

## Allo Transplant Helps Some Children with Neuroblastoma

## **Important Points:**

- Only 4% of patients with neuroblastoma (NBL) get an allo transplant.
- 20% of patients with NBL who get an allo transplant go into remission for at least 5 years.
- Patients with NBL who only get an allo transplant do better than patients who get an auto transplant first and then an allo transplant.

Neuroblastoma (NBL) is a cancer that stops nerve cells from growing. NBL usually happens in children. By the time most patients know they have NBL, the cancer has spread to other parts of their body. Many patients with NBL get an autologous hematopoietic cell transplant (auto transplant). An auto transplant uses the patient's own healthy blood cells to replace their unhealthy cells.

Only 4% (4 out of 100) of patients with NBL get an allogeneic hematopoietic cell transplant (allo transplant). An allo transplant uses healthy blood cells from a donor to replace the patient's unhealthy cells. Some patients with NBL only get an allo transplant. Other patients get an auto transplant first and then an allo transplant.

Researchers wanted to know if an allo transplant is a good treatment option for patients with NBL. In this study, the researchers looked at 143 patients who got allo transplants for NBL between 1990 and 2007. 46 patients only got an allo transplant. The other 97 patients got an auto transplant first and then an allo transplant.

With this study, researchers and doctors learned:

- 20% (1 out of 5) of patients with NBL who get an allo transplant go into remission, meaning their cancer goes away, for at least 5 years.
- Patients with NBL who only get an allo transplant do better than patients who get an auto transplant first and then an allo transplant.
  - Patients who only get an allo transplant survive longer, and their cancer comes back less often.

- Patients who are in remission before the allo transplant do better after transplant than patients who are not in remission.
  - Patients who are in remission before transplant survive longer, and their cancer comes back less often.

This information is important because we now know:

- Only 4% of patients with NBL get an allo transplant.
- 20% of patients with NBL who get an allo transplant go into remission for at least 5 years.
- Patients with NBL who only get an allo transplant do better than patients who get an auto transplant first and then an allo transplant.

## Source:

Allogeneic hematopoietic cell transplantation for neuroblastoma: the CIBMTR experience. Hale GA, Arora M, Ahn KW, He W, Camitta B, Bishop MR, Bitan M, Cairo MS, Chan K, Childs RW, Copelan E, Davies SM, Perez MA, Doyle JJ, Gale RP, Vicent MG, Horn BN, Hussein AA, Jodele S, Kamani NR, Kasow KA, Kletzel M, Lazarus HM, Lewis VA, Myers KC, Olsson R, Pulsipher M, Qayed M, Sanders JE, Shaw PJ, Soni S, Stiff PJ, Stadtmauer EA, Ueno NT, Wall DA, Grupp SA. Bone Marrow Transplantation. 2013 Aug 01; 48(8): 1056-1064. Epub 2013 Feb 18.