001).

Conclusions: After progression to CDK4/6i, ET-based regimens are associated with longer PFS2 and OS when compared to CT. However, this likely reflects clinical benefit from previous CDK4/6i+ET. For pts with short PFS on CDK4/6i+ET, CT may be a more effective option.

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213P Real-world clinical outcomes associated with first-line palbociclib and aromatase inhibitor therapy among patients with HR+/HER2- advanced breast cancer in Europe

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Background: Palbociclib (PB), a cyclin-dependent kinase 4/6 inhibitor, has become a standard of care in HR+/HER2- advanced/metastatic breast cancer (ABC) in Europe since EMA approval in 2016. This study examines clinical characteristics and outcomes in ABC patients treated with PB and an aromatase inhibitor (AI) in routine clinical practice in Europe.

Methods: A multicenter retrospective medical record review collected data on adult patients with HR+/HER2- ABC in Europe who received first-line PB+AI between September 2016 and July 2020. Sites screened all patients who received PB+AI during the study time frame and abstracted data for patients who met all eligibility criteria. We report here results from Germany, Spain and the UK; data from 4 additional European countries will be reported when data collection is complete. Study measures were descriptively analyzed, with the Kaplan-Meier method used to estimate real-world progression-free survival (rwPFS).

Results: Data were abstracted and analyzed for 668 patients from 47 sites. Median age at ABC diagnosis was 64.4 years (33.8% ≥70 yo), 99.6% were female, 82.9% were white, and median follow-up was 32.7 months. Of females (665), 14.1% were premenopausal at first-line PB+AI initiation. 38.5% of patients had de novo disease. At ABC diagnosis, 24.9% had bone only disease and 46.7% had visceral disease (Table). Objective response and clinical benefit rate were 35.8% and 80.7%, respectively. The median rwPFS (95% CI) was estimated to be 31.8 (27.7-35.4) months (Table).

Table: 213P

	N	%
Total number of patients	668	100.0
Age (years) at ABC diagnosis		
<50	101	15.1
50-69	341	51.1
≥70	226	33.8
Clinical stage at initial BC diagnosis		
Stage I–III (resectable)	380	56.9
Stage III–unresectable	18	2.7
Stage IV	239	35.8
Unknown	31	4.6
Disease-free interval		
De novo	257	38.5
≤12 months	152	22.8
>12 months	221	33.1
Unknown	38	5.7
Performance status at first-line		
0	161	24.1
1	176	26.3
≥2	58	8.7
Not recorded	273	40.9
Objective response rate	239	35.8
rwPFS, Kaplan–Meier estimate	Months (95% CI)	
Median	31.8 (27.7-35.4)	
rwPFS rate	% (95% CI)	
12 months	77.2	(73.8-80.3)
24 months	59.5	(55.5-63.2)
36 months	45.2	(41.0-49.4)

Conclusions: This real-world study affirms the favorable clinical outcomes demonstrated for first-line PB+AI in the previous clinical trials and supports its utilization as frontline treatment for this patient population. This study presents pooled analysis of