Topic:

What Should We Do on Monday Morning?

Abstract

For hormone receptor positive, HER2 negative (HR+/HER2-) subtype, what are the new updates? From decades ago, the use of endocrine therapy (ET) to treat breast cancer can be traced back as the very first targeted therapy, although the target was broadly presented in breast cancer. Then, mTOR inhibitor everolimus was approved in combination with to treat HR+/HER2- advanced breast cancer (ABC) patients, and no additional biomarker is required. Afterwards, CDK4/6 inhibitors had only changed the treatment standard in ABC but also improved survival outcomes in ABC patients, and again, no biomarker was identified. However, in recent years, along with the progress of new agent and sequencing, we now have new drugs that moved toward precision medicine: alpelisib, a PI3 kinase inhibitor, capivasertib, a Akt inhibitor, and elacestrant, an oral SERD, which requires PIK3CA mutation, PI3K/Akt/PTEN pathway alterations, and ESR1m respectively.

In early breast cancer setting, CDK4/6 inhibitor is the first class of small molecular inhibitors demonstrating clinical benefit in reducing recurrence and mortality when combined with adjuvant ET. Abemaciclib has been the first one and the only one for years until we hear the report of NATALEE trial, the trial that investigated the efficacy of ribociclib. After the 4 year landmark analysis released in ESMO 2024, the US FDA had approved ribociclib in HR+/HER2- EBC. Hope we can go through the data and find the most appropriate population to add on these agents.