TREATMENT OF CYCLIN INHIBITOR INDUCED NEUTROPENIA: IMPACT ON PROGRESSION FREE SURVIVAL

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BACKGROUND AND IMPORTANCE

The incidence of neutropenia in Cyclin-Inhibitor (CI) treatment of luminal metastatic breast cancer (LMBC) is very high and leads to a reduction or delay in the needed dose.

AIM AND OBJECTIVES

To analyze the efficacy of Granulocyte Colony-Stimulating Factor (G-CSF) in CI treatment. We used filgrastim as G-CSF.

MATERIAL AND METHODS

A retrospective study of the patients that initiated CI treatment between March 2018 and April 2020.

RESULTS

The population distribution is as follows:

- Metastatic debut: 29% (n=20)
- Progression during endocrine adjuvant treatment: 30% (n=21)
- Progression to 1st-line hormonotherapy: 14% (n=10)
- Progression to chemotherapy: 22% (n=22)

The results show:

- Age range: 65 (41-89) years
- CI treatment:
  - First line: 64% (n=44)
  - Progression to 1st-line hormonotherapy: 14% (n=10)
  - Progression to chemotherapy: 22% (n=22)

The PFS by line (months) is as follows:

- Global: 10.88
- First line: 15
- Second line: 8

The PFS by neutropenia (months) is as follows:

- Neutropenia: 9
- No neutropenia: 16

The PFS by filgrastim administration (months) is as follows:

- With: 15
- Without: 5

CONCLUSION AND RELEVANCE

- CI-induced neutropenia is a widespread complication and correlates with PFS in our patients' cohort: 15 vs. 8 months in the whole group. G-CSF treatment does not affect PFS but can help to maintain treatment and avoid early relapses.
- It should be studied whether neutropenia induced by treatment with CI behaves as a prognostic factor and whether the use of G-CSF could provide us with a clinical benefit.