Nature Reviews Clinical Oncology | Published online 17 Oct 2017; doi:10.1038/nrclinonc.2017.169

BREAST CANCER

Abemaciclib effective in combination with aromatase inhibition

The introduction of cyclin-dependent kinase 4 and 6 (CDK4/6) inhibitors has substantially improved the prognosis of women with advanced-stage breast cancer; however, the most appropriate therapy combinations and the most effective agent for each subgroup of patients have yet to be determined. Now, data from the phase III MONARCH 3 trial reveal the efficacy of abemaciclib in combination with aromatase inhibition (anastrozole or letrozole) relative to that of placebo plus aromatase inhibition in women with advanced-stage hormone receptor (HR)-positive, HER2-negative breast cancer.

Patients with confirmed locoregionally recurrent or metastatic disease not amenable to surgical resection or curative radiotherapy were randomly assigned (2:1) to either abemaciclib or placebo, plus an aromatase inhibitor. Median progression-free survival (PFS) was not reached in the abemaciclib group versus 14.7 months in the placebo group (HR 0.54; $P<0.000021$).

Virtually all patients (98.5%) who received abemaciclib had adverse events of any grade, with 48.6% having at least one grade ≥3 adverse event. Neutropenia was the commonest grade ≥3 adverse event, ocurring in 19.6% of patients. Notably, the incidence of neutropenia in this trial wassubstantially lower than that of patients with advanced-stage breast cancer the PALOMA-3 trial of patients with advanced-stage breast cancer receiving a different CDK4/6 inhibitor, palbociclib, in patients with advanced-stage breast cancer in the PALOMA-3 trial; however, patients receiving abemaciclib had a substantially greater incidence of diarrhoea of any grade, including grade ≥3 diarrhoea.

The findings of this study demonstrate that abemaciclib is an effective treatment of advanced-stage breast cancer, with a different adverse-event profile to that of palbociclib, although direct comparisons of the safety and efficacy of these two agents are currently unavailable.

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ORIGINAL ARTICLE Goetz, M. P. *et al.* MONARCH 3: abemaciclib as initial therapy for advanced breast cancer. *J. Clin. Oncol.* http://dx.doi.org/10.1200/JCO.2017.75.6155 (2017)