Quantification of The Time and Effort Associated with Autologous Peripheral Blood Stem Cell Mobilisation: A European Perspective

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Abstract

Introduction: The European Medicines Agency has approved Plerixafor in combination with G-CSF for autologous mobilization of hematopoietic stem cells in patients with lymphoma and multiple myeloma whose cells are required without increased toxicity.

Methods: The study population includes patients aged ≥18 years, with a primary diagnosis of Non-Hodgkin's Lymphoma (NHL), who underwent PBSC mobilisation at European centres. Part I of the study, currently under way, will enroll patients from 113 centres in 12 countries in Europe. The study will be conducted in two phases: (1) a cross-sectional phase to better understand the health resource utilization, including time, effort and costs to the hospital, associated with PBSC mobilisation and transplantation in patients with lymphoma and multiple myeloma; and (2) an economic evaluation comparing the costs and health resource utilization, including time, effort and costs associated with PBSC mobilisation and transplantation in patients with lymphoma and multiple myeloma.

Results: The study population includes patients aged ≥18 years, with a primary diagnosis of Non-Hodgkin's Lymphoma (NHL), who underwent PBSC mobilisation at European centres. Part I of the study, currently under way, will enroll patients from 113 centres in 12 countries in Europe. The study will be conducted in two phases: (1) a cross-sectional phase to better understand the health resource utilization, including time, effort and costs to the hospital, associated with PBSC mobilisation and transplantation in patients with lymphoma and multiple myeloma; and (2) an economic evaluation comparing the costs and health resource utilization, including time, effort and costs associated with PBSC mobilisation and transplantation in patients with lymphoma and multiple myeloma.

Discussion: The financial implications for transplant centers could be significant and may lead to further studies aiming to optimize staff time and reduce utilization related to PBSC mobilization in the hospital.