inhibitor bortezomib has shown some activity in a recently completed phase II study of the IELSG (NCT00210327).
Aggressive anthracycline-containing regimens are not usually necessary and should be reserved for the few patients with high tumor burden and for those with diffuse large cell infiltration. These latter, indeed, should be treated according to the recommendations for diffuse large cell lymphoma.

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5
Primary mediastinal lymphoma

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Primary mediastinal B-cell lymphoma is now recognised as a discrete clinico-pathologic entity. Molecular analysis reveals it to be different from other types of large B-cell lymphoma, particularly in the activation of the NF-kB pathway and expression of nuclear transcription factors. Retrospective analysis of large series suggests that it may respond better to multi-agent dose-dense chemotherapy regimens than to the more commonly-used CHOP, although this has not been examined prospectively. The addition of Rituximab may mitigate such differences, and may also diminish the role of consolidation radiotherapy, which is widely used to treat residual mediastinal masses. FDG-PET scanning is increasingly used in the management of lymphoma for the evaluation of residual masses after initial therapy, although there are important questions about specificity, particularly in large B-cell lymphoma following treatment with Rituximab, where the false positive rate appears to be relatively high. This is a particularly relevant issue for PMBL, and requires prospective examination, in the hope that this may allow the de-escalation of treatment if it can be shown to yield reliable prognostic information. The relative rarity of this type of lymphoma necessitates international collaboration in clinical trials, with the prospective clinico-pathologic study, IELSG 26 already underway.

6
Molecular pathology of B cell lymphoma

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B-cell derived Non-Hodgkin Lymphoma (B-NHL) represent a heterogeneous group of malignancies among which diffuse large cell lymphoma (DLBCL), follicular lymphoma (FL), mantle cell lymphoma (MCL) and Burkitt lymphoma (BL) represent common entities for which some understanding of their pathogenesis has been acquired. With the exception of MCL, all B-NHL arise by malignant transformation of B cells within the germinal center (GC), the structure where antigen-stimulated B cells undergo rapid proliferation and