ELSEVIER

Blood 142 (2023) 3083–3084

The 65th ASH Annual Meeting Abstracts

POSTER ABSTRACTS

624.HODGKIN LYMPHOMAS AND T/NK CELL LYMPHOMAS: CLINICAL AND EPIDEMIOLOGICAL

Targeted Immunotherapy and Checkpoint Blockade in Children, Adolescents, and Young Adults with Lymphoma: Radical Hodgkin Cohort

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Background:
Significant chronic health conditions continue to increase over time among pediatric, adolescent, and young adult (CAYA) classical Hodgkin lymphoma (cHL) survivors. Targeting the tumor microenvironment (TME) and tumor-specific antigens are emerging as effective and safe treatments for cHL patients which may help reduce toxicity. Recently, we completed a phase 2 trial evaluating the use of an antibody-drug conjugate targeting CD30 (brentuximab vedotin, Bv) and an anti-CD20 antibody targeting regulatory B-cells (rituximab, RTX) added to risk-adapted chemotherapy in newly diagnosed cHL CAYA patients. The combination was safe and resulted in significant reduction to toxic chemotherapy and radiation therapy (RT), while keeping superior outcomes (5-year OS/EFS 100%) [Hochberg/Cairo, JITC 2022]. Adding the checkpoint inhibitor nivolumab to chemoimmunotherapy with RTX + Bv may allow further anthracycline dose reduction and reduce the need for RT in intermediate-/high-risk cHL in CAYA.

Methods:
This is a multicenter study for patients with intermediate- and high-risk cHL. Intermediate-risk cHL patients receive 2 cycles of Bv, doxorubicin, vinblastine, dacarbazine, and RTX (Bv-AVD-R). Rapid early responders (RER) or slow early responders (SER) by FDG-PET scan receive 2 or 4 cycles of Bv, vinblastine, dacarbazine, nivolumab, and RTX (Bv-NVD-R), respectively without further anthracycline. High-risk cHL patients receive 2 cycles of Bv-AVD-R. RERs by FDG-PET scan receive 4 cycles of Bv-NVD-R; SERs receive 2 cycles of Bv, nivolumab, doxorubicin, vinblastine, dacarbazine and RTX (Bv-NAVD-R), followed by 4 cycles of Bv-NVD-R. RT will only be given to patients not achieving CR at the end of therapy.

Results:
Nine patients have received at least one dose of nivolumab to date and are included in the safety analysis, including 4 intermediate- and 5 high-risk patients. All 9 of these patients have completed interim FDG-PET following 2 cycles of Bv-AVD-R to evaluate early response status. All intermediate-risk patients and 3 high risk patients evaluated to date have been RER, achieving a complete response (CR) at interim FDG-PET. Two high-risk patients have been SER, with a partial response (PR) at interim FDG-PET. Both SER patients achieved a CR following the 6 additional cycles of chemotherapy as detailed above. No patients have required radiation therapy. Accrual is ongoing. We have completed the planned nivolumab safety run in phase. There have been no unexpected grade III/IV adverse events secondary to nivolumab and no dose-limiting toxicities.

Conclusions:
Targeting the Hodgkin Reed-Sternberg cell as well as the TME (regulatory B-cells) and PD1/PD-L1 axis is a promising approach in CAYA with cHL. (NCT05253495).

Disclosures Cairo: *Jazz Pharmaceuticals:* Consultancy, Honoraria, Research Funding, Speakers Bureau; *Omeros Pharmaceuticals:* Consultancy, Research Funding; *Novartis:* Consultancy; *Servier Pharmaceuticals:* Consultancy, Honoraria, Research Funding, Speakers Bureau; *Amgen Inc.:* Honoraria, Speakers Bureau; *Sanofi:* Honoraria, Speakers Bureau; *Sobi:* Honoraria, Speakers Bureau; *Miltenyi Biotec:* Research Funding; *Merck:* Research Funding; *Astra Zeneca:* Honoraria; *Celularity:* Research Funding; *Abbvie:* Consultancy.

OffLabel Disclosure: rituximab for frontline treatment of Hodgkin lymphoma

https://doi.org/10.1182/blood-2023-186691