Genomic analysis of circulating tumor DNA from patients with hormone receptor-positive, HER2-mutant metastatic breast cancer enrolled in SUMMIT: Acquisition of resistance to neratinib + fulvestrant + trastuzumab


Introduction
HER2-mutated cancers are genomically driven in a subset of metastatic breast cancers (MBC) and may be refractory as a mechanism of resistance to endocrine therapy.1

Methods
In the hypothesis-generating SUMMIT basket trial (NCT01953926), original cohorts of patients with locally assessed HER2-mutant papillary carcinoma (HER2-mucc) who had received any HER2-targeted therapy were enrolled as non-overlapping in order to assess the impact of subsequent treatment with neratinib (N). Clinical responses were monitored short of short-term. Clinical progression occurred with emergence of at least one additional genomic alteration of the included mutation.

Results
In the hypothesis-generating SUMMIT basket trial (NCT01953926), original cohorts of patients with locally assessed HER2-mutant papillary carcinoma (HER2-mucc) who had received any HER2-targeted therapy were enrolled as non-overlapping in order to assess the impact of subsequent treatment with neratinib (N). Clinical responses were monitored short of short-term. Clinical progression occurred with emergence of at least one additional genomic alteration of the included mutation.

Conclusions
Neratinib + fulvestrant + trastuzumab is effective in patients with HER2-mutant MBC in SUMMIT, with significant antitumor activity and progression-free survival among patients with pretreatment genomic characterization of mbc HR+ HER2+-mutant cancers.

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References

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