

# Abemaciclib Combined With Endocrine Therapy for the Adjuvant Treatment of HR+, HER2-, Node-Positive, High-Risk, Early Breast Cancer (monarchE)

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- PMID: 32954927
- PMCID: [PMC7768339](#)
- DOI: [10.1200/JCO.20.02514](#)

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## Abstract

**Purpose:** Many patients with HR+, HER2- early breast cancer (EBC) will not experience recurrence or have distant recurrence with currently available standard therapies. However, up to 30% of patients with high-risk clinical and/or pathologic features may experience distant recurrence, many in the first few years. Superior treatment options are needed to prevent early recurrence and development of metastases for this group of patients. Abemaciclib is an oral, continuously dosed, CDK4/6 inhibitor approved for HR+, HER2- advanced breast cancer (ABC). Efficacy and safety of abemaciclib in ABC supported evaluation in the adjuvant setting.

**Methods:** This open-label, phase III study included patients with HR+, HER2-, high-risk EBC, who had surgery and, as indicated, radiotherapy and/or adjuvant/neoadjuvant chemotherapy. Patients with four or more positive nodes, or one to three nodes and either tumor size  $\geq 5$  cm, histologic grade 3, or central Ki-67  $\geq 20\%$ , were eligible and randomly assigned (1:1) to standard-of-care adjuvant endocrine therapy (ET) with or without abemaciclib (150 mg twice daily for 2 years). The primary end point was invasive disease-

free survival (IDFS), and secondary end points included distant relapse-free survival, overall survival, and safety.

**Results:** At a preplanned efficacy interim analysis, among 5,637 randomly assigned patients, 323 IDFS events were observed in the intent-to-treat population. Abemaciclib plus ET demonstrated superior IDFS versus ET alone ( $P = .01$ ; hazard ratio, 0.75; 95% CI, 0.60 to 0.93), with 2-year IDFS rates of 92.2% versus 88.7%, respectively. Safety data were consistent with the known safety profile of abemaciclib.

**Conclusion:** Abemaciclib when combined with ET is the first CDK4/6 inhibitor to demonstrate a significant improvement in IDFS in patients with HR+, HER2- node-positive EBC at high risk of early recurrence.

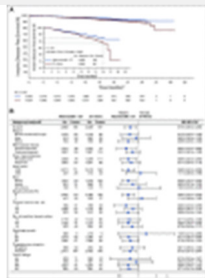
**Trial registration:** ClinicalTrials.gov [NCT03155997](https://clinicaltrials.gov/ct2/show/study/NCT03155997).

## Figures



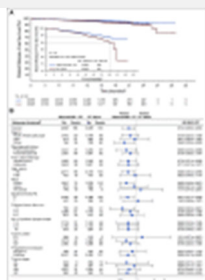
**FIG 1.**

CONSORT diagram. ( °)...



**FIG 2.**

Invasive disease-free survival (IDFS). (A)...



**FIG 3.**

Distant relapse-free survival (DRFS). (A)...