Informed Consent to Participate in Research

Your Name: _____

Study: BMT CTN 0901: A Randomized, Multi-Center, Phase III Study of Allogeneic Stem Cell Transplantation Comparing Regimen Intensity in Patients with Myelodysplastic Syndrome or Acute Myeloid Leukemia

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Sponsor: The National Institutes of Health (NIH) gave financial support for this research study through the Blood and Marrow Transplant Clinical Trials Network (BMT CTN).

Introduction

We are inviting you to join a research study. The main goals of the study are to:

- Compare two kinds of treatments used to destroy diseased cells and prepare your body for transplant. This process is also called a conditioning regimen.
- Measure how well your disease (acute myeloid leukemia or myelodysplastic syndrome) responds to the treatment.

Combinations of chemotherapy and sometimes radiation are used as a treatment to destroy cancer cells and help donor cells start to grow in your bone marrow. Depending on the combination used, each treatment (or conditioning regimen) can have a different intensity or strength.

- High intensity treatment uses high doses of chemotherapy or radiation.
- Reduced intensity treatment uses lower doses of chemotherapy or radiation.

Both kinds of treatments are used by stem cell transplant doctors around the world and are not experimental. Our goal is to see if one kind of treatment is better than the other for people who have a stem cell transplant to treat either their acute myeloid leukemia (AML) or myelodysplastic syndromes (MDS).

If you volunteer to join this study, we will randomly assign you to receive either a high intensity or a reduced intensity treatment before you receive the stem cells from your donor.

We believe this study will last about 18 months for most patients who decide to join. About 356 patients will take part in the study at transplant centers around the United States. We will explain the two different treatments in this consent form. Every participating clinic will report their results, so we can compare and share the results at the end of the study.

This consent form tells you about the study, its possible risks and benefits, other options available to you, and your rights as a participant in the study. Please take your time to make your decision.

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 take part, 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.

Background

This research study is sponsored by The National Institutes of Health (NIH) through the Blood and Marrow Transplant Clinical Trials Network (BMT CTN).

Conditioning Regimen

The conditioning regimen is a combination of chemotherapy and/or radiation given to patients before the donor cells are infused. This treatment allows donor cells to engraft and start growing in your bone marrow. The treatment also helps to kill cancer cells that might not be detectable.

Different chemotherapy drugs can be used as part of the conditioning regimen. Some common combinations of chemotherapy drugs used for transplant are:

- Busulfan + cyclophosphamide or fludarabine
- Fludarabine + melphalan
- Radiation + cyclophosphamide

Each combination of chemotherapy drugs or radiation has a different strength. This strength can also be described as the treatment "intensity."

Stem cell transplant destroys cancer in two ways.

- The treatment (or conditioning regimen) destroys cancer cells.
- The immune cells from the donor can recognize cancer cells and kill them.

High intensity treatments are also known as myeloablative conditioning (MAC) regimens. These treatments work well to destroy cancer cells because they use very high amounts of chemotherapy or radiation. High intensity treatments can also have more side effects during and after transplant.

Using a lower or "reduced" intensity treatment before transplant can have fewer serious problems from the chemotherapy drugs. While the cancer killing effects may also be lower, studies show that immune cells given during the transplant can help destroy remaining cancer cells. Transplants with reduced intensity conditioning (RIC) regimens are often used for people

who cannot have high doses of chemotherapy drugs or radiation because of their age or other medical problems.

This study will compare high intensity and reduced intensity treatments used to destroy cancer cells and prepare bone marrow for transplant. Our goal is to see if one kind of treatment is better than the other for people who have a stem cell transplant to treat either their AML or MDS.

Purpose

You are invited to join this research study because you have AML or MDS and are currently being evaluated for an allogeneic transplant. The main goal of this study is to see if patients with AML or MDS have better results with transplants using reduced intensity treatment compared to high intensity treatment.

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 to not be in this study, or leave this study at any time.

If you choose to not take part or to leave this study, your regular medical care will not be affected in any way. The conditioning regimen of your transplant will be the standard of care. If you decide to leave this study after taking the study treatment, or are asked to leave by your doctor for medical reasons, you will be asked to come back to the doctor's office for tests for your safety and as part of your routine medical care.

- Even if you withdraw from the study, the information collected from your participation will be included in the study evaluation, unless you specifically ask that it not be included.
- Your study doctor and study staff will be available to answer any questions that you may have about your participation in, or your withdrawal from this study.

Procedures

Before you join the study, we will evaluate your general health, medical history, and your current medications.

Study Participation

You will need to go to clinic at least once before the study begins. Your participation in the study starts after your sign this consent form. After your transplant you will have weekly evaluations for the first 3 months of this study. After 3 months, you will have an evaluation at 6, 12 and 18 months after your transplant.

These evaluations will be done if you are in the hospital ward or clinic, or if your disease becomes active again after the transplant.

Before You Start Your Treatment

You will have at least one clinic visit before you begin the study. This visit will collect information about your:

- Physical health (including history, height, weight and temperature);
- Heart, lung and kidney function;
- Chest x-ray;
- Bone marrow biopsy and aspirate;
- Routine blood tests, including cell counts, liver and kidney function;
- Routine markers of infectious diseases, including hepatitis, herpes, HIV, syphilis, varicella zoster (shingles) among others;
- Pregnancy test (if it applies to you);
- HLA typing for you and your donor; and,
- Health quality of life for English speaking patients (see below).

Randomization

We selected five different treatment options based on the ones that are most often used by transplant centers. The treatment options are listed in Table 1.

Your doctor will choose one reduced intensity treatment (A or B in the table below) and one high intensity treatment (C, D or E in the table below) to use for this study. These are often the most commonly used at [*insert Institution name*]. A computer program will then assign you by chance to either the reduced intensity or the high intensity treatment option.

You will have an equal chance of being placed in either group. This means that half of the people in the study will be in the reduced intensity group and half will be in the high intensity group.

TABLE 1: TREATMENT OPTIONS (CONDITIONING REGIMENS)

Reduced Intensity Treatments	
A	Fludarabine + Busulfan (Flu/Bu)
B	Fludarabine + Melphalan (Flu/Mel)

High Intensity Treatments	
C	Busulfan + Fludarabine (Bu/Flu)
D	Busulfan + Cyclophosphamide (Bu/Cy)
E	Cyclophosphamide + Total Body Irradiation (Cy/TBI)

Study Evaluations

We will measure your health at specific times during your study participation. These tests and how often they are scheduled are standard for what we do for all patients receiving an allogeneic transplant. We would do them even if you were not part of this study.

- History, physical exam and weight: weekly for 3 months, 6, 12 and 18 months.
- Routine blood tests, including cell counts, liver and kidney function: weekly for 3 months, 6, 12 and 18 months.
- Bone marrow biopsy and/or aspirate: at Day 100 and 18 months.
- Graft-versus-host disease (GVHD) and infections monitoring: weekly for 3 months, 6, 12 and 18 months.
- Side effects or toxicity: monthly for the first 3 months, then at 6, 12 and 18 months.
- Blood or bone marrow tests to find out the proportion of donor cells present in the recipient (chimerism) at 1, 3 and 18 months.
- Blood samples to determine the level of busulfan in your blood after the first dose (if you received busulfan as part of your treatment) only if your transplant center is participating in the ancillary study.
- Health quality of life for English speaking patients (see below) at 3, 12 and 18 months.

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Blood Samples for Busulfan Pharmacokinetics

Some transplant centers may be participating in this ancillary study.

Researchers are trying to learn more about how your body breaks down one of the drugs (busulfan) given as part of the conditioning regimen in this study. Samples for this test will be collected from you only if you receive this drug and your transplant center is participating in this ancillary study. These tests measure how much busulfan is concentrated in the blood. Busulfan levels are already done routinely in some settings in order to avoid too high levels. Every patient can have different levels of this drug after receiving the same dose of busulfan.

The goal of this study is to see if these levels can be tied to the success of the transplant. This study will explore the levels of busulfan in these two treatment intensities and compare with what happens after transplant.

This study will collect up to seven blood samples within 6 to 8 hours after a dose of busulfan was given to you. Each blood sample volume is 3 mL (1/2 teaspoon). Once all seven blood samples are collected from you, they will be sent to a laboratory for testing. None of your personal information will be shared with the laboratory.

The busulfan blood tests are part of this clinical trial at select centers, but your center may repeat these tests as part of the routine transplant procedure. If this happens, your doctor will either collect 6 mL (1 teaspoon) each time as described above, or collect 3 mL for the research tests on another day that busulfan is given.

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Health Quality of Life

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.

Other Treatment Choices

It is your choice to join this study. If you decide you do not want to participate, you may still receive a transplant for treatment of your disease. It is possible that you may have a treatment and evaluations that are very similar to what would be if you joined this study.

Your study doctor will discuss these choices with you. If you decide you do not want to join this research study, your medical care will not be affected in any way.

Risks and Discomforts

The risks and discomforts of stem cell transplant are the same if you join this study, or if you do not join this study. The differences in side effects from medications are because of the different levels of treatment strength.

High intensity treatments usually have more side effects early after transplant compared to reduced intensity treatments. Other problems with transplant, such as graft-versus-host disease (GVHD) and infections happen equally in patients who have high intensity or reduced intensity treatments.

Risks Related to Medications or Radiation Used in Conditioning Regimens

All chemotherapy and radiation treatments used as conditioning in this study are commonly used in allogeneic stem cell transplantation. The side effects can change based on the amount of drug given. This is true for busulfan, which is used for reduced intensity and high intensity treatments but in different amounts.

TABLE 2 – ADVERSE EVENTS

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)
	Damage to male (testes) 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	Bleeding in the bladder Inflammation of the heart muscle (heart failure) Shortness of breath	Allergic reaction Lung fibrosis Serious skin rashes

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

TABLE 2 – ADVERSE EVENTS, continued

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 Veno-occlusive disease High blood pressure High magnesium and phosphorus levels in the blood High sugar levels in the blood Infertility Low blood pressure Seizures	Cataracts Lung fibrosis

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 *("Likely" refers to a side effect that is expected to occur in more than 20% of patients.)*	**Less Likely** *("Less likely" refers to a side effect that is expected to occur in 20% or fewer patients.)*	**Rare, but Serious** *(These possible risks have been reported in rare occurrences, typically less than 2% of patients. They may be serious if they occur.)*
Diarrhea Nausea Stomach cramps Vomiting (throwing up) Painful swelling of the salivary glands under the ears for a few days Short-term hair loss Anemia Infection Bleeding Cataracts Sterility (inability to have children) Slow growth Hormone problems (such as thyroid disease or diabetes) Mouth sores	Lung inflammation Pneumonia Redness of the skin Serious liver problems	Risk of developing other cancers in the future Difficulty swallowing Back problems Kidney problems Learning problems

Risks Related to the Medication Used to Help Prevent Graft-versus-Host Disease

Graft-versus-Host Disease (GVHD) is a medical condition that can become serious enough to cause death. GVHD is a common development after allogeneic stem cell transplant. It happens when the donor cells attack and damage your organ tissues after transplant. GVHD can cause:

- Skin rashes
- Feeling sick to your stomach (nausea)
- Throwing up (vomiting)
- Abdominal pain
- Diarrhea
- Liver damage or jaundice (yellowing of the skin or eyes)

Your doctor will prescribe medication to prevent GVHD. You will start GVHD prevention around the time you get your donor cells, and it can last many months after the transplant. These medications do not completely prevent GVHD and more drugs might be needed to manage this complication.

Your doctor will decide which GVHD prevention treatment is the best choice for you. This decision is not part of the research study. Your doctor will also decide your medications based on what is regularly used for transplant in this hospital or clinic. Below is a list of commonly used drugs used to prevent GVHD. Your doctor may choose to use other medications than what is listed here.

- **Tacrolimus**: This drug is used to try to prevent GVHD. Early side effects you may have include: feeling sick to your stomach (nausea) or throwing up (vomiting) after you swallow. Other side effects include high blood pressure (hypertension), shaking hands (tremor), increased hair growth and possibly how clearly you can think or make decisions (mental function).

  If you have these effects, they generally go away if your doctor lowers the amount of medication you take. A few patients have had a seizure while on this medication.

  Your liver or kidneys might not work as well as they did before. If this happens, your doctor may lower the amount of drug you take or stop giving the drug completely. You might be more likely to have kidney problems if you need to take other medications at the same time. This is especially true for drugs that we know might cause kidney problems, such as antibiotics. Sometimes, the kidney damage caused is serious enough for you to need an artificial kidney machine (hemodialysis).

  Some patients given tacrolimus develop diabetes and must take insulin while taking tacrolimus.

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

- **Methotrexate:** This is also a medication used to try to prevent GVHD. Methotrexate causes damage to cells and can affect many different parts of your body. It may cause mouth sores or mouth inflammation. Or if you already have these problems from your treatments and other medications, they can get worse.

  Methotrexate may slow down the recovery of blood cells after transplantation. Methotrexate can also cause kidney damage. If your kidneys are already damaged for other reasons, it can make your kidneys worse. If kidney damage does happen, your doctor might give you a lower dose of methotrexate, or stop giving it completely.

- **Tacrolimus and Methotrexate:** These medications can affect your body's immune system and make it easier for you to get infections. Even simple infections can become very serious and even life-threatening. As a result, you might have more infections for several months after transplant, especially viral infections and pneumonia.

- **Risks Related to the Transplant Procedure:** The following risks are part of the transplant process and not connected to any one medication or the transplanted donor cells.

  - **Bleeding:** Platelets help your blood to clot. When you have low amounts of platelets, you may have bleeding problems. Once your new bone marrow starts to grow, your platelets will increase and your blood will start to clot normally again.

    Bleeding problems can range from minor bleeding, such as nosebleeds or bruising, to more serious bleeding in your brain and lungs. Serious bleeding can be very dangerous and can happen if your platelet levels stay low. Usually, we can prevent major bleeding problems with transfusions of platelets. However, if your body does not respond well to transfused platelets, you may be at serious risk for bleeding.

  - **Veno-occlusive Disease (VOD):** High dose chemotherapy, radiation therapy and medications used to prevent GVHD can cause veno-occlusive disease (VOD). VOD causes severe damage to the liver. Symptoms include jaundice (yellowing of the skin and eyes), weight gain, and extra fluid build-up in the belly (abdominal cavity) and other parts of the body. We can usually manage veno-occlusive disease very well, to the point where it goes away. However, complications can happen with VOD that may put your life in danger.

  - **Mouth Sores and Diarrhea:** The large doses of chemotherapy and radiation cause irritation in the lining of the mouth and intestines. This can result in painful mouth sores and diarrhea. If you have severe mouth sores, we will give you medicine to help control the pain. If your mouth sores are very bad, you may not be able to eat normally until the sores are healed. Mouth sores get better when your white blood count starts to rise, and your donor cells start to grow (also called engraftment).

  - **Capillary Leak Syndrome:** This can happen from your chemotherapy and radiation treatments. The blood vessels may become 'leaky' and fluid enters your abdomen, lungs, and other tissues. You may gain water weight and not go to the bathroom as often as you normally do. Capillary leak syndrome can be difficult to manage if extra fluid enters your lungs and makes it hard to breathe. You may die if fluid continues to build up in your lungs.

- **Unexpected Organ Damage and Other Side Effects:** You might have unexpected, life-threatening heart, lung, kidney, or liver damage as a result of your transplant. High doses of chemotherapy and radiation can cause very bad lung damage that may not get better with time or medications. If this happens, you may need to use oxygen or even a respirator. The lung damage may get worse and be life-threatening. Rarely, multiple organ failure (such as lung and kidney failure) can happen, which can lead to death.

- **Fluid Build-up:** We will give you intravenous (IV) fluids during the transplant process and it can be hard for your body to eliminate this fluid. We will also give you Furosemide, which is a medication that can help your body get rid of the extra fluid. One risk of Furosamide is hearing loss. Some side effects may be loss of body chemicals such as potassium and sodium.

- **Late Effects:** You may have side effects happen a few months to many years after your transplant.
  - You may have problems with your thyroid gland that require you to take thyroid medication.
  - You may get cataracts earlier in life compared to a person who has not had a transplant. If you develop cataracts (cloudiness in the eyes) they may need treatment.
  - Your kidneys could be affected and cause anemia (low red blood cell count) or high blood pressure.
  - You may develop a second cancer as a result of the chemotherapy, radiation and/or underlying disease. If secondary cancers happen they generally do not develop until 10 to15 years after your transplant.
  - We do not know the long-term effects of transplant on your heart, lungs and brain.

- **Unforeseen Risks:** New risks might appear at any time during the study that are different from the risks listed in this Consent Form. We will promptly tell you of any new information that may affect your decision to participate.

- **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 have the potential of becoming pregnant must use some form of effective birth control while receiving chemotherapy, TBI, and GVHD prophylaxis. Effective birth control is defined as the following:
  - Refraining from all acts of vaginal intercourse (ABSTINENCE)
  - Consistent use of birth control pills
  - Injectable birth control methods (Depro-Provera, Norplant)

- Tubal sterilization or male partner who has undergone a vasectomy
- Placement of an IUD (intrauterine device)
- Use, with every act of intercourse, of a diaphragm with contraceptive jelly and/or condoms with contraceptive foam.
- Sterility and future childbearing potential for men and women. Chemotherapy and/or irradiation may affect your ability to have children. Male patients may become sterile (unable to produce sperm) and should discuss with their doctor regarding sperm banking prior to transplantation. Female patients who have attained puberty may find that their menstrual cycle becomes irregular or stops permanently. However, this DOES NOT MEAN THAT YOU CANNOT BECOME PREGNANT, and you must use some effective method of birth control during transplant and afterwards until you are off GVHD prophylaxis. Damage to reproductive tissue may result in infertility (inability to have children). It is not known if the damage could result in birth defects. You should discuss these risks and options in detail with your doctor before entering this study.

Possible Benefits

Taking part in this study may or may not make your health better compared to receiving the transplant through your routine medical care. We do know that the information from this study will help doctors learn more about selection of conditioning regimen intensities. This information could help patients in the future who are in need of an allogeneic transplant.

What if I change my mind?

You can change your mind at any time about allowing us to use your samples and health information for research. We ask that you contact [Principal Investigator] in writing and let him/her know you do not want us to use your research samples or health information for research. His/her mailing address is on the first page of this form.

If you withdraw yourself from this protocol, even if you allowed your samples to be used for research, your samples will not be used from that point and they will be discarded. However, samples and information that have already been shared with other researchers cannot be taken back or destroyed.

New Information Available During the Study

During this research study, new information about the study drug or the risks and benefits of the study may become known to the study doctors. 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 you will be offered all available care to suit your needs and medical conditions.

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 and research records remains confidential. We will not discuss or publish information about your health with any unauthorized person or persons. However, we cannot guarantee total privacy.

Your personal information may be given out if required by law. If information from this study is published or presented at scientific meetings, your name and other personal information will not be used. Your study number is not related to your name, social security number or medical record number at [*insert facility name*].

A description of this clinical trial will be available on http://www.ClinicalTrials.gov, as required by U.S. Law. This Web site will not include information that can identify you. At most, the Web site will include a summary of the results. You can search this Web site at any time.

Information about your transplant from your original medical records may be seen or sent to national and international transplant registries, including:

- The Center for International Blood and Marrow Transplant Research (CIBMTR)
- The National Marrow Donor Program (NMDP)
- The Food and Drug Administration (FDA)
- The National Institutes of Health (NIH), which include the National Heart, Lung, and Blood Institute (NHLBI) and the National Cancer Institute (NCI)
- Data and Coordinating Center of the Blood and Marrow Transplant Clinical Trials Network (BMT CTN), and
- Other authorized study organizations

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

Ending Your Participation

The study doctor or the study sponsor may stop the study at any time, and you may be asked 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.

The study sponsor may decide to end the study at any time. If you are asked 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.

Physical Injury as a Result of Participation

It is important that you tell your study doctor or study staff if you feel that you have been hurt or injured because of taking part in this study. 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 this 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.

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.

Costs & 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 the busulfan blood samples required for the study or the optional blood sample for research on this study.

Ethical Review

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

Further Information

If you need any information about this study, or if you have any problems while you are participating in this study you can contact the study doctor or his/her staff. They may be contacted at the telephone numbers listed below.

[*Insert name and contact details*].

Independent Contact

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*].

Health Insurance Portability and Accountability Act 1 (HIPAA1) 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 Study of Allogeneic Stem Cell Transplantation Comparing Regimen Intensity in Patients with Myelodysplastic Syndrome or Acute Myeloid Leukemia

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*]

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

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:

- Principal Investigator and the researcher's staff:
  Dr. Bart Scott, Co-Principal Investigator
  Dr. Mitchell Horwitz, Co-Principal Investigator
- National Heart, Lung, and Blood Institute (NHLBI) and the National Cancer Institute (NCI), both of the National Institutes of Health (NIH),
- Study sponsors: Blood and Marrow Transplant Clinical Trials Network (BMT CTN), Data and Coordinating Center
- 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.

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.**

Blood Samples for Future Research (*optional*)

Researchers also want to learn how to better predict possible health problems and how to make transplants more successful. Much of this research is done using human tissue or blood.

We would like to store a sample of your blood for use in future research studies. Your blood would be collected at your transplant center before your transplant. We would keep the sample at a central place called the BMT CTN Research Sample Repository (this will be called the "Repository" in the rest of the consent form). A Repository is a place that protects, stores and sends out samples for approved research studies.

Some general things you should know about letting us store your blood samples for research are:

- We will only store samples from people who give us permission. You should feel free to talk over your decision with your family, friends, doctor, and health care team. If you decide to not let us store research samples now or in the future, it will not affect your medical care.
- Research is meant to gain knowledge that may help people in the future. You will not get any direct benefit from taking part.
- All testing done on your blood is for research purposes. You or your doctor will not be given results and they will not be added to your medical record.
- You will not get paid for any samples or for any products that may be developed from current or future research.

If you agree to provide a blood sample, here is what will happen:

1. A single 6 mL sample of your blood (approximately 1 teaspoon) will be collected before your transplant and stored solely for research purposes. The collection will be done at the same time as the routine blood collection done for the study.

2. The research sample will be given unique bar code designation that cannot be linked to you by the researcher testing your samples.

3. Researchers can apply to study the materials stored in the Repository.

4. Materials stored in the Repository will be used mainly by clinicians and researchers in the BMT CTN network. In the future, the remaining research samples and clinical data will be made available outside of this network. Researchers from other universities, the government, and drug or health-related companies can apply to use the samples and information. Only skilled researchers will be allowed to use the samples and information.

5. The BMT CTN Steering Committee or the BMT CTN Biomarkers Committee must approve each study application before they will share samples or information with researchers. This kind of review is to make sure that the investigators requesting the

samples are qualified, and that the research they propose has a high potential of success and for contribution of scientific knowledge.

6. DNA from your stored blood sample might be used in genome-wide association (GWA) or pharmacogenomics 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 identify genes involved in human disease. This method searches the genome for small genetic changes that are more common in people with a particular disease than in people without the disease. Each study can look at hundreds of thousands of genetic changes at the same time. Researchers use data from this type of study to find genes that may add to a person's risk of developing a certain disease. Pharmacogenomics studies are similar genetic tests but look specifically at genes related to how the body breaks down medications.

   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.

7. 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.

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 future 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 my blood and information can be stored indefinitely by the BMT CTN and/or NHLBI Repositories for research to learn about, prevent, or treat health problems. I also understand that my DNA and health information may or may not be used in genome-wide association studies.

- ❑ I agree to allow my blood samples to be stored for research.
- ❑ I do not agree to allow my blood samples to be stored for research.

_____ _____

Signature Date

TITLE: **BMT CTN 0901:** A Randomized, Multi-Center, Phase III Study of Allogeneic Stem Cell Transplantation Comparing Regimen Intensity in Patients with Myelodysplastic Syndrome or Acute Myeloid Leukemia

CO-INVESTIGATOR:
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- I have read and understood this Consent Form. The nature and purpose of the research study has been explained to me.
- I understand that the transplant intensity will be randomly assigned 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 Signature Print Name 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.

Signature of Counseling Physician Date

Signature of Interpreter Date