

APPENDIX B-1
PATIENT INFORMED CONSENT

Informed Consent to Participate in Research



Your Name: _____

Study Title: **A Randomized, Multi-Center, Phase III Trial of Calcineurin Inhibitor-Free Interventions for Prevention of Graft-versus Host-Disease**

Protocol: BMT CTN # 1301

Principal Investigator: *Insert local PI information*

Sponsor: The National Institutes of Health (NIH) is sponsoring this study by providing financial support through the Blood and Marrow Transplant Clinical Trials Network (BMT CTN).

1. Introduction

We invite you to join this clinical trial, also known as a research study. We are doing this study because we want to compare three transplant procedures to see which is better at preventing Graft-versus-Host Disease (GVHD). You are being asked to join this study because:

1. You have a disease that can be treated by an allogeneic blood or marrow stem cell transplant; and
2. Your doctor plans on using a standard intensity conditioning regimen for your transplant.

This study will take at least two (2) years and will include 345 participants – 115 participants in each of three (3) treatment groups.

This Consent Form will tell you about the purpose of the study, the possible risks and benefits, other options available to you, and your rights as a participant in the study.

Everyone who takes part in research at [insert facility name] should know that:

- Being in any research study is voluntary.
- You may or may not benefit from being in the study. Knowledge we gain from this study may benefit others.
- If you join the study, you can quit the study at any time.
- If you decide to quit the study, it will not affect your care at [insert name of facility or institution].
- Please ask the study staff questions about anything that you do not understand, or if you would like to have more information.
- You can ask questions now or any time during the study.
- Please take the time you need to talk about the study with your doctor, study staff, and your family and friends. It is your decision to be in the study. If you decide to join, please sign and date the end of the Consent Form.

You and your doctor will discuss other treatment choices if you do not want to participate in this study.

2. Study Background

The National Institutes of Health (NIH), through the Blood and Marrow Transplant Clinical Trials Network (BMT CTN), are providing staff support and money for this research study. The BMT CTN and the NIH will make decisions about how to manage the study. Miltenyi Biotec, a company that produces a device used to process the stem cells before administering in patients, is also supporting this study with supplies and money.

A hematopoietic stem cell transplant (HSCT) is a standard therapy for blood cancers such as acute leukemias and myelodysplastic disorders. A common problem that may occur after HSCT is a condition known as Graft-Versus-Host Disease (GVHD). The word “graft” refers to the donor blood cells that you will receive during your transplant. The word “host” refers to the person (in this case, you) receiving the cells. GVHD is a complication where the donor graft attacks and damages some of your (the transplant recipient's) tissues. It has two basic forms, an acute form which tends to occur rapidly and is most common in the first three months after the transplant and a chronic form, which develops slowly and at a later time after transplant.

- GVHD can cause skin rash, intestinal problems such as nausea, vomiting, or diarrhea,
- It may also damage your liver and cause hepatitis or jaundice.
- GVHD may also increase your risks of infection.
- Chronic GVHD can affect many organs and causes significant impact on the quality of life of patients.

3. Study Purpose

We are inviting you to take part in this study because you have acute leukemia or myelodysplasia, and a hematopoietic stem cell transplant is a treatment option.

The purpose of this study is to compare three different combinations of treatment plans to see whether one or more of them are better than a standard transplant procedure. The procedures being studied have the objective to reduce the occurrence of chronic GVHD. The procedures included in this clinical trial are:

Treatment Group A: CD34 Selected Peripheral Blood Stem Cell Transplant

Treatment Group B: Bone Marrow Transplant followed by Post-Transplant Cyclophosphamide

Treatment Group C: Bone Marrow Transplant with Tacrolimus and Methotrexate as GVHD Prevention

Doctors primarily want to compare Groups A and B with Group C (control). The study will help doctors make choices about transplants procedures with fewer chronic GVHD complications for patients.

4. Right to Ask Questions and/or Withdraw

You have the right to ask questions about the study at any time. If you have questions about your rights as a participant or you want to leave the study, please contact:

[insert contact info]

Being in this study is voluntary. You can choose not to be in this study or leave this study at any time. If you choose not to take part or leave this study, it will not affect your regular medical care in any way.

Your study doctor and study staff will be available to answer any questions that you may have about taking part in or leaving this study.

5. Study Treatment and Tests

We will check your health before you start treatment, while you receive treatment, and for two years after transplant.

Before You Begin the Study

Before you begin the study, you will need to have several exams, tests or procedures to find out if you can be in the study. All patients participating in this study need to have a matched donor. Most of these exams, tests or procedures are part of regular cancer care and may be done even if you do not join the study. These include:

- Medical history
- Physical examination, including height and weight
- Blood and urine tests
- Heart function tests, including EKG and ejection fraction
- Lung (pulmonary) function tests
- Tests to evaluate your cancer, including a bone marrow aspirate/biopsy
- Chest X-ray or chest CT
- A pregnancy test if you are a woman able to have children. If you are pregnant, you will not be able to take part in this study.

If you join the study, the study-specific assessments listed below will be done before you begin the conditioning regimen:

- Health quality of life questionnaires (for English and Spanish speaking adult patients ≥ 18 years of age and English speaking pediatric patients, ages 8 to 18 years).
- *Optional* blood samples for future research (see Section 18: Blood Samples for Future Research)

Study Participation

If you decide to join the study, your participation will last for **2 years** after your transplant. We will ask you to sign this Consent Form and you will get a copy of the signed form to keep.

Randomization

We will use a computer to randomly assign you to 1 of 3 treatment groups. You will have an equal chance of being placed in 1 of the 3 groups. Neither you nor your doctor or study investigator will have any control over which treatment group you will be assigned.

During Your Transplant

The treatments that are used to prevent GVHD either start before or after the infusion of stem cells. These treatments are a combination of immune suppressing drugs and a standard component of the transplant.

The 3 treatment groups being included in this study are outlined below:

Treatment Group A: CD34 Selected Peripheral Blood Stem Cell Graft

- Conditioning regimen: your doctor will select one of two conditioning regimens that are allowed in this treatment group. One includes total body irradiation plus chemotherapy, and the other includes chemotherapy alone.
- The donor graft will be peripheral blood stem cells.
- The donor graft will be processed through a device that removes cells that are associated with the development of GVHD.

Treatment Group B: Post-Transplant Cyclophosphamide

- Conditioning regimen: your doctor will choose one of three conditioning regimens allowed in this treatment group.
- The donor graft will be bone marrow.
- After your transplant:
 - Cyclophosphamide will be given by intravenous infusion (through your vein), over 1-2 hours, on Day 3 and Day 4 after your transplant.

Treatment Group C: Tacrolimus and Methotrexate

- Conditioning regimen: your doctor will choose one of four conditioning regimens allowed in this treatment group.
- Before your transplant:
 - Tacrolimus will be given as a pill by mouth or by intravenous infusion (through your vein) twice a day, beginning three (3) days before your transplant. The amount of drug given will slowly be decreased and eventually stopped. This process occurs over several months.
- The donor graft will be bone marrow.
- After your transplant:
 - Methotrexate will be given by intravenous infusion (through your vein) on four (4) different days (1, 3, 6 and 11) after your transplant.

Both Treatment Groups A and B do not require long term use of medication to suppress the immune system.

Peripheral Blood Stem Cell or Bone Marrow Transplant

On your transplant day, the bone marrow or peripheral blood stem cells will be given to you through your catheter, like a blood transfusion. The cells will travel to your bone marrow where they will start to make healthy, new blood cells after several weeks.

Health Evaluations After the Transplant

We will test (evaluate) your health during the study. These tests and how often they are scheduled are standard care for patients receiving an allogeneic transplant. Most of these would be done even if you were not part of this study. You will be watched closely for any signs and symptoms of GVHD.

- Physical exam to assess toxicities, and infections weekly until Day 63 and then at Days 100, 150, 180, 270, 365 and 730.
- Physical exam to assess GVHD weekly starting Day 7 until Day 63 and then at Days 100, 150, 180, 270, 365 and 730.
- Routine blood tests (cell counts, liver and kidney function) weekly until Day 63 and then at Days 100, 180, 270, and 365.

- Blood tests to monitor for CMV and EBV weekly until Day 100 and then at each clinical assessment until Day 180.
- Restaging tests to see how much cancer you have after transplant on Days 100, 180, 365 and 730.
- Health quality of life questionnaires after the transplant on Days 100, 180, 365 and 730 (for English and Spanish speaking adult patients \geq 18 years of age and English speaking pediatric patients, ages 8-18 years).
- *Optional* blood samples for future research after transplant on Days 35, 100, 180 and 365 (see Section 18: Blood Samples for Future Research).

6. Health Quality of Life (for English and Spanish speaking adult patients, and English speaking pediatric patients only)

We will ask you about your general health and how well you feel while you participate in this study. Even though different treatments may treat a disease equally well, there might be a difference in how patients feel or the side effects they have after their treatment. This is important information for when we evaluate the treatments in this study.

We will collect information by using surveys. The surveys will ask about:

- How you feel
- What symptoms you might have and how they affect you
- How well can you do regular daily activities

You will need to fill out the surveys and each survey should take about 30 minutes to finish. Your answers will help us understand how your transplant treatment affects how you feel, what you can do, and your general quality of life.

7. Risks and Discomforts

You will have side effects while on the study. Side effects can range from mild to serious. The risks and discomforts of participating in this study will be similar to what you may have with stem cell transplant if you do not participate in this study, but you might do better or worse than on standard transplant treatment. Your health care team may give you medicines to help lessen side effects such as feeling sick to your stomach (nausea) among other support treatments. In some cases, side effects can be long lasting or may never go away.

Risks and Toxicities Related to Conditioning Regimens

The table below describes all conditioning regimens that are allowed to be used in this clinical trial. The regimen you will receive depends on the treatment group you will be assigned and your doctor's choice. Some of these regimens are used in transplants performed outside a clinical trial.

TABLE 1: CONDITIONING REGIMEN OPTIONS BY TREATMENT GROUP

Treatment Group A: CD34 Selection		Treatment Groups B & C: PTCy & Control	
1	Total Body Irradiation / Cyclophosphamide/Thiotepa/AntiThymocyte Globulin (ATG)	3	Busulfan/Cyclophosphamide (Bu/Cy)
		4	Busulfan /Fludarabine (Bu/Flu)
2	Busulfan/Melphalan/Fludarabine/ AntiThymocyte Globulin (ATG)	5	Cyclophosphamide/Total Body Irradiation (Cy/TBI)
		6	Total Body Irradiation/Etoposide (TBI/Etoposide) ONLY FOR THE CONTROL ARM

The risks associated with each medication and or radiation you will receive as part of the conditioning regimen are listed below. The expected frequency of each of these side effects is shown in Table 2.

TABLE 2 - RISKS AND SIDE EFFECTS

Likely	What it means: This type of side effect is expected to occur in more than 20% of patients. This means that 21 or more patients out of 100 might get this side effect.
Less Likely	What it means: This type of side effect is expected to occur in 20% of patients or fewer. This means that 20 patients or fewer out of 100 might get this side effect.
Rare, but Serious	What it means: This type of side effect does not occur very often – in fewer than 2% of patients – but is serious when it occurs. This means that 1 or 2 patients (or fewer) out of 100 might get this side effect.

TABLE 3 – ADVERSE EVENTS

Busulfan

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Abdominal discomfort Constipation Diarrhea Dizziness Fluid retention Headache Heartburn Insomnia Lack of appetite Mouth sores Nausea and vomiting Running nose Skin rashes Irregular or no menstrual cycles Tachycardia	Cough Hepatic Venous-occlusive disease High blood pressure High magnesium and phosphorus levels in the blood High sugar levels in the blood Infertility Low blood pressure Seizures Shortness of breath	Cataracts Lung fibrosis

Cyclophosphamide

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Sores in mouth or on lips Damage to male (tests) and female (ovaries) sex glands Diarrhea Fluid retention Hair loss Infertility Irregular or no menstrual cycles Loss of appetite Nausea, Vomiting Suppression of the immune system Decreased platelet count and increased risk of bleeding	Bleeding in the bladder Anemia (low red blood cell count) Damage to the fetus if you become pregnant while taking drug Stomach pain Skin rash	Allergic reaction Lung fibrosis (scarring of lung tissue with cough and shortness of breath) Serious skin rashes Severe heart muscle injury and death (at very high doses) Secondary (new) cancers

If you are taking cyclophosphamide, your doctor may also prescribe you a medicine called **Mesna**. Mesna helps prevent bladder discomfort and bleeding that can occur from taking cyclophosphamide.

Etoposide

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Diarrhea Hair loss Nausea and vomiting	Mucositis Constipation Abdominal pain	Allergic reaction Peripheral Neuropathy

Fludarabine

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Diarrhea Mouth sores Nausea and vomiting Suppression of the immune system	Fever Numbness in the extremities Sleepiness Visual changes Weakness	Coma Cough Inflammation of the lung Interstitial Pneumonia Skin rash

Melphalan

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Constipation Diarrhea Hair loss Mucositis Nausea and vomiting	Heart rhythm abnormalities Hepatitis Kidney failure	Allergic reaction Interstitial Pneumonia Seizure Lung fibrosis

Total body Irradiation (TBI)

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Diarrhea (loose stools) Nausea (sick to the stomach) Stomach cramps Vomiting (throwing up) Painful swelling of the parotid gland (salivary glands under the ears) for a few days Short-Term hair loss Anemia Infection Bleeding Cataracts Sterility (inability to have children) Growth failure Endocrinopathies (such as thyroid disease or diabetes) Mouth sores	Lung inflammation Pneumonia Redness of the skin Liver problems	Risk of developing other cancers in the future as a consequence of having received the total body irradiation Difficulty swallowing Back problems Kidney problems

Thiotepa

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Lower white blood cell count with increased risk of infection Diarrhea (loose stools) Vomiting (throwing up) Liver damage Lower sperm production in men Hair loss Nausea (feeling sick to your stomach) Loss of appetite Missing or stopping menstrual cycle in women Mouth/throat sores Sterility (inability to have children)	Liver abnormalities Skin rash Change in skin coloring Risk of bleeding due to low platelet count	Confusion Disorientation

Rabbit Anti-Thymocyte Globulin (rATG)

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Fever Shaking chills Low blood pressure Skin rash Itching Decreased platelet counts Decreased white blood cell counts	Serum sickness, consisting of : -Severe skin rashes -Mouth sores -Vaginal sores -Pain/swelling of joints -Kidney damage	Severe allergic reaction which may cause: -Life-Threatening drop in blood pressure -Wheezing -Difficulty breathing -Severe hives

Risks and Toxicities Related to GVHD Prophylaxis

If you were assigned to the CD34 Selection Arm and your cells are selected with the CliniMACS® CD34 Reagent System, you may receive low doses of iron, iron-dextran and monoclonal antibody when the selected cells are re-infused. Our experience shows that these low doses are unlikely to cause any bad side effects, including cancer.

If you were assigned to the control group (treatment group C) you will receive medications to help prevent the development of GVHD.

Methotrexate

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Decreased white blood cell count with increased risk of infection. Fatigue Infections	Nausea/Vomiting Irritation or sores in the lining of the throat or mouth Diarrhea Abdominal discomfort Fever Chills Anemia Abnormal liver tests Kidney failure	Dizziness Scarring of the lungs

Tacrolimus (FK506, Prograf®)

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
<ul style="list-style-type: none"> ▪ Kidney problems ▪ Loss of magnesium, calcium, potassium ▪ High blood pressure ▪ Tremors ▪ Increases in cholesterol and triglyceride ▪ Decreased platelet count with increased risk of bleeding ▪ Infections 	<ul style="list-style-type: none"> ▪ Nausea ▪ Vomiting ▪ Liver problems ▪ Changes in how clearly one can think ▪ Insomnia ▪ Unwanted hair growth ▪ Confusion 	<ul style="list-style-type: none"> ▪ Seizures ▪ Changes in vision ▪ Dizziness ▪ Red blood cell destruction

It is very important that you do not eat grapefruit or drink grapefruit juice while taking Tacrolimus. Grapefruit has an ingredient called bergamottin, which can affect some of the treatment drugs used in this study. Common soft drinks that have bergamottin are *Fresca*, *Squirt*, and *Sunny Delight*.

Cyclosporine A

Likely Side Effects (May happen in more than 20% of patients)	Less Likely (May happen in less than 20% of patients)	Rare (May happen in less than 2% of patients)
Kidney problems Loss of magnesium, calcium, and potassium High blood pressure	Liver problems Unwanted hair growth Growth of extra tissue on the gums Burning, tingling or numbness in the hands, arms, feet or legs	Seizures Changes in vision Formation of very small blood clots

Risks and Toxicities Related to Transplant

The following problems may occur as a result of stem cell transplantation. These risks may occur whether a transplant was done as part of the study or not:

Slow recovery of blood counts. The red blood cells, white blood cells, and platelets can be slow to recover after blood or marrow transplant. Until your blood counts recover, you will need blood and platelet transfusions, and will be at risk for bleeding and infections. To speed the recovery of the white cells as much as possible you may receive Filgrastim.

Graft failure. The stem cells (the “graft”) may fail to grow inside your body. Past experience suggests that there can be up to a 10-15% chance of graft failure. If graft failure occurs, this may result in low blood counts for a long period of time. If your counts do not recover, you may need to receive a second transplant. Graft failure can be fatal.

Graft-Versus-Host Disease (GVHD). GVHD results from cells in the graft recognizing your body as foreign and attacking it. In most cases, GVHD can be successfully treated. Sometimes GVHD is severe or difficult to treat and may lead to death. You will be watched closely for this complication and given drugs to prevent and/or treat it.

Acute GVHD may produce skin rash, nausea, vomiting, diarrhea, abdominal pain, abnormalities of liver function, and an increased risk of infection. Chronic GVHD may produce skin rashes, hair loss, thickened dry skin, dry eyes, dry mouth, liver disease, weight loss, diarrhea, and an increased risk of infection. To confirm the diagnosis of acute or chronic GVHD, you may be asked to have a biopsy (a small sample of your tissue to look at under the microscope) of your skin, gut, or, rarely, your liver.

Other complications. Other complications may include:

- a. **Damage to the vital organs in your body.** The transplant could cause problems in any body organ such as the heart, lungs, liver, gut, kidneys and bladder, or brain. The kidneys and the liver are most likely to be damaged. Some patients will experience serious lung problems from infections or the chemotherapy and radiation.
- b. **Serious infections.** Full and complete recovery of your immune system may take many months. During this time, there is an increased risk of infections. You will be prescribed certain drugs to reduce the chance of those infections. However, these treatments do not always work. If you have an infection, you may have to stay in the hospital longer or be re-hospitalized after transplant. Although most infections can be successfully treated, some infections may result in death.
- c. **Relapse of disease or a new blood cancer.** Your leukemia may come back even if the transplant is initially successful. In rare cases, a new blood cancer may develop from the donor cells. Cyclophosphamide can cause damage to blood cells, which may result in a blood cancer such as myelodysplastic syndrome (MDS) or acute myeloid leukemia (AML). The blood cancer usually develops 2-10 years after treatment, or 6 years on average. The risk of developing a new blood cancer after allogeneic blood or marrow transplant is probably less than 2%. If cancer develops in your donor's blood cells, you may require additional treatment with chemotherapy or another blood or marrow transplant.
- d. **Lymphoproliferative Syndrome:** Patients in Treatment Group A (CD34 Selected Peripheral Blood Stem Cell Graft) have an increased risk of developing post-transplant lymphoproliferative disorder (PTLD) or lymphoma caused by a virus called EBV. They can develop symptoms like fevers and enlarged lymph nodes. Your doctor may use scans and biopsies to confirm the diagnosis. Your blood will be monitored to check if you have signs of EBV in the blood. In many patients EBV can be treated at that stage before it ever progresses to lymphoma. EBV in the blood or EBV lymphoma often responds to treatment with rituximab, a drug commonly used in other lymphomas. PTLD can be fatal.
- e. **Risk to the unborn.** The treatments in this study have not been proven to be safe at any stage of pregnancy. Therefore, if you are pregnant or nursing, you are not eligible for this study. Women who can become pregnant must use effective birth control while receiving chemotherapy, TBI, and drugs to prevent GVHD, and for 1 year after transplant. Effective birth control is defined as the following:
 1. Refraining from all acts of vaginal sex (abstinence)
 2. Consistent use of birth control pills

3. Injectable birth control methods (Depo-Provera, Norplant)
4. Tubal sterilization or male partner who has undergone a vasectomy
5. Placement of an IUD (intrauterine device)
6. Use of a diaphragm with contraceptive jelly and/or condoms with contraceptive foam every time you have sex.

Reproductive Risks

The drugs used in this research study may damage your reproductive organs, affect your ability to have children or possibly cause birth defects if you take them while you are pregnant. It is important that a woman is not pregnant or breast-feeding and does not become pregnant during the course of the study.

It is important that both women who can become pregnant and their male partners use birth control for 1 year after transplantation while on this study.

If you are a woman and can become pregnant, you will need to take a pregnancy test before you start the study. You should discuss ways to prevent pregnancy while you are in the study. Women who have gone through puberty may find that their menstrual cycle becomes irregular or stops permanently. This does not mean that you cannot become pregnant. You must still use an effective method of birth control during your transplant and continue until you are finished with your GVHD prevention treatment.

If you are a man, your body may not be able to produce sperm (become sterile). You should talk with your doctor about banking your sperm before having a transplant.

Please check with your doctor to understand more about these risks.

Unforeseen Risks

New risks might appear at any time during the study. These risks might be different from what is listed in this Consent Form. We will promptly tell you about new information that may affect your decision to take part in the study. We may learn new things that might make you want to stop being in the study. We will let you know if this happens and you can decide if you want to continue in the study.

Other Treatments or Medications

Some medicines react with each other, and it is important that you tell the study doctor or staff about any other drugs, treatments, or medicines you are taking. This includes non-prescription medications, vitamins and herbal treatments.

It is also important that you tell the study staff about any changes to these medications during your participation in the study.

For more information about risks and side effects, ask your study doctor.

7. Alternative Treatments

Participation in this study is optional. If you choose not to take part, you may still receive an allogeneic transplant to treat your disease. The treatment and evaluations you would receive could be very similar to what would receive if you join this study.

Your study doctor will talk with you about your options. If you decide not to participate in this study, your medical care will not be affected in any way.

Your other choices may include:

- Treatment with other drugs, radiation, or a combination of drugs and radiation without a transplant.
- An allogeneic blood or marrow transplant that is not part of the study, or another type of transplant
- Participation in another clinical trial, if available (check with your doctor)
- No treatment for your blood cancer at this time
- Comfort care

Every treatment option has benefits and risks. Talk with your doctor about your treatment choices before you decide if you will take part in this study.

8. Possible Benefits

Taking part in this study may or may not make your health better. The information from this study will help doctors learn more about medications used to prevent GVHD.

9. New Information Available During the Study

During this research study, the study doctors may learn about new information about the study drugs or the risks and benefits of the study. If this happens, they will tell you about the new information. The new information may mean that you can no longer participate in the study, or that you may not want to continue in the study.

If this happens, the study doctor will stop your participation in the study and will offer you all available care to suit your needs and medical conditions.

10. Privacy, Confidentiality and Use of Information

Your confidentiality is one of our main concerns. We will do our best to make sure that the personal information in your medical record is kept private. However, we cannot guarantee total privacy. All your medical and demographic (such as race and ethnicity, gender and household

income) information will be kept private and confidential. (*Name of Transplant Center*) and the organizations listed below will not disclose your participation by any means of communication to any person or organization, except by your written request, or permission, or unless required by federal, state or local laws, or regulatory agencies.

Individuals authorized by the organizations below will have access to your research and medical information. They may use this information for inspections or audits to study the outcomes of your treatment, or for required reporting to regulatory authorities (such as the FDA for serious adverse events). In agreeing to participate, you consent to such inspections and to the copying of parts of your records, if required by these organizations.

- The National Institutes of Health (NIH), which include the National Heart, Lung, and Blood Institute (NHLBI) and the National Cancer Institute (NCI)
- The Food and Drug Administration (FDA)
- The Blood and Marrow Transplant Clinical Trials Network Data and Coordinating Center (BMT CTN DCC), including the Center for International Blood and Marrow Transplant Research (CIBMTR), the National Marrow Donor Program (NMDP), and the EMMES Corporation.
- The BMT CTN Data and Safety Monitoring Board (DSMB)
- Miltenyi Biotec, makers of the device that removes cells that are associated with the development of GVHD (used in Treatment Group A)

We will not identify you by name in any publications or reports that come from these organizations or groups.

Information that does not include personally identifiable information about this clinical trial has been or will be submitted, at the appropriate and required time, to the government-operated clinical trial registry data bank, which contains registration, results, and other information about registered clinical trials.

This data bank can be accessed by you and the general public at www.ClinicalTrials.gov. Federal law requires clinical trial information for certain clinical trials to be submitted to the data bank.

Genetic Information Nondiscrimination Act:

A new federal law (2009), called the Genetic Information Nondiscrimination Act (GINA), generally makes it illegal for health insurance companies, group health plans, and employers of 15 or more persons to discriminate against you based on your genetic information. Health insurance companies and group health plans may not request your genetic information that we get from this research. This means that they must not use your genetic information when making decisions regarding insurability. Be aware that this new federal law will not protect you against genetic discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

11. Ending Your Participation

Being in this study is voluntary. You can choose to not be in this study, or leave this study at any time. If you choose not to take part or leave this study, your regular medical care will not be affected in any way. Tell your doctor if you are thinking about stopping or decide to stop. He or she will tell you how to stop safely.

The study doctor or the study sponsor may stop the study at any time, and we may ask you to leave the study. We may ask you to leave the study if you do not follow directions or if you suffer from side effects of the treatment. If we ask you to leave the study, the reasons will be discussed with you. Possible reasons to end your participation in this study include:

- You do not meet the study requirements.
- You need a medical treatment not allowed in this study.
- The study doctor decides that it would be harmful to you to stay in the study.
- You are having serious side effects.
- You become pregnant.
- You cannot keep appointments or take study drugs as directed.
- The study is stopped for any reason.

If you decide to leave this study after taking the study treatment, or are asked to leave by your doctor for medical reason, you will need to come back to the doctor's office for tests for your safety. Even if you leave the study, the information collected from your participation will be included in the study evaluation.

12. Physical Injury as a Result of Participation

It is important that you tell your doctor, _____ [*investigator's name(s)*] or study staff if you feel that you have been injured because of taking part in this study. You can tell the doctor in person or call him/her at _____ [*telephone number*].

You will get medical treatment if you are injured as a result of taking part in this study. You and/or your health plan will be charged for this treatment. The study will not pay for medical treatment.

In case of injury resulting from this study, you do not lose any of your legal rights to seek payment by signing this form.

13. Compensation or Payment

You will not be paid for your participation in the research study. You will not get compensation or reimbursement for any extra expenses (travel, meals, etc.) you may have through your participation on this trial.

14. Costs and Reimbursements

Most of the visits for this research study are standard medical care for patients undergoing allogeneic transplants and will be billed to your insurance company. You and/or your health plan/insurance company will need to pay for some or all of the costs of standard treatment in this study.

You or your insurance will not be charged for optional blood samples for research on this study.

For more information on clinical trials and insurance coverage, you can visit the National Cancer Institute's Web site at <http://cancer.gov/clinicaltrials/understanding/insurance-coverage>. You can print a copy of the "Clinical Trials and Insurance Coverage" information from this Web site. Another way to get the information is to call 1-800-4-CANCER (1-800-422-6237) and ask them to send you a free copy.

15. Ethical Review

The ethical aspects of this research study have been reviewed and approved by [name of IRB].

16. For More Information

If you need more information about this study, or if you have problems while you are participating in this study, you can contact the study doctor or his/her staff. They can be reached at the telephone numbers listed here:

[Insert name and contact details]

17. Contact Someone about Your Rights

If you wish to speak to someone not directly involved in the study, or if you have any complaints about any aspect of the project, the way it is being conducted or any questions about your rights as a research participant, then you may contact:

[Insert appropriate contact details]

For questions about your rights while taking part in this study, call the _____ *[name of center]* Institutional Review Board (a group of people who review the research to protect your rights) at _____ *(telephone number)*.

18. *Optional Blood Samples for Future Research*

This section of the informed consent form is about optional future research studies. This research will be done using blood samples from patients who are taking part in the main study described above. You may give blood samples for these research studies if you want to. You can still be a part of the main study even if you say 'no' to giving blood samples for these research studies. You can say "yes" or "no" to giving these optional blood samples for research. Please mark your choice at the end of this section.

We would like to have five (5) blood samples for future research studies. If you agree, these samples will be drawn before you begin the conditioning regimen for your transplant (2 teaspoons or 6 mL), and at 4 different times after your transplant on Days 35, 100, 180, and 365 (20 teaspoons or 86 mL at each time point). **These samples will only be collected in patients who weigh more than 30.0 kg.** Usually the blood can be drawn from a vein in your arm at the same time as other blood collections.

The samples collected for future research purposes will be sent to the BMT CTN Repository. The samples will be labeled with unique codes that do not contain information that could identify you. A link to this code does exist. The link is stored at the Data and Coordinating Center for the Blood and Marrow Transplant Clinical Trials Network (BMT CTN DCC). The staff at the repository where your samples are being stored does not have a link to this code. Your research samples will continue to be stored at the BMT CTN Repository until they are used up for research.

The reason for collection of these samples is to perform future studies to better understand how your immune system recovers after the transplant. This will help understand why patients develop complications after transplant, including infections and graft-versus-host disease.

The research that may be done with your blood is not designed specifically to help you. It might help people who have cancer and other diseases in the future.

Reports about research done with your blood will not be given to you or your doctor. These reports will not be put in your health record. The research will not have an effect on your care.

Genome-Wide Association Studies:

DNA from your stored blood samples might be used in genome-wide association (GWA) studies for a future project either done or supported by the National Institutes of Health (NIH). Genome-wide association studies are a way for scientists to find genes that have a role in human disease or treatment. Each study can look at hundreds of thousands of genetic changes at the same time.

If your coded samples are used in such a study, the researcher is required to add your test results and sample information into a shared, public research database. This public database is called the NIH Genotype and Phenotype Database and it is managed by the National Center for Biotechnology Information (NCBI). The NCBI will never have any information that would

identify you, or link you to your information or research samples, although the results of genetic studies could theoretically include identifying information about you.

Things to Think About:

The choice to let us have blood samples for future research is up to you. No matter what you decide to do, it will not affect your care.

If you decide now that your blood can be kept for future research, you can change your mind at any time. Just contact your study doctor and let him or her know that you do not want us to use your blood sample. Then any blood that remains will no longer be used for research.

In the future, people who do research on these blood samples may need to know more about your health. While the study doctor or others involved in running this study may give the researchers reports about your health, it will not give them your name, address, phone number, or any other information that will let the researchers know who you are.

Your blood will be used only for research and will not be sold. The research done with your blood may help to develop new products in the future.

Benefits:

The benefits of research using blood include learning more about how your body's immune system recovers after a transplant, as well as why certain complications like graft-versus-host disease or infections develop.

Risks:

There is a small risk of an infection or fainting from the blood draw.

The greatest risk to you is the release of information from your health records. We will do our best to make sure that your personal information will be kept private. The chance that this information will be given to someone else is very small.

Making Your Choice:

Please read each sentence below and think about your choice. After reading each sentence, please indicate your choice below. If you have any questions, please talk to your doctor or nurse, or call our research review board at _____.

No matter what you decide to do, it will not affect your care.

Statement of Consent

The purpose of storing blood samples, the procedures involved, and the risks and benefits have been explained to me. I have asked all the questions I have at this time and I have been told whom to contact if I have more questions. I have been told that I will be given a signed copy of this consent form to keep.

I understand that I do not have to allow the use of my blood for research. If I decide to not let you store research samples now or in the future, it will not affect my medical care in any way.

I voluntarily agree that blood samples may be collected and that my blood and related information can be stored indefinitely by the BMT CTN Repository for research on how my body’s immune system recovers after the transplant.

- I do agree to give optional blood samples for future research.
- I do not agree to give optional blood samples for future research.

Signature

Date



Health Insurance Portability and Accountability Act 1 (HIPAA³) Authorization to use and disclose individual health information for research purposes

A. Purpose:

As a research participant, I authorize the Principal Investigators and the researcher's staff to use and disclose my individual health information for the purpose of conducting the research study:

A Randomized, Multi-Center, Phase III Trial of Calcineurin Inhibitor-Free Interventions for Prevention of Graft-versus-Host Disease

B. Individual Health Information to be Used or Disclosed:

My individual health information that may be used or disclosed to do this research includes:

- Demographic information (for example: date of birth, sex, weight)
- Medical history (for example: diagnosis, complications with prior treatment)
- Findings from physical exams
- Laboratory test results obtained at the time of work up and after transplant (for example: blood tests, biopsy results)

C. Parties Who May Disclose My Individual Health Information:

The researcher and the researcher's staff may collect my individual health information from: *[List hospitals, clinics or providers from which health care information can be requested]*

D. Parties Who May Receive or Use My Individual Health Information:

The individual health information disclosed by parties listed in item c and information disclosed by me during the course of the research may be received and used by the following parties:

Study Sponsors

- National Heart, Lung, and Blood Institute (NHLBI) and the National Cancer Institute (NCI), both of the National Institutes of Health (NIH)
- Blood and Marrow Transplant Clinical Trials Network Data and Coordinating Center (BMT CTN DCC) , including the Center for International Blood and Marrow Transplant Research (CIBMTR), the National Marrow Donor Program (NMDP), and the EMMES Corporation.
- BMT CTN 1301 Co-Principal Investigators: Dr. Leo Luznik, Dr. Marcelo Pasquini, and Dr. Miguel Angel Perales.

Other Organizations

³ HIPAA is the Health Insurance Portability and Accountability Act of 1996, a federal law related to privacy of health information

- U.S. government agencies that are responsible for overseeing research such as the Food and Drug Administration (FDA) and the Office of Human Research Protections (OHRP)
- U.S. government agencies that are responsible for overseeing public health concerns such as the Centers for Disease Control (CDC) and federal, state and local health departments
- Miltenyi Biotec, makers of the device that removes cells that are associated with the development of GVHD (used in Treatment Group A)

E. Right to Refuse to Sign this Authorization:

I do not have to sign this Authorization. If I decide not to sign the Authorization, I will not be allowed to participate in this study or receive any treatment related to research that is provided through the study.

My decision not to sign this authorization will not affect any other treatment, payment, or enrollment in health plans or eligibility for benefits.

F. Right to Revoke:

I can change my mind and withdraw this authorization at any time by sending a written notice to the Principal Investigator to inform the researcher of my decision.

If I withdraw this authorization, the researcher may only use and disclose the protected health information already collected for this research study. No further health information about me will be collected by or disclosed to the researcher for this study.

G. Potential for Re-disclosure:

My individual health information disclosed under this authorization may be subject to re-disclosure outside the research study and no longer protected.

Examples include potential disclosures for law enforcement purposes, mandated reporting or abuse or neglect, judicial proceedings, health oversight activities and public health measures.

H. This authorization does not have an expiration date.

I have read and understood this Consent Form. The nature and purpose of the research study has been explained to me.

- I have had the chance to ask questions, and understand the answers I have been given. I understand that I may ask questions at any time during the study.
- I freely agree to be a participant in the study.
- I understand that I may not directly benefit from taking part in the study.
- I understand that, while information gained during the study may be published, I will not be identified and my personal results will stay confidential.
- I have had the chance to discuss my participation in this research study with a family member or friend.
- I understand that I can leave this study at any time, and doing so will not affect my current care or prevent me from receiving future treatment.
- I understand that I will be given a copy of this signed consent form.

Participant Name

Date

Signature

Date

If you are not the subject, please print your name _____
and indicate one of the following:

_____ The subject's parent
_____ A surrogate
_____ A proxy

_____ The subject's guardian
_____ A durable power of attorney
_____ Other, please explain:

Legally Authorized Representative Signature

Date

I certify that I have provided a verbal explanation of the details of the research study, including the procedures and risks. I believe the participant has understood the information provided.

Name of Counseling Physician

Date

Signature of Counseling Physician

Date

CONSENT AND ASSENT INSTRUCTIONS

CONSENT: Subjects 18 years and older must sign on the Subject Signature line below. For subjects under 8 years old, consent is provided by the Legally Authorized Representative.

ASSENT: Is required for subjects ages 7 to 17, using the Assent Section on the following page.

I have been informed about this study's purpose, procedures, possible benefits and risks. I have been given the chance to ask questions. My questions have all been answered satisfactorily. I understand that I can ask other questions at any time.

I voluntarily agree to take part, or to allow my child to take part, in this study.

By signing this consent form, I have not given up any of the legal rights that I (my child) otherwise would have as a subject in a research study.

Subject's Signature

Date

Pediatric Assent to Participate in Research

For Children Ages 7 to 17 years old

Study Title: A Randomized, Multi-Center, Phase III Trial of Calcineurin Inhibitor-Free Interventions for Prevention of Graft-versus Host-Disease

Protocol: BMT CTN # 1301

- **Why am I here?**

We are inviting you to join our study because you will receive a stem cell transplant to treat your disease. A transplant uses blood-making cells from another person (donor) to replace your cells that are not healthy. A donor is the name for a person who gives some of their blood-making cells for a transplant.

- **Why are you doing the study?**

We are comparing three different ways (types) to do a transplant to learn if any of them are better. Sometimes the donor cells cause a problem called graft versus host disease (GVHD). GVHD happens when the donor cells attack your body. One way to avoid this problem is to give medications, other ways include removing the donor cells that can attack your body before injecting them to you or killing them after they are injecting in you. These are the three types of transplant that are being compared in this study.

- **What will happen to me?**

If you participate in this study you will receive one of the transplant types which will be chosen by chance, like a flip of a coin.

Before your transplant, you will have check-ups with your doctors. Then, you will get a small tube put in your chest in the operating room (you will be asleep for this). The small tube makes it easier for you to get your medications. It will also make it easier and less painful for drawing blood for tests.

You will receive medicines that will help the cells from your donor grow in your body. These medicines might make you feel sick. You might throw up, lose your hair, or get sores in your mouth.

After you are done taking the medicines, you will get cells from your donor. This is your transplant. Your donor can be your sister or brother (related to you) or someone you don't know (unrelated to you). Your new cells will come from your donor's bone marrow. The cells will make new and healthy cells in your body.

You will stay in the hospital for several days before your transplant and for about 4 weeks after your transplant. After you go home, you will need to go back to see your doctor often.

It is possible that your disease will come back after the transplant. If this happens, your doctor will find another way to treat you.

- **Will it Hurt?**

For your transplant, we will put a small tube in your chest. It might hurt a little and you might bleed a little. You will need blood drawings sometimes from your arm, which also might hurt a little. Your doctor and nurses will make sure you feel as little pain as possible.

- **Will the Study help me?**

We don't know if the study will help you or not.

- **What if I have questions?**

You can ask any question that you have about the study. If you forget to ask a question and think of it later, you can call me [*insert office number*]. You can also ask your question the next time you see me.

- **Do I have to be in the study?**

Writing your name on this page means that you agree to be in the study and know what will happen to you. If you decide to quit the study, all you have to do is tell your doctor.

You and your parent or guardian will get a copy of this form after you sign it.

Signature of Child

Date

Age (years)

Print Name of Child

Certification of Counseling Healthcare Professional: I certify that the nature and purpose, the potential benefits, and possible risks associated with participation in this study have been explained to the above individual and that any questions about this information have been answered.

Counseling Healthcare Professional

Date