

IRB APPROVED
Sep 16, 2022

TITLE: MULTI-CENTER RANDOMIZED CONTROLLED PHASE 2B CLINICAL TRIAL TO EVALUATE THE SAFETY AND EFFICACY OF TVI-BRAIN-1 COMBINED WITH CONFORMAL RADIOTHERAPY AND TEMOZOLOMIDE COMPARED TO STANDARD THERAPY AS A TREATMENT FOR NEWLY DIAGNOSED O⁶-METHYLGUANINE METHYLTRANSFERASE NEGATIVE (MGMT UNMETHYLATED) GRADE 4 ASTROCYTOMA (GLIOBLASTOMA MULTIFORME; GBM)

TREATMENT NAME: TVI-BRAIN-1

PROCOTOL NO.: TVI-AST-008
WCG IRB Protocol #20224974
CINJ# 142203

SPONSOR: TVAX Biomedical, Inc.

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**STUDY-RELATED
PHONE NUMBER(S):** 732-235-2465 (24 hours)

RESEARCH CONSENT SUMMARY

You are being asked for your consent to take part in a research study. This document provides a concise summary of this research. It describes the key information that we believe most people need to decide whether to take part in this research. Later sections of this document will provide all relevant details.

What should I know about this research?

- Someone will explain this research to you.
- Taking part in this research is voluntary. Whether you take part is up to you.
- If you don't take part, it won't be held against you.
- You can take part now and later drop out, and it won't be held against you

- If you don't understand, ask questions.
- Ask all the questions you want before you decide.

How long will I be in this research?

We expect that your taking part in the treatment part of the research will last for 15 weeks, after which there will be follow-up visits every 3 months until Year 2, every 6 months until Year 3, and annually thereafter.

Why is this research being done?

The purpose of this specific clinical study is to determine how safe and effective an investigational immunotherapy called TVI-Brain-1 would be as a treatment for newly diagnosed glioblastomas when combined with surgery, radiotherapy and chemotherapy.

What happens to me if I agree to take part in this research?

If you decide to take part in this research study, the general procedures include collection and testing of cancer tissue samples after surgery and chemoradiation therapy (with radiation, temozolomide, and divalproex). If you are randomized into the study treatment group, you will also have procedures including two vaccinations created from your cancer cells, leukapheresis to collect your immune T-cells, and transfer of those T-cells after chemoradiation therapy. You will then be followed up with MRIs at follow-up visits.

Could being in this research hurt me?

The most important risks or discomforts that you may expect from taking part in this research include side effects from radiation, chemotherapy, TVI-Brain-1 (procedures include attenuated cancer cell vaccine, leukapheresis, and infusion of activated T-cells).

- Radiation may cause hair loss, skin irritation, nausea, vomiting, changes in appetite, drowsiness, fatigue, decreased sex drive, and hearing problems.
- Temozolomide (chemotherapy) may cause nausea, vomiting, headache, fatigue, seizures, constipation, diarrhea, weakness, bleeding, decreased white blood cell, red blood cell, and platelet counts.
- The attenuated cancer cell vaccine may cause fever, chills, flu-like symptoms, redness and swelling at the injection sites, and lymph glands near the injection sites. If the cancer cells have not been irradiated enough during the manufacture of the vaccine, cancer may grow at the vaccination site.
- Leukapheresis may cause pain, bruising, bleeding, blood clot formation, light-headedness, fainting, low blood pressure, vomiting, rapid breathing, chills, tingling, shortness of breath and nausea.
- Activated T-cells may cause headache, chills, nausea, low blood pressure, confusion, anxiety, fever, fatigue, low temperature, dizziness, weakness, rapid heartbeat, and shortness of breath.

More detailed risks are described later in the consent form.

Will being in this research benefit me?

Whether you are in the control group or the study group, you will receive the usual treatment for your disease (surgery, radiation therapy, chemotherapy). If you are in the study group, the also receiving TVI-Brain-1 may or may not provide additional benefit. Your participation in this study will help us learn more about treating your disease which may help others in the future.

What other choices do I have besides taking part in this research?

Instead of being in this research, your choices may include treatment with surgery, radiation therapy, and chemotherapy; there may also be other research studies you may join.

DETAILED RESEARCH CONSENT

INTRODUCTION

As a person with a glioblastoma, which is a form of brain cancer, you are being invited to participate in a research study of an investigational new cancer treatment. The treatment is called TVI-Brain-1, which is a type of immunotherapy. This research study will be conducted at the Rutgers Cancer Institute of New Jersey with Michael Salacz, M.D. as the Principal Investigator.

You do not have to participate in this research study. Participating in research is different from receiving standard health care. You might obtain personal benefit from participating in this study, but you should understand that the main purpose of research is to create new knowledge that could benefit future patients and society in general. There is no guarantee that you will benefit from participating in this research. .It is important that you read the rest of this form before you make a decision about whether or not to participate in this research study. You should ask as many questions as are needed to understand what will happen to you, if you participate in this study.

BACKGROUND

There are no highly effective treatments for glioblastomas. The current experimental treatment is being evaluated as a treatment for glioblastomas because there is a need to develop safer and more effective treatments for this disease. TVI-Brain-1 is an experimental treatment, which means that it is not approved by the FDA for the treatment of glioblastomas.

Glioblastomas routinely are treated with a combination of surgery, radiation and chemotherapy with temozolomide. Temozolomide is approved by the FDA as a treatment for adult glioblastomas. Surgery, radiation and chemotherapy may increase overall survival. Surgery, radiation and chemotherapy may also produce side effects. TVI-Brain-1 will be combined with/added to surgery, radiation and chemotherapy in a way that allows you to receive any of the benefits that these standard treatments provide as well as any benefits that the TVI-Brain-1 may provide. This is a randomized study where the combination of TVI-Brain-1 and standard therapy is being compared to standard therapy alone. Subjects who agree to participate in this study will be randomly (like the flip of a coin) assigned to receive standard therapy alone or standard therapy plus TVI-Brain-1. There is no way to predict whether you will be assigned to the group which receives standard therapy alone

or receives standard therapy plus TVI-Brain-1. You will have a 50% chance of being in the standard treatment alone or in the group receiving standard treatment and the study drug.

A recent clinical study using the TVI-Brain-1 treatment in 14 adult patients with recurrent glioblastomas showed that it is well tolerated by the body.

The TVI-Brain-1 treatment begins with vaccinations. The vaccine is created with cancer cells collected from your brain surgery. The vaccinations generate large numbers of immune white blood cells in your body. Those immune cells are removed from your blood and their potency is increased in the laboratory. These activated immune white blood cells are the active anti-cancer agent in TVI-Brain-1 and will be put back into your blood after radiotherapy and chemotherapy are completed.

Everyone's immune system responds differently to cancer. Some immune systems produce enough immune white blood cells to affect the growth of cancer. Some immune systems do not produce enough immune white blood cells to affect the growth of cancer.

Whether or not your immune white blood cells will affect the growth of your cancer is unknown.

PURPOSE

This clinical trial is being performed because there is a need for safer and more effective treatments for glioblastomas. The purpose of this specific clinical study is to determine how safe and effective TVI-Brain-1 would be as a treatment for newly diagnosed glioblastomas when combined with surgery, radiotherapy and chemotherapy.

PROCEDURES / DEFINITIONS

The combination of standard therapy and the TVI-Brain-1 treatment will take approximately 15 weeks. The standard therapy alone will take about 12 weeks. Following treatment, you will continue to be monitored at periodic intervals for the rest of your life.

The TVI-Brain-1 treatment is made up of 4 parts: (1) Vaccination, (2) Leukapheresis, (3) Immune white blood cell infusion, (4) Interleukin 2 (IL-2) treatment. Following your surgery, you will receive two vaccinations and leukapheresis will be performed. Radiotherapy and chemotherapy then will be performed. The immune white blood cell infusion will occur following completion of radiotherapy and chemotherapy. After the immune white blood cell infusion, you then will receive the IL-2 treatment.

Part 1. Vaccinations: You will be vaccinated to stimulate your immune system to produce an immune response against your cancer. The vaccine is made up of your own irradiated cancer cells (cells treated with radiation to remove their ability to grow and replicate) and GM-CSF (granulocyte macrophage colony-stimulating factor - trade name; Leukine). GM-CSF is a substance that your body produces naturally to stimulate the growth of white blood cells. GM-CSF is approved by the FDA for use in cancer patients undergoing chemotherapy, however it is considered investigational for this purpose.

The vaccinations will be given by intradermal (under the surface of the skin) injections on both sides of your upper chest and upper thighs.

Part 2. Leukapheresis: After two vaccinations, you will have a sample of your white blood cells removed by a process called leukapheresis. Leukapheresis is a standard medical procedure, which involves removing blood, separating out a sample of the white blood cells, and returning the remaining blood components to your body. Leukapheresis will be performed twice on successive days. The white blood cells that are collected will be taken to the laboratory and stored frozen until your radiotherapy and chemotherapy are completed. The white blood cells will then be removed from the freezer and used to produce immune cells white blood cells to fight your cancer. The leukapheresis visits are typically performed at the hospital as an outpatient procedure.

A Quinton-type catheter (a tube placed into a vein located under your collar bone) is necessary for the leukapheresis collection process and will need to be inserted before the leukapheresis procedure. You will meet with the radiology team who will review the risks of catheter placement and consent for this procedure will be reviewed and signed.

Part 3. Chemotherapy and Radiation treatment (Standard of Care): The standard of care therapy will be given to both treatment groups. This consists of a combination of chemotherapy called temozolomide, divalproex, and radiation therapy.

Part 4. TVI-Brain-1 Infusion of Immune Cells: During the week following completion of chemoradiotherapy, your activated immune cells will be infused into your bloodstream through a vein in your arm.

Part 5. Interleukin-2 (IL-2; trade name - Proleukin) Treatment: IL-2 is a substance that your body produces naturally to stimulate the growth of immune white blood cells. IL-2 is approved by the FDA for use in the treatment of patients with certain types of cancer; however it is considered investigational in this study. You will receive five subcutaneous (under the skin) IL-2 injections.

During some scheduled study visits, blood samples will be obtained, which will be used to help understand which patients respond to the treatment and why they respond. These samples may be stored for several years. In the event you are not eligible to participate in the study, any collected samples will be destroyed.

STUDY VISIT DESCRIPTIONS

BEFORE THE TREATMENT

Screening: Once it has been determined that a vaccine can successfully be made from your cancer tissue you will be screened for enrollment in this study. The following will be done during this visit:

- The study consent will be reviewed and signed.
- Medical and medication history.
- A physical exam.

- You will be asked about your ability to carry out everyday activities.
- Approximately 3 teaspoons of blood will be drawn for:
 - Blood, blood chemistry, liver and kidney function tests
 - Pregnancy test for women of child bearing potential

The study doctor will let you know the results of the pregnancy test.

- MRI (magnetic resonance image) scan of the brain. An MRI scan of the brain creates internal body pictures using magnetic energy. MRIs are routine procedures used to monitor your cancer.
- This visit will last approximately 5 hours.

DURING THE TREATMENT:

Vaccination #1 Visit (TVI-Brain-1 group only):

- You will receive the 1st vaccination during the first week to 14 days after your surgery. The vaccination is injected intradermally (under the skin) and is divided into 4 sites. The 4 sites are the left and right upper chest and the left and right upper thigh.
- Skin test reagents will be injected intradermally (under the skin) on your forearms. The skin test reactions will be measured 24 and 48 hours later.
- Physical exam.
- Recent medical and medication history.
- Ability to carry out everyday tasks and how you are feeling will be reviewed.
- Approximately 3 teaspoons of blood will be drawn for immunological testing.
- This visit will last 1 to 2 hours.

GM-CSF Injection Visits (TVI-Brain-1 group only):

- You will receive injections of GM-CSF for 3 days in a row after the 1st vaccination. The GM-CSF is injected in the same location as each of the 4 vaccination sites.
- You will be asked about any effects that the treatment might have had on how you feel.
- These visits will last approximately 30 minutes.

Vaccination #2 Visit (TVI-Brain-1 group only):

- You will receive the 2nd vaccination approximately 7-10 days after the 1st vaccination. The vaccination is again injected intradermally and is divided into 4 sites similar to the first vaccinations.
- Physical exam.
- Recent medical and medication history.
- Ability to carry out everyday tasks and how you are feeling will be reviewed.
- You will be asked about any effects that the treatment might have had on how you feel.
- Blood will be drawn for blood, blood chemistry, liver and kidney function tests
- This visit will last 1 to 2 hours.

GM-CSF Injection Visits (TVI-Brain-1 group only):

- You will receive injections of GM-CSF for 3 days in a row after the 2nd vaccination injected intradermally into the 4 vaccination sites.
- You will be asked about any effects that the treatment might have had on how you feel.
- These visits will last approximately 30 minutes.

Quinton Catheter Visit (TVI-Brain-1 group only):

- The Quinton-type catheter procedure will be reviewed by the radiology team and a consent will be signed.
- A Quinton-type catheter will be placed in a vein under your collarbone prior to the apheresis procedure.

Leukapheresis Visit (TVI-Brain-1 group only): Apheresis will be performed approximately 10 days following the 2nd vaccination.

- You will be asked about any effects that the treatment might have had on how you feel.
- Approximately 3 teaspoons of blood will be drawn for laboratory and immunologic tests.
- Skin test skin test reagents will be injected intradermally (under the skin) on your forearms. The skin test reactions will be measured 24 and 48 hours later.
- The leukapheresis visit will last approximately 5 hours.
- A second leukapheresis will be performed within approximately 24 hours.

Concomitant radiotherapy and temozolomide visits (Standard of Care therapy, both groups):

Regardless of the treatment arm to which you are randomized, both groups will receive standard of care therapy which is a combination of temozolomide, divalproex, and radiation treatment and will begin approximately 5 – 6 weeks after surgery. For the TVI-Brain-1 treatment group, both radiotherapy and chemotherapy with temozolomide and divalproex begin in the week following the successful completion of the leukaphereses. The radiotherapy and temozolomide and divalproex will continue for approximately six weeks. The following are performed during each week of radiotherapy.

The following assessments are performed weekly during chemoradiotherapy:

- Approximately 3 teaspoons of blood will be drawn for laboratory tests

The following additional assessments are performed during the third and fifth week of chemoradiotherapy:

- Medications required and taken since last visit are reviewed and recorded.
- Adverse events are reviewed and recorded
- Review glucocorticoid medications taken since last visit.
- Physical examination

- Vital signs, height, and weight measurements
- Karnofsky Performance Status

An MRI scan of the brain will be done at the end of chemoradiotherapy.

Activated Immune Cell Infusion Visit (TVI-Brain-1 group only):

- Activated immune cells will be infused intravenously (into the vein) 3-5 days following completion of chemoradiotherapy. Cells will be infused slowly over a minimum of 30 minutes and a maximum of 5 hours.
- Physical exam.
- Recent medical and medication history.
- Ability to carry out everyday tasks and how you are feeling will be reviewed.
- You will be asked about any effects that the treatment might have had on how you feel.
- Blood will be drawn for laboratory tests
- This visit will last approximately 5 hours. You will be required to remain in the greater Kansas City area for 24 hours. This requirement exists so that, if side effects requiring medical management do occur, they may be managed by experienced study staff.

Interleukin 2 Injection visits (TVI-Brain-1 group only):

- Low-dose IL-2 will be injected subcutaneously (under the skin) on five occasions. The first IL-2 injection is given no less than 24 hours and no more than 48 hours following the infusion of the activated T cells. The other injections will follow with the injections being separated by a minimum of 48 and a maximum of 72 hours.
- At the first IL-2 injection visit, approximately 3 teaspoons of blood will be drawn for immunological testing.
- Adverse events are reviewed
- Medications required and taken since last visit are recorded.
- Review glucocorticoid medications taken since last visit.
- The visits last approximately 30 minutes.

AFTER THE TREATMENT (Both groups)

Post-Treatment Visit:

- Physical exam.
- Recent medical and medication history.
- Your ability to carry out everyday tasks and how you are feeling will be reviewed.
- You will be asked about any effects that the treatment might have had on how you feel.
- Approximately 3 teaspoons of blood will be drawn for laboratory tests.
- Approximately 2 teaspoons of blood will be drawn for immunological testing.
- MRI scan of the brain.
- This visit will last approximately 5 hours.

Treatment Follow-up Visits: Following the end of treatment evaluation, the following are performed once every three months for two years, once every six months through 3 years, then annually to monitor your condition.

- A physical exam will be performed.
- Your recent medical and medication history will be reviewed.
- Your ability to carry out everyday tasks and how you are feeling will be reviewed.
- Approximately 3 teaspoons of blood will be drawn for laboratory tests (only on certain visits).
- MRI scan of the brain.

RISKS/POSSIBLE SIDE EFFECTS

Potential radiation side effects:

- Hair loss
- Skin irritation
- Hearing problems
- Nausea or vomiting
- Changes in appetite
- Drowsiness and fatigue
- Decreased sex drive

Potential temozolomide side effects:

- nausea and vomiting
- headache
- fatigue
- seizures
- constipation
- diarrhea
- weakness
- bleeding
- lowered white cell count (may increase risk for infection)
- lowered platelet counts
- anemia
- hair loss
- dizziness
- trouble with memory and sleeping
- rash
- liver injury

Potential divalproex side effects:

- dizziness
- drowsiness
- abdominal pain, upset stomach
- decreased appetite
- diarrhea
- nausea
- in some people, nervousness, difficulty sleeping, tremor
- low platelets (increased risk of bleeding)
- low red blood cells
- low white blood cells
- liver injury
- hypersensitivity and rash

Potential vaccine side effects

- Fever
- Chills
- Flu like symptoms
- Redness and swelling may develop at the injection sites
- Enlargement of the lymph glands near the injection sites

Cancer cells that have been insufficiently irradiated could grow at the vaccination site. Extensive controls are in place to ensure that cancer cells have been irradiated so that they are unable to grow. In the unlikely event that cancer cell growth does occur, the cancer would immediately be surgically removed.

Potential GM-CSF (Leukine®) side effects

- Fever
- Chills
- Nausea and vomiting
- Diarrhea
- Fatigue
- Weakness
- Headache
- Decreased appetite
- Development of blood clots
- Rapid or irregular heartbeat or other heart problems
- Faintness
- Facial flushing
- Pain in bones, muscles, chest, abdomen or joints
- Reaction at injection site
- Rashes
- Kidney or liver dysfunction

Potential leukapheresis side effects

- Local pain, bruising, bleeding, blood clot formation, and in rare instances, an infection might occur at the site where blood is drawn.
- Light-headedness, fainting, low blood pressure, vomiting, and rapid breathing
- Chills caused by cooling of the blood
- Tingling and nausea caused by the blood thinning medicine (called citrate) which prevents the blood from clotting in the machine.
- Loss, breakdown or clotting of blood
- Allergic reactions
- Accidental addition of air to the blood going back to you
- Fluid overload or loss resulting in shortness of breath or decreased blood pressure

Potential activated T cell side effects

- Headache
- Chills
- Nausea
- Hypotension
- Low blood pressure
- Confusion
- Anxiety
- Fever
- Fatigue
- Hypothermia
- Dizziness
- Weakness
- Rapid pulse or heartbeat
- Shortness of breath

Potential IL-2 (Proleukin) side effects:

The IL-2 doses that are being given in the current study are generally described as low-dose. Low dose IL-2 sometimes produces fever, chills, tiredness, headaches and nausea. The following side effects were generated during the treatment of patients with high-dose IL2.

- Fever, chills, tiredness, headache, muscle and joint pain
- Low blood pressure
- Nausea/vomiting
- Diarrhea
- Weakness
- Confusion
- Shortness of breath
- Facial flushing
- Rash or dry, itchy skin
- Low urine output
- Abnormal blood tests suggesting effect on liver or kidney function
- Dizziness
- Increased heart rate or change in heart rhythm
- Abdominal pain
- Swelling in face, hands or feet
- Loss of appetite
- Insomnia
- Trouble concentrating
- Runny nose
- Anemia
- Allergic reaction
- Cough
- Low white blood cell count with increased risk of infection
- Confusion

- Drowsiness
- Mouth sores
- Low platelet count with increased risk of bleeding
- Coma
- Kidney failure
- Stroke
- Seizures
- Psychosis
- Depression
- Damage to bowel – ruptured or bleeding bowel
- Serious infection
- Heart attack
- Bleeding problems
- Death from low blood pressure, capillary leak syndrome, heart problems or other complications

Pregnancy Related Risk: It is not known how the study treatment will affect an unborn or nursing child. There may be risks to an unborn or nursing child that have not yet been identified. Because the treatment/drug(s) in this research study may affect an unborn child, you should not become pregnant or father a child while on this research study. You should not nurse your baby while participating in this research study. You must notify the investigator immediately if you become pregnant or if you have caused a pregnancy. You will not be allowed to enter this study if you are already pregnant.

If you have not been surgically sterilized, or have not undergone menopause at least 1 year ago, you must practice a method of birth control. Examples of birth control include: birth control pills, implant, intrauterine device, (IUD), or a barrier method such as a diaphragm with intravaginal spermicide, cervical cap, male or female condom. The study doctor will discuss what method(s) may be most effective for you.

Other Risks: Your eligibility for the study depends on obtaining enough tumor cells for use in creating the vaccination. The surgical specimen collected might not provide enough cells to allow you to be treated in the study. There is a risk that the tumor cells and apheresis-gathered T-cells could get contaminated or infected during processing outside the body.

Drawing blood may cause pain, bruising, lightheadedness, or, on rare occasions, infection.

Risks associated with an MRI may include feelings of claustrophobia or anxiety. If you have metallic objects, there may be injury of tissue around the metallic objects and movement of the metallic object if not attached to bone. Contrast dye may be used, which has a small possibility of a severe allergic reaction and may also cause kidney problems, especially if you are dehydrated or have poor kidney function.

Possibility of Unknown Risks: The study treatment may have other unknown or unforeseen side effects. There is always the possibility that you may have a reaction that is unforeseen and unanticipated. It is important that you report any and all symptoms or reactions to the investigator. You will be monitored for side effects by study personnel, and the investigator may decide that you should be withdrawn from the study.

NEW FINDINGS

You will be informed if any significant new findings develop during the course of the study that could affect your willingness to participate in this study.

BENEFITS

There is no assurance that you will benefit from participating in this study. The treatment could have no effect on the growth of your cancer. Your disease could worsen during the treatment. You may, in fact, experience a decrease in quality of life as a result of side effects from this treatment. If the study treatment is effective, the potential benefit of this treatment to you could be shrinkage of your cancer, which could result in a decrease in symptoms and/or an improvement in the quality of your life. It is hoped that additional information gained in this research study may be useful in the future in the development of this treatment for other persons with brain and other types of cancer.

ALTERNATIVES

The following therapeutic options are available to you if you decide not to participate in this experimental clinical trial.

1. Surgery to remove a portion of your cancer.
2. Surgery to remove a portion of your cancer plus chemoradiotherapy with temozolomide alone.
3. Surgery to remove a portion of your cancer plus chemoradiotherapy with temozolomide alone followed by additional chemotherapy.
4. Supportive care such as hospice.

ALTERNATIVE CLINICAL TRIALS

There are other clinical trials that are evaluating other experimental treatments for glioblastoma that are potentially available to you. You could participate in one of those trials if you decide not to volunteer in this trial. Those clinical trials are listed in the clinical trial website of the National Cancer Institute (<http://www.clinicaltrials.gov>).

COST OF PARTICIPATION

The Sponsor may pay for the study drug and specific research related procedures. There could be added costs to you or your insurance company because of your participation in this research study. If you have questions about what costs will be covered by the Sponsor you should discuss this with the research staff.

Your insurance may not cover costs associated with your participation in this study. It is suggested that you contact your insurance carrier to determine its policy on the payment of the costs of your participation in this research study and the impact of participation on future health insurance coverage.

PAYMENT TO SUBJECTS

You will not be paid to take part in this study.

IN THE EVENT OF INJURY

Subjects in this study may be exposed to certain risks of personal injury in addition to those associated with standard forms of treatment. In addition, it is possible that during the course of this study, new adverse effects that result in personal injury may be discovered.

If you get ill or are injured as the direct result of being in this study inform your study doctor as soon as possible. The Institution will make appropriate referrals for treatment. The Study Sponsor shall reimburse all the reasonable and necessary costs of diagnosis and treatment of any Study subject injury, including hospitalization, if it:

- (a) Is not a medical condition that you had before you started the study;
- (b) Is not the result of the natural progression of your disease or condition;
- (c) Is not caused by your failure to follow the study plan; and
- (d) Is not proved to be directly caused by the Institution's negligence or misconduct.

There are no other plans for the University to provide other forms of compensation (such as lost wages) to you for research related illnesses or injuries. However, by signing this form, you are not giving up any legal rights to seek further compensation.

In the event you experience a serious side effect during this study, you should immediately contact Dr. Michael Salacz at 732-235-2465 (24 hours).

CONFIDENTIALITY AND PRIVACY

All efforts will be made to keep your personal health information in your research record confidential, but total confidentiality cannot be guaranteed. Your protected health information will be processed and shared during the study by your study doctor, study staff and representatives/designees of the Sponsor. The researchers will keep your records related to the study private as is required by law.

The research team may use or share your information collected or created for this study with the following people and institutions:

- The Rutgers University Institutional Review Board and Compliance Boards
- The Office for Human Research Protections in the U.S. Dept. of Health and Human Services
- The Food and Drug Administration
- TVAX Biomedical, the study sponsor

We may publish the results of this research. However, we will keep your name and other identifying information confidential.

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

Data or specimens collected in this research might be deidentified and used for future research or distributed to another investigator for future research without your consent.

Your specimens (even if identifiers are removed) may be used for commercial profit. You will not share in this commercial profit.

This research is covered by a Certificate of Confidentiality from the National Institutes of Health. This means that the researchers cannot release or use information, documents, or samples that may identify you in any action or suit unless you say it is okay. They also cannot provide them as evidence unless you have agreed. This protection includes federal, state, or local civil, criminal, administrative, legislative, or other proceedings. An example would be a court subpoena.

There are some important things that you need to know. The Certificate DOES NOT stop reporting that federal, state or local laws require. Some examples are laws that require reporting of child or elder abuse, some communicable diseases, and threats to harm yourself or others. The Certificate CANNOT BE USED to stop a sponsoring United States federal or state government agency from checking records or evaluating programs. The Certificate DOES NOT stop disclosures required by the federal Food and Drug Administration (FDA). The Certificate also DOES NOT prevent your information from being used for other research if allowed by federal regulations.

Researchers may release information about you when you say it is okay. For example, you may give them permission to release information to insurers, medical providers or any other persons not connected with the research. The Certificate of Confidentiality does not stop you from willingly releasing information about your involvement in this research. It also does not prevent you from having access to your own information.

SUBJECT RIGHTS AND WITHDRAWAL FROM THE STUDY

Your participation in this study is voluntary. The choice not to participate or to quit at any time can be made without penalty or loss of benefits to which you are otherwise entitled. Not participating or quitting will have no effect upon the medical care or treatment you receive now or in the future at The Rutgers Cancer Institute of New Jersey.

The study may be discontinued for any reason without your consent by the investigator conducting the study, by the sponsor of the study, or by the FDA.

Your participation can be discontinued by the investigator or by the sponsor if it is felt to be in your best interest or if you do not follow the study requirements. You may be asked to return to the clinic for a final visit.

You have a right to change your mind about allowing the research team to have access to your health information. To cancel your permission, you should notify Dr. Michael Salacz at Rutgers Cancer Institute of New Jersey, 195 Little Albany Street, New Brunswick, NJ 08901 or call Dr. Michael Salacz at 732-235-2465.

If you cancel permission to use your health information, you will be withdrawn from the study. The researchers and the sponsor may continue to use and share information that was gathered before your cancellation. They will stop collecting any additional information about you, unless they need information about a side effect of the study treatment.

Should the study be terminated prior to the completion of your participation, neither the sponsor, the investigator, nor The Rutgers Cancer Institute of New Jersey will be under any obligation to provide you with additional treatments of the type used in the study. Your physician will decide upon further treatment after study termination, if indicated.

QUESTIONS

If you have questions, concerns, or complaints, or think this research has hurt you, talk to the research team at the phone number(s) listed in this document.

If you have any more questions, concerns, problems, information or input about the research or would like to know your rights as a research subject, you can contact the Rutgers Institutional Review Board or the Rutgers Human Subject Protection Program via phone at 732-235-2866 or 732-235-9806 or via email irboffice@research.rutgers.edu or you can write us at 335 George Street, Liberty Plaza Suite 3200, New Brunswick, NJ 08901.

This research is being overseen by WCG IRB. An IRB is a group of people who perform independent review of research studies. You may talk to them at 855-818-2289 or researchquestions@wcgirb.com if:

- You have questions, concerns, or complaints that are not being answered by the research team.
- You are not getting answers from the research team.
- You cannot reach the research team.
- You want to talk to someone else about the research.
- You have questions about your rights as a research subject.

PERMISSION (AUTHORIZATION) TO USE OR SHARE HEALTH INFORMATION THAT IDENTIFIES YOU FOR A RESEARCH STUDY

The next few paragraphs tell you about how investigators want to use and share identifiable health information from your medical record in this research. Your information will only be used as described here or as allowed or required by law. If you sign this consent form, you agree to let the investigators use your identifiable health information in the research and share it with others as described below. Ask questions if there is something you do not understand.

What Is the Purpose of The Research and How Will My Information Be Used?

You are being invited to take part in this research study which is described at the beginning of this form. The purpose of collecting and using your health information for this study is to help investigators answer the questions that are being asked in the research.

What Information About Me Will Be Used?

- All information in your medical record
- Hospital discharge summaries
- Radiology records or images (MRI, CT, PET scans)
- Medical history or treatment
- Medications
- Consultations
- Laboratory/diagnostic tests or imaging
- EKG and/or EEG reports
- Pathology reports, specimen(s) or slide(s)
- Operative reports (about a surgery)
- Emergency Medicine reports

Who May Use, Share or Receive My Information?

The research team may use or share your information collected or created for this study with the following people and institutions:

- Rutgers University Investigators Involved in the Study
- The Rutgers University Institutional Review Board and Compliance Boards
- TVAX Biomedical, the study sponsor and/or their representatives/designees
- The Food and Drug Administration
- The Office for Human Research Protections in the U.S. Dept. of Health and Human Services
- Hospital Personnel as Necessary for Clinical Care:
 - Robert Wood Johnson University Hospital

Those persons or organizations that receive your information may not be required by Federal privacy laws to protect it and may share your information with others without your permission, if permitted by the laws governing them.

Will I Be Able to Review My Research Record While The Research Is Ongoing?

No. We are not able to share information in the research records with you until the study is over. To ask for this information, please contact the Principal Investigator, the person in charge of this research study.

Do I Have to Give My Permission?

No. You do not have to permit use of your information. But, if you do not give permission, you cannot take part in this study. (Saying no does not stop you from getting medical care or other benefits you are eligible for outside of this study.)

If I Say Yes Now, Can I Change My Mind and Take Away My Permission Later?

Yes. You may change your mind and not allow the continued use of your information (and to stop taking part in the study) at any time. If you take away permission, your information will no longer be used or shared in the study, but we will not be able to take back information that has already been used or shared with others. If you say yes now but change your mind later for use of your information in the research, you must write to the researcher and tell them of your decision: Dr. Michael Salacz, Rutgers Cancer Institute of New Jersey, 195 Little Albany Street, New Brunswick, NJ 08901.

How Long Will My Permission Last?

There is no set date when your permission will end. Your health information may be studied for many years.

AGREEMENT TO TAKE PART IN RESEARCH

Dr. Michael Salacz has given you information about this research study. He/she has explained what will be done and how long it will take, and any inconvenience, discomfort or risks that may be experienced during this study. You freely and voluntarily consent to participate in this research study. You have read and understand the information in this form and have had an opportunity to ask questions and have them answered.

You will be given a signed copy of the consent form to keep for your records.

Subject's Printed Name

Subject's Signature

Date

Printed Name of Person Obtaining Consent

Signature of Person Obtaining Consent

Date

Printed Name of Principal Investigator

Principal Investigator's Signature