



A service of the [U.S. National Library of Medicine](#)
and the [National Institutes of Health](#)

Select 19356859

1: [Int J Radiat Oncol Biol Phys.](#) 2009 Apr 6. [Epub ahead of print]



A Phase II Study of Preradiotherapy Chemotherapy Followed by Hyperfractionated Radiotherapy for Newly Diagnosed High-Risk Medulloblastoma/Primitive Neuroectodermal Tumor: A Report from the Children's Oncology Group (CCG 9931).

[Allen J](#), [Donahue B](#), [Mehta M](#), [Miller DC](#), [Rorke LB](#), [Jakacki R](#), [Robertson P](#), [Sposto R](#), [Holmes E](#), [Vezina G](#), [Muraszko K](#), [Puccetti D](#), [Prados M](#), [Chan KW](#).

Departments of Pediatrics and Pathology, New York University Medical Center, New York, NY.

PURPOSE: To verify feasibility and monitor progression-free survival and overall survival in children with high-risk medulloblastoma and noncerebellar primitive neuroectodermal tumors (PNETs) treated in a Phase II study with preradiotherapy chemotherapy (CHT) followed by high-dose, hyperfractionated craniospinal radiotherapy (CSRT). **METHODS AND MATERIALS:** Eligibility criteria included age >3 years at diagnosis, medulloblastoma with either high M stage and/or >1.5 cm(2) postoperative residual disease, and all patients with noncerebellar PNET. Treatment was initiated with five alternating monthly cycles of CHT (A [cisplatin, cyclophosphamide, etoposide, and vincristine], B [carboplatin and etoposide], A, B, and A) followed by hyperfractionated CSRT (40 Gy) with a boost to the primary tumor (72 Gy) given in twice-daily 1-Gy fractions. **RESULTS:** The valid study group consisted of 124 patients whose median age at diagnosis was 7.8 years. Eighty-four patients (68%) completed the entire protocol according to study guidelines (within 9 months), and the median time to complete CSRT was 1.6 months. Major reasons for failure to complete CHT included progressive disease (17%) and toxic death (2.4%). The 5-year progression-free survival and overall survival rates were 43% +/- 5% and 52% +/- 5%, respectively. No significant differences were detected in subset analysis related to response to CHT, site of primary tumor, postoperative residual disease, or M stage. **CONCLUSIONS:** The feasibility of this intensive multimodality protocol was confirmed, and response to pre-RT CHT did not impact on survival. Survival data from this protocol can not be compared with data from other studies, given the protocol design.

PMID: 19356859 [PubMed - as supplied by publisher]
