Ex vivo procedures associated with autologous hematopoietic stem cell transplantation Procedimientos ex vivo asociados al trasplante autólogo de células troncales hematopoyéticas.

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In the last 15 years, autologous cryopreserved bone marrow has been extensively used to reestablish hematopoiesis after myeloablative therapies in patients with leukemia, lymphomas or solid tumors. Recently, the use of stem cells obtained from peripheral blood has become an additional source of autologous stem cells for patients, with bone marrow diseases as well as for patients with mammary or ovarian cancer, after high dose chemotherapy. The use of this therapy has created the need of implementing laboratory procedures (ex vivo) to concentrate, purify, cryopreserve and evaluate the hematopoietic stem cell and eliminate tumoral cells. This article reviews these procedures, available in Chile at the present time, and comments on the impact of its use in autologous bone marrow or peripheral blood stem cell transplantations in an estimated population of 300 patients per year.