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A survey of clinical practice for the front-line treatment of peripheral T-cell lymphoma (PTCL) in the United Kingdom

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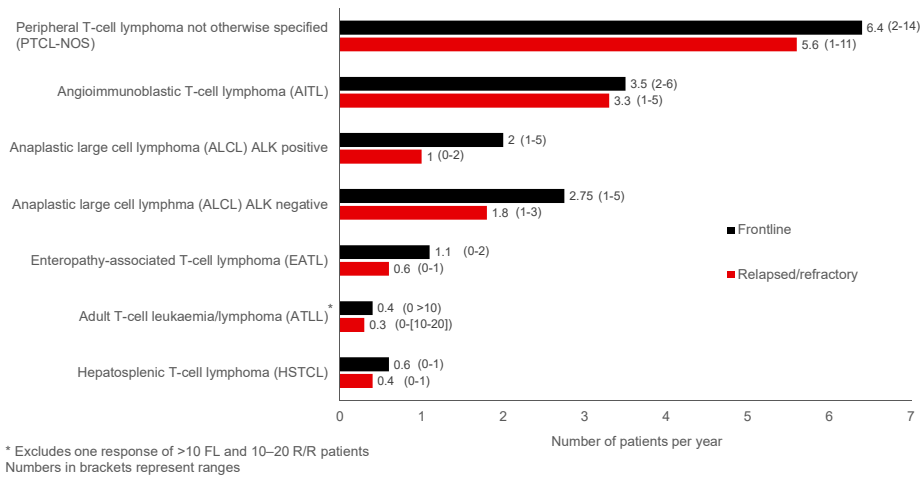
Background

- Peripheral T-Cell Lymphoma (PTCL) is a rare and aggressive subset of Non-Hodgkin's Lymphoma (NHL), that carries poor prognostic outcomes.
- PTCL comprises approximately 5-10% of all new NHL cases in the UK.[1-3] There are multiple subtypes of PTCL including PTCL- not otherwise specified (NOS), angioimmunoblastic T-cell lymphoma (AITL), anaplastic large cell lymphoma (ALCL) anaplastic lymphoma kinase (ALK)+ve, ALCL ALK-ve, Enteropathy-associated T-cell lymphoma (EATL), adult T-cell lymphoma (ATLL) and Hepatosplenic T-cell lymphoma (HSTCL).[4]
- Generally, combination chemotherapy (CHOP) is the standard front-line therapy, with clinical trials preferred where available.[5-7]
- The role of consolidative stem cell transplant (SCT) is not established in the front-line treatment of PTCL, and its adoption in the UK varies due to the limited data supporting its efficacy.
- The purpose of this survey was to assess the current front-line management of PTCL in the UK.

Study design

- An electronic survey was completed by ten clinicians with experience of managing PTCL based in large teaching hospitals across the UK.
- Questions assessed the number and subtype of patients treated annually, guidelines used, standard treatment approach, expected efficacy of treatments and proportion of patients receiving consolidation with autologous SCT.

Figure 1 Mean number of patients treated each year in the front-line and relapsed/refractory (R/R) setting across each PTCL subtype



* Excludes one response of >10 FL and 10–20 R/R patients
Numbers in brackets represent ranges

Figure 2. Standard front-line approach and treatment regimen for each PTCL subtype across the ten centres sampled

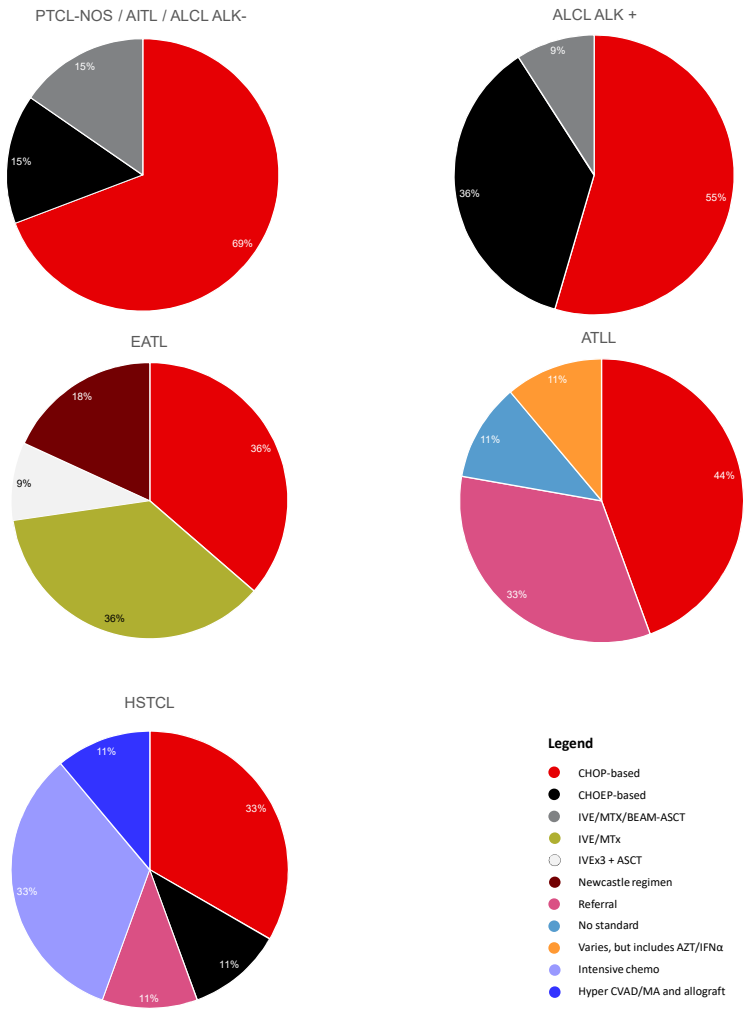


Figure 3. Expected median DOR and PFS by front-line treatment type

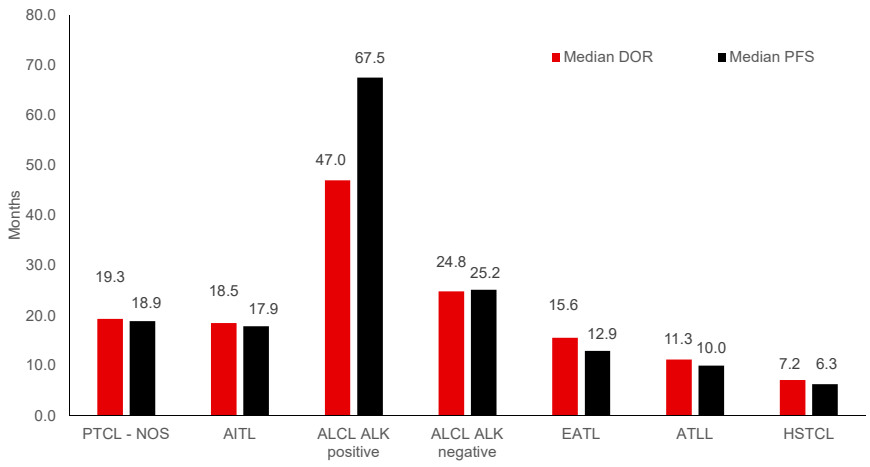


Figure 4. Expected efficacy of front-line treatment approach by PTCL subtype

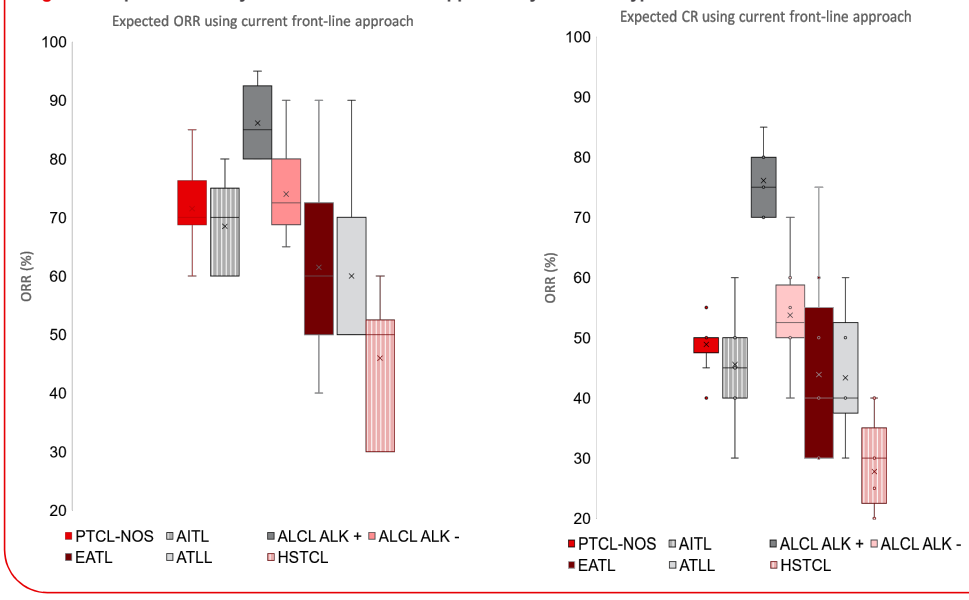
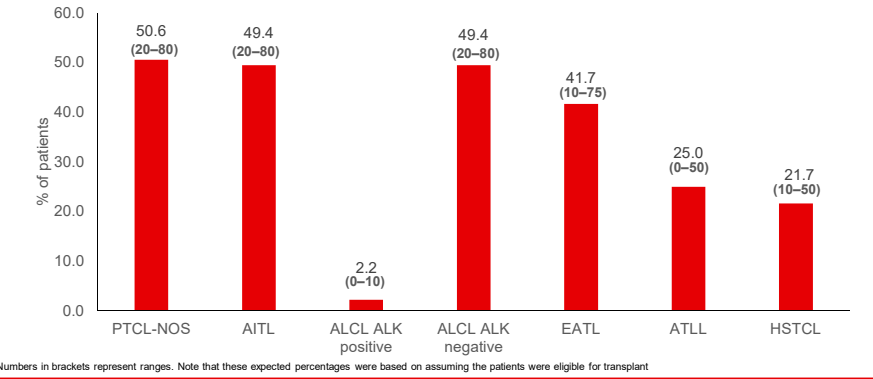


Figure 5. Percentage of patients expected to receive a SCT consolidation following front-line therapy



Numbers in brackets represent ranges. Note that these expected percentages were based on assuming the patients were eligible for transplant

Results

- The number of patients treated in each centre is generally low, with an average of 19 patients seen per centre per year (range: 10-32).
- The majority of patients treated have PTCL-NOS or AITL, with other subtypes seen less frequently.
- Standard front-line approach for PTCL-NOS, AITL and ALCL ALK+ve is CHOP-based therapy, with slight differences within the group, notably on whether or not to include etoposide, while two clinicians had a preference for IVE+ methotrexate.
- ALK +ve ALCL patients are generally treated with CHOP-based chemotherapy, and consolidative SCT is not considered, as their expected outcomes are better due to their good risk profile.
- The highest response rates (ORR and CR) to front-line therapy would be expected in patients with ALK +ve ALCL (86.1% and 76.9%), with the lowest in HSTCL (43.9% and 26.3%).
- Approximately 50% of patients with PTCL-NOS, AITL and ALK -ve ALCL would be considered potentially eligible for SCT at the start of treatment, with 20-30% actually receiving transplant.

Conclusions

- In the front-line setting for PTCL-NOS, AITL and sALCL ALK -ve, CHOP is the most frequently used regimen. However, this may be an inadequate option in higher risk groups, which may explain some variability in approach to treatment.
- Although there is inconclusive efficacy evidence, it is expected that 20-30% of patients will receive a consolidative SCT transplant.
- Overall, duration of response and PFS across most PTCL subtypes remains quite short with current therapy
- There remains an unmet need in suitable treatment options for PTCL patients.

References

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Abbreviations

AZT, zidovudine; AITL, angioimmunoblastic T-cell lymphoma; ALCL, anaplastic large cell lymphoma; ALK, anaplastic lymphoma kinase; ATLL. adult T-cell lymphoma; CHOP, cyclophosphamide, hydroxydaunorubicin, oncovin and prednisolone; CR, complete response; EATL, Enteropathy-associated T-cell lymphoma; HSTCL, Hepatosplenic T-cell lymphoma; IFNα, interferon alpha; IVE, infosafmide, epirubicin and etoposide; NHL, Non-Hodgkin's Lymphoma; ORR, Objective response rate; PTCL, Peripheral T-Cell Lymphoma; PTCL-NOS, not otherwise specified; SCT, Stem cell transplant;

Acknowledgments

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