BACKGROUND

Cyclin-dependent kinase 4/6 inhibitors (CDK4/6i) currently represent the standard of care for the initial treatment of patients with metastatic hormone receptor-positive/human epidermal growth factor receptor 2-negative (HR+/HER2-) breast cancer. The aim of our study is to evaluate the safety of the use of concomitant RT in a consecutive series of HR+/HER2-patients treated in two academic institutions with CDK4/6i in the metastatic setting.

METHODS

From September 2017 to February 2020, we collected and analysed a sequential series of patients with metastatic disease treated with CDK4/6i, receiving RT or not, at two European institutions. Primary outcomes of the study were the impact of concomitant RT on any toxicity (any grade), any adverse events (AEs) ≥G3, CDK4/6i dose reduction rate, and CDK4/6i treatment discontinuation rate.

RESULTS

We analysed a total of 132 consecutive patients. The median age of the patients was 59 years (range 37-86). Concomitant RT administration was not significantly related to higher AEs ≥G3 (p=0.19) and any grade toxicity (p=1.0); there was no association with RT and CDK4/6i dose reductions (p=0.49) and discontinuations (p=0.14).

At a median duration of follow-up of 18.8 months, the progression-free survival (PFS) rate was 65.0% and the overall survival (OS) rate was 38.7% in the whole group. The use of concomitant RT did not affect both PFS (p=0.71) and OS rates (p=0.55).

CONCLUSIONS

Our data are encouraging regarding the safety of this combination, showing that concurrent RT did not have an impact on systemic treatment conduction and did not increase toxicity.