C27

TO : See Below

DATE: 3 May 1973

AFR1.950505.027

FROM : Head, Experimental Hematology Section, POB, MO, DCT, NCI

SUBJECT : Plan for Total Body Gamma Radiation

1. Purpose. In certain cases patients will receive total body gamma radiation at the Armed Forces Radiobiology Institute located behind the U.S. Naval Hospital. The protocol to be used in these cases will consist of the following: 1) isolation of the patient in the usual hospital room as described in the bone marrow transplant protocol; 2) two consecutive daily doses of Cyclophosphamide (60 mg per kilo per day) given as described for Cyclophosphamide in the transplant protocol; 3) three complete 24-hour periods of rest (no drug to be administered); 4) total body gamma irradiation to be administered at AFRI facility 1,000 rads (20 rads per minute). Please see below for cautions and procedures involved in transporting patients to the radiation facility; 5) twenty-four hours following the total body gamma irradiation, the patient will be given the allogeneic bone marrow infusion. The allogeneic bone marrow transplant protocol will be followed for the care of the patient during this preparative regimen and all laboratory studies; patient care suggestions will be identical.

2. Use of Radiation Facility. An agreement made between AFRI and the National Institutes of Health specifically provides for certain rules which must be followed by the National Cancer Institute when using the AFRI cobolt facility. The following is included: 1) the primary physician and supervisory personnel should accompany patient to radiation facility; 2) Radiation Therapist from the National Cancer Institute (Dr. Thomas Pomeroy or his delegate); 3) nursing personnel should be supplied by the National Cancer Institute (preferably from 2E and Clinic); 4) an Anesthesiologist must be on call from the NIH for emergencies; 5) resuscitation equipment should be provided by the NCI and be available at the radiation facility prior to the institution of the total body gamma irradiation. The following emergency equipment will be in the room with the patient during the period of radiation: 1) airway, respirator bag and mask, oxygen; 2) endotracheal incubation set; 3) cardiac defibrillator; 4) emergency drug cart with medications, syringes, needles, etc.; 5) intravenous fluids including 5% dextrose and water and ringers lactate and fluid administration sets; 6) suction pump with sterile canulas; 7) For transportation of the patient, the patient will be carried as completely covered as possible including mask and gown. Patient should best be carried on a rolling ambulance litter from the hospital bed to the waiting ambulance; the ambulance will drive to the rear-loading dock at AFRI and the litter will then be wheeled into the Radiation Control Room. The ambulance will wait at AFRI

throughout the radiation procedure; 8) The patient and relatives must have signed an informed consent for the administration of total body gamma irradiation prior to transportation to the AFRI facility.

NIH personnel to be contacted prior to finalizing arrangements for total body gamma radiation: 1) Head, Experimental Hematology Section, Pediatric Oncology Branch, NCI or his representatives; 2) Chief Nurse, Pediatric Oncology Branch (2 East); 3) Head Nurse, Out-Patient Clinic (Mrs. Metka) or her representative who will arrange for the transportation of the patient, an ambulance driver, and ambulance; 4) Anesthesiology Department (Anesthesiologist-on-call); 5) Radiation Therapist (Dr. Thomas Pomeroy or his representative), NCI.

3. If there are any questions concerning the above information, please feel free to contact me prior to the implementation of this transportation protocol. Thank you.

Robert G. Graw, Jr., M.D.

cc: Buzz Stromberg, AFRRI
Senior Staff, Pediatric Oncology Branch, NCI
Ms. Zealy, 2E
Ms. Siepp, Clinic
Ms. Metka, Clinic
Dr. Thomas Pomeroy, Radiation Department, NCI
Gerald Johnston, Radiation Committee, NIH