Currently, the standard of care for early (non-metastatic) hormone-receptor-positive (HR+) breast cancer can vary depending on certain tumor characteristics, but may include combinations of surgery, radiation, and chemotherapy, that is then followed by endocrine therapy. Endocrine therapy can include tamoxifen and/or aromatase inhibitors and is typically taken for at least five years. The addition of endocrine therapy to early HR+ breast cancer treatment has significantly reduced the risk of recurrence and has improved patient outcomes. Still, there is a subset of these patients that have high-risk clinical features who tend to experience early recurrence, despite undergoing the standard treatment.

Verzenio® (generic name: abemaciclib) is a CDK4/5 inhibitor that when combined with some endocrine therapies has previously been shown to improve outcomes for patients with advanced HR+ breast cancer and those that have developed endocrine therapy resistance [1, 2]. Until this study, it was unclear whether Verzenio® would be helpful as a primary treatment for patients with early disease.

In a study recently published in the Journal of Clinical Oncology, Dr. Stephen Johnston and international colleagues initiated a phase-III clinical trial to determine whether the addition of Verzenio® to endocrine therapy could reduce the risk for recurrence in patients with early HR+ breast cancer with certain high-risk characteristics [3]. High-risk features were described as: four or more positive lymph nodes OR one to three positive lymph nodes and either tumor size ≥ 5 cm, histologic grade three, or central Ki-67 ≥ 20%. Of the 5,637 patients enrolled, all underwent some combination of surgery, radiation, and chemotherapy prior to being randomly assigned to one of two groups. The control group received endocrine therapy as prescribed by their physician; and in the Verzenio® group, patients received endocrine therapy as prescribed by their physicians PLUS daily Verzenio® for 2 years.

Early evaluation of this study revealed that after two years, 92.2% of patients in the Verzenio® group and 88.7% of patients in the control group were alive with no evidence of recurrence, and this data was statistically significant. However, it should be noted that at the time of this interim analysis, the majority of patients had not completed the two years of treatment. Thus future analyses will be needed to understand the full impact of Verzenio®. Nonetheless, at the time of this interim analysis, there were 123 recurrence events in the Verzenio® group compared to the 181 recurrence events in the control group.
The takeaway message: Verzenio® plus endocrine therapy reduces early recurrence in patients with high-risk HR+ breast cancer. Further evaluation will be needed to know the full impact of Verzenio®, however interim analyses are promising. This clinical trial has the potential to change the standard treatment for patients with high-risk HR+ breast cancer. To note, Verzenio® is currently not FDA-approved for the treatment of early breast cancer but is approved for the treatment of advanced disease.

References: