EFFECTIVENESS OF PLERIXAFOR IN HEMATOPOIETIC STEM CELL MOBILISATION AND REPACKAGING STRATEGY TO REDUCE COST



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BACKGROUND

Plerixafor + Granulocyte-Colony Stimulating Factor (G-CSF)



Enhances the mobilization of hematopoietic stem cells for autologous transplantation in adult hematological patients (lymphoma or multiple myeloma) whose cells are poorly mobilized.

OBJECTIVES

- To asses the use of plerixafor in routine clinical practice.
- To evaluate its **effectiveness**.
- To perform an economic analysis of the cost avoided by repackaging vials.

MATERIAL AND METHODS

Observational, retrospective, descriptive study: January 2018 - July 2024.

Data were collected using the electronic medical record.

An analysis of the avoided cost associated with the repackaging is also performed.

RESULTS

42 patients were included

VARIABLES	DATA
AGE (years)	Median: 58.65 ± 10.71.
SEX	52.38% men (n = 22).
DIAGNOSIS	50% Multiple Myeloma; 18.04% Non-Hodgkin Lymphoma; 16.66% Donors; 9.52% Hodgkin Lymphoma; 2.38% Lymphomatoid Granulomatosis. Diagnosis aligned with product summary: 81.96% (34/42 cases).
CD34+ CELL CONCENTRATION IN PHERIPHERIAL BLOOD (PB)	Patients reaching adequate CD34+ cells (>10cells/µL): 36 (85.71%).
PREVIOUS MOBILISATION THERAPIES	18 patients G-CSF; 12 Etoposide + G-CSF; 7 Cyclophosphamide + G-CSF; 4 Etoposide + G-CSF and Cyclophosphamide + G-CSF; 1 Etoposide + G-CSF and Gemcitabine.
PLERIZAFOR DOSE ADMINISTERED	0.24 mg/kg/day. Average dose: 18.6 mg.

Plerixafor has been prepared in a horizontal laminar flow hood, keeping unused drug fraction in a refrigerator, stability of 84 days.

SAVINGS €53,304.75



Total cost without repackaging

Total cost with repackaging

€203,547.12

€150,242.37

-CONCLUSION -

Plerixafor has been shown to be effective for the mobilization of hematopoietic progenitors in patients refractory. Furthermore, the development of a repackaging strategy has been shown to be efficient.