Impact of Prior Fulvestrant Use and Endocrine Therapy Duration on Real-World Outcomes of Elacestrant Treatment in ER+/HER2- Metastatic Breast Cancer

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SAN ANTONIO BREAST CANCER SYMPOSIUM®
DECEMBER 10–13, 2024
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Introduction

- Elacestrant is a first-in-class oral selective estrogen receptor degrader (SERD) approved for ESR1-mutated, ER+/HER2- metastatic breast cancer. In the phase III EMERALD trial, elacestrant significantly improved progression-free survival vs. standard-of-care endocrine therapy (fulvestrant or an aromatase inhibitor) in patients (pts) previously treated with a CDK4/6 inhibitor (i).[1]
- Exploratory analyses suggested greater benefit among those with longer disease control on prior endocrine therapy (ET) + CDK4/6i. Real-world (RW) data on how prior ET exposure, including fulvestrant use (alone or in combination with a CDK4/6i) and duration of ET, affects elacestrant outcomes remain limited.
- This study assessed associations of prior fulvestrant use and ET duration with time to next treatment (TTNT) and RW overall survival (rwOS) in pts who received elacestrant monotherapy.

Methods

- This was a retrospective, observational study using data from the Integra PrecisionQ RW de-identified database. Pts who received elacestrant monotherapy between 1/27/2023 and 1/31/2025 were included.
- Pts were stratified by:
  - Prior use of fulvestrant monotherapy (yes vs. no)
  - Prior use of CDK4/6i in combination with fulvestrant (yes vs. no)
  - Duration of prior ET (≥12 vs. <12 m)
- Outcomes included pt demographics, TTNT, and real-world overall survival (rwOS).
- Associations between cohort variables and TTNT/rwOS were evaluated using multivariable Cox proportional hazards regression adjusted for demographic and clinical covariates.

Results

- A total of 589 pts were included (**Table 1**). Of these, 77 had prior fulvestrant monotherapy, 294 had prior CDK4/6i + fulvestrant, and 329 had ≥12 m of prior ET.
- No significant differences in TTNT or rwOS were observed by prior fulvestrant monotherapy or prior CDK4/6i + fulvestrant exposure. In contrast, patients with ≥12 m of prior ET had significantly longer TTNT and improved rwOS (**Table 2**).
- Pts with prior ET duration of ≥12 m had significantly longer TTNT and improved rwOS (**Table 2**).
  - Median TTNT 6.0 m vs. 4.6 m (log-rank p < 0.001)
  - Median rwOS 23.0 m vs. 13.8 m (log-rank p < 0.001)

Table 1. Baseline Patient Demographics and Clinical Characteristics*

	Prior fulvestrant monotherapy	
	Yes (n=77)	No (n=512)
Age at elacestrant treatment, years, median (range)	73 (37- 89)	68 (31-90)
Number of prior lines of therapy, median (range)	4 (1-16)	2 (0-13)
	Prior CDK4/6i + fulvestrant	
	Yes (n=294)	No (n=295)
Age at elacestrant treatment, years, median (range)	70 (37-90)	69 (31-89)
Number of prior lines of therapy, median (range)	3 (0-13)	2 (0-16)
	Duration of prior ET	
	≥12 m (n=329)	<12 m (n=260)
Age at elacestrant treatment, years, median (range)	70 (31-90)	68 (37-89)
Number of prior lines of therapy, median (range)	32 (0-13)	3 (0-16)

* Cohorts (prior fulvestrant monotherapy, prior CDK4/6i + fulvestrant, duration of prior ET) are not mutually exclusive.

Table 2. Median TTNT and Median OS

Prior fulvestrant monotherapy			
	Yes	No	Log-rank p-value
Median TTNT, m (95% CI)	6.0 (4.7, 7.1)	5.3 (6.7, 5.8)	0.54
Median OS, m (95% CI)	18.3 (9.3, NR)	17.3 (14.7, 20.9)	0.82
Prior CDK4/6i + fulvestrant			
	Yes	No	Log-rank p-value
Median TTNT, m (95% CI)	5.2 (4.6, 5.8)	5.7 (5.0, 6.0)	0.14
Median OS, m (95% CI)	18.3 (14.1, 22.7)	17.2 (13.4, 23.0)	0.65
Duration of prior ET			
	≥12 m	<12 m	Log-rank p-value
Median TTNT, m (95% CI)	6.0 (5.5, 6.9)	4.6 (4.2, 5.2)	<.0001
Median OS, m (95% CI)	23.0 (16.8, NR)	13.8 (11.0, 18.3)	<.0001

Results (cont'd)

- In multivariable analyses, pts with ≥12 m prior ET were 31% less likely to initiate a subsequent treatment (**Figure 1**).
  - TTNT hazard ratio 0.69 (95% CI: 0.56-0.85)
- After adjusting for covariates, the association between ≥12 m of prior ET on rwOS was no longer significant (**Figure 2**).

Figure 1. Multivariate Cox Proportional Hazards Model of TTNT†

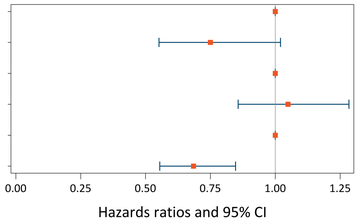
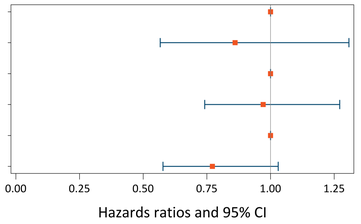


Figure 2. Multivariate Cox Proportional Hazards Model of OS†



† Selected variables shown; other variables (age, race, ethnicity, ECOG, and elacestrant line of therapy) were adjusted for in the full model.

Conclusion

In this RW cohort of pts treated with elacestrant, prior fulvestrant exposure (alone or with a CDK4/6i) did not significantly impact clinical outcomes. Longer duration of prior ET (≥12 mo) was associated with delayed TTNT and numerically improved survival, suggesting that endocrine sensitivity may identify patients most likely to benefit. Our findings align with post-hoc analyses from the EMERALD trial[2] and support the clinical relevance of prior ET duration when sequencing therapies. As with any retrospective study, data completeness is limited; information on metastatic disease burden (e.g., bone vs. visceral involvement) was not consistently available, which may introduce unmeasured confounding.

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1. Bidard FC, Kaklamani, VG, et al. Elacestrant (oral selective estrogen receptor degrader) Versus Standard Endocrine Therapy for Estrogen Receptor-Positive, Human Epidermal Growth Factor Receptor 2-Negative Advanced Breast Cancer: Results From the Randomized Phase III EMERALD Trial. J Clin Oncol. 2022;40(28):3246-3256. doi:10.1200/JCO.22.00338
2. Bardia A, Cortés J, Bidard FC, et al. Elacestrant in ER+, HER2– Metastatic Breast Cancer with ESR1-Mutated Tumors: Subgroup Analyses from the Phase III EMERALD Trial by Prior Duration of Endocrine Therapy plus CDK4/6 Inhibitor and in Clinical Subgroups. Clin Cancer Res. 2024;30(19):4299-4309. doi:10.1158/1078-0432.CCR-24-1073

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