

Algorithm based on response, biology guides neuroblastoma therapy

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(HealthDay)—Use of a response- and biology-based treatment algorithm

for intermediate-risk neuroblastoma is associated with excellent survival and reduces treatment for some patients, according to a study published online Aug. 6 in the *Journal of Clinical Oncology*.

Clare J. Twist, M.D., from the Roswell Park Cancer Institute in Buffalo, New York, and colleagues enrolled 404 evaluable patients between 2007 and 2011 with intermediate-risk neuroblastomas. Based on prognostic markers, including allelic status of chromosomes 1p and 11q, patients were initially assigned to receive two, four, or eight cycles of chemotherapy with or without surgery; the ultimate duration of treatment was based on overall response.

The researchers found that subsets of patients had a reduction in treatment compared with the legacy Children's Oncology Group studies. The three-year event-free survival rate was 83.2 percent, and the overall survival rate was 94.9 percent. Compared with patients with one or more unfavorable biologic features, infants with stage 4 tumors with favorable biology had superior three-year event-free survival (86.9 versus 66.8 percent); they also had a trend toward overall survival advantage (95.0 versus 86.7 percent). For patients with localized disease, overall survival was 100 percent.

"Using this response- and biology-based algorithm that includes the allelic status of 1p36 and 11q23, excellent survival was achieved with refined treatment strategies for specific subsets of intermediate-risk patients," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

More information: [Abstract/Full Text \(subscription or payment may be required\)](#)

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