

T cell Brazil project: A pioneer project to collect data of T-Cell NHL patients among five regions of Brazil

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Peripheral T-cell lymphomas (LPCT) constitute a heterogeneous group of aggressive neoplasms corresponding to less than 15% of all non-Hodgkin's lymphomas (NHL) in adults [1]. Nonspecific T-cell peripheral lymphoma belongs to a group of lymphomas predominantly T-cell nodules that derive from several types of mature T cells that do not meet the criteria of the specific LPCT subtypes. Non-specific peripheral T-cell lymphoma is the most common subtype in Western countries, accounting for about 30% of LPCT and about 6% of NHL [2,3].

In 2003 the International T-Cell Lymphoma Project started a broad cooperative study aiming at better defining the clinicopathologic features and prognoses of different neoplastic entities included some in the group of PTCLs and NKTCLs. A cohort of 1,314 cases was collected from 22 centers worldwide, consisting of patients with previously untreated PTCL or NKTCL who were diagnosed between 1990 and 2002. This was the largest series reported to date of peripheral NK/T-cell lymphomas. The results of this retrospective study confirm that the clinical outcome for patients with most of these lymphoma subtypes is poor with standard therapies, novel agents and new modalities being needed to improve survival [4].

After that, it was presented in the ASH-2016 meeting [5], T-cell Project representing one of the largest cohort of prospectively collected data on pts with aggressive T-cell lymphomas around the world. Of the 1020 cases reviewed, 44% were at high-risk according to PIT and 45% according to IPI score; a median time to relapse/progression was 8 months (2-73); After a median follow-up from relapse/progression disease of 38 months (1-96), 440 patients had died; and their median survival after relapse/progression (SAR) was 5.8 months (95% CI: 4.9-7.2). At 3 years, the SAR was 28% for relapse group (95% CI: 21-35) and 21% (95% CI: 17-25) for refractory ($P < 0.0001$). These results highlighted the urgent need for novel agents and more effective salvage therapies.

The literature is scarce regarding to the clinical and epidemiological data of peripheral T cell lymphomas mainly in Brazil. Brazil is highly heterogeneous in terms of climate, geography, and environment even displays great genomic diversity. At present day, Brazilian population has over 209 million people concentrated in the south and southeast region. The different regions have unique particularities in cultural aspects even so concerning terms of schooling, longevity and per capita income [6].

Regarding to health centers there are many disparities that affect the epidemiology of diseases, reflecting on the patient diagnosis, treatment and outcomes. These were one of the causes to develop T Cell Brazil registry.

The registry was designed to verify whether a prospective collection of data would allow access to more accurate information permitting a better definition of prognosis of PTCL and NK/ T-cell lymphomas according to World Health Organization (WHO 2016) [7] classification, excluding Mycosis fungoides; Sézary syndrome and chronic lymphoproliferative disorders. Besides that, the analysis of patients distributed in all five macro- regions of the country can give us a better understanding of our patients. The sample size estimated was 500 patients with histologically confirmed. The estimated time for collecting data will be three years to insert. A histopathology review will be done by a panel of experts randomly. Validated cases must be supplied with data regarding treatment procedures and follow-up for at least five years, to calculate the overall survival.

Nowadays, there are 40 centers in regulatory phase. Registration will be made on-line on a key restricted web-database, REDCap (Research Electronic Data Capture) [8] after obtaining the informed consent. The adoption of SSL03 technology will assure protection in web communications of subject's clinical data.

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Finally, this registry will be the first experience cover all over the country, striving to achieve not only registries but also an educational and of interchanging experience network among the multidisciplinary health team in Brazil. We hope this project may bring a deep knowledge the T-cell lymphoma in our population, in different levels, mainly related a new approaches for a better treatment.

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