FRED HUTCHINSON CANCER RESEARCH CENTER

Area Code 206 292-2931

1124 Columbia Street

Seattle, Washington 98104

MEMORANDUM

December 19, 1984

To:

Members of the Division

From:

Paul J. Martin, M.D.

Re:

Leukemia Research Fund Workshop

I have a couple of bits of information to add from the recent Leukemia Research Fund Workshop on the place of monoclonal antibodies in bone marrow transplantation for leukemia. As noted by Keith in his Miami notes, the UCLA group has reported eight relapses among the 20 patients receiving T depleted donor marrow, compared to one among the 20 control patients. Five of the eight relapses were in the "cytogenetic but not morphologic" category, and occurred in the five patients who had graft failure. Only three of the study patients had overt relapse, a result not statistically different from results in the control group.

The best results for bone marrow transplantation with T cell depletion appeared to come from the Royal Free Hospital where the incidence of graft failure has been low. Among 24 patients receiving two doses of cyclophosphamide, 750 rads TBI (26 rad/min), donor marrow depleted with the use of anti-T8 and anti-T12 antibodies, and no postgrafting immunosuppression for treatment of acute leukemia in first or second remission or CML in chronic phase, there have been five deaths: one at one week due to cardiotoxicity, one at 10 weeks due to graft failure, and three at 32, 68 and 83 weeks due to relapse. A Kaplan-Mier plot (with tick marks) is attached. Only one of the patients had acute GVHD (grade III). This patient received marrow that contained appreciable numbers of T cells. The Royal Free Hospital investigators believe that they are also seeing less chronic GVHD than expected and less CMV interstitial pneumonia, a result they attribute to the absence of graft-versus-host disease and the ability to omit post-grafting immunosuppression.

Graft failures have occurred among patients receiving bone marrow depleted of T cells with the use of the Royal Free Hospital cocktail at other centers in Europe. Prentice reported that a "multifactorial analysis" of the combined data implicated the irradiation dose as the only predictive factor of graft failure. Only one patient among 36 prepared with 750 rads as a single dose (26 rads/min) had graft failure, whereas nine of 13 patients receiving 5x200 rads/3 days or 6x200 rads/3 days had graft failure.

terrible

MEMORANDUM December 19, 1984 Page 2

I have a copy of the data sheets submitted by investigators who attended this meeting detailing results patient by patient, except for the Wisconsin and Minnesota groups where the data was withdrawn. The data on these sheets is a bit overwhelming but I would be happy to provide copies to anyone who wishes to see them.

PJM:pmm