Response to chemotherapy and treating institution predict survival in primary central nervous system lymphoma.

The majority of the available data on primary central nervous system lymphoma (PCNSL) derive from small unicentric or oligocentric studies. In this multicentre study, we evaluated the response, survival and toxicity in PCNSL patients after carmustine, methotrexate 1.5 g/m², procarbazine and dexamethasone (BMPD) chemotherapy and searched for prognostic factors. Fifty-six patients received the BMPD protocol (dexamethasone was given only in course 1). The overall complete response rate to chemotherapy was 61% (34/56). Ten complete responders received whole-brain irradiation and 24 were not irradiated. Responders to chemotherapy had significantly longer median overall survival than non-responders (18.2 vs. 9.9 months, P = 0.02). Median survival was significantly longer at institutions accruing at least four patients than at those with fewer patients (31.5 vs. 9.5 months, P = 0.03).