Breast Cancer (2023) 30:1107
https://doi.org/10.1007/s12282-023-01469-y

LETTER TO THE EDITOR

Is there any association between acute kidney injury and olaparib use in patients with BRCA1- or BRCA2-mutated high-risk early breast cancer from the phase 3 OlympiA trial

Kadri Altundag[1]

Received: 24 April 2023 / Accepted: 6 May 2023 / Published online: 11 May 2023

To the Editor,

I read Yamauchi et al. article [1] with great interest as they investigated the effectiveness and safety of adjuvant olaparib in a subset of Japanese patients with high-risk early breast cancer who had BRCA1- or BRCA2-mutations. This subset was drawn from the phase 3 OlympiA trial. They came to the conclusion that the efficacy and safety analysis results were consistent with the OlympiA population worldwide, indicating that the conclusions from the global study can be applied to clinical practice in Japan. As a secondary endpoint, safety outcomes were also examined, with adverse events such as pneumonitis, radiation pneumonitis, myelodysplastic syndrome, acute myeloid leukemia, and new primary cancer other than MDS or AML being of particular interest. Data on kidney function among olaparib-treated patients are lacking, though. In a recent study, the incidence of any acute kidney injury (AKI), which is defined as a rise in serum creatinine of 1.5 times or more from baseline in the first 12 months after treatment with olaparib or niraparib in patients with ovarian cancer, was examined. They found that of 269 patients, 60 (22.3%) developed AKI, including 43/194 (22.1%) olaparib-treated patients and 17/75 (22.7%) niraparib-treated patients. Only 9 of 269 (3.3%) had AKI attributable to the olaparib or niraparib According to their findings, AKI is frequently experienced after taking olaparib or niraparib, as well as a brief decline in eGFR; however, sustained AKI that can be directly attributed to olaparib or niraparib, as well as long-term estimated glomerular filtration rate decline, are rare [2]. In conclusion, AKI may be regarded as a side effect in high-risk, early breast cancer patients with BRCA1 or BRCA2 mutations who are taking olaparib.

Declarations

Conflict of interest I have no conflict of interest to declare.

References

1. Yamauchi H, Toi M, Takayama S, Nakamura S, Takano T, Cui K, et al. Adjuvant olaparib in the subset of patients from Japan with BRCA1- or BRCA2-mutated high-risk early breast cancer from the phase 3 OlympiA trial. Breast Cancer. 2023. https://doi.org/10.1007/s12282-023-01451-8. (**Epub ahead of print**).
2. Gupta S, Hanna PE, Ouyang T, Yamada KS, Sawtell R, Wang Q, et al. Kidney Function in Patients with Ovarian Cancer Treated with Poly (ADP-ribose) polymerase (PARP) Inhibitors. J Natl Cancer Inst. 2023. https://doi.org/10.1093/jnci/djad070. (**Epub ahead of print**).

✉ Kadri Altundag
altundag66@yahoo.com

[1] MKA Breast Cancer Clinic, Tepe Prime, Cankaya, 06800 Ankara, Turkey