Treatment options with CDK4&6inhibitor, S-1, and PARP-inhibitor for HR-positive HER2-negative early breast cancer: Japan experience

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Postoperative adjuvant therapy for patients at high risk of recurrence with HR-positive, HER2-negative breast cancer has evolved rapidly in recent years.

In Japan, based on the results of the Monarch E trial, postoperative adjuvant therapy with abemaciclib has been available for high-risk patients since December 2021. And based on the results of the POTENT trial conducted in Japan, the use of TS-1 is also recommended in the 2022 Japanese guidelines, although an application for indication expansion is currently pending.

Furthermore, based on the results of the OlympiA trial, the use of PARP inhibitors as adjuvant therapy for breast cancer with BRCA mutations has also become possible from the end of August 2022.

Thus, while these new evidences have given us more options for postoperative adjuvant therapy for HR-positive, HER2-negative, high-risk breast cancer, the major issues now are which of these agents to use and which patients are truly eligible for treatment.

Since each of these drugs became available at about the same time, there is no evidence on whether they can be administered sequentially, much less in combination. Other than olaparib, which targets BRCA mutations, both abemaciclib and TS-1 are widely useful agents, so there is no clear biomarker for recommending each agent.

In this conference, we will compare and review the clinical trials that served as evidence, and report on the treatment strategies we consider and their future prospects, based on the recommendations of the guidelines in Japan and the current situation in actual clinical practice.