In Situ Vaccination With Flt3L, Radiation, and Poly-ICLC Combined With Pembrolizumab in Patients With Non-Hodgkin's Lymphoma, Metastatic Breast Cancer, and Head and Neck Squamous Cell Carcinoma

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STUDY INFORMATION:

Study Title: In Situ Vaccination with Flt3L, Radiation, and poly-ICLC Combined with Pembrolizumab in Patients with Non-Hodgkin's Lymphoma, Metastatic Breast Cancer, and Head and Neck Squamous Cell Carcinoma

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SUMMARY OF THIS RESEARCH STUDY:

This document explains a research study you might be interested in joining. Participation in the study is voluntary. You can agree to join or not. Your decision will not limit your ability to receive care at Mount Sinai. You should only agree to take part if you understand the study and if all of your questions about the research study are answered. If you do join the study, the research team must share any new information with you that may change your mind about taking part.

The purpose of this research study is to see if a combination of 4 therapies is effective and safe in treating your type of cancer. The therapies given in this study are intended to stimulate the body's immune system to learn to recognize and then to destroy the cancer.

This is a **combination of 4 therapies**, three of which are used to treat a single "target site" of your cancer (such as a lymph node or a single tumor), and the 4th is given directly into the blood stream (intravenous or "IV"). This combination of drugs is investigational, meaning they have not been tested together and are not FDA approved to be used together.

1. Radiation: The target site—lymph node or tumor (the one what will be injected)—will get two small doses of radiation. Radiation is often times used to shrink and kill tumors in patients with certain types of lymphoma, breast cancer and head and neck cancer, however, the dose of

radiation that you will receive—one dose on day one of the clinical trial and one dose on day two—is 10 to 20 time less radiation that you would receive for treatment of these cancers.

2. Flt3L/CDX-301 is an immune cell growth factor, similar to white blood cell growth factors (Neupogen or Neulasta) or red blood cell growth factors (EPO or Epogen) that you may have received to help protect your blood cells previously. Flt3L causes your body to make more immune cells, specifically a type of immune cell called "dendritic cells".
3. Poly-ICLC is an immune cell activating factor. Its function is to turn on the immune cells that have been brought to the tumor by Flt3L.
4. Pembrolizumab is an antibody (a type of human protein) that is being tested to see if it will allow the body's immune system to kill your tumor cells. Pembrolizumab is approved for use by the U.S. Food and Drug Administration (FDA) for the treatment of adult patients with many different types of cancer including head and neck cancer. Pembrolizumab is not FDA approved to treat patients with non-Hodgkin's lymphoma or metastatic breast cancer, as it has not been effective at treating these cancers when used alone. While most people do not have immediate side effects when this medication is given, it has the ability to cause side effects for weeks to months after stopping therapy.

If you choose to take part, you will be asked to:

- Come in for a screening visit for health exams and tests to see if you're eligible for the study.
- Follow your treatment period.
    - Participants will be seen in clinic daily for the first two weeks, biweekly or weekly during poly-ICLC administration at time of injection, and then every 3 weeks thereafter for treatment with pembrolizumab. Participants will receive a scheduled 8 cycles of pembrolizumab during the evaluation period for this trial.
- Taking part in this study may or may not cost your insurance company more than the cost of getting regular cancer treatment.
- If you agree, this blood and tissue will be kept and may be used in future research to learn more about cancer and other diseases.

We will tell you about new information or changes in the study that may affect your health or your willingness to continue in the study.

If you choose to take part, the main risks to you are:

- Discomfort at the injection site
- Headache
- Flu-like symptoms

You will not benefit directly from taking part in this research.

Instead of taking part in this research, you can:

- Choose to receive standard treatment for your disease
- Take part in another study, if available

If you are interested in learning more about this study, please continue to read below.

STUDY PARTICIPATION:

You may qualify to take part in this research study because you have a certain type of non-Hodgkin's lymphoma, breast cancer, or head and neck cancer.

Your participation in this research study is expected to last about 25 months, during which time you will be receiving the tests that need to be performed prior to starting the study regimen, all parts of the study regimen, and the tests needed to be obtained after the study regimen is completed. The therapies that are involved (those mentioned above) occur over the course of 6 months.

There are 62 people expected to take part in this research study at Icahn School of Medicine at Mount Sinai.

Funds for conducting this research study are provided by Merck & Co, manufacturer of pembrolizumab. A description of this clinical trial will be available on http://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 website at any time.

DESCRIPTION OF WHAT IS INVOLVED:

If you agree to take part in this research study, the following information describes what may be involved.
The Investigator will evaluate you to verify (make sure) that you are eligible for the study by:

- Review of your most recent CT scans. CT or CAT scans are x-ray procedures that are used to define normal and abnormal structures in the body and to measure the size of your cancer. If your most recent CAT scans are not recent enough, new CT scans may need to be performed.
- Review of medical history and physical exam
- General Laboratory Blood Tests measure the amount and types of your blood cells and also measure tests of your organs, such as liver function, kidney function, as well as the salts and proteins in your blood.
- A procedure called leukapheresis – a way to collect immune cells circulating in your blood. For each leukapheresis procedure, about 4 teaspoons of blood will be taken. The leukapheresis

procedure basically requires receiving two 'i.v.' lines and resting for an hour while blood is collected and returned to you.

- Core needle or punch biopsy of lymph node will only be required for subjects who will have the study drugs injected into a lymph node (where the cancer has migrated to). How accessible the tumor or lymph node is to being safely injected with the study drugs will determine which site will be the “target site.” Core needle biopsy involves inserting a small needle under the skin and into the tumor to inject lidocaine (numbing medicine) after which a needle is inserted into the tumor multiple times to take small amounts of cancer tissue. Punch biopsy involves removing a small, tube-shaped piece of skin and some of the tissue underneath using a sharp cutting tool.
- Collect about 1 teaspoon of urine for a pregnancy test if you’re are a woman of childbearing potential

If you are eligible and agree to participate in the study, some of your tumor will be collected by core needle or punch biopsy (described above), and a second tumor site will also be biopsied in the same manner (only if there is a second site easily accessible, and subject may refuse). If subject requires lymph node biopsy during screening to confirm diagnosis, these additional biopsies can be done on the same day. Some tumor cells may be used to confirm your cancer diagnosis, while the remainder of cells from the biopsy will be stored for use in other tests (which are part of this study) to determine whether the study therapies have successfully caused your immune system to recognize your cancer cells.

What happens during the study?
Starting on the first day (a Monday) you will receive nine injections of Flt3L/CDX-301 injected directly into the “target site” which may be a tumor or a lymph node that is full of tumor cells. These will be given to you over a 2-week period (Blue arrows in the Summary of Study Schedule). These medicines will be given to you in the Ruttenberg Treatment Center at the Cancer Center at Mount Sinai Hospital.

On the days of your Flt3L/CDX-301 injections, the following will be done:

- A review of other medications and any side effects to the study therapies
- Vital signs before the injections and 30 minutes after

On day 1 and 2 you will receive low-dose local radiation to the same site of cancer that is being injected (purple arrows). This small dose is used as standard therapy for lymphoma patients, but is significantly less than is typically given to breast cancer and head and neck cancer patients, and unlikely to cause side effects. Still, the radiation oncologist will discuss the possible (rare) side effects with you prior to receiving this study therapy. Before the trial starts you will have a visit in the doctor’s office of the radiation oncologist, and you will have a special CT scan performed to plan exactly where the radiation will go.

On Day 8 (Monday of the second week), along with an injection of the CDx-301 (Flt3L) you will receive two standard vaccines which you may have previously been given as a child or as an

adult. One is the hepatitis B vaccine (Engerix®) and the other is the diphtheria/pertussis/tetanus shot (Infanrix®) (dark red arrow). One of these will be injected alongside the CDX-301(Flt3L) into the target tumor, while the other will be injected into your arm (like vaccines such as the flu shot are typically given) on the opposite side of your body.

On Friday of the second week, Tuesday and Friday of the third week, and every Tuesday for the next 5 weeks you will receive injections of poly-ICLC injected directly into the same site of cancer (total 8 shots of poly-ICLC, red arrows). These will be given to you in the Ruttenberg Treatment Center at the Cancer Center at Mount Sinai Hospital.

On the days of your poly-ICLC injections, the following will be done:

- A review of other medications and any side effects to the study therapies
- Vital signs before the injections and 30 minutes after

If there is a dose delay during the first two weeks of treatment, you may be given the option to re-start treatment, at the discretion of the investigator.

On Tuesday of the 4th week of therapy (the same day as your 4th injection of poly-ICLC) you will receive the first dose of pembrolizumab (green arrows). Pembrolizumab is given to you IV. This will be done every 3 weeks from that initial time for a **total of 8 doses** (the last one given roughly six months after starting the trial). The infusion will take at least 60 minutes.
Once a week for the first three weeks you will have blood taken, (approximately 4 ½ tablespoons) to test your immune system's response to the study therapies, and then every 3 weeks after that (see calendar), at the same time additional blood will be taken for standard blood tests to check your blood counts, and the markers in your blood that tell us how your organs are working.
On Tuesday of week 3 and Tuesday of week 10 another core needle or punch biopsy of the "target site" that is being injected, as well as another tumor if accessible, will be performed.

Week:	**Before**	1					2					3		4	5	6		7	8	10
Day:	**Starting Treatment**	M	T	W	T	F	M	T	W	T	F	Tu	F	Tu	Tu	Tu		Tu	Tu	Tu
History & Physical	**X**	**X**									**X**					**X**				**X**
Symptom assessment by doctor or nurse	**X**	**X**					**X**					**X**	**X**	**X**	**X**	**X**		**X**	**X**	**X**
Tissue biopsy	**X**											**X**								**X**

Screening blood tests	X																		
Radiation		X	X																
Flt3L		X	X	X	X	X	X	X	X	X									
Poly-ICLC											X	X	X	X	X	X		X	X	
Pembrolizumab														X				X		X
Blood tests												X						X		X
Immune Monitoring	X							X				X						X		X
Vaccines								X												
Imaging	X																			X

*The study timetable above is flexible given the possibility of delays for the treatment of toxicities. The study timetable will be adjusted at the discretion of the investigator, or per patient schedule.

You will have a CT scan at the time of your third infusion of pembrolizumab, and every 3 months after that to check whether your cancer is growing or shrinking. *After you finish the last dose of pembrolizumab we will contact you at least once a month to see how you are doing, and we will see you in the clinic at least once every 3 months for 2 years to review your CT results.*

What are we doing and why are we doing these things?

- **Low dose radiation therapy:** You will receive low-dose radiation study therapy to induce some initial tumor cell death at one site where you have cancer. The goal of this is that dead tumor cells may be used by your immune system to "teach" your immune cells to detect your cancer, the term we often use is "priming the immune response." This study therapy is approximately one-tenth of what is considered normal-dose radiation therapy used to treat some types of lymphoma, breast cancer and head and neck cancer, and is therefore has very minimal side effects. Because this study therapy will be administered by a separate physician called a Radiation Oncologist, that doctor will discuss the complete details of this study regimen including a discussion of the risks and benefits.
- **Intratumoral (into the tumor) injections of Flt3L/CDX-301 and poly-ICLC:** You will receive 9 total injections Flt3L/CDX-301 and 8 total injections of poly-ICLC administered directly into the same site of cancer that will be treated with radiation. These two experimental agents are

designed to 1) bring your immune cells to the site of a tumor and 2) activate those immune cells so that they will recognize the cancer cells as something which should be eliminated from the body. The injections are performed with a small needle placed directly into the "target site." Because making more immune cells and activating those cells is also part of the natural immune reaction that occurs when you get a cold or viral infection (like the flu) one of the side effects of these medicines is that subjects might get a "flu-like reaction" with fevers, chills, achy muscles, or fatigue. Swelling or tenderness at the site of injection are also common with this medicine.

- **Intratumoral (into the tumor) and intramuscular (into the muscle) vaccines:** On Tuesday of the second week of therapy you will receive the hepatitis B vaccine (Engerix®) and the diphtheria/pertussis/tetanus shot (Infanrix®). One will be injected into the tumor in the same manner as the Flt3L/CDx-301 and poly-ICLC while the other will be injected into your arm (how these vaccines are typically given) on the opposite side of your body. The goal of this is to use your immune system's response to this vaccine "boost" to see how the medicines we are giving you are affecting your immune system.
- **Pembrolizumab:** This is an antibody (protein) given intravenously that binds to your T cells (one type of white blood cells we know are able to kill cancer), and help turn them off. This therapy further helps turn ON the immune system, so that the immune system can kill cancer cells.
- **Core Needle or Punch Biopsy:** This procedure use to sample a small number of cells at the site of a tumor. This is used to determine whether the immune cells are successfully being recruited to the tumor site and becoming activated and also allows for the doctor to look at the structure of the tumor, and the way in which your immune cells are interacting with the cancer cells. Topical numbing medicine will also be used to make this more comfortable, and should result in minimal discomfort.
- **Medical History:** The research team will ask you a series of questions and collect any information that is new since your previous visit.
- **Physical Examination:** Your height and weight will be measured and your physician will examine your physical features for any abnormalities**.**
- **Vital Signs:** Your temperature, pulse rate, respiration rate and blood pressure will be taken.
- **PET/CT or CT scans ("CAT scans"):** A picture, similar to an X-ray, will be taken of several areas of your body. You will need to lay or stand still for a brief amount of time while a machine is used to take the pictures. You will receive all of these scans regardless of your participation in this study as a part of your clinical care.
- **Blood samples:** Approximately 75-100 mL (5-7 tablespoons) of blood will be needed at some visits (see calendar). The blood will be withdrawn from your arm by inserting a needle. The blood samples will be analyzed in various tests used to note your progress.
- **Pregnancy test:** You will be asked to provide a urine sample for a pregnancy test if you are able to become pregnant.
- **Leukapheresis** is the separation of white blood cells from blood with a special device that collects your blood, separates the components required and returns the remaining blood to you. Each leukapheresis procedure will last about 1 hour. You will have a tube inserted into a vein in

each arm. One tube moves blood through the machine that removes the white blood cells, and the rest of the blood goes back into your body through the tube in your other arm. This will be done at the first, third and fifth immune monitoring time points above.

Throughout the study, you will be monitored to see if your disease has worsened and if you are having any side effects.

Because this research study involves the use of study drugs, a note must be included in your electronic medical record that you are taking part in the research. This way, anyone involved in your medical care will know that you are a study participant, and they can work to avoid any problems or negative outcomes that could arise if they do not know.

Genetic Testing

Research using tissues is an important way to try to understand human disease and/or the role genes play in disease. Genes are part of every cell in the body and contain material called DNA that is passed from parent to child. DNA determines the make-up or characteristics of the body like eye color and some diseases. DNA carries the blueprints (plan) for the many actions which occur in the body. Your tissue/blood may be helpful for research. The research that may be done with your tissue/blood will not benefit you. We hope the information learned from this research will benefit other patients with your disease or other diseases in the future.

Reports about research done with your tissue will not be given to you or your other doctors. These reports will not be put in your health record. The research will not have an effect on your care. Sometimes tissue/blood is used for genetic research (diseases that are passed on in families).If you agree to participate in the optional research, there will be no benefit to you. We hope the information learned from this research will benefit other patients with your disease or other diseases in the future. Even if your tissue/blood is used for this kind of research, the results will not be put in your health records. There are very few risks to you from using your samples for research. One risk is the release of information from your health records. Your samples will be stored using a unique code that does not identify you by name or address. Researchers with access to your samples will not be able to identify you. The code linking the sample to your name would be stored at Mount Sinai and known only to your doctor and a limited number of research personnel at Mount Sinai. Your records will be protected so that your name will be kept private.

Your tissue/blood will be used only for research and will not be sold. You will not be paid for allowing your leftover tissue to be used in research. Similarly, there will be no cost to you for any tissue/blood collected and stored long-term (banked). If you decide now that your tissue/blood can be kept for research, you can change your mind at any time. Just contact your study doctor and let him or her know that you do not want us to use your samples. Then the tissue/blood will no longer be used for research. Samples will be stored for as long as deemed useful for research purposes. Any samples you have donated which are used in research may result in new products, tests, or discoveries. In some

instances, these may have potential commercial value and may be developed and owned by the Investigators, by Mount Sinai and/or others. However, donors of tissue/blood do not retain any property rights to the materials. Therefore, you would not share in any financial benefits from these products, tests, or discoveries.

The researchers would like to ask your permission to keep specimens (like blood, tissue, hair, or any other body matter) collected from you during this study to use them in future research studies. They would also like to know your wishes about how they might use your specimens in future research studies. If you agree to allow researchers to store your specimen for future research studies, your samples may be used for Genetic Tests. You should also know that it is possible that products may someday be developed with the help of your specimens, and there are no plans to share any profits from such products with you.

HIV/AIDS

To take part in this research study, your blood will be tested for evidence of HIV, the virus that causes AIDS. People can get HIV through unprotected sexual contact with someone who has HIV, and through contact with blood (as in sharing needles including for piercing, tattooing, and injecting drugs). People who are pregnant with HIV infections can transmit HIV to their infants during pregnancy, delivery or while breastfeeding. There are treatments for HIV/AIDS that can help people stay healthy. People with HIV/AIDS can adopt safe practices to protect uninfected and infected people in their lives from getting HIV or getting infected with a different strain of HIV.

By law, positive test results for HIV/AIDS (as well as other communicable diseases such as hepatitis B, hepatitis C, and syphilis) are reported to the NYS Department of Health so they can study how people get and transmit the disease and notify sexual or needle-sharing partners they may have been exposed. If you wish to be tested anonymously for HIV/AIDS, the research team can refer you to a public testing center, but you will not be able to be in this study. New York State law protects the confidentiality of HIV test results and other related information. It is illegal to discriminate against a person based on their HIV status and services are available to help if this happens. You are free to refuse to get an HIV test, but if you refuse you cannot be part of this research study.

Pregnancy

If you can possibly get pregnant, a urine test for pregnancy will be done before you begin the study.

You cannot be included in the study if you are or become pregnant, as the study drug could harm your fetus. You also should not be in the study if you are producing milk to feed a child as the study drug could harm your baby.

Unless you are at least one year past menopause or have had a successful operation to make pregnancy impossible, you should use effective birth control. Unless you are sexually abstinent (not having genital sex) the recommended methods of birth control are:

- The consistent use of approved hormonal birth control (pill, patches, or rings),
- An intrauterine device (IUD),
- Contraceptive injection (Depo-Provera),
- Double barrier methods (Diaphragm with spermicidal gel or condoms with contraceptive foam),
- Sexual abstinence (no sexual activity),
- Sterilization (a vasectomy, getting tubes tied, or a hysterectomy).

All birth control methods (other than abstinence and sterilization) are only effective if you use them properly, start them at least one month before you begin the research study, and continue using them throughout the research study and for 4 months the research study ends. If you are unsure whether the method of birth control you use is approved to use while you are in this study, you should ask the Lead Researcher before you begin the study. If you are less than one-year post-menopausal, you could still become pregnant. If you or your partner becomes pregnant, or may be pregnant, at any time during the study, you must tell a person from the research team immediately. The team may stop the study drug and refer you/your partner to an obstetrician/gynecologist for follow-up.
Should you/your partner become pregnant, whether or not you/your partner have the baby, the people funding and overseeing the research may ask for information on the pregnancy, even if you are no longer part of the study. You/your partner will be asked for additional written consent to share this information if that happens.

Semen/Sperm:

Drugs can be found in semen and alter sperm. Since you are taking part in a study using experimental drugs or treatments, it is recommended that 1) you use a condom, 2) you do not get a partner pregnant or expose them to semen, and 3) you do not donate semen. These recommendations apply both while you are taking the study drug, and for 3 months after you stop taking the study drug. This is because levels of the study drug may be present in the sperm and/or semen even after you stop taking the study drug. You are encouraged to tell your female partner(s) and/or their doctor(s) that you are participating in this clinical trial.

Future Contact:

The researchers may wish to use your personal contact information to contact you in the future. Do you give the researchers permission to **contact you** in the future to request the collection of additional information about you, discuss how your private information, study data and/or samples might be used, or discuss possible participation in another research study?

Please initial your choice: Yes_____ No_____

If "Yes", please indicate your preferred method of contact: (initial all that apply)

[ ] Email [ ] Phone [ ] Letter [ ] Text

While future contact does not provide direct benefit to you, the study results and data collected may help benefit people in the future.

USE OF YOUR DATA AND/OR SAMPLES:

The researchers would like your permission to keep your personal information (such as, name, address, date of birth, social security number), study data and/or samples (blood, tissue, urine, saliva, or any other body matter) to use or share in future studies. You can still be part of the study if you do not allow us to use or share them. Please select Yes or No to each of the questions below. To decline all future uses/sharing please select 'No' each time.

(1) Will you allow the researchers to store your data and/or samples to use in future research studies?

Please initial your choice: Yes_____ No_____

If you select No, please stop here and move to the next section, **'Your Responsibilities If You Take Part in This Research**' section below."

If yes, please continue to the next question and tell us how your personal information, study data and/or samples may be used in future research studies.

(2) The researchers can store your data and/or samples in one of two ways:

a) Anonymously (no one will know who the data and/or samples came from). If you choose this option, you can't change your mind. So, if you wanted to have your data and/or samples destroyed in the future, the team could not do it as they would not know which data and/or samples were yours.
b) Linked to your identity (using a code that can show the information came from you personally). In this case you could ask for your data and/or samples to be destroyed in the future if you want that to happen.

How would you like your data and/or samples stored? Please initial **ONE** choice below:

I would like my data and/or samples stored anonymously _____

I would like my data and/or samples stored with a link to my identity through the use of a code_____

(3) Do you give the researchers permission to keep the data and/or samples, so they could use them in future studies that are **directly related** to the purpose of the current study?

Please initial your choice: Yes_____ No_____

(4) Do you give the researchers permission to keep the data and/or samples indefinitely, so they could use them for future studies that are **not related** to the purpose of the current study (for example a different area of research)?

Please initial your choice: Yes_____ No_____

(4.1) From time to time, researchers outside of medicine and related sciences would like to use data and/or samples. This might be in the fields such as anthropology, human origins, mapping human migration patterns. Do you give permission for researchers **outside the field of medicine** to use your data and/or samples?

Please initial your choice: Yes_____ No_____

a. If the future research in a different area can be done without having to know that the data and/or samples came from you personally, that will be done.
b. If the future research in a different area requires that it is known specifically who the data and/or samples came from, then one of the following will be done:
   I. If you allowed the researchers to contact you in the future, they may be able to contact you to explain why your data and/or samples is needed and what will be done with it. Your permission will be asked to use your data and/or samples in that research project.
   II. If you do not give permission to be contacted in the future, or if it is found that contacting you is not practical (for example, because you have moved), your data and/or samples may still be used. The Institutional Review Board (IRB) will be asked for permission to use the data and/or samples linked to your identity. The IRB can give permission for researchers to use and share identifiable health information without contacting you, but only if it determines that sharing the data and/or samples will not be more than minimal risk to you or your privacy. The IRB is a committee of doctors and scientists and nonscientists, including people not associated with this hospital or medical school, whose job it is to protect people who participate in research.

(5) Do you give permission to have your data and/or samples given **to other researchers,** including those at Mount Sinai, other medical or scientific institutions and for-profit companies, for use in research within the limits you have chosen above?

Please initial your choice: Yes_____ No_____

(6) Do you give permission to have portions of your data and/or samples deposited in large public databases (repositories) for use in research with the limits you may have chosen above? Please read the paragraphs below which explains repositories, then initial your choice:

To do more powerful research, it is helpful for researchers to share data and/or samples from the people they study. They do this by putting data and/or samples into a repository. A repository is where something is stored safely for a specified period of time. Data and/or samples from one study may be stored in a repository along with data and/or samples from other studies. Sample repositories are commonly called biobanks, while data repositories are commonly called databases. . Researchers can then use the data and/or samples from multiple studies to learn even more about health and disease. If you agree to take part in this study, some of your genetic and health information might be placed into one or more scientific databases, but they will not share your direct identifiers (for example, name, address, date of birth). These databases are maintained by either Icahn School of Medicine at Mount Sinai, another institution, the federal government, or private companies. Any researcher who wants to do a study using data and/or samples from the repository must apply for permission. There are different ways of reviewing such requests. Researchers with an approved study may be able to see and use your data, along with that from many other people. Researchers may use your samples for genetic sequencing and other experimental testing. Researchers will always have a duty to protect your privacy and to keep your information confidential, but there are always risks associated with data and/or sample collection and sharing. They are described in more detail in the Risks section.

Please initial your choice: Yes_____ No_____

YOUR RESPONSIBILITIES IF YOU TAKE PART IN THIS RESEARCH:

If you decide to take part in this research study, you will be responsible for the following things: complying with the requirements of the study, taking prescribed medications, avoidance of certain medications (the study team will tell you what drugs to avoid), using birth control methods as described in the Description of What's Involved section, and attendance at study visits. You must be willing to follow study procedures. This includes reporting any changes in your health that occur during the study. Even if you do not think the changes in your health are related to your participation in the study, you must inform the study doctor or nurse. All pregnancies must be reported immediately. Tell any doctor you see that you are participating in this study. Your study doctor will be able to inform your primary care physician about your participation in the study if you would like, provided that you agree to this information being disclosed. While participating in this research study, you should not take part in any other research project without approval from the Investigator. This is to protect you from possible injury arising from such things as extra blood drawing, extra x-rays, the possible interaction(s) of research drugs, or other similar hazards.

COSTS OR PAYMENTS THAT MAY RESULT FROM PARTICIPATION:

You will not be paid for taking part in this study. Being in this study will not cost you anything extra. Researchers will not pay you for your travel or the time it will take for you to be in the study.

There may be costs to you for taking part in this study. You or your insurance company will be responsible for the costs of all items and services during the research study which you could have received for your condition if you were not enrolled in this research study. You or your insurance company will also be responsible for the costs of all services that occur during the research study that your physician believes are medically necessary to treat you. You or your insurance company will not be responsible for the costs of the items and services associated with this research study which are provided to you only for research purposes and not considered a part of standard evaluation or therapy.

The study will provide the study drugs, Flt3L/CDX-301, pembrolizumab and poly-ICLC, at no cost while you are participating in this research. You will not receive money or any other form of compensation for participating in this study.

POSSIBLE BENEFITS:

This study is not designed to benefit you personally. Others may not benefit either. However, a possible benefit may be that your cancer improves. Because people respond differently to study therapies and because the study drugs are experimental, no one can know in advance if you will benefit. It is possible that your condition may worsen while on study therapy. The potential benefits of using the study medicines are still unknown. However, the information gained on this approach and how it works may help the understanding of treating cancer in the future.

POSSIBLE RISKS AND DISCOMFORTS:

The study doctor and research staff will monitor you to see if you have side effects. However, the Investigator and Sponsor (the drug manufacturer) do not know all the side effects that may happen, and there may be unknown side effects that could occur with this new combination of medications. Side effects can vary from mild to very serious, and there is also a risk of death. The study doctor may give you drugs to help lessen side effects you experience. In some cases, the duration of side effects may be unknown. If you experience side effects that require treatment between regular clinic/hospital visits, it is important that you make every effort to inform Mount Sinai. Some medications may interact with the study drug and with the other medications you will be taking in this study. Because of this, it is important

to tell the research staff about any medications you are taking and to check with the research team before starting any new medications.

What is known about the side effects of Flt3L/CDX-301?

Side effects associated with poly-ICLC in prior clinical trials included:

Frequent (>20%)

- Discomfort at injection site: usually mild and last only a few days but can be significant enough that they may be sufficiently painful that they require pain medicine or other medical treatment
- Headache
- Pain
- Flu-like symptoms: these generally occur 8 to 12 hours after the injection and can include:
    - feeling weak or tired
    - fever or chills (usually decreases with acetaminophen or aspirin)
    - muscle or joint aches or bone pain
    - nausea or vomiting
    - cough
    - sore throat
    - runny nose

- ***Infrequent (1-20%)***
- *Back pain*
- *Diarrhea*
- *Abdominal pain or upset stomach*
- *Rash*
- *Tingling fingers (usually in the tips of the fingers or toes)*
- *Bleeding at the injection site*
- *Itching*
- *Dizziness*
- *Chest pain*
- *Shortness of breath*

- *Constipation*
- *Feeling anxious*
- *Bruising*
- *Swelling of the arms or legs*

What is known about the side effects of poly-ICLC?

Side effects associated with poly-ICLC in prior clinical trials included:

Frequent (>20%)

- *Discomfort at injection site: usually mild and last only a few days but can be significant enough that they may be sufficiently painful that they require pain medicine or other medical treatment*
- *Flu-like symptoms: these generally occur 8 to 12 hours after the injection and can include:*
    - *fever of less than 38ºC which usually decreases with acetaminophen or aspirin*
    - *muscle or joint aches*
    - *nausea*
    - *feeling tired*

Infrequent (1-20%)

- *Temporary decrease in white blood cell counts*
- *Temporary decrease in platelet counts*
- *Temporary decrease in red blood cell counts*
- *Inflammation of the liver - this has been detected by blood tests in some subjects, though it is generally not associated with any symptoms and resolves within 1 week*
- *Seizures - these were observed only in subjects who already had a prior history of epilepsy, and these subjects recovered. Though subjects with a history of seizures may be part of this study, it is important to make sure your doctor is aware if you have a history of seizures.*

What is known about pembrolizumab?

Pembrolizumab may cause one or more of the side effects listed below. This information is based on data from cancer subjects in other clinical trials with pembrolizumab. In addition, there may be side effects that are not yet known that may occur. You should tell your doctor or nurse right away about any possible side effects you experience. The most common side effects of pembrolizumab are:

- Fatigue

- Skin reactions: including rash, itching, hives, redness, and dry skin.
- Diarrhea
- Nausea
- Abdominal pain
- Decreased appetite
- Low red blood cells (can cause weakness, fatigue, dizziness, fainting, lack of energy, pale skin, rapid heart rate or palpitations and shortness of breath).
- Fever
- Joint pain or stiffness
- Less common side effects of pembrolizumab include:
- Bowel inflammation
- Liver function blood test abnormalities (may indicate a reaction to pembrolizumab)
- Loss of color (pigment) from areas of skin
- Dry mouth
- Vomiting
- Weight loss
- Thyroid gland abnormalities (can cause fatigue, weight gain, and swelling of the legs and feet)
- Blood chemistry abnormalities, including low blood phosphate, magnesium, and potassium levels (can cause muscle twitching, shortness of breath, and fatigue).
- High blood uric acid level (a high uric acid level may result in attacks of gout or decreased kidney function).
- Lung inflammation (pneumonitis - see details below)
- Cough
- Dizziness
- Headache
- Low white blood cells (cells that help fight infection), which can leave you more vulnerable to infections
- Chills
- Muscle soreness, weakness, stiffness spasms or paralysis
- Pain in arms or legs

- Tingling, burning, or numbness in hands and feet
- Shortness of breath
- Abnormal taste
- Flushing
- High or low blood pressure
- Allergic reaction during or between study drug infusions
- Increased sensitivity of skin to sunlight
- Constipation
- Difficulty swallowing
- Heartburn
- Low blood platelets (may increase risk of bleeding)
- Rare but potentially serious side effects of pembrolizumab include:
- Low blood oxygen level
- Acute lung injury or failure
- Collection of fluid around the lungs
- Inflammation of the appendix (appendicitis)
- Increase in inflammatory blood proteins (e.g., lipase) can indicate inflammation of the pancreas, which can cause abdominal pain and low blood pressure
- Adrenal gland abnormalities (can cause muscle weakness, fatigue, weight loss, decreased appetite, darkening of your skin, and low blood pressure)
- Pituitary gland inflammation - can cause headaches, visual disturbances, excessive urination, and thirst
- Changes in vision (including decreased or blurry vision), inflammation of the eye, or bleeding into the eye
- Liver inflammation
- Acute kidney injury or failure
- Abnormal blood cell production
- Inflammation of the mouth and lining of the digestive tract
- Swelling of the face, arms, or legs

- Inflammation of the pancreas (pancreatitis) - can result in abdominal pain and -if severe- can result in low blood pressure and require urgent hospitalization for administration of i.v. fluids and close observation.
- Back pain
- Autoimmune disorders, including Guillain-Barre syndrome (associated with progressive muscle weakness or paralysis)
- Chest discomfort
- Heart palpitations
- Inflammation of the heart or its lining
- Collection of fluid around the heart
- Increased blood sugar
- Dehydration
- Infections: including sepsis, lung infections, and skin infections.
- Decreased movement of the intestines
- Disorientation
- Swelling of the optic disc - can cause visual disturbances and headaches
- Inflammation of the optic nerve - it may lead to complete or partial loss of vision
- Inflammation or loss of the lining of the brain and spinal cord - can cause confusion, loss of consciousness, weakness, impairment in sensation or incontinence of bowels or bladder
- Drug reaction with rash, blood cell abnormalities, enlarged lymph nodes, and internal organ involvement (including liver, kidney, and lung); known as Drug Reaction with Eosinophilia and Systemic Symptoms (DRESS)
- Myasthenia gravis, a nerve disease that may cause weakness of eye, face, breathing, and swallowing muscles. One death in a subject who received pembrolizumab combined with ipilimumab was considered due to myasthenia gravis and severe infection (sepsis).
- Abnormal brain function due to brain inflammation (encephalitis), potentially life-threatening or fatal.
- Toxic epidermal necrolysis, a potentially life threatening disease characterized by blistering and peeling of the top layer of skin resembling that of a severe burn, has occurred in subjects who received pembrolizumab.
- Rhabdomyolysis (muscle fiber released into the blood stream which could damage your kidney) and polymyositis (chronic muscle inflammation with muscle weakness) has been reported in one subject.

Potential toxicities of radiation involved in this study:

The potential risks of radiation involved in this study are the same as the risks of pembrolizumab listed above.

Lung Inflammation (pneumonitis): It is possible that pembrolizumab may cause inflammation of the tissues of the lung. This adverse effect has been reported infrequently in subjects treated with pembrolizumab. While many subjects with x-ray or CT abnormalities have not developed any symptoms, some subjects have developed mild to severe symptoms and in rare cases, death has occurred as a result of their lung inflammation. Signs and symptoms of lung inflammation may include difficulty breathing, pain or discomfort while breathing, chest pain, cough, shortness of breath, increased rate of breathing, fever, low blood oxygen levels, or fatigue. Your study doctor and nurse will watch you closely for changes in your ability to breathe and for other signs or symptoms that might show you are developing this type of lung inflammation and will perform regular tests including physical exams, measurement of oxygen levels through noninvasive testing (i.e., pulse oximeter), blood tests, chest x-rays and/or CT scans.

Please inform your study doctor or nurse IMMEDIATELY if you experience any of the following:

- Any new or increased shortness of breath;
- Any new or increased chest pain;
- Any new or increased pain/difficulty while breathing;
- Any new or increased cough or any significant change in your type of cough; for example, any new or increased mucous or blood in your cough;
- Any change in the amount of oxygen you require;
- Any fever, fatigue, or other symptoms that occur at the same time as any changes to your breathing or other lung symptoms.

If you start to develop symptoms, your study doctor will ask you to return to the clinic for additional tests, which could include a physical exam, measurement of oxygen levels, blood tests, chest x-rays, and/or CT scans. You will be monitored very closely for changes in your overall lung symptoms, monitoring may require hospitalization. You may require specific treatment in order to control pneumonitis. You may also be seen by a special doctor called a pulmonologist, who has special training to be an expert in how your lungs work. Prolonged treatment with medicines that suppress inflammation, sometimes needed to manage the side effects of pembrolizumab, may lower your body's ability to fight off certain infections. These infections may require treatment with antibiotic or antifungal medications and may be fatal.

In addition to these risks, this research may hurt you in ways that are not known. The unknown risks might be minor or might be major (death).

Risk of Leukapheresis procedure:

There is a small chance that your blood calcium level may go down. This may cause numbness and tingling, especially in the hands and feet and around the mouth. It can also sometimes cause painful

muscle spasms. The risks of blood drawing and leukapheresis include pain, bruising, fainting, bleeding and very rarely, infection.

The risks of excisional lymph node biopsy are pain, bruising, bleeding and very rarely, infection.

There is a chance that the study drug may leak during injection if it is given on the same day as the biopsy. The risks of this are small, and there are procedures in place to minimize this risk.

The risks of CT scans are very few. Some subjects may have an adverse reaction to the chemical (called “contrast”) injected by vein prior to each scan. Such reactions are usually controlled by giving medicines that relieve inflammation, but reactions can be serious enough that the subject may need to be observed in the hospital. The low dose of radiation delivered by the CT scans for this research study is not felt to have a significant health risk.

Reproductive Risks:

There are unknown risks from Flt3L/CDX-301, poly-ICLC and pembrolizumab to the development of the fetus. Therefore, if you can become pregnant, you should not become pregnant during treatment with these medicines and for 180 days after completing study therapies. If you are able to become pregnant, in order to participate in this study, you must agree to use birth control to prevent pregnancy. Men with female partners who are able to become pregnant also have to use condoms during the therapy with these medicines and for 180 days after completing study therapies. Please read the acceptable methods of birth control found under the Description of What’s Involved section of this document.

Risk of Core Needle or Punch Biopsy: Risks of biopsy are infection, pain, and bleeding. To minimize these risks, sterile procedures, anesthesia, and careful observation of the subject post-procedure are used.

Blood Sampling: The possible side effects of drawing blood include pain, bleeding, bruising, light-headedness, fainting and, on rare occasions, local blood clot formation or infection with redness and irritation of the vein.

Intravenous (IV) Line: infusion of pembrolizumab may cause discomfort, irritation, mild bruising, bleeding, leakage of drug solution, and rarely infection, nausea, and lightheadedness.

Biopsy Samples: Risks potentially associated with a biopsy include pain or bleeding from needles used to give anesthesia and the procedure itself, or an allergic reaction to the local anesthetic used. There may be bruising at the site of biopsy. Continuous bleeding and infection are rare and very often can be well controlled. Depending on the procedure involved in performing the biopsy, there may be other risks involved, all of which will be discussed with you by your doctor.

CT scan Risk: CT scans do create low levels of radiation, which has a small potential to cause cancer and other defects. However, the risk associated with any one scan is small. It is not known to what degree receiving multiple CT scans might increase the risk of secondary cancers. It has been estimated that a single CT scan might increase the risk sufficiently that 1 out of 2000 patients receiving a CT scan could acquire a secondary cancer and this is a small number in comparison to "baseline" chance of developing cancer (1 out of 5 people in the U.S.). It is possible that receiving multiple CT scans would result in a higher risk of secondary cancers than a single scan. It is also known that adults have a

significantly lower risk of developing secondary cancers after the same exposure in comparison to children. The potential risk associated with receiving multiple CT scans specifically for patients who already have cancer is weighed against the potential risk of doing fewer CT scans and having insufficient information about the potential growth of the cancer.

You will have radiation-based procedures or examinations that are part of the regular care for your condition and you would have them whether or not you participate in this research. You will not be exposed to any additional radiation because you are participating in this research.

MRI Risk: There are no known risks or side effects with having an MRI. If a contrast material is used, your study doctor will tell you about possible side effects or allergic reaction.

Whole body PET scan risk: There are no known risks or side effects with having a PET scan. The injection you will be given contains a form of sugar that is radioactive. It is radioactive, but it is not strong enough to pose a significant health risk to you. The estimated radiation exposure for PET scan is 7 mSv. To put that in context, the average person in the United States gets a radiation exposure of 6.2 mSv per year from both natural sources, like the sun, outer space, air, food and soil as well as from medical procedures. People who work with radiation (for example, x-ray technologists) are allowed a maximum exposure of 50 mSv each year. Although these levels of radiation are thought to cause an increased risk of cancer, studies in people who work with radiation have rarely shown a measurable increase in cancer risk. You can experience discomforts from lying down for 1/2 hour or more in the PET scanner, and possible claustrophobia.

Risk of loss of private information; this risk always exists, but there are procedures in place to minimize the risk. The risks of a blood draw include pain, bruising, and the slight possibility of infection at the place where the needle goes in. Some people feel dizzy or may faint during or after a blood draw.

Group Risks - Although your name will not be given to researchers, basic information such as your race, ethnic group, and sex may be shared. This information helps researchers learn whether the factors that lead to health problems are the same in different groups of people. It is possible that such findings could one day help people of the same race, ethnic group, or sex as you. However, they could also be used to support harmful stereotypes or discrimination.

Privacy Risks - Your name and other information that could directly identify you (such as an address, date of birth, or social security number) will never be placed into a database . However, because your genetic information is unique to you, there is a small chance that someone could trace it back to you. The risk of this happening is very small, but may grow in the future. Since the database contains genetic information, a break in security may also pose a potential risk to blood relatives as well as yourself. For example, it could be used to make it harder for you (or a relative) to get or keep a job or insurance. If your private information was misused, it is possible you would experience other harms, such as stress, anxiety, stigmatization, or embarrassment from revealing information about your family relationships, ethnic heritage, or health conditions.

Insurance Risks - There is a Federal law called the Genetic Information Nondiscrimination Act (GINA). This law makes it illegal for health insurance companies, group health plans, and most employers of

over 15 people to discriminate against you based on your genetic information. However, it does not protect you against discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

In addition to these risks, this research study may hurt you in ways that are not known. The unknown risks could be minor or major (death).

OTHER OPTIONS TO CONSIDER:

You may decide not to take part in this research study. If you decide not to take part, this will not affect the clinical care you receive at Mount Sinai. The choice is totally up to you.
Instead of being in this research study, your choices may include:

- Choose to receive standard treatment for your disease
- Taking part in another study, if available
- Getting no treatment

The potential benefit of other options such as chemotherapy or antibody therapy are that those approaches may result in significant shrinkage of your tumors, although this would likely be temporary as this type of cancer you have is not generally curable with those medicines. The potential risks of those therapies are the numerous possible side effects, most commonly (but not limited to) temporary weakening of your immune system, which can put you at risks for serious infections.

Talk to the study doctor about your choices before you decide if you will take part in this study.

IN CASE OF INJURY DURING THIS RESEARCH STUDY

If you are injured or made sick from taking part in this study, you will get medical care. Generally, this care will be billed to you or your insurance in the ordinary manner and you will be responsible for all therapy costs not covered by your insurance, including deductibles, co-payments and coinsurance. does not prevent you from seeking payment for injury related to malpractice or negligence. You can contact the Lead Researcher for more information.

It is important that you tell the study doctor, Dr. Brody if you feel that you have been injured because of taking part in this study. You can tell the study doctor in person or call him at: (646) 543-2859. The study Sponsor or study doctor will not pay for this medical treatment, and you will not receive any other kind of payment.

All forms of medical diagnosis and treatment -- whether routine or experimental -- involve some risk of injury. In spite of all precautions, you might develop medical complications from participating in this study.

The Centers for Medicare and Medicaid Services (CMS) is the government agency that oversees Medicare and Medicaid. Funding agencies who make payments for injuries related to studies must report payments to CMS. In order to do this, the funder must have certain information about you, such as your name, date of birth, Social Security Number, Medicare or Medicaid ID numbers, date of injury, and description of injury. The funding agency is only allowed to use this information to report payments related to the injury should this be necessary or as otherwise specified in the Authorization to Use and Disclose Protected Health Information section, which is included below.

ENDING PARTICIPATION IN THE RESEARCH STUDY:

You may stop taking part in this study at any time. No matter what you choose, your care and benefits through Mount Sinai will not be negatively impacted.

If you decide to stop being in the study, please contact the Lead Researcher or the research staff. If you or the Lead Researcher decide that you should stop study therapy or be removed from this study before completion of all required visits, you will be asked to return to the clinic to evaluate your cancer and any safety concerns.

You may also withdraw your permission for the researchers to use and share any of your protected information for research, but you must do so in writing to the Lead Researcher at the address on the first page. Even if you withdraw your permission, the Lead Researcher may still use the information that was already collected if that information is necessary to complete the research study. Your health information may still be used or shared after you withdraw your authorization if you have an adverse event (a bad effect) from taking part in the research study.The Investigator has been provided with relevant information on Flt3L/CDX-301, poly-ICLC and pembrolizumab and will continue to receive updates during the study. If at any time you have questions or concerns about the study or Flt3L/CDX-301, poly-ICLC, or pembrolizumab you can ask the Investigator or research team.

If you stop being in the research study, the research team may not remove information they have already placed in the study database, and may continue to use that data as part of this study. The research team may ask you whether they can continue to collect information from your medical record.

If you decide you don't want your data and/or samples to be used for research anymore, you can contact the researcher and ask to have your data and/or samples withdrawn or labeled so that they will not to be used in additional projects or shared. If your data and/or samples have already been shared with researchers, those researchers will be asked to stop using them. However, if any data and/or samples

have already been shared without your identity or a linking code, it won't be possible to retrieve them. Data and/or samples that have already been used will not be affected by your decision. If your data and/or samples have already been deposited in an external repository, the study team will request that your data and/or samples be removed.

Withdrawal without your consent: The Lead Researcher, the funder or Mount Sinai may stop your involvement in this research study at any time without your consent. This may be because the research study is being stopped, the instructions of the research team have not been followed, the Lead Researcher believes it is in your best interest, or for any other reason. If data and/or samples have been stored as part of the research study, they too can be destroyed without your consent.

CONTACT INFORMATION:

If you have any questions, concerns or complaints at any time about this research, or you think the research has harmed you, please contact the office of the research team and/or the Lead Researcher at phone number 646-543-2859.

If there is an emergency, please call 911 or go to the emergency room. Let the emergency room staff know you are in a research study so they can contact the Lead Researcher if needed.

DISCLOSURE OF FINANCIAL INTERESTS:

Researchers sometimes get paid for consulting or doing work for companies that produce drugs, biologics or medical devices. If you have questions regarding industry relationships, you are encouraged to talk to the Lead Researcher or visit our website at http://icahn.mssm.edu/ where Mount Sinai publicly discloses the industry relationships of our faculty.

The company sponsoring this research study makes the drug being tested and has a financial interest that could be affected by the outcome of this research study.

MAINTAINING CONFIDENTIALITY – HIPAA AUTHORIZATION:

As part of this study, some of your private and/or protected health information will be obtained, used, and shared with your permission. There is a Federal Health Insurance Portability and Accountability Act (HIPAA) that makes sure this is done correctly and safely.

What is protected health information (PHI)?
PHI is the combination of two things:

1. PHI contains information that identifies you. It will be used to contact you and link you to your health information, like name, date of birth, medical record number, and address.
2. PHI also contains health information, including information about your mental and physical health from your visits to doctors or hospitals, or from study visits.

Every time you visit a hospital or your doctor, PHI is created and recorded in your medical record by your healthcare providers. In the same way, the PHI created as part of this study will be linked to who you are and your medical information.

What PHI is collected and used in this research study, and might also be shared with others?
As part of this study, the research team at the hospital(s) involved in the research will collect your name, address, telephone/fax numbers, dates directly related to the individual (birth, admission, discharge, date of death, etc.), e-mail addresses, social security number, medical records number, health plan numbers and account numbers.
The researchers will also get information from your medical record at Mount Sinai Hospital and your private doctor.

During the study, the researchers will gather information by:

- Reviewing and/or taking your medical history (includes current and past medications or therapies, illnesses, conditions or symptoms, family medical history, allergies, etc.)
- Doing a physical examination that generally also includes blood pressure reading, heart rate, breathing rate, and temperature.
- Completing the tests, procedures, questionnaires and interviews explained in the description section of this consent.
- Reviewing HIV-related information, which includes any information indicating that you have had an HIV-related test, or have HIV infection, HIV-related illness or AIDS, or any information which could indicate that you have been potentially exposed to HIV.
- Reviewing genetic tests.

Why is your PHI being used?
Researchers need the information that identifies you so they can contact you during the study. They need your health information and the results of any tests and procedures being collected as part of this study to answer the questions posed in the study. The purpose of the study is discussed earlier in this consent form. Before researchers analyze the data, they remove any information that would let others know who you are or that you took part in the study. If researchers publish or present study results at scientific meetings, lectures, or other events, their presentations would not include any information that would let others know who you are, unless you give separate permission to do so.

The Lead Researcher may also use and share the results of these tests and procedures with other healthcare providers at Mount Sinai who are involved in your care or treatment. The research team and

other authorized members of The Mount Sinai Health System ("Mount Sinai") workforce may use and share your information to ensure that the research meets legal, institutional or accreditation requirements. For example:

- The Mount Sinai Program for the Protection of Human Subjects is responsible for overseeing research on human participants and may need to see your information.
- If you receive any payments for taking part in this study, the Mount Sinai Finance Department may need your name, address, social security number, payment amount, and related information for tax reporting purposes.
- I*f the research team uncovers abuse, neglect, or reportable diseases, this information may be disclosed to appropriate authorities.*

Who, outside Mount Sinai, might receive your PHI?

As part of the study, the Lead Researcher, research team and others in the Mount Sinai workforce may disclose your PHI, including the results of the research study tests and procedures, to the following people or organizations: (It is possible that there may be changes to the list during this research study; you may request an up-to-date list at any time by contacting the Lead Researcher.)

- The United States Department of Health and Human Services (DHHS) and the Office of Human Research Protection (OHRP) (the government organization that is responsible for protecting human research participants).
- A Data Safety Monitoring Board or other committee that will monitor the study on an ongoing basis for safety.
- The United States Food and Drug Administration (the government organization that approves drugs or devices for medical use)
- Others: Manufacturers of the study drug CDX-301 (Celldex) will receive information on the blood counts of subjects receiving therapy. Although adverse effects on blood counts were not seen in healthy volunteers receiving CDX-301 in a recent Phase I study, such information would be important for the manufacturer to be aware of.

In all disclosures outside of Mount Sinai, you will not be identified by name, social security number, address, telephone number, or any other direct personal identifier unless disclosure of the direct identifier is required by law. Some records and information disclosed may be identified with a unique code number. The Lead Researcher will ensure that the key to the code will be kept in a locked file, or will be securely stored electronically. The code will not be used to link the information back to you without your permission, unless the law requires it, or rarely if the Institutional Review Board (IRB) allows it after determining that there would be minimal risk to your privacy. It is possible that a sponsor or their representatives, a data coordinating office, a contract research organization, may come to inspect your records. Even if those records are identifiable when inspected, the information leaving the institution will be stripped of direct identifiers. Additionally, when applicable, the monitors, auditors, the IRB, *OHRP, as well as the Food and Drug Administration (FDA) will be granted direct access to your medical records for verification of the research procedures and data. OHRP and FDA are authorized to remove information with identifiers if necessary to complete their task. By signing this document you*

are authorizing this access. The results of this research may be published. However, your name and other identifying information will be kept confidential.

For how long will Mount Sinai be able to use or disclose your PHI? Your authorization for use of your PHI for this specific study does not expire.

Will you be able to access your records?
During your participation in this study, you will not be able to access your medical records. This is done to prevent the knowledge of study results from affecting the reliability of the study. Your information will be available should an emergency arise that would require your treating physician to know this information to best treat you. You will have access to your medical record and any study information that is part of that record when the study is over or earlier, if possible. The research team is not required to release research information to you that is not part of your medical record.

Do you need to give the researchers permission to obtain, use or share your PHI?
NO! If you decide not to let the research team obtain, use or share your PHI, you should not sign this form, and you will not be allowed to volunteer in the research study. If you do not sign, it will not affect your treatment, payment, or enrollment in any health plans or affect your eligibility for benefits.

Can you change your mind?
If you decide to stop being in the study, please contact the Lead Researcher or the research staff.
The research team may ask you whether they can continue to collect information from your medical record. You will also have to decide if you wish to limit the continued use of the information collected during the study. Under US privacy laws you may also withdraw your permission for the researchers to use and share any of your protected information for research, but you must do so in writing to the Lead Researcher at the address on the first page.

Even if you withdraw your permission, the Lead Researcher may still use the information that was already collected, but only to complete this research study. Your health information may still be used or shared after you withdraw your authorization if you have an adverse event (a bad effect) from taking part in the research study.

If you have not already received it, you will also be given The Hospital's Notice of Privacy Practices that contains more information about how The Hospital uses and discloses your PHI.

It is important for you to understand that once information is disclosed to others outside Mount Sinai, the information may be re-disclosed and will no longer be covered by the federal privacy protection regulations. However, where possible, Mount Sinai has entered into agreements with those who will receive your information to continue to protect your confidentiality.

If researchers are reviewing your medical records or asking questions about your medical history or conditions, it is possible that they may learn information related to your HIV status. If that is the case, the following information concerns you. If researchers are not reviewing your medical records or asking questions about your medical history or conditions, then you may ignore the following section.

Notice Concerning HIV-Related Information

If you are authorizing the release of HIV-related information, you should be aware that the recipient(s) is (are) prohibited from re-disclosing any HIV-related information without your authorization unless permitted to do so under federal or state law. You also have a right to request a list of people who may receive or use your HIV-related information without authorization. If you experience discrimination because of the release or disclosure of HIV-related information, you may contact the New York State Division of Human Rights at (888) 392-3644 or the New York City Commission on Human Rights at (212) 306-5070. These agencies are responsible for protecting your rights.

How the Institutional Review Board (IRB) can help you:

This research has been reviewed and approved by an Institutional Review Board (IRB). You may reach a representative of the Mount Sinai Program for Protection of Human Subjects at telephone number (212) 824-8200 during regular work hours (Monday-Friday, 9am-5pm, excluding holidays) for any of the reasons listed below. This office will direct your call to the right person within the Mount Sinai Health System:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You are not comfortable talking to the research team.
- You have questions about your rights as a research participant.
- You want to get information or provide input about this research.

ADULT PARTICIPANT:

Your signature below documents your permission to take part in this research study and to the use and disclosure of your protected health information. A signed and dated copy will be given to you.

Signature of Participant	Printed Name of Participant	Date	Time

PERSON EXPLAINING STUDY AND OBTAINING CONSENT:

Signature of Consent Delegate	Printed Name of Consent Delegate	Date	Time

WITNESS SECTION:

My signature below documents that the information in the consent document and any other written information was accurately explained to, and apparently understood by, the participant, and that consent was freely given by the participant.

Signature of Witness	Printed Name of Witness	Date	Time