TuSalud

Itovebi Combo Extends Survival, Delays Chemotherapy for Some Patients With Advanced Breast Cancer

Adding inavolisib to palbociclib and fulvestrant improved overall survival for people with previously treated PIK3CA-mutated HR-positive, HER2-negative advanced breast cancer.

May 26, 2025 By Liz Highleyman, adapted from ASCO

New findings from the Phase III INAVO120 trial show that adding inavolisib [Itovebi] to palbociclib [Ibrance] and fulvestrant [Faslodex] can help extend survival and delay the time until treatment with chemotherapy in patients with previously treated PIK3CA-mutated HR-positive, HER2-negative advanced breast cancer. The research will be presented at the 2025 American Society of Clinical Oncology (ASCO) Annual Meeting, taking place May 30 to June 3 in Chicago.

About the Study

“The INAVO120 study was designed to address a need for more potent and tolerable therapies for PIK3CA-mutated, hormone receptor-positive, human epidermal growth factor receptor 2-negative advanced breast cancer in the first-line setting,” lead study author Nicholas Turner, MD, PhD, of Royal Marsden Hospital in London, said in an ASCO news release. “The INAVO120 trial findings support an inavolisib-based regimen as an emerging new standard of care that helps people live longer, as well as substantially improving how long treatment works.”

Breast cancer is classified by the type of receptors on tumors. Most have estrogen or progesterone receptors that make them treatable with hormone therapy, designated as HR-positive. HER2-positive tumors express a receptor for a protein that promotes cell growth and can be treated with HER2 inhibitors such as Herceptin (trastuzumab). Triple-negative breast cancer doesn’t express any of these receptors and is harder to treat.

Inavolisib is a type of targeted therapy drug called a PI3K inhibitor. It works by targeting the PIK3CA mutation, which can stop cancer cells from dividing and spreading. Palbociclib is a targeted therapy drug that inhibits the activity of CDK4/6 enzymes, and fulvestrant is a hormone therapy drug.

In 2024, the Food and Drug Administration approved inavolisib in combination with palbociclib and fulvestrant to treat people with HR-positive, HER2-negative advanced breast cancer with

a PIK3CA mutation that has progressed following treatment with hormone therapy. This approval was based on previous results from the INAVO120 trial, which found that progression-free survival (PFS) significantly improved in patients who received inavolisib in combination with palbociclib and fulvestrant.

New Study Findings

In the INAVO120 update to be presented at the ASCO meeting, researchers analyzed the final overall survival (OS) data.

INAVO120 included 325 patients with PIK3CA-mutated, HR-positive, HER2-negative locally advanced or metastatic breast cancer that had grown during or following treatment with hormone therapy. The patients were randomly assigned to receive either inavolisib in combination with palbociclib and fulvestrant (161 patients) or a placebo with palbociclib and fulvestrant (164 patients).

After a median follow-up of just under three years (34.2 months), researchers found that:

- The median OS was 34 months for patients in the inavolisib group vs. 27 months for those in the placebo group.
- Overall, the inavolisib combination reduced the risk of death by 33% for participants.
- For those who received inavolisib, the probability that they would still be alive after treatment was:
  - 96.8% at 6 months after treatment (vs. 90.1% in the placebo group)
  - 87% at 1 year after treatment (vs. 76.7%)
  - 74.3% at 1.5 years after treatment (vs. 67.2%)
  - 65.8% at 2 years after treatment (vs. 56.3%)
  - 56.5% at 2.5 years after treatment (vs. 46.3%).
- The objective response rate – the percentage of patients whose tumors shrank by more than 30% in response to treatment – was 62.7% for patients in the inavolisib group vs. 28% in the placebo group.
- The median time until patients needed to start chemotherapy was 35.6 months in the inavolisib group vs. 12.6 months in the placebo group.
- With the final results now in hand, the median PFS was recalculated from 15 months in the inavolisib group to 17.2 months while the median PFS remained 7.3 months in the placebo

group.

Most patients in both the inavolisib group (90.7%) and the placebo group (84.7%) experienced severe (grade 3 or 4) adverse events. Hyperglycemia, or high blood sugar, was particularly common in the inavolisib group (63.4% versus 13.5% in the placebo group). Drug discontinuation rates were generally low, but substantially more people stopped treatment due to side effects in theinavolisib group (6.8%) compared with the placebo group (0.6%).

Beyond INAVO120, inavolisib is currently being evaluated in three other Phase III studies: INAVO121, INAVO122 and INAVO123. All three studies are for people with PIK3CA-mutated locally advanced or metastatic breast cancer using various treatment combinations.

“The INAVO120 trial has identified a targeted treatment regimen that meaningfully improves survival in patients with untreated PIK3CA-mutated hormone receptor-positive metastatic breast cancer – a big step forward for these patients,” said ASCO breast cancer expert Jane Lowe Meisel, MD, FASCO, of the Winship Cancer Institute of Emory University School of Medicine.“This study illustrates the importance of genomic testing at the time of diagnosis of hormone receptor-positive metastatic breast cancer, so that patients with PIK3CA mutations who qualify for this approach can be readily identified.”

This study was funded by F. Hoffmann–La Roche and a grant (P30CA008748) to the Memorial Sloan Kettering Cancer Center.

This report is adapted from a news release published by the American Society of Clinical Oncology on May 22, 2025.

Click here for more news from ASCO 2025.
