Nature Reviews Clinical Oncology | Published online 28 Dec 2017; doi:10.1038/nrclinonc.2017.209

HAEMATOLOGICAL CANCER

Brentuximab effective in untreated Hodgkin lymphoma

The standard-of-care chemotherapy regimen for patients with previously untreated Hodgkin lymphoma, consisting of doxorubicin, bleomycin, vinblastine and dacarbazine (ABVD), has not changed in several decades. Now, data from ECHELON-1, an open-label, randomized phase III clinical trial reveal the superior efficacy of a modified regimen containing the antibody–drug conjugate brentuximab vedotin (A+AVD) instead of bleomycin.

A total of 1,334 patients with stage III or IV previously untreated Hodgkin lymphoma were randomly assigned (1:1) to receive either ABVD or A+AVD. Patients receiving A+AVD had a significant improvement in 2-year modified progression-free survival (82.1% versus 77.2% in the ABVD group; HR 0.77, $P = 0.03$). Patients receiving A+AVD had an increased risk of grade ≥3 adverse events and neutropenia (83% versus 66%), of which neutropenia was the most frequent (in 54% versus 39% of patients) relative to those in the ABVD group. However, patients in the A+AVD group had a slightly reduced risk of adverse events leading to treatment discontinuation, and fewer deaths during treatment (9 versus 13). Of note, 7 of the 9 deaths in the A+AVD group were neutropenia related, whereas 11 of 13 deaths in the ABVD group involved pulmonary toxicities.

These findings demonstrate the superiority of A+AVD over the current standard-of-care treatment for Hodgkin lymphoma. Patients in the A+AVD group had a higher risk of grade ≥3 neutropenia, leading the trial safety committee to recommend prophylactic use of granulocyte–macrophage colony-stimulating factor to minimize this risk. Investigators also comment that the A+AVD regimen might be substantially safer in elderly patients, who typically have a considerably higher risk of pulmonary toxicities in response to bleomycin.

Peter Sidaway

ORIGINAL ARTICLE Connors, J. M. *et al.* Brentuximab vedotin with chemotherapy for stage III or IV Hodgkin's lymphoma. *N. Engl. J. Med.* http://dx.doi.org/10.1056/NEJMoa1708984 (2017)