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| Study Title: | Safety and Feasibility Study of Chimeric Antigen Receptor (CAR) T Cell Therapy with YESCARTA in the Outpatient Setting NCT05108805 |
| Version Date: | 06APR2022 |
| PI: | Olalekan O. Oluwole, MD, MPH |

Name of participant: _____ Age: _____

**The following is given to you to tell you about this research study. Please read this form with care and ask any questions you may have about this study. Your questions will be answered. Also, you will be given a copy of this consent form.**

**Key Information:**
The first section of this document contains some key points that the research team thought you would find important. The study is described in more detail after this section. If you do not understand something, please ask someone.

**Key information about this study:**

YESCARTA (also known as axicabtagene ciloleucel) is a treatment currently approved by the United States Food and Drug Administration (FDA) for various forms of lymphoma, a type of cancer involving cells of the immune system. YESCARTA was initially approved in the U.S. in October 2017.

YESCARTA is made from your own white blood cells, which will be modified in a laboratory to recognize and attack your lymphoma cells. Because YESCARTA is a specialized and fairly new therapy, patients currently receiving YESCARTA at Vanderbilt and other medical centers are typically required to spend several days in the hospital – even if their treatment is well tolerated.

In this study, we want to help understand if it is safe and feasible for participants to receive YESCARTA therapy in the outpatient setting, with fewer days spent as a patient in the hospital. The key difference of receiving YESCARTA in this study, is the location where many of the follow-up safety visits after YESCARTA are conducted.

If you participate in this study, you and a family member, friend or caregiver must stay in housing located close to Vanderbilt University Medical Center (VUMC) for up to 4 weeks after your YESCARTA treatment. You will utilize a wearable device called Everion for approximately 2 weeks after YESCARTA infusion to take some of these measurements (see separate Everion information). If the caregiver becomes unable to assist, you will have pre-arranged another caregiver that will be available. It is anticipated this housing will be an apartment selected for the study located within 30 miles of the VUMC campus, where you will have appointments every day for at least 14 days after your YESCARTA

treatment, and where you can quickly get specialized help if you have side effects from your therapy. You understand and agree to follow these requirements.

For your safety, you cannot stay alone in the apartment. A family member, friend, or caregiver must stay with you. During this time, you and your companion must measure and record your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature) and conduct a remote telemedicine visit every day, with a nurse practitioner over the internet using an iPad or similar electronic device.

You do not have to be in this study in order to receive YESCARTA. In this study, there is no difference in the YESCARTA drug or dose of YESCARTA that you and your study doctor would otherwise have access to outside of this study.

- Since YESCARTA is made from your own white blood cells, your blood will be collected by a process called "leukapheresis" (loo-kah-fur-ee-sis), which will concentrate your white blood cells.
- Your blood cells will then be sent to a manufacturing center to make your YESCARTA.
- Before receiving YESCARTA, you will be scheduled for 3 days of chemotherapy (on Days -5, -4 and -3) to prepare your immune system to receive YESCARTA.
- When your YESCARTA is ready, your study team will give it to you through a catheter placed into your vein (intravenous infusion). Your YESCARTA infusion is scheduled to be completed on a single day (Day 0) and usually takes less than 30 minutes.

Every day for 14 days (including weekends) after your YESCARTA treatment on Day 0, you will be scheduled for the following visits (as further described in the next section of this document):

- In the morning, you will travel to the clinic for bloodwork and an 8:00 am check-up visit.
- In the late afternoon between 3:30 to 5:30 pm, and in the late evening at about 10:00 pm, you will have a remote telemedicine visit with audio and video, using the internet, while you are in the apartment and a nurse practitioner is located elsewhere.

Before and in between these in-person and remote visits, you and your companion will measure and record your vital signs (at about 6:00 am, 12:00 noon, 4:00pm, and 8:00 pm) using training and wearable devices you will receive as part of your participation in this study. Before starting YESCARTA, you and your companion will be able to practice taking your vital signs and will have a practice telemedicine visit supervised by the study staff.

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For your safety, recording your vital signs and participating in the telemedicine visits is very important. If you and your companion are uncomfortable with the process, feel like you need additional training, or decide not to participate in the study, please tell your study team and study doctor so that you can receive more training or be considered for YESCARTA treatment outside of the study. If you have serious side effects after receiving YESCARTA or are unable to fully complete the remote telemedicine visits, then you will most likely be hospitalized for your safety.

Before getting YESCARTA, tell your study doctor about all your medical problems, including if you have or have had:

- Neurologic problems (such as seizures, stroke, or memory loss)
- Lung or breathing problems
- Heart problems
- Liver problems
- Kidney problems
- A recent or active infection.

Tell your study doctor about all the medications you take, including prescription and over-the-counter medicines, vitamins, and herbal supplements.

Your disease may or may not respond to the treatment. You may have side effects from YESCARTA and feel worse. The most common side effects of YESCARTA include:

- Fever (100.4°F/38°C or higher)
- Low white blood cells (can occur with a fever)
- Low red blood cells
- Low blood pressure (dizziness or lightheadedness, headache, feeling tired, short of breath)
- Fast heartbeat
- Confusion
- Difficulty speaking or slurred speech
- Nausea
- Diarrhea.

YESCARTA may cause side effects that are life-threatening and can lead to death. Call or see your study doctor or get emergency help right away if you experience any of the following:

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- **Fever** (100.4°F/38°C or higher)
- **Difficulty breathing**
- **Chills or shaking chills**
- **Confusion**
- **Dizziness or lightheadedness**
- **Severe nausea, vomiting, or diarrhea**
- **Fast or irregular heartbeat**
- **Severe fatigue or weakness.**

These are not all the possible side effects of YESCARTA. Additional more detailed information about side effects is presented in the below section.

Because YESCARTA treatment can cause sleepiness, confusion, weakness, temporary memory and coordination problems, you are advised to not drive, operate heavy machinery, or do other dangerous things for at least 8 weeks after your YESCARTA infusion. You should also not donate blood, organs, tissues, and cells for transplantation after YESCARTA.

This study is partially funded by Kite Pharma Inc. which is the pharmaceutical company that makes YESCARTA. YESCARTA is an approved therapy for your disease, and YESCARTA will be provided as a standard of care therapy by your insurance. You and/or your insurance will be responsible for the cost of other usual care you would receive even if you were not participating in this study.

About 20 total combined patients are anticipated to enroll in this study at Vanderbilt.

As discussed in detail below, if you enroll in this study, you must be willing and able to make numerous visits to the study site within about 28 days before and 30 days after receiving YESCARTA. Additional long-term follow-up visits are intended at 2, 3, 6, and 12 months after your YESCARTA treatment.

**Detailed Information:**
The rest of this document includes detailed information about this study (in addition to the information listed above).

You are being asked to take part in this research study because you have been diagnosed with a form of lymphoma (a type of cancer involving cells of the immune system) and your study doctor feels your

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disease may possibly benefit from treatment with a therapy called YESCARTA (also known as axicabtagene ciloleucel).

You do not have to be in this research study. You may choose not to be in this study and get other treatments without changing your healthcare, services, or other rights. You can stop being in this study at any time. If we learn something new that may affect the risks or benefits of this study, you will be told so that you can decide whether or not you still want to be in this study. Your medical record will contain a note saying you are in a research study and may contain some research information about you. Anyone you authorize to receive your medical record will also get this information.

YESCARTA is made using your own blood cells. If you meet the requirements after screening tests for this study, you will be enrolled and have a procedure called leukapheresis. This is a procedure where blood is taken from you and circulated through a machine that divides the cells in your blood (white blood cells, red blood cells and platelets). During leukapheresis, white blood cells including T cells (a type of white blood cell that helps fight infection and cancer) are collected; and then all other remaining cells and plasma (the liquid part of the blood) are given back to you. This process can take approximately 4 hours. The T cells that are collected will then be sent to a manufacturing facility to be genetically modified in order to make YESCARTA.

The genetic modification introduces a special chimeric antigen receptor (CAR) gene into the T cells outside of your body in a permanent and irreversible way, now called YESCARTA, so that they can help find your tumor cells. After YESCARTA is made, it is sent back to your study doctor. The study doctor will then have you come back into the clinic so that YESCARTA can be given back to you through an intravenous (IV) infusion. The hope is that YESCARTA can then target and kill tumor cells. YESCARTA is standard of care for your condition, but follow-up monitoring is typically done in the hospital. In this research study, follow up monitoring being done in a home-setting, partly with wearable vitals monitoring devices, for research purposes.

As described further below, this study has several parts:

- Screening (to check if you are eligible to be in this study).
- Leukapheresis (to collect white blood cells from you, in order to make your YESCARTA in a lab).
- Bridging therapy (if needed for your disease).
- Preparation for lymphodepletion (to check you are still eligible to proceed with the study).
- Lymphodepleting chemotherapy (on Days -5, -4 and -3) to prepare your immune system to receive YESCARTA.

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- YESCARTA treatment (on Day 0).
- Post-treatment follow-up visits:
  - Days 1 to 14:
    Three visits every day, for 2 weeks: in-clinic visit, and two online telemedicine visit.
  - Day 21.
  - Day 30.
  - Month 2.
  - Month 3.
  - Month 6.
  - Month 12.

**Screening**

You will have the following done within 28 days prior to enrolling in the study, in order to determine if you meet the study requirements for participation:

- Review of your general medical history including information about your disease and what previous treatments you may have received.
- You will be asked about your level of activity.
- You will be asked to complete a questionnaire about your quality of life and state of health.
- Physical exam that includes obtaining your body weight, height, and vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature).
- Assessment of your nervous system including questions to check your current mental status (ICE score).
- You will be asked about any problems you are having and the medicines you are taking including prescriptions and over-the-counter medicines.
- Collection of about ½ tablespoon of blood for routine laboratory testing. If you are a woman capable of becoming pregnant, you will also have either a urine or blood pregnancy test.
- Echocardiogram (ECHO ultrasound of your heart) and electrocardiogram (ECG) to determine your heart's performance.
- Existing (archival) tissue samples of your disease will be reviewed under a microscope to confirm the diagnosis of your disease.
- Possibly, if your study doctor determines you are showing symptoms, a spinal tap (lumbar puncture) using a needle inserted into your back will collect a small sample of cerebrospinal fluid (CSF), the fluid that surrounds your brain and spinal cord, to check if you have cancer cells in your central nervous system (CNS). This is standard of care.

- Possibly, a bone marrow aspirate/biopsy if your study doctor feels this is necessary (for example, if you have not already had this done within the previous 12 months prior to screening for this study). This is standard of care.
- Brain MRI (or brain CT scan if preferred brain MRI is not possible) and a positron emission tomography (PET)-CT scan of your neck, chest, abdomen, and pelvis to confirm the location and extent of your disease. This is standard of care. CT chest, abdomen and pelvis may be an alternative as decided by your doctor.

**Enrollment/leukapheresis**

If you meet all of the eligibility requirements for enrollment, you will then be scheduled to undergo leukapheresis (pronounced "loo-kah-fur-ee-sis"). This is a collection of white blood cells from you, which are then used to make your YESCARTA in a laboratory.

On the day of leukapheresis (or day before leukapheresis for the laboratory tests), the following will be performed:

- Measurement of your weight and vital signs.
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- About ½ tablespoon of blood will be collected from you for routine laboratory testing.
- About 2 tablespoons of blood will be collected from you for additional laboratory testing for research purposes.
- Leukapheresis (over about 4 hours) to collect your white blood cells for research purposes.

Note: because your YESCARTA must be custom made in a laboratory (using your white blood cells that are shipped to the laboratory), there is a rare but possible risk that a manufacturing problem could occur which might delay or possibly even prevent YESCARTA from being successfully made from your cells. The risk of a YESCARTA manufacturing failure is estimated to be about 1 in 100 (1%).

In case of a YESCARTA manufacturing failure, a second manufacturing of YESCARTA may be attempted. If you had to wait for YESCARTA therapy because of this, it is possible that you would need additional chemotherapy (such as bridging therapy discussed immediately below) while you waited, which may increase your risk of side effects (for example, if your disease got worse while waiting, or if you would otherwise not need such chemotherapy if your YESCARTA was ready to go).

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**Bridging Therapy (if needed)**
Before your upcoming YESCARTA treatment, you may first need some kind of additional treatment for your disease. This is called "bridging" chemotherapy.

Your study doctor will discuss what this involves, but bridging therapy often includes steroids (for example, dexamethasone or methylprednisolone) in combination with an antibody called rituximab or a combination of chemotherapy and rituximab.
If you need bridging therapy, it will be administered after leukapheresis and completed prior to the start of your lymphodepleting chemotherapy.

**Preparation for Lymphodepletion**
Sometime between Day -9 and Day -6, you will have the following done as safety check before starting lymphodepleting chemotherapy:

- Physical exam including obtaining your body weight and vital signs.
- Review of any changes to your medical history and disease.
- You will be asked about your level of activity.
- You will be asked to complete a questionnaire about your quality of life and state of health.
- Assessment of your nervous system including questions to check your current mental status (ICE score).
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- Collection of about ½ tablespoon of your blood for routine laboratory testing. If you are a woman capable of becoming pregnant, you will also have either a urine or blood pregnancy test.
- PET-CT scan to recheck your disease (if you received bridging therapy as mentioned above, or if your most recent PET-CT scan is more than 28 days old).

**Day -5 to -3: Lymphodepleting chemotherapy with cyclophosphamide and fludarabine (Cy/Flu)**
After your leukapheresis procedure and prior to your upcoming YESCARTA treatment, you will receive 2 chemotherapy medicines called fludarabine and cyclophosphamide. Each day for 3 days, these chemotherapy medicines will be given through your vein. These drugs are not intended to treat your cancer directly, but instead to help YESCARTA work with less interference from the cells in your immune system.

To prepare your immune system to receive YESCARTA (upcoming on Day 0), you will have the following things done on the five days before receiving YESCARTA:

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Day -5
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- Collection of about 2 tablespoon of more blood for additional laboratory testing for research purposes.
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- You may be asked to have an optional tumor tissue biopsy for research purposes.
- You may be asked to have an optional spinal tap (lumbar puncture) using a needle inserted into your back to collect a sample of cerebrospinal fluid (CSF) from your nervous system.
- Vital signs.
- Intravenous (IV) infusion of chemotherapy: cyclophosphamide and fludarabine (Cy/Flu).

Day -4
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- Vital signs.
- Intravenous (IV) infusion of chemotherapy: cyclophosphamide and fludarabine (Cy/Flu).

Day -3
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- Vital signs.
- Intravenous (IV) infusion of chemotherapy: cyclophosphamide and fludarabine (Cy/Flu).

Day -2
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.

Day -1
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.

In order to prepare for your upcoming remote telemedicine visits that are part of the research part of the study (that you will have after receiving YESCARTA on Day 0), you and your family member, friend or caregiver will be trained to operate the equipment needed to measure your vital signs (blood pressure,

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heart rate, breathing rate, oxygen saturation, and temperature) and how to report this information at a practice telemedicine visit (conducted with an iPad or similar electronic device that uses the internet). You will utilize a wearable device called Everion, Vital Connect Patch, Blood Pressure cuff and Oximeter to take some of these measurements (see separate Everion information) as part of the research study.

In order to participate in this study, you and your companion (who will stay with you for several days in the apartment) must be willing and able to obtain your vital signs and demonstrate the ability to complete a practice telemedicine visit as part of the research for this study. If you, your companion or your study team determine this will not be possible, then you will stop participating in this study and be offered the option to instead receive YESCARTA outside the study (where your post-YESCARTA monitoring visits would typically involve staying in the hospital for several days as standard of care).

**Day 0: YESCARTA treatment**

In the morning at about 8:00 am, you will report to the clinic for the following:

- Physical exam including obtaining your vital signs.
- Assessment of your nervous system including questions to check your current mental status (ICE score).
- Questions about any problems you are having and any changes to the medicines you are taking including prescriptions and over-the-counter medicines.
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- About 2 tablespoons of blood will be collected from you for additional laboratory testing for research purposes.
- Approximately 1 hour prior to YESCARTA infusion, you will receive prophylactic medication acetaminophen, diphenhydramine and dexamethasone
- Intravenous infusion of YESCARTA over about 30 minutes.

After your YESCARTA infusion, you will be monitored for about 2 hours. If you are doing ok, you will be released and go to the apartment.

Between 3:30 and 5:30 pm in the afternoon, , you and your companion will have a remote telemedicine check-in (conducted online typically with video, using the internet) with a nurse practitioner. You will be in the apartment and the nurse will be located elsewhere. You and the nurse practitioner (NP) will activate the telemedicine App in the electronic device you will use for the research study. Your companion will obtain your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature) and provide the nurse with the information. The nurse will also review your previous

vital signs. You will be asked questions to check your nervous system and current mental status (ICE score) and how you are doing. If you are having problems, the nurse and a doctor working with the nurse may require that you return to the hospital for your safety. If you are doing ok, you will stay in the apartment and return to the clinic in the morning.

At approximately 10:00 pm in the evening, you and your companion will have a remote telemedicine check-in (conducted online typically with video, using the internet) with a nurse practitioner. You will be in the apartment and the nurse will be located elsewhere. You and the nurse practitioner (NP) will activate the telemedicine App in the electronic device you will use for the research study. Your companion will obtain your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature) and provide the nurse with the information. The nurse will also review your previous vital signs. You will be asked questions to check your nervous system and current mental status (ICE score) and how you are doing. If you are having problems, the nurse and a doctor working with the nurse may require that you return to the hospital for your safety. If you are doing ok, you will stay in the apartment and return to the clinic in the morning.

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**Day 1 – Day 14 (every day for 14 days)**

- Day 1 and 2 only: dexamethasone 10mg pill taken orally
- 6:00 AM:
  Early in the morning, your family member, friend or caregiver staying with you in the apartment will obtain and record your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature). You or your companion will call the nurse practitioner telephone line to report the information. You will utilize a wearable device called Everion, Vital Connect Patch, blood pressure cuff, and oximeter to take some of these measurements for research purposes (see separate Everion information).

- 8:00 AM:
  Later in the morning, you will visit the outpatient clinic at 8am each day, including weekends. About ½ tablespoon of your blood will be collected for routine laboratory testing. Your vital signs will be checked. You will be asked about any side effects you are experiencing and about any changes to your medications. Your vital signs log will be reviewed by a nurse with extra training (nurse practitioner) and your telemedicine equipment will be checked. You will have a physical exam conducted by the nurse practitioner and doctor; they will review data and ask you questions to check your nervous system (ICE score). You will be released back to the apartment by about 10am or shortly after if no criteria for hospitalization are met.

  In association with your daily clinic visit, the following additional items are scheduled to be performed on the following days:
  - Day 1: You may be asked to have an optional spinal tap (lumbar puncture) using a needle inserted into your back to collect a sample of cerebrospinal fluid (CSF) from your nervous system as a standard of care procedure.
  - Day 2: You may be asked to have an optional tumor tissue biopsy for research purposes.
  - Days 1, 2, 3, and 4: About 2 tablespoons of additional blood will be collected for additional laboratory testing for research purposes.
  - Days 7 and 14: About 2 tablespoons of additional blood will be collected for additional laboratory testing for research purposes.

- 12:00 Noon:
  At mid-day, your family member, friend or caregiver staying with you in the apartment will obtain your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature) and record them in the logbook for research purposes. You or your companion

will call the nurse practitioner telephone line if pre-specified criteria for hospital admission are met. You will utilize a wearable device called Everion, Vital Connect Patch, blood pressure cuff, and oximeter to take some of these measurements (see separate Everion information) for research purposes.

- Between 3:30 PM and 5:30 PM and at 10:00 PM:
  You will have an online telemedicine visit (conducted remotely by iPad or similar electronic device) with a nurse practitioner.

  You and the nurse practitioner will activate the telemedicine App in the electronic device you will use for the study. Your companion will obtain your vital signs (blood pressure, heart rate, breathing rate, oxygen saturation, and temperature) and provide the nurse with the information. The nurse will also review your previous vital signs. You will be asked questions about how you are doing, and your answers will be recorded. A neurological assessment will be completed, and your ICE score calculated.

**For your safety, you will be admitted to the hospital (for observation or as inpatient, depending on the severity of symptoms) for any of the following:**

1. Fever ≥ 102°F or higher, or fever 100.4 to < 102 with a change in status; for example, low blood pressure (hypotension), altered mental status, or other sign(s) of possible organ problems.
2. Hemodynamic instability (including any of the following):
   - Low blood pressure requiring IV fluids;
   - Mean arterial pressure (MAP) < 20% of baseline;

     note: MAP is sometimes calculated as (systolic blood pressure + 2x diastolic pressure) / 3; [for example, a blood pressure of 83/50 mmHg might be reported with a MAP of 61 mmHg, by the following calculation: (83 + 2x50) / 3 = 183/3 = 61 mmHg];
   - Systolic blood pressure (SBP) < 90 mmHg;
   - Heart rate (HR) > 130/min.
3. Low blood oxygenation (hypoxia) with oxygen saturation (SpO2) < 90%.
4. Abnormal neurological function (grade 1 or higher immune effector cell-associated neurotoxicity syndrome [ICANS]) based on questions about your mental status (ICE score).

5. Other criteria at the discretion of your study doctor or the covering physician working with your nurse practitioner.

**Day 21**

Twenty-one days (or sometime between 18 and 24 days – i.e. ±3 days) after your YESCARTA treatment, you will visit the doctor's office for the following to check how you are doing:

- Physical exam including obtaining your vital signs.
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- Questions about any side effects you are experiencing and about any changes to your medications.

**Day 30**

Thirty days (or sometime between 30 and 33 days – i.e. +0-3 days) after your YESCARTA treatment, you will visit the doctor's office for the following to check how you are doing:

- Physical exam including obtaining your vital signs.
- Assessment of your nervous system including questions to check your current mental status (ICE score).
- Collection of about ½ tablespoon of your blood for routine laboratory testing.
- About 2 tablespoons of blood will be collected from you for additional laboratory testing for research purposes.
- Questions about any side effects you are experiencing and about any changes to your medications.
- You will be asked to complete a questionnaire about your quality of life and state of health.
- PET-CT scan to recheck your disease.

**2 months**

Two months (± 7 days) after your YESCARTA treatment, you will visit the doctor's office for the following to check how you are doing:

- Physical exam including obtaining your vital signs.
- Assessment of your nervous system including questions to check your current mental status (ICE score).

**3 months**

Three months (± 7 days) after your YESCARTA treatment, you will visit the doctor's office for the following to check how you are doing:

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- Physical exam including obtaining your vital signs.
- Collection of about ¼ tablespoon of your blood for routine laboratory testing.
- About 2 tablespoons of blood will be collected from you for additional laboratory testing for research purposes.
- Assessment of your nervous system including questions to check your current mental status (ICE score).
- You will be asked to complete a questionnaire about your quality of life and state of health.
- PET-CT scan to recheck your disease.

**6 months**
Six months (± 7 days) after your YESCARTA treatment, you will visit the doctor's office for the following to check how you are doing:

- Physical exam including obtaining your vital signs.
- Collection of about 2 tablespoons of your blood for laboratory testing for research purposes.
- You will be asked to complete a questionnaire about your quality of life and state of health.
- PET-CT scan to recheck your disease.

9 months
Nine months (± 7 days) after your YESCARTA treatment

- You will be asked to complete a questionnaire about your quality of life and state of health.

**12 months**
Twelve months (± 7 days) after your YESCARTA treatment, about 2 tablespoons of your blood will be collected for laboratory testing for research purposes.

- You will be asked to complete a questionnaire about your quality of life and state of health.

**Side effects and risks that you can expect if you take part in this study:**
Throughout your participation in this study, you will be given medicines and treatments to help prevent or treat any side effects. You will be made as comfortable as possible.

You may experience all, some, or none of the adverse effects listed below. If you do experience any of the listed adverse effects, the events often start during the first week after YESCARTA infusion and usually resolve completely within 1 to 4 weeks. Occasionally some side effects may take longer to improve.

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If significant new findings are found during the conduct of the study that could affect your willingness to continue to participate, information will be reported to you as soon as possible.

Not all potential side effects (also known as adverse effects or adverse events) in humans are known. In addition to the adverse effects noted below, there is a risk that you may experience new or unexpected adverse effects, some of which may have a delayed onset. You may also experience side effects that are more severe than those reported to date. If you have any side effects as a result of your participation in this study, please tell your study doctor.

Your study doctor will closely monitor your health throughout this study. Your study doctor will discuss with you any questions regarding risks, discomforts, and side effects.

**Important known risks of YESCARTA**

**Cytokine release syndrome (CRS)** is an important known risk associated with YESCARTA therapy. CRS is a group of symptoms associated with systemic inflammation throughout the body. CRS can be very serious, life-threatening and even cause death.

Release of cytokines (proteins in certain cells of the body) by the immune system is normally involved in otherwise protective and desirable inflammation reactions in the body. One way that cytokine release normally occurs in the body, is when T-cells of the immune system are activated. Because YESCARTA treatment increases T-cell activity, there is a risk that YESCARTA therapy can cause too much cytokine release in the body, and possibly lead to cytokine release syndrome (CRS).

If too many cytokines are released throughout the body in an uncontrolled way, this may result in a variety of adverse events including effects on your heart, stomach and intestines, liver, blood clotting, kidneys, lungs and skin. You can experience symptoms of cytokine release syndrome (CRS) such as:

- **Fever**
- **Chills**
- **Headache**
- **Nausea**
- **Vomiting**
- **Fatigue**
- **Joint pain**

- **Low blood pressure**
- **Rapid heart rate**
- **Low oxygen levels in the blood.**

In clinical trials, the onset of CRS was typically within 2 days after infusion of YESCARTA, with a range of onset from 1 to 12 days. CRS typically resolved within approximately 7 days. CRS has generally been manageable and reversible with supportive care measures and medications, although rarely fatal events have occurred. Severe cases of CRS have occurred in clinical trial patients that required medications to maintain a normal blood pressure as well as placement of a breathing tube for mechanical ventilation (breathing machine).

In a previous study in which 108 patients with lymphoma (relapsed/refractory B-cell non-Hodgkin lymphoma) received YESCARTA, cytokine release syndrome (CRS) occurred in 101 out of 108 (94%) patients. In 14 out of 108 (13%) patients, CRS was considered ≥ Grade 3 (Lee grading system) and caused serious toxicity to body organs, required multiple drugs to maintain blood pressure (pressors), and the patients needed oxygen support for breathing (supplemental oxygen and/or mechanical ventilation with a breathing tube).

After receiving YESCARTA on Day 0, if you experience cytokine release syndrome (CRS) between Day 0 thru Day 14, you may be given a drug called tocilizumab (pronounced "toe-si-liz-oo-mab" and also known as ACTEMRA), which is approved for the treatment of CRS (as well as several types of arthritis). Tocilizumab is an antibody, which for CRS is recommended as an intravenous (IV) infusion into a vein, that helps against inflammation processes in the immune system that contribute to CRS.

In patients receiving tocilizumab, the most common adverse reactions in at least 5 in 100 (5%) patients include: upper respiratory tract infections, nasopharyngitis (inflammation inside the nose and back of the throat), headache, high blood pressure (hypertension), increased liver enzyme (ALT) blood test, and injection site reactions. Also, because of its activity in helping to slow or calm the immune system, an important additional side effect or risk of tocilizumab treatment is the possibility of serious infections. Serious infections leading to hospitalization or death including tuberculosis (TB), bacterial , invasive fungal, viral, and other opportunistic infections have occurred in patients receiving tocilizumab.

**Neurologic toxicities** (side effects involving the nervous system) including fatal or life-threatening reactions have occurred in patients receiving YESCARTA. Neurologic toxicities associated with YESCARTA

treatment can occur at the same time as cytokine release syndrome (CRS) discussed above, or after CRS has improved or gone away.

In one study involving YESCARTA, neurologic toxicities occurred in 87% of patients. 98% of all neurologic toxicities occurred within the first 8 weeks of YESCARTA infusion. The middle (median) time to onset of neurologic toxicity was 4 days after starting YESCARTA (range of 1 to 43 days). The middle (median) duration was 17 days for how long neurologic toxicities lasted. Serious neurologic toxicity (Grade 3 or higher) consistent with a likely need for hospitalization occurred in 31% of patients.

The most common neurologic toxicities associated with YESCARTA (and the percentage of patients who experienced such side effects) included:

- **Encephalopathy** (decreased brain function) (57%)
- **Headache** (44%)
- **Tremor** (rhythmic shaking due to a problem in the nervous system causing uncontrolled muscle contractions; typically in the hands, but possibly elsewhere like the arms, head, vocal cords, trunk, legs, and/or feet) (31%)
- **Dizziness** (21%)
- **Aphasia** (difficulty speaking or understanding speech) (18%)
- **Delirium** (disturbance in consciousness) (17%)
- **Insomnia** (difficulty sleeping) (9%)
- **Anxiety** (9%).

Prolonged encephalopathy (decreased brain function) lasting up to 173 days was noted. Serious events including leukoencephalopathy (inflammation of the white matter of the brain), myelitis (inflammation of the spinal cord which can lead to paralysis) and seizures have occurred with YESCARTA. Fatal and serious cases of cerebral edema (fluid build-up around the brain causing pressure on the brain) have occurred in patients treated with YESCARTA.

Neurologic events observed in clinical trial patients treated with YESCARTA have generally been manageable and reversible with supportive care measures and administration of medications. Severe neurologic events have occurred that required placement of a breathing tube for mechanical ventilation (breathing machine) and care of the patient in the intensive care unit. If you develop a neurologic event(s) after YESCARTA therapy, you should not drive or operate heavy or potentially dangerous machinery until at least 4 weeks after the neurologic event(s) have been deemed completely resolved by your study doctor.

Brain swelling (cerebral edema) and spinal cord swelling (spinal cord edema) are serious neurologic risks associated with YESCARTA. Death due to brain swelling has been reported rarely in studies involving chimeric antigen receptor (CAR) T cell products, including YESCARTA. Symptoms may include headache, nausea, vomiting, changes in vision, inability to speak or think clearly, severely decreased brain function that can lead to lethargy and coma (loss of consciousness), difficulty breathing, weakness or paralysis, permanent disability, and death. Brain and spinal cord swelling require aggressive treatment including placing a breathing tube for mechanical ventilation (breathing machine), administration of medications, or very rarely, surgery to decrease the swelling or pressure. The exact cause of brain and spinal cord swelling in connection with treatment of CAR T cell products like YESCARTA is not fully understood at this time.

After receiving YESCARTA on Day 0, you will be monitored for neurologic toxicities. If you experience neurologic side effects between Day 0 thru Day 28, you may be given an anti-seizure medicine called levetiracetam (pronounced "lev-eh-teer-ASS-eh-tam" and also known as KEPPRA). Levetiracetam is an approved drug for the treatment of various forms of epilepsy. For patients receiving YESCARTA therapy, a main purpose of levetiracetam medication is to help prevent moderate neurologic symptoms from becoming more severe – for example, to help avoid or to control the possible side effect of seizure.

The most common side effects of levetiracetam in adult patients include: somnolence (sleepiness or drowsiness), asthenia (abnormal weakness or lack of energy), infection, and dizziness.

As outlined below (with percentages shown for each event) data regarding side effects, also called adverse reactions, associated with YESCARTA treatment are available from a previous study in which 108 patients with lymphoma (relapsed/refractory B-cell non-Hodgkin lymphoma) received YESCARTA.

The most common adverse reactions occurring in at least 20 out of 100 patients (≥20%) receiving YESCARTA included:

- **Cytokine release syndrome** (CRS, systemic inflammation) (94%)
- **Fever** (86%)
- **Hypotension** (low blood pressure) (57%)
- **Encephalopathy** (decreased brain function) (57%)
- **Tachycardia** (rapid heart rate) (57%)
- **Fatigue** (46%)
- **Headache** (45%)

- **Decreased appetite** (44%)
- **Chills** (40%)
- **Diarrhea** (38%)
- **Febrile neutropenia** (fever associated with a low white blood cell count) (34%)
- **Infections** (of unspecified cause) (26%)
- **Nausea** (34%)
- **Hypoxia** (low oxygen in the blood) (32%)
- **Tremor** (rhythmic shaking due to a problem in the nervous system causing uncontrolled muscle contractions; typically in the hands, but possibly elsewhere like the arms, head, vocal cords, trunk, legs, and/or feet) (31%)
- **Cough** (30%)
- **Vomiting** (26%)
- **Dizziness** (21%)
- **Constipation** (23%)
- **Cardiac arrhythmias** (abnormal heart rhythm) (23%).

Less common adverse reactions occurring in at least 10 but less than 20 out of 100 patients (≥10% but <20%) receiving YESCARTA included:

- **Edema** (swelling caused by fluid build-up) (19%)
- **Motor dysfunction** (such as muscle spasms and/or muscle weakness) (19%)
- **Dyspnea** (shortness of breath) (19%)
- **Aphasia** (difficulty speaking or understanding speech) (18%)
- **Pain in extremity** (for example, in fingers, toes, arms, and/or legs) (17%)
- **Delirium** (disturbance in consciousness) (17%)
- **Viral infection** (16%)
- **Weight decreased** (16%)
- **Hypogammaglobulinemia** (low levels of antibodies [proteins] that help fight infections (15%)
- **Back pain** (15%)
- **Hypertension** (high blood pressure) (15%)
- **Abdominal pain** (14%)
- **Muscle pain** (14%)
- **Bacterial infections** (13%)
- **Pleural effusion** (fluid around the lungs) (13%)

- **Renal insufficiency** (decreased kidney function; typically with increased blood creatinine) (12%)
- **Dry mouth** (11%)
- **Dehydration** (11%)
- **Arthralgia** (joint pain) (10%)
- **Thrombosis** (abnormal blood clotting) (10%).

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Serious adverse reactions occurred in fifty-two percent (52%) of patients. The most common serious adverse reactions occurring in more than 2 in 100 patients (>2%) receiving YESCARTA included:

- **Encephalopathy** (decreased brain function)
- **Fever**
- **Lung infection**
- **Febrile neutropenia** (fever and low white blood cell count; increased risk of infection)
- **Cardiac arrhythmia** (abnormal heart rhythm)
- **Cardiac failure** (heart failure)
- **Urinary tract infection** (UTI)
- **Renal insufficiency** (decreased kidney function; typically with increased blood creatinine)
- **Aphasia** (difficulty speaking or understanding speech)
- **Cardiac arrest** (heart stops beating)
- ***Clostridium difficile* infection** (typically causing severe diarrhea and colitis, a serious inflammation of the colon)
- **Delirium** (disturbance in consciousness)
- **Hypotension** (low blood pressure)
- **Hypoxia** (low oxygen in the blood).

The most common adverse reactions Grade 3 or higher (indicating severity often needing hospitalization) occurring in at least 10 in 100 patients (≥ 10%) receiving YESCARTA included:

- **Febrile neutropenia** (fever associated with a very low white blood cell count) (31%)
- **Encephalopathy** (decreased brain function) (29%)
- **Fever** (16%)
- **Infections** (unspecified cause) (16%)
- **Hypotension** (low blood pressure) (15%)
- **Cytokine release syndrome** (CRS, systemic inflammation) (13%)
- **Lung infections** (possibly viral or bacterial) (~13%)
- **Hypoxia** (low oxygen in the blood) (11%).

Other clinically important adverse reactions occurring in less than 10 in 100 patients (<10%) treated with YESCARTA included:

- **Coagulopathy** (changes in the ability of blood to clot) (2%)
- **Cardiac failure** (heart failure) (6%)

- **Cardiac arrest** (heart stops beating) (4%)
- **HLH/MAS** (**hemophagocytic lymphohistiocytosis / macrophage activation syndrome**) (life-threatening multi-organ failure associated with widespread inflammation throughout the body due to malfunctioning immune system (1%)
- **Hypersensitivity** (allergic reaction) (1%)
- **Fungal infections** (5%)
- **Ataxia** (loss of control of body movements) (6%)
- **Seizure** (burst of uncontrolled electrical activity in the brain; can cause abnormal movements like stiffness, twitching or limpness, or less obvious symptoms like altered sensations or states of awareness) (4%)
- **Dyscalculia** (difficulty understanding or calculating numbers; sign of brain dysfunction) (2%)
- **Myoclonus** (sudden muscle contraction/jerk) (2%)
- **Pulmonary edema** (fluid in the lungs) (9%)
- **Rash** (9%)
- **Capillary leak syndrome** (fluid or proteins leak into surrounding tissues) (3%).

Laboratory abnormalities Grade 3 (severe or medically significant but not immediately-life-threatening) or Grade 4 (life-threatening requiring urgent intervention) occurring in at least 10 in 100 patients (≥ 10%) after YESCARTA treatment included:

- **Lymphopenia** (reduced lymphocytes, a type of white blood cells; increased risk of infection) (100%)
- **Leukopenia** (reduced white blood cells; increased risk of infection) (96%)
- **Neutropenia** (low neutrophils, a type of white blood cells; increased risk of infection) (93%)
- **Anemia** (decreased red blood cells that carry oxygen through the body; can cause fatigue and weakness) (66%)
- **Thrombocytopenia** (decreased platelets needed for blood clotting; increased risk of bleeding) (58%)
- **Hypophosphatemia** (low phosphate) (50%)
- **Hyponatremia** (low sodium) (19%)
- **Hyperuricemia** (uric acid increased) (13%)
- **Direct bilirubin increased** (can indicate poor liver function) (13%)
- **Hypokalemia** (low potassium) (10%)
- **Alanine aminotransferase (ALT) increased** (elevated liver enzyme; can indicate liver stress or liver injury) (10%).

Difficulty swallowing, spinal cord swelling (spinal cord edema) and partial or total loss of use of limbs have been reported for patients not participating in clinical trials. Because these reactions were reported voluntarily from a population of unknown size, estimates of frequency cannot be made.

It is possible that YESCARTA may not work to control your disease. Also, because of the side effects of YESCARTA discussed above, and potentially other side effects we don't know about yet, it is possible that YESCARTA therapy may make you feel worse, or even contribute to your death.

After your cells are collected to make YESCARTA, a specific virus called a retrovirus will be used to insert a gene into your cells in the laboratory in order to make your custom YESCARTA. The retrovirus has been disabled to prevent it from multiplying or growing on its own and infecting your body after YESCARTA is infused into you, but there is a theoretical concern that the retrovirus used to make YESCARTA could cause an infection.

Researchers have wondered whether a transferred gene might sometimes land in a place in a cell where it can cause harm. This happened to two children in another study (which did not involve YESCARTA but did use a similar technology), where genes were inserted into stem cells. After getting the gene transfer into their stem cells, the children developed leukemia (a type of blood cell cancer). A group of experts looked at all the test results and concluded that gene transfer caused the leukemia by causing some cells to grow out of control. The children appeared to be responding to treatment of the leukemia, but their long-term health is unknown at this time. In this study, genes are transferred to your mature white blood cells (not stem cells, which occurred in the children), and this has not knowingly resulted in leukemia.

**Risks of Lymphodepleting Chemotherapy**

You should discuss precautions, benefits and risks associated with the lymphodepleting chemotherapy drugs cyclophosphamide and fludarabine (Cy/Flu) with your study doctor prior to participating in this study. You may experience all, some or none of the events listed below:

- Low blood counts:
  - Decrease in the number of white blood cells (neutropenia and/or lymphopenia); this increases the risk of infection, which may be life-threatening.
  - Fever with a very low white blood cell count (febrile neutropenia).

  - Decrease in the number of cells that clot the blood (thrombocytopenia), which may cause bleeding or bruising; this may be serious or life-threatening and may require a blood transfusion; there have been rare cases of fatal bleeding events.
  - Decrease in the number of cells that carry oxygen through the body (anemia), which can cause things like fatigue, weakness, dizziness, and shortness of breath.
- Electrolyte or mineral changes in the blood (for example, changes in sodium, calcium and/or phosphate).
- There have been rare cases of fatal stroke.
- Other risks associated with chemotherapy should be discussed with your study doctor prior to participating in this study.

To help protect against the risk of bleeding in bladder (which might initially be noted as blood in the urine) caused by chemotherapy, you may receive a medication called mesna. Some patients have reported a bad taste or experienced nausea and vomiting after receiving mesna. Your study doctor will discuss mesna with you, but some other possible side effects of mesna include allergic reaction and a rare, but very serious, rash called Stevens-Johnson syndrome (SJS). Cases of SJS are often a reaction to medication and start with flu-like symptoms, followed by a painful rash that spreads and blisters. The top layer of affected skin then dies, sheds and begins to heal after several days. SJS is a medical emergency that usually requires hospitalization for wound care, pain management, and control of skin regrowth. It can take weeks to months to recover. Stevens-Johnson syndrome and a more severe form of the condition called toxic epidermal necrolysis (TEN), which typically involves more than 30% of the skin surface, can both cause death.

**Risks of Procedures**

Blood Collection

Pain, redness, soreness, bruising, or infection may occur at the needle stick site. Rarely some people faint. The study doctor may put some cream (called EMLA) on your skin to numb the area so you will not feel the needle stick as much. The numbing cream may make your skin or the area have a change in skin color, but this is rare.

Intravenous (IV) Catheter

Prior to beginning YESCARTA, your study doctor may need to insert an intravenous (IV) catheter for the delivery of chemotherapy and YESCARTA and to take blood samples. IV catheters can usually be placed in a hand, arm, or leg. These are known as "peripheral" IVs. IVs placed in the central circulation, like the internal jugular vein (neck) or subclavian vein (just beneath the collar bone), are known as" central lines." You should discuss this with your study doctor. For both types of intravenous catheter, the area

will be numbed (with an anesthetic) before the catheter is inserted. During the insertion, you could feel a pinch and shortly thereafter bleeding, redness, or a bruise could develop. Rarely, an infection could occur if not kept clean. For central catheters, although rare, they can sometimes cause collapse of a lung or cause bleeding. Lung collapse is usually treated by putting a tube into your chest for a few days to allow your lung to expand. Pressure is placed on any area that might bleed.

Leukapheresis

Leukapheresis is the first step in the process of treating you with YESCARTA. During this procedure, your own white cells are removed from your blood in order to prepare them for your YESCARTA treatment. During leukapheresis, you may experience tingling in your face and lips due to the medicine used to keep your blood from clotting during the procedure. The nurses may give you a calcium-containing antacid, like TUMS, to chew that helps to take away this tingling. Rarely, people may experience lightheadedness or dizziness. You will likely be asked to drink plenty of water so you are well hydrated, and that you eat prior to the procedure to help prevent lightheadedness or dizziness. Rare complications of leukapheresis include lowered blood pressure, bleeding, or infection at the entry site of the IV.

Echocardiography (ECHO)

An ECHO is a test that shows how the heart moves as it beats. During an ECHO test, ultrasound (high-frequency sound waves) from a hand-held wand placed on your chest provides pictures of the heart's valves and chambers and helps doctors evaluate the pumping action of the heart. You should feel no major discomfort during the test. You may feel coolness on your skin from the gel on the wand and a slight pressure of the wand on your chest.

Electrocardiogram (ECG)

An ECG is a test that measures the heart's electrical activity. You will typically be asked to lie flat on a table and several small electrode pads (like stickers) will be placed on your body. This test takes about 10 minutes. The test may cause some redness or itching where the pads are placed.

Lumbar Puncture

A lumbar puncture (also known as spinal tap) may be done to sample cerebrospinal fluid (CSF), which is the fluid that surrounds your brain and spinal cord, to help determine if your disease is affecting the brain. In order to collect cerebrospinal fluid (CSF), you may be asked to undergo lumbar puncture before and after YESCARTA treatment, as well as anytime your condition or disease affects your nervous system in such a way that doctors feel information from a lumbar puncture is necessary for your safety.

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A lumbar puncture is done by inserting a thin, hollow needle between 2 of the vertebrae (bones) in your lower back. Prior to the lumbar puncture, medicine (local anesthetic) is typically given to help numb the area. Lumbar puncture may cause headache, local pain or discomfort, bleeding, or infection. While rare, the procedure may also cause bleeding into the fluid surrounding the spinal cord and brain or an abnormal movement of your brain inside your skull (herniation), either of which can be fatal. After the procedure you may develop a headache that may be accompanied by nausea, vomiting, and dizziness.

Bone Marrow Aspirate and Biopsy

A bone marrow aspirate and biopsy if necessary to obtain more information about your disease may be performed using a hollow needle to remove some liquid bone marrow and a small core of bone marrow. Before the biopsy, medicine is given (local anesthetic) to help numb the area where the needle will be inserted. The procedure may cause discomfort, pain, bleeding, scarring, or infection at the site of the aspirate/biopsy.

Tumor Tissue Biopsy

Before and after YESCARTA treatment, you may be asked to have a tumor tissue biopsy, which is a procedure that involves removing samples of tumor surgically or percutaneously (through the skin) using a hollow "core" needle. To undergo a biopsy, you will be given medication to help numb the area and reduce pain. A small cut may then be made in the skin. The biopsy may cause some pain and discomfort or bleeding. It is possible, but not likely, that you could get an infection. In very rare cases, people might have an allergic reaction to the numbing medicine. The allergic reaction could include rash/hive, flushing of the face, itching, wheezing, and tightness in the throat. There may be a small scar from the biopsy.

Magnetic Resonance Imaging (MRI)

An MRI is a type of scan using magnets to make a picture of the body and identify areas that could be injured or suspicious for diseases such as cancer. An MRI of your brain is intended during screening to help ensure you do not have detectable cancer in your central nervous system or brain. Some people cannot have an MRI because they have some type of metal in their body. For example, if you have a heart pacemaker, artificial heart valves, metal implants such as metal ear implants, pieces or fragments of bullets or shrapnel, chemotherapy or insulin pumps, or any other metal such as metal clips or rings, you cannot have an MRI.

During an MRI, you will lie in a small closed area usually inside a large magnetic tube. Some people are scared or anxious in small places (claustrophobic). The MRI scanner makes loud banging noises while

taking a measurement, so either ear plugs or specially designed headphones will be used to reduce the noise.

PET-CT Scan

Positron emission tomography (PET) scanning uses radioactive glucose (sugar) to study how organs and tissues in the body are functioning. Abnormal cells in the body use glucose at a different rate than normal cells, allowing the scanner to create a detailed picture of how your body is working. A CT scan, also called computerized tomography (CT), is an X-ray procedure where a high-speed scanner is used to take multiple images or pictures of your body. A computer then creates images of your body incorporating the 2 scans (PET plus CT). Procedures such as PET-CT scans will be used during this study to examine your response to treatment.

You will be asked to lie still on a table, and you may have to hold your breath for a few seconds to avoid blurring the pictures. You may hear slight buzzing, clicking, and/or whirring sounds as the CT scanner moves around your body. You may experience some discomfort, anxiety, or fatigue from lying inside the scanner. The contrast dye used to improve the image quality may cause you to get a metallic taste in your mouth, to feel warm throughout your body for a few moments, and rarely cause nausea or vomiting. Before you begin, it is very important to tell the team performing these scans if you have any allergies to drugs or food (like shellfish).

Radiation Risks:

This research study may involve exposure to radiation from up to 1 CT scan of the head, and 5 PET/CT scans or 5CT scans of the Chest, Abdomen, and Pelvis. This radiation exposure is not necessary for your medical care and is for research purposes only. The total amount of radiation that you will receive by participating in this study is equal to your body receiving about 14% more than the amount allowed in a year for people who are exposed to radiation as part of their work. Please tell your doctor if you have taken part in other research studies or received any other medical care recently involving radiation. If you are pregnant or breast feeding, you SHOULD NOT participate in this research study.

To help protect your bladder from the effects of the injected radioactive substances, you should drink plenty of fluids and empty your bladder every two hours for at least the first six hours after you have each PET/CT scan.

Comment about Risk of Outpatient Therapy

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Outpatient therapy is associated with the potential risk of delay in being able to administer intervention for specific side effects or complications that may arise during therapy. These include but are not limited to tocilizumab for cytokine release syndrome, corticosteroids neurological events, and antibiotics for fever.

This risk is mitigated by the following processes

1. Participants are housed within a mile radius of Vanderbilt and we have an established system to rapidly get them to the hospital (bypassing the emergency room) and start intervention within 1 hour
2. Vanderbilt has a track record of safety with myeloablative transplant in the outpatient setting
3. A dedicated phone line that goes directly to a nurse practitioner 24 hours a day
4. Wearable devices that report vital signs in real time with alerts and data available immediately to study personnel
5. Home health nurse visit to participants
6. Telemonitoring visit in the night

VitalConnect Patch:
VitalConnect Patch is used for cardiac monitoring. The adhesives in this product may cause adverse skin reactions. Discomfort or irritation may occur; if this occurs the patch may be removed.

Everion Arm Band
Wearing the arm band may cause discomfort. In addition, wearing multiple monitoring devices may also be uncomfortable.

**Reproductive Health/Sexual Activity and Pregnancy**

Some medications have the potential to cause side effects in the reproductive system of women or men that could cause harm, including birth defects, in subsequent pregnancies. There has not been enough study of YESCARTA to be able to predict the risks to pregnant women, the developing fetus, or to the breast-feeding child.

Therefore, women and female partners of male patients should not attempt pregnancy, and women should not be pregnant or breast-feeding for at least 6 months after conditioning chemotherapy (lymphodepleting chemotherapy). Women of childbearing potential must have a negative pregnancy test prior to enrollment because of the potentially dangerous effects of the conditioning chemotherapy on the fetus and the unknown risks from YESCARTA.

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If sexually active with the ability to become pregnant or to cause pregnancy, both women and men participating in this study must agree to use an effective birth control method as discussed with and directed by their study doctor, for at least 6 months after completion of conditioning chemotherapy. If you become pregnant and/or are breast-feeding within 6 months of conditioning chemotherapy, it is important that you tell your study nurse/doctor immediately.

If you are male and your partner becomes pregnant within 6 months after you complete conditioning chemotherapy, it is important that you tell your study nurse/doctor immediately.
If you are female and known to be post-menopausal, you are not required to use contraception while in this study. Rarely, women considered to be post-menopausal become pregnant.

In the event of pregnancy, the study team may request additional information about the pregnancy or the outcome of the pregnancy in an effort to better understand the effects of YESCARTA treatment on a pregnancy and/or the fetus.

**Risks that are not known:**
Patients receiving YESCARTA are typically required to spend several days in the hospital, even if their YESCARTA treatment is well tolerated. Because patients in this study will receive YESCARTA in the outpatient setting, with fewer time required at the hospital, there may be risks that we do not know about at this time.

**Good effects that might result from this study:**
The benefits to science and humankind that might result from this study: Taking part may help patients with cancer get better or more accessible care in the future.

**Payments for your time spent taking part in this study or expenses:**
You will not be compensated for your participation.

**Costs to you if you take part in this study:**
If you agree to take part in this research study, you and/or your insurance will not have to pay for the tests and treatments that are being done only for research. However, you are still responsible for paying for the usual care you would normally receive for the treatment of your illness. This includes treatments and tests you would need even if you were not in this study. These costs will be billed to you and/or your insurance. You should learn before participating in this study which part of the research-related care will be free, which costs your insurer will pay for, and which costs will be your responsibility.

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You have the right to ask what it may cost you to take part in this study. If you would like assistance, financial counseling is available through the Vanderbilt Financial Assistance Program. The study staff can help you contact this program. You have the right to contact your insurance company to discuss the costs of your routine care (non-research) further before choosing to be in the study. You may choose not to be in this study if your insurance does not pay for your routine care (non-research) costs and your doctor will discuss other treatment plans with you.

**Payment in case you are injured because of this research study:**
If it is determined by Vanderbilt and the Sponsor-Investigator (with Funder input) that an injury occurred, then you and/or your insurance may be billed for the cost of immediate medical care provided **at Vanderbilt** to treat the injury. You will be responsible for any copayments or deductibles associated with the treatment of that injury.

There are no plans for Vanderbilt or the Funder(s) to pay for the costs of any additional care. There are no plans for Vanderbilt or the Funder(s) to give you money for the injury.

**Who to call for any questions or in case you are injured:**
If you should have any questions about this research study or if you feel you have been hurt by being a part of this study, please feel free to contact Vanderbilt-Ingram Cancer Center at (877) 936-8422 or (615) 322-5000 and ask for Olalekan Oluwole, MD, MPH.

For additional information about giving consent or your rights as a person in this study, to discuss problems, concerns, and questions, or to offer input, please feel free to call the VUMC Institutional Review Board Office at (615) 322-2918 or toll free at (866) 224-8273.

**Reasons why the study doctor may take you out of this study:**
Your study doctor might take you out of the study for reasons such as:

- You are unable to tolerate the treatment, or you have a side effect which the study doctor feels should end the treatment.
- Your disease spreads or gets worse (progresses).
- You have another serious illness or need major surgery.
- You do not follow the study doctor's instructions.
- The study doctor feels it is not in your best interest for you to continue in the study or decides to stop the study.

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| PI: | Olalekan O. Oluwole, MD, MPH |

If you are removed from the study, the reason will be explained to you.

**What will happen if you decide to stop being in this study?**
If you decide to stop being part of the study, you should tell your study doctor. Deciding to not be part of the study will not change your regular medical care in any way.

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

**Clinical Trials Reporting Program**.
Vanderbilt's NCI-Designated Cancer Center or the Sponsor registers National Cancer Institute (NCI)-supported clinical trials with NCI though their Clinical Trials Reporting Program (CTRP) to provide study related information. The data provided will include the following identifiable information that may identify you: birth month/year and five-digit zip code. NCI uses the data to manage and enhance the nation's investment in cancer research.

**Confidentiality:**
All efforts within reason will be made to keep your personal information in your research record confidential but total confidentiality cannot be guaranteed. Your information and samples will be given a code. Dr. Oluwole, his staff, and other authorized people will be the only people who know your personal information.

Study data will be recorded in a Vanderbilt electronic database which is maintained by a research coordinator and data manager at Vanderbilt. The electronic database is password protected in order to help protect your identity. Your study records will be locked up in the clinical trials office.

Vanderbilt may share your information, without identifiers, to others or use it for other research projects not listed in this form. Vanderbilt, Dr. Oluwole and his staff will comply with any and all laws regarding the privacy of such information. There are no plans to pay you for the use or transfer of this de-identified information.

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Disclosures that you consent to in this document are not protected. This includes putting research data in the medical record or sharing research data for this study or future research. Disclosures that you make yourself are also not protected.

**Privacy:**
Any samples and information about you may be made available to others to use for research. To protect your privacy, we will not release your name. You will not receive any benefit as a result of the tests done on your samples. These tests may help us or other researchers learn more about the causes, risks, treatments, or how to prevent this and other health problems.

Your samples may be used to make new products or tests. These may have value and may be developed and owned by the study staff, Vanderbilt University, Vanderbilt University Medical Center, and/or others. If this happens, there are no plans to provide money to you.

**Authorization to Use/Disclose Protected Health Information**
**What information is being collected, used, or shared?**
To do this research, we will need to collect, use, and share your private health information. By signing this document, you agree that your health care providers (including both Vanderbilt University Medical Center and others) may release your private health information to us, and that we may use any and all of your information that the study team believes it needs to conduct the study. Your private information may include things learned from the procedures described in this consent form, as well as information from your medical record (which may include information such as HIV status, drug, alcohol or STD treatment, genetic test results, or mental health treatment).

**Who will see, use or share the information?**
The people who may request, receive or use your private health information include the study sponsor Vanderbilt Medical Center and its agents or contractors, study safety monitors and auditors, data managers and other agents and contractors used by the study team, researchers and study team members. Additionally, we may share your information with other people at Vanderbilt, for example if needed for your clinical care or study oversight. Also, your records may be seen by people from regulatory authorities (like the US Food and Drug Administration [FDA]), auditors, and the IRB. By signing this form, you give permission to the research team to share your information with others outside of Vanderbilt University Medical Center. This may include the funder of the study and its agents or contractors, outside providers, and government agencies. We try to make sure that everyone who sees your information keeps it confidential, but we cannot guarantee that your information will not be

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shared with others. If your information is disclosed by your health care providers or the research team to others, federal and state confidentiality laws may no longer protect it.

**Do you have to sign this Authorization?**
You do not have to sign this Authorization, but if you do not, you may not join the study.

**How long will your information be used or shared?**
Your Authorization for the collection, use, and sharing of your information does not expire. Additionally, you agree that your information may be used for similar or related future research studies.

**What if you change your mind?**
You may change your mind and cancel this Authorization at any time. If you cancel, you must contact the Principal Investigator in writing to let him know using the contact information provided in this consent form. Dr. Oluwole's mailing address is:

Olalekan Oluwole, MD, MPH
Vanderbilt University Medical Center
3927 The Vanderbilt Clinic
1301 Medical Center Drive
Nashville, TN 37232

Your cancellation will not affect information already collected in the study, or information that has already been shared with others before you cancelled your authorization.

If you decide not to take part in this research study, it will not affect your treatment, payment or enrollment in any health plans or affect your ability to get benefits. You will get a copy of this form after it is signed.

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**STATEMENT BY PERSON AGREEING TO BE IN THIS STUDY**

**I have read this consent form and the research study has been explained to me verbally. All my questions have been answered, and I freely and voluntarily choose to take part in this study.**

Date _____ Signature of patient/volunteer _____

Consent obtained by:

Date _____ Signature _____

Printed Name and Title _____

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## Consent for Genetic Research

The purpose of this study is to look at genes (DNA) and how they affect health and disease. Genes are the instruction manual for your body. The genes you get from your parents decide what you look like and how your body behaves. They can also tell us a person's risk for certain diseases and how they will respond to treatment.

Patients with similar diseases do not always obtain the same benefit from the same treatment. Therefore, a goal is to help understand why patients respond differently to treatment, and to then develop treatment that provides maximum benefit for individual patients.

As part of the study, your tumor biopsy tissue, bone marrow biopsy and aspirate, cerebrospinal fluid (CSF), blood and/or fluid samples will be collected to better understand your disease. It is possible that genetic testing may be conducted on some or all of this material. You are being asked for your permission to allow this.

It is possible that genetic testing on these samples could help to learn more about:

- The effect of treatment on your body
- Why some people respond to treatment and others do not
- Why some people have side effects
- The causes of the disease.

What we learn about you from research on your samples is unlikely to be put in your health record. No one else (like a relative, boss, or insurance company) will be given your test results.

One risk of giving samples for this research may be the release of your name that could link you to the stored samples and/or the results of the tests run on your samples. This may cause problems with insurance or getting a job. To help prevent this, these samples will be given a code. Only the study staff will know the code. The name that belongs to the code will be kept in a locked file or in a compute r with a password. Dr. Oluwole and his staff helping with the study will have access to your name.

Health insurance companies and group health plans may not use your genetic information when making decisions regarding your eligibility or premiums. Employers with 15 or more employees may not use your genetic information that comes from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment.

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Your sample may be used to make DNA that will be kept for an unknown length of time (maybe years) for future research. Samples will be destroyed when no longer needed. Your samples may be used to make new products, tests or findings. These may have value and may be developed and owned by the study staff, Vanderbilt University, Vanderbilt University Medical Center, and/or others. If this happens, there are no plans to provide money to you.

Your samples and information about you may be shared with others to use for research. To protect your privacy, we will not release your name. You will not receive any benefit as a result of the tests done on your samples. These tests may help us learn more about the causes, risks, treatments, or how to prevent this and other health problems.

At any time, you may ask to have your sample destroyed. You should contact Dr. Oluwole to have your sample destroyed and no longer used for research. His mailing address is:

Olalekan Oluwole, MD, MPH
Vanderbilt University Medical Center
3927 The Vanderbilt Clinic, 1301 Medical Center Drive
Nashville, TN 37232

We will not be able to destroy research data that has already been gathered using your sample. Also, if your identity was removed from the samples, we will not be able to locate and destroy them. There will be no costs to you for any of the tests done on your samples. You will not be paid for the use of your samples.

Please check Yes or No to the questions below:

My blood/tissue/fluid samples may be used for current gene research in cancer related to YESCARTA:

☐ Yes

My blood/tissue/fluid samples may be stored/shared for future gene research in cancer:

☐ Yes ☐ No

My blood/tissue/fluid samples may be stored/shared for future gene research for other health problems (such as arthritis, heart disease, etc):

☐ Yes ☐ No

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My optional paired samples of tumor and CSF samples on Day -5 (before lymphodepleting chemo) and Day 2 (48 hours post CAR T infusion) may be used for future gene research in cancer:

☐ Yes ☐ No

Signature: _____ Date: _____