Complete clinical response in metastatic breast cancer after front-line treatment with ribociclib/tamoxifen

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Background and Importance

Endocrine therapy with ovarian suppression or ablation is the standard first-line treatment for perimenopausal or premenopausal women with HR-positive, HER2-negative, advanced breast cancer; however, endocrine therapy resistance and disease progression occur in most cases. Ribociclib is a selective, small molecule inhibitor of CDKs 4 and 6 has showed that alongside endocrine therapy can improve PFS and achieve higher proportions of overall responses than endocrine therapy alone in premenopausal women with HR-positive, HER2-negative, advanced breast cancer.

Objectives

We present the case of a woman patient diagnosed with stage-IV HR+/HER2- breast cancer (Ki67 25%) who achieved complete response to first-line ribociclib treatment.

Material and Methods

This was an observational retrospective study of the use of ribociclib in a 60-year-woman diagnosed with HR+/HER2- metastatic breast cancer. Data were obtained of the electronic medical records.

Results

- Jul 2015: Premenopausal 54-aged patient HR+/HER2-Ki67 10% localised infiltrating ductal carcinoma 1.5cm-size tumour
- Jul 2015: She underwent tumorectomy and received adjuvant radiotherapy and five-year tamoxifen
- Mar 2021: She suffered from loss of strength of left upper limb CT-scan revealed a mass in the left axillary region and hypermetabolic bone lesions in the femur
- Jun 2021: Breast cancer HR+/HER2-Ki67 25% premenopausal 60-year treated with 3-monthly goserelin, tamoxifen and ribociclib
- Sept 2021: Treatment was well tolerated She achieved complete metabolic response of the lesions described in the axilla and bone, without current foci of neoplastic disease
- Sept 2021: The last CT-scan revealed absence of neoplastic disease
- Jun 2022: She continues with the same treatment without dose modifications or delays

Conclusion

This case report documents an exceptional tumor response of a fast growing, locally advanced, bone metastatic HR+/HER2- de novo breast cancer treated by ribociclib/tamoxifen/goserelin combination therapy. Treatment success is long lasting with few side effects.