Breast cancer after hormone replacement therapy—does prognosis differ in perimenopausal and postmenopausal women?

Hormone replacement therapy (HRT) has been associated with higher incidence of breast cancer in postmenopausal women, but it is unclear if breast cancers developing after HRT use have different prognosis. 1053 women with hormone receptor positive non-metastasized breast cancer were analyzed in a retrospective trial, stratifying by HRT use before diagnosis. Postmenopausal HRT users had significantly more early tumor stages (p<0.001). HRT in postmenopausal patients was associated with longer time to progression (TTP) (HR 0.81, 95%CI 0.55-1.19, p=0.28) and overall survival (OS) (HR 0.68, 95%CI 0.45-1.02, p=0.059). Perimenopausal HRT users showed shorter TTP and OS (HR 1.99, 95%CI 0.57-6.91, p=0.28 and HR 4.59, 95%CI 0.91-23.25, p=0.06 respectively). Higher BMI was significantly associated with poorer prognosis in perimenopausal women only (TTP: HR=1.16; OS: HR=1.31). In this retrospective analysis postmenopausal HRT users seemed to have a better breast cancer prognosis. For perimenopausal HRT users however, a trend towards worse prognosis was found.