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LETTER TO THE EDITOR

# Treatment options for patients with HR+/HER2− advanced breast cancer during the COVID-19 pandemic: dose reduction of ribociclib does not diminish efficacy

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**To the editor,**

The COVID-19 pandemic poses unprecedented challenges to the field of oncology. I read with great interest the recent recommendations outlined by Deitz et al. for patients with breast cancer during the COVID-19 pandemic [1]. For patients with hormone receptor-positive/human epidermal growth factor receptor 2-negative (HR+/HER2−) metastatic breast cancer, it is recommended that use of targeted oral therapies be weighed against the risk of adverse events and that dose reductions can minimize treatment-related toxicities. This was followed by the statement "dose reduction of palbociclib does not diminish efficacy."

Currently, there are three CDK4/6 inhibitors approved for the treatment of HR+/HER2− metastatic breast cancer. To provide additional information for health care professionals in their decision-making, I would like to point out that dose reduction of the CDK4/6 inhibitor ribociclib also does not diminish efficacy. An analysis of patients with advanced breast cancer in the phase III MONALEESA-2, -3, and -7 trials who received ribociclib as initial endocrine-based therapy for advanced breast cancer showed that median progression-free survival was comparable between patients who had no dose reduction vs patients with ≥ 1 dose reduction (MONALEESA-2: 27.7 months vs 25.3 months; MONALEESA-3: not estimable vs not estimable; MONALEESA-7: 23.8 months vs 27.5 months) [2]. It has also been reported separately that ribociclib demonstrated a significant overall survival benefit over endocrine therapy alone in phase III trials (MONALEESA-3 and -7; MONALEESA-2 overall survival data is immature at this time) [3]. In all three trials, the most frequent adverse event (all grades) for patients with no dose reduction and ≥ 1 dose reduction was neutropenia. The most common reason for dose reduction was an adverse event.

Awareness of all available options may help in making treatment decisions for individual patients. I hope the information provided here can aid in that process.

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## Compliance with ethical standards

**Conflict of interest** Dr. O'Shaughnessy reports AbbVie Inc., Agendia, Amgen Biotechnology, AstraZeneca, Bristol-Myers Squibb, Celgene Corporation, Eisai, Genentech, Genomic Health, GRAIL, Immunomedics, Heron Therapeutics, Ipsen Biopharmaceuticals, Jounce Therapeutics, Lilly, Merck, Myriad, Novartis, Ondonate Therapeutics, Pfizer, Puma Biotechnology, Prime Oncology, Roche, Seattle Genetics, Syndax Pharmaceuticals.

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## References

1. Deitz JR, Moran MS, Isakoff SJ et al (2020) Recommendations for prioritization, treatment and triage of breast cancer patients during the COVID-19 pandemic. Breast Cancer Res Treat. https://doi.org/10.1007/s10549-020-05644-z
2. Beck JT, Neven P, Sohn J et al (2019) Ribociclib treatment benefit in patients with advanced breast cancer with ≥1 dose reduction: Data from the MONALEESA-2, -3, and -7 trials. Cancer Res 79(4S):P6-18-06
3. NCCN Clinical Practice Guidelines in Oncology for Breast Cancer V.3.2020.