A PILOT STUDY TO INVESTIGATE FACTORS TO PREDICT THE EFFECT OF FULVESTRANT 500MG TREATMENT IN POSTMENOPAUSAL PATIENTS WITH TAM OR AI-RESISTANT ESTROGEN RECEPTOR POSITIVE BREAST CANCER

S. Noda, Y. Asano, K. Kurata, T. Morisaki, S. Kashiwagi, H. Kawajiri, T. Takashima, N. Onoda, K. Hirakawa
Surgical Oncology, Osaka City University Graduate School of Medicine, Osaka, JAPAN

Aim: Fulvestrant (FUL) has been used to treat postmenopausal women with hormone receptor-positive metastatic or recurrent breast cancer after the failure of treatment attempts with tamoxifen (TAM) or aromatase inhibitor (AI). The factors predicting the outcome of treatment by FUL have not yet been identified. We retrospectively investigated our experience in an attempt to determine possible predictive factors of FUL treatment.

Methods: 42 patients were treated by FUL at a dose of 500 mg/ month from November 2011 to April 2014 in our institute. All cases were postmenopausal women at average age of 67.2 years, showed resistance to previous treatments with TAM and/ or AI. Estrogen receptor expression was positive in 41 cases and was unknown in one case. Six cases had unresectable locally advanced disease, 6 cases had stage IV disease, and 30 cases had postoperative recurrence.

Results: Responses were determined as PR 10%; SD 33%; PD 57%, with a clinical benefit rate of 29%. The clinical benefit of FUL was significantly more commonly observed in patients with higher age (67 years or more), greater number of prior endocrine therapy (3 or more), and having demonstrated clinical benefit by prior AI treatment. In addition to these three factors, PFS was significantly prolonged in the group of patients who had shown clinical benefit of prior TAM treatment compared with those without. Patients with high BMI (>25) had a tendency to extend PFS (p = 0.05). However, no predictive factor of better PFS could be identified by multivariate analysis.

Conclusions: In responders to prior endocrine therapy, (especially AI treatment,) the effect of FUL might be expected even when conducted in a late line. Although higher BMI had been reported to have a negative impact on the outcome in postmenopausal women with breast cancer, treatment with FUL might be efficient in these patients. We believe this pilot study demonstrated the need for further validation.

Disclosure: All authors have declared no conflicts of interest.