AB006. SOH21AS117. The role of brentuximab vedotin in BIA ALCL: a review of the literature and recommendations for refinement of the NCCN guidelines

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**Background:** Breast implant-associated anaplastic large-cell lymphoma (BIA ALCL) is a newly legitimised disease associated with textured breast implants. Presenting with periprosthetic swelling 7–10 years post-implantation, the clinical course is usually indolent. More rarely, BIA ALCL may present at a later stage. Surgical excision is the gold standard. The National Comprehensive Cancer Network (NCCN) have formulated guidelines for BIA ALCL, however clarity is lacking for stages II–IV. Brentuximab vedotin is a monoclonal antibody targeting CD30 which is effective in treating BIA ALCL. Current guidelines indicate brentuximab combined with chemotherapy for stages II–IV. We propose stage-specific refinement of the NCCN guidelines, with a view to reducing unnecessary toxicity.

**Methods:** We conducted an extensive literature review of BIA ALCL treated with brentuximab identifying 68 papers. Of these 5 were identified to present 7 case reports of BIA ALCL treated with brentuximab.

**Results:** Mean time from implant to diagnosis was 10.43±4.86 years. Indications for breast implant were reconstruction (57.14%) and bilateral breast augmentation (42.86%). Six reported textured implant use (85.71%). One patient received neoadjuvant brentuximab. Two patients received combined adjuvant chemotherapy and brentuximab. Three patients received adjuvant brentuximab monotherapy. One patient was entered into the ECHELON II trial. All patients were well at time of reporting.

**Conclusions:** More refined guidelines regarding stages II–IV BIA ALCL must be developed. We propose this revision include brentuximab as a monotherapy in stages II–III, reserving combined brentuximab and chemotherapy for stage IV. Clinicians must report their experiences of treating BIA ALCL with brentuximab to allow for improved evidence-based practice.

**Keywords:** Breast implant-associated anaplastic large-cell lymphoma; brentuximab vedotin; lymphoma; national comprehensive cancer network; textured breast implants

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**Footnote**

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