Allogeneic hematopoietic cell transplant (allo-HCT) can cure several hematological malignancies that are incurable with standard therapies. Successful allo-HCT requires the availability of a suitably matched donor such as an HLA-identical sibling (MRD) or a 10 of 10 locus HLA-A, B, C and DRB1 matched unrelated donor (MUD). Unfortunately, many patients, especially those from minority and mixed ethnic backgrounds will lack such a donor. Cryopreserved umbilical cord blood (UCB) has been used as an alternative donor source for such patients. However, UCB units often contain insufficient cells for an adult recipient and UCB transplants can be associated with slow immunological recovery in adult recipients with associated prolonged risk of opportunistic infections and other post-transplant complications. Almost all patients who need an allo-HCT have a first degree relative with whom they share a HLA-haplotype. Un-manipulated allo-HCT from such haploidentical donors have resulted in unacceptable rates of graft rejection and severe graft-versus-host disease (GVHD). Thus a conventional approach to allo-HCT from haploidentical donors in centers such as Perugia, Italy has involved stringent depletion of T-cells from the graft to prevent GVHD and very intense preparative regimens to prevent graft-rejection. Although such transplants are feasible, they are associated with high-rates of
regimen related toxicity and very slow immunological recovery with associated high rates of treatment related mortality\(^1,2\).

Recently an alternative approach to allo-HCT from haploidentical donors has been developed which uses no ex-vivo T-cell depletion and instead uses post-transplant cyclophosphamide (Haplo-ptCy) to relatively specifically eliminate alloreactive T-cells responsible for graft-rejection and GVHD, while preserving other T-cells that are important for immunologic recovery\(^3,4\). Haplo-ptCy have been shown to result in low rates of GVHD, infections and treatment related mortality in single and multicenter trials including a parallel phase-II comparison to UCB transplantation conducted by the Blood and Marrow Transplantation Clinical Trials Network (BMT-CTN)\(^5\). However, Haplo-ptCy has not been formally compared to allo-HCT performed using conventional MRD or MUD donors.

In a paper presented at an oral session at the 53rd annual meeting of the American Society of Hematology meeting (December 2011, San Diego, CA, Abstract 833; Blood vol 118 (21) p380) researchers from NSH-BMT compared outcomes following 53 consecutive Haplo-ptCy to 117 consecutive allo-HCT from MRD and 101 from MUD respectively. All transplants were performed contemporaneously at NSH-BMT using identical supportive care measures. The patients undergoing allo-HCT from the three types of donor were well matched with respect to age, gender, diagnosis, risk-profile of malignancy and co-morbidities. Haplo-ptCy patients were more likely to receive bone marrow rather than peripheral blood stem cell grafts and more likely to receive reduced intensity versus myeloablative preparative conditioning for transplant. A Cox proportional hazards analysis was conducted and outcome measures were adjusted for any difference in confounding variables between the three groups. The results demonstrated that patients who underwent Haplo-ptCy had similar overall and disease-free survival to patients transplanted from MRD and MUD respectively (Fig 1A,B). Cumulative incidences of non-relapse-mortality and relapse of malignancy (Fig 1C, D) were also not significantly different between the three groups. Rates and severity of acute GVHD were similar but cumulative incidence of extensive and severe chronic GVHD were lower in Haplo-ptCy patients.

This study is the first to compare a large number of allo-HCT performed using Haplo-ptCy to contemporaneous allo-HCT performed from MRD and MUD at the same center. It shows that Haplo-ptCy produces similar outcomes to transplants performed from conventional donors. Thus Haplo-ptCy represents a valid standard of care in patients who lack a conventional donor.

The NSH-BMT Team is committed to transitioning patients from sickness to wellness. As part of this commitment, the NSH-BMT Program was a Gold Level sponsor for the two-day BMT InfoNet Survivorship Symposium in Atlanta, Ga. The symposium brought together key leaders and speakers to focus on seeing patients through the continuum of care.

More than 350 patients and family members received critical information from experts in the field of blood and marrow transplantation and psychosocial support. Most importantly, the symposium provided hope for patients and family members.

**Symposium Highlights included:**
- 30 different workshops & 42 expert presenters, including many NSH-BMT staff members
- Educational & support topics ranged from how to detect and manage physical complications arising after transplant to coping with psychological changes
- Meet the Expert panel featured transplant directors from across the Southeast, including Dr. H. Kent Holland, FACT Program Director for NSH-BMT

The NSH-BMT Team is committed to providing cutting-edge disease specific treatment for hematological malignancies. In February, 22 of Kaiser Permanente’s Atlanta hematology/oncology and national BMT team members participated in a NSH-BMT Educational Summit. BMT physicians and staff members provided the latest diagnostic and treatment advances in acute/chronic leukemia, hodgkin's disease, non-hodgkins lymphoma, multiple myeloma and solid tumors. This effort is part of the NSH-BMT Program’s commitment to continuing education of partner physicians and payor groups. The summit forged stronger partnerships among Atlanta based Kaiser hematology/oncology physicians and the national Kaiser Transplant Network while promoting improved patient care.

**Highlights from the BMT InfoNet’s Fourth National Survivorship Symposium**

The NSH-BMT Team is committed to providing cutting-edge disease specific treatment for hematological malignancies. In February, 22 of Kaiser Permanente’s Atlanta hematology/oncology and national BMT team members participated in a NSH-BMT Educational Summit. BMT physicians and staff members provided the latest diagnostic and treatment advances in acute/chronic leukemia, hodgkin's disease, non-hodgkins lymphoma, multiple myeloma and solid tumors. This effort is part of the NSH-BMT Program’s commitment to continuing education of partner physicians and payor groups. The summit forged stronger partnerships among Atlanta based Kaiser hematology/oncology physicians and the national Kaiser Transplant Network while promoting improved patient care.
Patient Support: NSH-BMT/Leukemia Coordinator’s Office

The coordinator’s office plays a key role in organizing and coordinating new patient referrals (NPC), Pre/Post BMT/leukemia schedules and follow-up evaluation studies. The coordinator organizes details of the procedure, communicates to all parties, works through issues and problems and most importantly, ensures each patient is prepared to undergo BMT/leukemia therapy. NSH-BMT is fortunate to have 10 highly trained full time BMT/Leukemia Program coordinators.

Job functions of BMT/Leukemia Coordinators:
- Contacting the NPC, scheduling appointments and obtaining prior medical records
- Continuous communication with patient/referring MD office/NSH-BMT physician team
- Scheduling Pre/Post BMT evaluation studies
- Obtaining/reviewing required pre-post BMT testing results
- Participating in clinical transplant program’s quality improvement plans/initiatives

NSH-BMT Team Present at OptumEducation Spotlight

The NSH-BMT Program and Piedmont Hospital’s Transplant Institute co-hosted the OptumEducation Spotlight Event at Georgia Aquarium. The NSH-BMT Program was the only center in the Southeast to be asked to host an Optum Spotlight educational event.

Discussions and lectures included BMT and solid organ topics. BMTGA physicians/outpatient BMT team lectures included the following:
- Auto vs. Allo: Which is best for which disease?
- Donor Matching: Is a half match better than a full match?
- GVHD: Friend or foe?
- Allogeneic Transplant: No longer a risky Procedure!
- A journey through transplant
- HSCT: Does it make a difference where you go?

At the conclusion of the BMT lectures, a reception in the Artic Beluga Whale Room brought together event participants to enjoy cocktails, hors d’oeuvres from Wolfgang Puck Catering and aquarium events.
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<td>NSH 940</td>
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<td>NSH 943</td>
<td>A multicenter access and distribution protocol for unlicensed cryopreserved cord blood units (CBUs) for transplantation in pediatric and adult patients with hematologic malignancies and other indications</td>
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<td>NSH 971</td>
<td>BMT CTN 0801 Phase II/III Randomized, Multi-Center Trial comparing Sirolimus plus prednisone vs Sirolimus/Calcineurin Inhibitor plus prednisone in the treatment of chronic graft-versus-host disease.</td>
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The Blood and Marrow Transplant Program at Northside Hospital

The BMT Program at Northside Hospital is a collaborative effort between the Blood and Marrow Transplant Group of Georgia and Northside Hospital. The program is one of the largest clinical transplant programs in the United States, serving patients undergoing bone marrow/stem cell transplant therapy and providing primary leukemia treatment. The NSH-BMT Program also has received the prestigious designation of Core Clinical Center for the Blood and Marrow Transplant Clinical Trials Network (BMT-CTN), a designation accompanied by a research grant awarded by the National Heart, Lung, and Blood Institute (NHLBI) and the National Cancer Institute (NCI). Our program has received National Center of Excellence Awards by major insurance companies and is nationally accredited by the following organizations:

- National Marrow Donor Program (NMDP)
- Foundation for Accreditation of Cellular Therapy (FACT)
- Advancing Transfusion and Cellular Therapies Worldwide (AABB)
- Food and Drug Administration (FDA)

Mission Statement

The NSH-BMT Program is committed to being the premier clinical transplant program in Georgia and the Southeast, providing outstanding state-of-the-art care for patients with leukemia and/or undergoing marrow and stem cell transplantation.

The NSH-BMT Program offers:

- Autologous Stem Cell Transplants
- Related and Unrelated Allogeneic Stem Cell Transplants
- Haploidentical Stem Cell Transplants
- Cord Blood Transplants
- Nonmyeloablative / Reduced Intensity Stem Cell Transplants

To refer a patient, please call 404-255-1930.

www.bmtga.com • www.northside.com