VARIABLE INTENSITY CONDITIONING WITH DURABLE ENGRAFTMENT AND LESS GRAFT VERSUS HOST DISEASE. Carolyn Bigelow, Stephanie Elkins, Cheryl Hardy, Joe Files. Medicine/Hematology, University of Mississippi Medical Center, Jackson, MS.

From June 2002 through May 2003 seven adult patients with hematological malignancies received a bone marrow transplant from a matched unrelated NMDP donor (five patients) or a related sibling (two patients). One patient in the latter group also received peripheral blood stem cells. The patients displayed a variety of malignancies, including one patient with T-cell CLL, one with multiple myeloma, three with AML, one with NHL and one with myelodysplastic syndrome. The median age of the patients was 51 years old, range 41-55. Five patients were 6/6 or 10/10 antigen matches and two were allele level mismatches. The patients received a variable intensity conditioning regimen that included Campath 20 mg/d x 5d, fludarabine 30 mg/m$^2$ x 5d and melphalan 140 mg/m$^2$ x 1d. All patients received an adequate dose of CD34+ cells and none of the products was manipulated. The conditioning regimen was well tolerated by all patients, with no regimen-related toxicity. Median day of WBC engraftment was day+15 and median day of platelet engraftment was day+12. None of the patients have experienced graft failure. Unlike standard conditioning regimen and nonmyeloablative regimen in our program there was no acute or chronic GVHD observed in any of the patients conditioned by this regimen; GVHD prophylaxis included standard dose cyclosporine or tacrolimus and MMF. Four of six patients were alive at day+100 and two of these are still alive, including the first patient transplanted more than a year ago. Another patient who is still alive has not reached day+100. There has been evidence of relapse in five patients, likely due to the strongly immunosuppressive effect of this regimen that has reduced the potential graft versus leukemia (GVL) effect. Two patients received donor lymphocyte infusions in an effort to boost the GVL effect. In conclusion, a conditioning regimen with robust and persistent engraftment and lack of GVHD is of great promise and will be modulated to enhance the anti-tumor effect.