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CONSENSUS UPDATE

HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR NON-HODGKIN LYMPHOMA

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INTRODUCTION:

The treatment of lymphoproliferative neoplasms has advanced in recent years with the introduction of many monoclonal and other targeted therapies. Despite these advances, haematopoietic stem cell transplantation (HSCT) remains important in the management of non-Hodgkin's lymphomas (NHL), especially in the scenario of recurrences (Table 1)[1].

In certain situations where HSCT does not show a great benefit, there are opportunities for studies with new therapies. In these scenarios, CAR-T cells have been performed in Diffuse Large B Cells Lymphomas patients when rescue chemotherapy and autologous HSCT led to partial remission (PR), which is unsatisfactory and has unclear benefit in terms of survival [2].

In Table 1 are described the main indications and therapies' level of evidence according to the subtypes of NHL.

LYMPHOMA SUBTIPE	AUTOLOGOUS	EVIDENCE	ALLOGENEIC	EVIDENCE
DLBCL (Diffuse Large B-Cell Lymphoma)	Relapse/Induction failure High risk CR1/PR!	1a 2c	Post autologous relapse	2c
Follicular	Early relapse In transformation 2nd line	2b 2b	Second or multiple relapses	2c
Mantle cell	1st CR/1st PR Relapse/failure	2b 2b	Post autologous relapse Refractory disease Blastoid variant/TP53 mutated	2c 2c 2c
PTCL (Peripheral T-Cell Lymphoma)	1st CR(ALK-)/PR 2nd CR/PR	2b 2c	ATLL/HETCL Induction failure or post autologous relapse	2c 2b

UPDATE

Although the indications for allogeneic HSCT remain unchanged from the previous document, currently CAR-T cell therapy has indications that compete with those for allogeneic HSCT. In an attempt to facilitate the choice between therapies in relapses after autologous HSCT or in patients who are refractory to rescue regimens and who do not benefit from the indication for autologous HSCT, we list below the main benefits of these 2 forms of treatment[3]:

CAR-T	Allo HSCT
Immediate antitumor effect	Can be performed in cytopenic patients
Effective against active disease	Low impact of previous therapies
Avoid risk of graft versus host disease (GVHD), with different toxicities	Longer follow up with known toxicities
Low procedure related mortality	Better availability and cost

In addition to the different benefits between the two therapies listed above, there seems to be a slight advantage for CAR-T when compared to allogeneic HSCT used in patients with DLBCL with more than 2 lines of treatment, an advantage that disappears when patients are evaluated regardless of the number of lines. of treatment[4].

Unlike follicular lymphoma and NHL T for which there is still no indication for CART in Brazil, either due to lack of benefits or unavailability, in marginal zone lymphoma allogeneic HSCT is beginning to lose ground in its indication in relapses after autologous HSCT for CART[5].

Although allogeneic HSCT begins to have questions about its indication in DLBCL and marginal zone lymphoma, the current unavailability of access to therapies with CART, keep its indication almost unchanged.

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