

The MSK Campaign

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Reduced Chemotherapy for High-Risk Neuroblastoma: N9 and N10 Clinical Trials

Prepared for the Juliana Greenfield Family Foundation

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Memorial Sloan Kettering Cancer Center (MSK) pediatric hematologist-oncologist **Brian Kushner, MD** continues to explore innovative approaches to treating patients with high-risk neuroblastoma more effectively and with fewer side effects. Dr. Kushner's N9 clinical trial, launched with support from the Juliana Greenfield Family Foundation, shows that using a new regimen with fewer cycles of chemotherapy and less toxic drugs could be an improved treatment strategy for high-risk neuroblastoma, even without stem cell transplants.

With N9 enrollment complete and follow-up ongoing, Dr. Kushner's team has launched the N10 phase 2 trial to test whether adding an anti-GD2 monoclonal antibody, naxitamab or Danyelza®, to the N9 regimen can further improve patient outcomes. The goal is to reduce the number of chemotherapy cycles to minimize long-term toxicity. Dr. Kushner's team is not the only one looking to revolutionize treatment for high-risk neuroblastoma, but MSK's approach stands out by omitting transplants, offering outpatient immunotherapy, using lower dose hyperfractionated radiation, and incorporating an anti-neuroblastoma vaccine as standard.

The Children's Oncology Group (COG) also has a phase III study, ANBL0532, to assess the effect of increasing local dose of radiation to a residual primary tumor in patients with high-risk neuroblastoma. Today, MSK's no-transplant approach is gaining increased attention in the pediatric oncology field. Our N10 study, which has been approved by the Institutional Review Board (IRB) and is now actively enrolling participants, has the potential to transform future treatment for high-risk neuroblastoma both at MSK and globally.

Looking Ahead

Backed by strong research and generous support from the Juliana Greenfield Family Foundation, Dr. Kushner and his team are dedicated to advancing promising therapies for high-risk neuroblastoma, accelerating progress toward better treatments with reduced toxicity.



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