INSTITUTE: National Cancer Institute

STUDY NUMBER: 12-C-0112 PRINCIPAL INVESTIGATOR: Terry Fry, M.D.

STUDY TITLE: Phase I Study of T Cells Expressing an Anti-CD19 Chimeric Receptor in Children and Young Adults with B Cell Malignancies

Continuing Review Approved by the IRB on 04/25/16
Amendment Approved by the IRB on 05/04/16 (O) Date Posted to Web: 05/12/16

Screening

INTRODUCTION

We invite you to take part in a research study at the National Institutes of Health (NIH).

First, we want you to know that:

Taking part in NIH research is entirely voluntary**.**

You may choose not to take part, or you may withdraw from the study at any time. In either case, you will not lose any benefits to which you are otherwise entitled. However, to receive care at the NIH, you must be taking part in a study or be under evaluation for study participation.

You may receive no benefit from taking part. The research may give us knowledge that may help people in the future.

Second, some people have personal, religious or ethical beliefs that may limit the kinds of medical or research treatments they would want to receive (such as blood transfusions). If you have such beliefs, please discuss them with your NIH doctors or research team before you agree to the study.

Now we will describe this research study. Before you decide to take part, please take as much time as you need to ask any questions and discuss this study with anyone at NIH, or with family, friends or your personal physician or other health professional.

If you are signing for a minor child, "you" refers to "your child" throughout the consent document.

Why is this study being done?

NIH investigators are conducting an experimental cell therapy study using the blood cells from children who have B-cell cancer that expresses the CD19 protein. We use an anti-CD19 CAR gene and a type of virus (retrovirus) to make these cells (anti-CD19 CAR cells). The Chimeric Antigen Receptor (CAR) is an artificial T cell receptor made so that the immune cells will

recognize or respond to a specific molecule, which in this study is the CD19 protein. We use a portion of an antibody to the CD19 and a part of a molecule that activates the immune cells. We combine the CAR molecule with your T-cells, a type of immune cell. Together we hope the CAR will help these T-cells find and kill the cancer in your body. We will grow these cells in the laboratory in large numbers and then the anti-CD19 CAR cells will be given to you as an intravenous (IV) infusion.

To be eligible for treatment on this study, your cancer cells must have a protein on their surface called "CD19", because they are the target for treatment.

Why are you being asked to take part in this study?

We invite you to take part in testing to see if your cancer cells carry this protein, which is the first step in testing whether you are eligible for the research study with the anti-CD19 CAR cells. We are asking your permission for a sample of your blood and/or bone marrow (or lymph node) to be sent to the NIH. This eligibility screening evaluation involves the following test:

CD19 antigen: The investigational drug is designed to bind only to cells that have a specific protein, called the CD19 antigen, on their surface. To be eligible for this trial, your tumor cells must be shown to have this CD19 protein. We are asking your permission to look to see if there are tumor cells in your blood or bone marrow (or lymph nodes) that have CD19. We will need about one teaspoonful of blood or bone marrow (depending on where the tumor cells are) for this test.

Description of Research Study

What will happen if you take part in this research study?

This test takes approximately one week for the results to be available. Your physician will be informed of the results and potential eligibility for the research study as soon as possible. If the results of this testing suggest that you may be eligible for the experimental cell therapy, additional information will be provided to you at that time. However, the results of this testing do not guarantee that you will are eligible for the treatment study with anti-CD19 CAR cells, as there are additional eligibility requirements. If you are interested in considering treatment on the anti-CD19 CAR cell study, you will need to come to the NIH for additional eligibility testing. Your consent to allow further testing, and possibly to participate in the research study itself, will be discussed at that time.

Alternative Approaches or Treatments

What other choices do I have if I do not take part in this study?

You may choose not to have samples sent to the NIH for testing.

Risks or Discomforts of Participation

The risks of sending blood and/or tissue samples to the NIH are minimal. Risks associated with blood draws and bone marrow or spinal tap include:

- pain;
- bleeding;
- bruising; and rarely,
- infection or
- fainting.

Your physician may have you sign a separate consent form to allow a bone marrow aspiration or spinal tap. Sending the samples to the NIH does not put you under any obligation to be treated on this research study.

Potential Benefits of Participation

Are there benefits to taking part in this study?

There are no benefits of sending this blood and/or tissue to the NIH except that you may be eligible to participate in the experimental study with the anti-CD19 CAR cells.

Research Subject's Rights

Taking part in eligibility screening testing for a research study at the NIH is entirely voluntary. You may choose not to have your samples sent to the NIH. There are no penalties for choosing not to participate. A member of the research team conducting the study with the anti-CD19 CAR cells at the NIH will discuss this eligibility testing with you by telephone. You may ask any and all questions and we invite you to do so. If you agree to this eligibility testing, you or your physician will be asked to mail the original signed consent form and fax a copy to the investigator, Pediatric Oncology Branch, National Cancer Institute, NIH, Building 10, Room 1W-3750, 9000 Rockville Pike, Bethesda, MD 20892-1928, Phone 301-496-4256, Fax 301-451-7010. All medical records are treated confidentially. As outlined on the next page, certain authorized parties have access to medical records from your participation.

Conflicts of Interest

The National Institutes of Health (NIH) reviews NIH staff researchers at least yearly for conflicts of interest. This process is detailed in a Protocol Review Guide. You may ask your research team for a copy of the Protocol Review Guide or for more information. Members of the research team who do not work for NIH are expected to follow these guidelines but they do not need to report their personal finances to NIH.

OTHER PERTINENT INFORMATION

1. Confidentiality. When results of an NIH research study are reported in medical journals or at scientific meetings, the people who take part are not named and identified. In most cases, the NIH will not release any information about your research involvement without your written permission. However, if you sign a release of information form, for example, for an insurance company, the NIH will give the insurance company information from your medical record. This information might affect (either favorably or unfavorably) the willingness of the insurance company to sell you insurance.

The Federal Privacy Act protects the confidentiality of your NIH medical records. However, you should know that the Act allows release of some information from your medical record without your permission, for example, if it is required by the Food and Drug Administration (FDA), members of Congress, law enforcement officials, or authorized hospital accreditation organizations.

2. Policy Regarding Research-Related Injuries. The Clinical Center will provide short-term medical care for any injury resulting from your participation in research here. In general, no long-term medical care or financial compensation for research-related injuries will be provided by the National Institutes of Health, the Clinical Center, or the Federal Government. However, you have the right to pursue legal remedy if you believe that your injury justifies such action.

3. Payments. The amount of payment to research volunteers is guided by the National Institutes of Health policies. In general, patients are not paid for taking part in research studies at the National Institutes of Health. Reimbursement of travel and subsistence will be offered consistent with NIH guidelines.

4. Problems or Questions. If you have any problems or questions about this study, or about your rights as a research participant, or about any research-related injury, contact the Principal Investigator, Terry Fry M.D., Building 10, Room 1W-3750, Telephone: 301-402-0215. You may also call the Clinical Center Patient Representative at 301-496-2626. If you have any questions about the use of your specimens or data for future research studies, you may also contact the Office of the Clinical Director, Telephone: 301-496-4251.

5. Consent Document. Please keep a copy of this document in case you want to read it again.

COMPLETE APPROPRIATE ITEM(S) BELOW:

A. Adult Patient's Consent

I have read the explanation about this study and have been given the opportunity to discuss it and to ask questions. I hereby consent to take part in this study.

Signature of Adult Patient/ Legal Representative — Date

Print Name

B. Parent's Permission for Minor Patient.

I have read the explanation about this study and have been given the opportunity to discuss it and to ask questions. I hereby give permission for my child to take part in this study.
(Attach NIH 2514-2, Minor's Assent, if applicable.)

Signature of Parent(s)/Guardian — Date

Print Name

C. Child's Verbal Assent (If Applicable)

The information in the above consent was described to my child and my child agrees to participate in the study.

Signature of Parent(s)/Guardian — Date — Print Name

THIS CONSENT DOCUMENT HAS BEEN APPROVED FOR USE FROM APRIL 25, 2016 THROUGH OCTOBER 24, 2016.

Signature of Investigator — Date

Print Name

Signature of Witness — Date

Print Name