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CONSENT TO ACT AS A PARTICIPANT IN A RESEARCH STUDY

Title: Phase I, Dual Arm, Open-Label, Trial of Intralesional 5-Fluorouracil (5FU) and Intralesional 5FU Combined with Topical Calcipotriene in Patients with Squamous Cell Carcinoma (SCC) of the Lower Extremities

Principal Investigator:

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Co-Investigators:

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Hannah Glass, PA-C

Jeffery Plowey HTL (ASCP), MBA – Study Coordinator

Contact Information:

You can contact the study investigator if you have any questions about the study, concerns or complaints.

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If you have any questions about your rights as a research subject or wish to talk to someone other the research team, please call the University of Pittsburgh Human Subjects Protection Advocate toll-free at 866-212-2668.

FDA Clinical Trial Registry [21 CFR 50.25] – NCT# 03370406

A description of this clinical trial will be available on <http://www.clinicaltrials.gov>, as required by US 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.

Source of Support:

Funding from the American College of Mohs Surgery.

Why is this research being done?

A squamous cell is a type of epithelial cell. People often think of epithelial cells as "skin" cells but these cells are found in many areas of the body. Squamous cell carcinoma (SCC) can occur anywhere there are squamous cells and is a common form of a keratinocyte skin cancer. Squamous cell carcinoma of the lower extremity is a distinct subset of cutaneous squamous cell carcinomas which tend to occur multiply in elderly women. Surgery has been the standard of care for this subset of SCC but leads to many complications such as poor wound healing and postoperative infections. Furthermore, a phenomenon called eruptive postoperative SCC can occur, in which cytokines (cell signaling proteins) released during wound healing trigger secondary tumor formation in genetically predisposed cells surrounding the original SCC.

The purpose of this research is twofold. The first indication is to explore a new, non-surgical and less invasive therapeutic approach for the treatment of squamous cell carcinoma (SCC) on the legs. The second indication is to collect and bank tumor samples to study the therapy's effect on the tumor cellular microenvironment.

This study aims to evaluate the safety and efficacy of locally treating tumors with an injectable solution of chemotherapeutic 5-fluorouracil (5FU) 50mg/ml alone or in combination with a topical immune response modifier, 0.005% calcipotriene cream. The intended goal for the study is to eliminate the need for surgery by significantly shrinking and/or eliminating the tumor, thereby preventing surgical complications and improving post-treatment outcomes.

5FU is a potent, widely used and well-studied chemotherapeutic that is used in a variety of internal cancers such as breast cancer, colorectal cancer, pancreatic cancer, and stomach cancer. It is also formulated into a cream for the topical (applied to skin) treatment of accessible pre-cancerous and cancerous skin growths.

The use of topical 5FU is only effective on pre-cancerous and cancerous skin growths that are most superficial (on the skin surface) on the skin. Topical 5FU is unable to penetrate deep enough through the skin's barrier to kill certain tumors such as SCC that reside deeper than the skin's surface. To overcome the skin's barrier a small amount, approximately one half of a milliliter of 50mg/ml 5FU will be injected directly into the tumor lesion once a month over a three (3) month period. It is hoped that localized and targeted injections of 5FU will be effective in the killing and elimination of SCC tumors. The small direct injection into the tumor is also meant to minimize the systemic side effects of the drug.

5FU alone may not be enough to eliminate the tumor and will not prevent secondary tumor eruptions, therefore we also propose to treat one study group with 5FU, as previously described, in combination with 0.005% calcipotriene topical cream. Calcipotriene is a man-made form of vitamin D and is a FDA approved treatment of psoriasis. In the treatment of psoriasis, calcipotriene works by modifying how skin cells grow and develop. More recently calcipotriene has been shown to have immune modulating properties. It activates the immune system by stimulating the immune response which recruits pathogen fighting cells. It is the hope that the addition of calcipotriene will create both an innate response to dying cells induced by 5FU injections as well as an adaptive response and prevent secondary tumor eruptions by tissue-

resident memory (Trm) cell formation in patients in the future. Calcipotriene will be applied by the participant directly to the lesion topically two (2) times daily for four (4) days one (1) day after each of three (3) 5FU injections.

A total of thirty (30) participants will be enrolled into the study and will be randomly divided into three (3) groups of ten (10). The three (3) groups consist of a control group which will receive only the routine current standard of care at end of study period, a group that will receive 5FU only and a final group that will receive 5FU plus 0.005% calcipotriene topical cream.

To ensure all patients are tumor free at the end of the study period all patients will undergo the routine current standard of care and have their lesions excised surgically (control group), and biopsied (5FU and 5FU + Calcipotriene groups) and surgically excised if the biopsy is positive, and clinically observed if the biopsy is negative. This may be done with standard excision or Mohs surgery based on the location. Mohs surgery (also called Mohs micrographic surgery) is a highly precise procedure used to treat certain types of skin cancer. During the surgery, the doctor removes the visible cancer and then examines it under a microscope right away. If cancer cells are still present, they remove another very thin layer and check again. This step-by-step process continues until no cancer cells remain. Because it removes only the tissue that contains cancer, Mohs surgery has very high cure rates and preserves as much healthy skin as possible. It's often used for skin cancers on the face or other areas where saving healthy tissue is especially important.

Who is being asked to take part in this research study?

Persons 18 years or older, who have been diagnosed with a squamous cell carcinoma between 1.0cm and 2.0cm in diameter, on their lower extremity(ies).

What procedures will be performed for research purposes?

In office procedures:

First Study Appointment:

At your first study appointment a member of the research team will sit down with you to discuss the research study, why you qualify to be a participant, and answer any questions you may have on the study. If you agree to participate in the study, you will be required to sign this **Informed Consent Form**. Once you have agreed to participate in the study and have been consented it will be determined if you meet all the inclusion and exclusion criteria, your lesion of concern will be evaluated which will include an evaluation of the draining lymph node basin(s). As part of the determining if you meet all the inclusion criteria a ECOG (Eastern Cooperative Oncology Group) Performance Status score will be determined. The score determines the participant's level of functioning in terms of their ability to care for themselves, daily activity, and physical ability (walking, working, etc.). If you are a female of childbearing years you will also be asked to take a pregnancy test. Once it is determined you meet the inclusion/exclusion criteria you will be randomly assigned to a study group and a small punch biopsy will be taken under local anesthesia, lidocaine. The biopsy will be retained and stored in a tissue bank for future studies

which may include but not limited to microscopic and genetic analysis. See Sections Below for more detailed description of study groups and study procedures.

If you have any doubts about or need more time to come to a decision to participate, please inform your study representative and a follow up appointment will be made.

You will be assigned to a treatment group based on a computer-generated random study matrix and from your participant number. The computer randomly assigns a participant number to each study group. Your participant number is generated by the order in which you enroll into the study, i.e. if you are 3rd participant to enroll you will be participant 3, 4th patient to enroll participant 4, etc.

Example of randomly generated study matrix

	Group A	Group B	Group C
Participant #	Participant 5	Participant 1	Participant 7
Participant #	Participant 14	Participant 22	Participant 9

You will be assigned randomly (like flipping a coin) to one of the three study groups. The assignment is done by a computer program, so your study staff will not know in advance what group you will be assigned to.

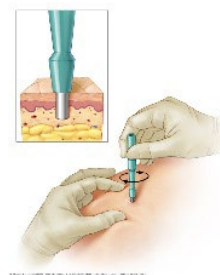
In the event you decide not to participate or withdraw from the study you will be scheduled to have your SCC lesion excised at the first available surgery appointment within a four (4) week period from time of your initial diagnosis biopsy.

In office experimental Procedures

Pregnancy Test – If determined to be necessary a urine specimen will be collected after participant has agreed to and signed the consent and an urine pregnancy test will be conducted.

Groups A / B / C

- A small 2 mm (less than 1/12 of an inch) sample of tumor (biopsy) will be taken by a punch biopsy (a cookie-cutter-like tool) under local anesthesia. The removed biopsy sample will be collected and stored in what is called a **Tissue Bank** for future studies on but not limited to genetic analysis, tumor biology, tumor immune response and biological response to study medications. Samples may be kept for an indefinite amount of time.
- Photograph of tumor lesion
- Measurement of tumor lesion
- Complete excision of tumor by scalpel under local anesthetic as part of your routine current standard of care (Group A; Group B and C if the punch biopsy taken after the study is positive for cancer cells). Part of the excised tumor will be retained in a tissue bank for future study. **Note: This procedure is not part of the study and is*



considered routine current standard of care (care that you would have received under normal circumstances irrespective of being in a study) and will be billed to your insurance company as such. This procedure is included to inform you that part of the tumor from this procedure will be retained in a tumor bank which will not be billed to your insurance company.

Groups B / C

- Injection of a small amount of 5FU 5% (50mg/ml) solution (approximately 0.5 ml or 1/10 of a teaspoon) directly into the tumor once a month for 3 months.

At home experimental procedures:

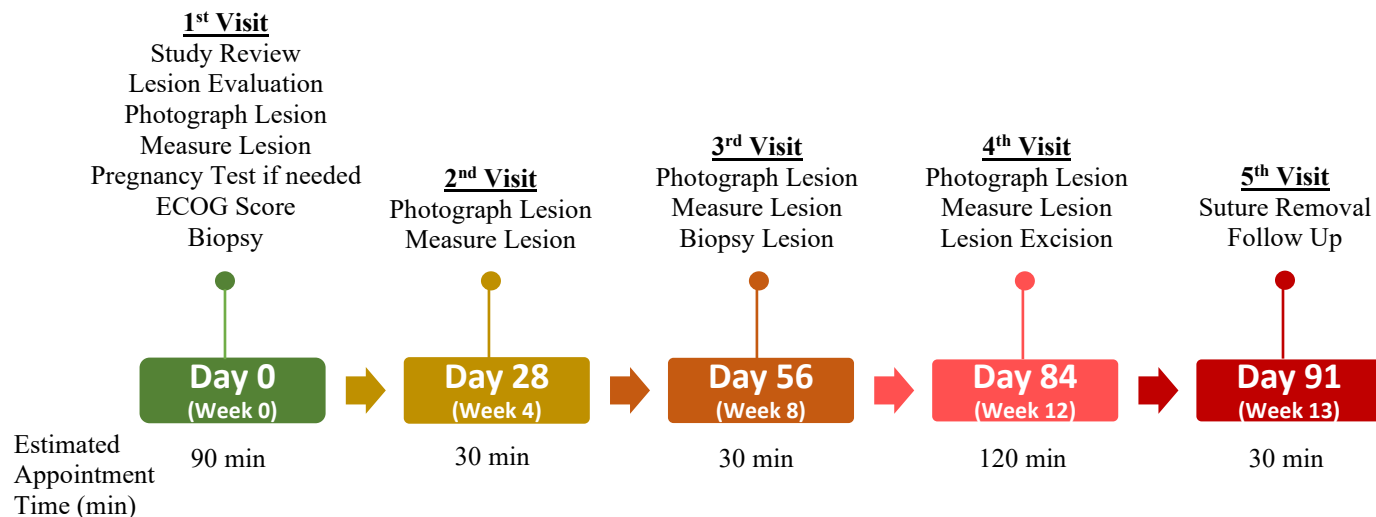
Group C only

- Participant will apply 0.005% calcipotriene topical cream, at home, directly to the lesion site two (2) times daily for four (4) days one (1) day after each of three (3) 5FU injections. The topical calcipotriene cream will be supplied to you as part of the study.

If you agree to participate in the study, you will be randomly assigned to one of the following groups. The following describes the procedures that will occur in each of the groups. All procedures are described above.

Group A: Routine Current Standard of Care only.

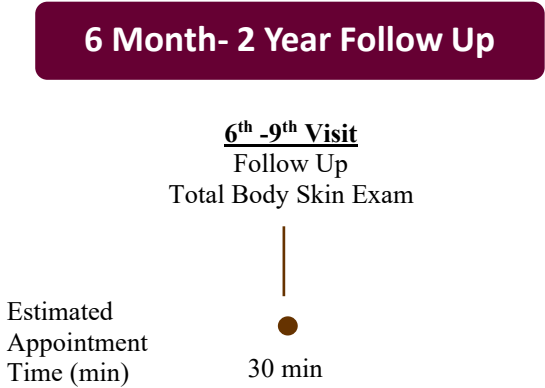
Group A - Routine Current Standard of Care – Study Schedule



This group will come once a month for 4 months, during which time your lesion will be monitored only. If the lesion grows to exceed 2 cm or becomes painful, Mohs surgery will be performed. A photograph and measurement of the lesion will be taken during each visit. The first visit (day 0) will consist of your initial consult, consent, ECOG evaluation, pregnancy test

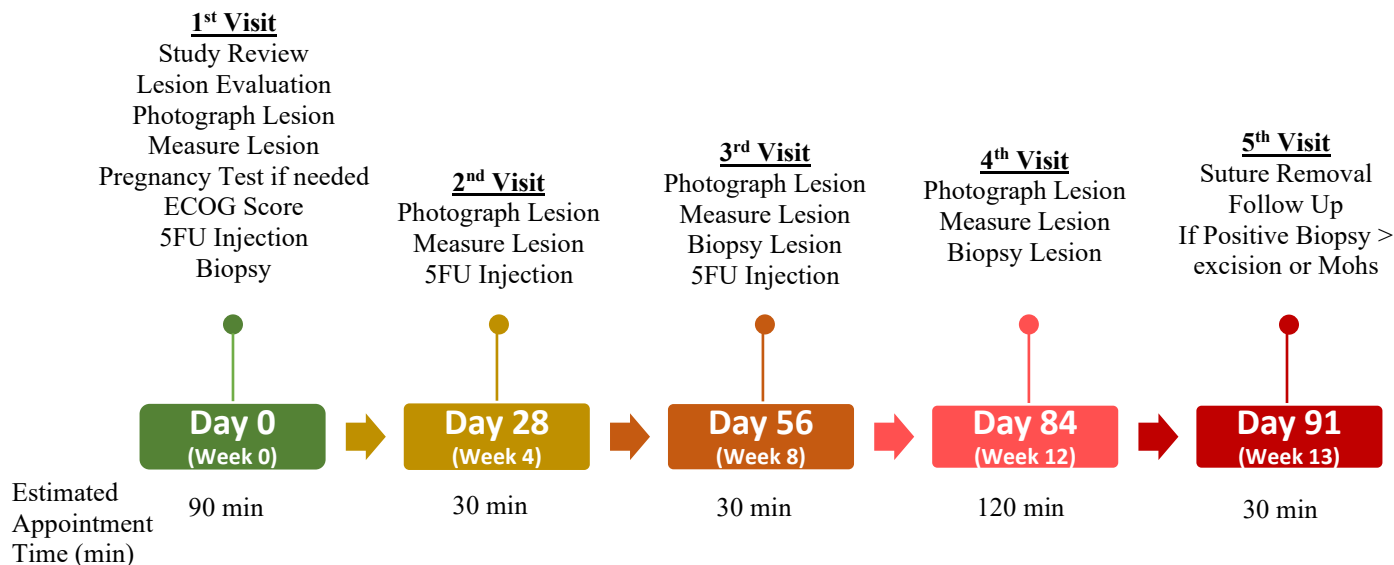
if needed and you will receive an injection of anesthetic (lidocaine) to locally numb the area around the lesion and a 2mm sample of your lesion will be obtained by punch biopsy. At the 3rd visit (day 56) you will receive an injection of anesthetic (lidocaine) to locally numb the area around the lesion and a 2mm sample of your lesion will be obtained by punch biopsy. This specimen sample will be retained in a tissue bank for future studies. On the 4th visit your lesion site will be anesthetized by an injection of local anesthetic and the tumor lesion will be excised (the tumor will be cut out) by routine current standard of care which will be Mohs surgery or standard excision based on location. Mohs surgery (also called Mohs micrographic surgery) is a highly precise procedure used to treat certain types of skin cancer. During the surgery, the doctor removes the visible cancer and then examines it under a microscope right away. If cancer cells are still present, they remove another very thin layer and check again. This step-by-step process continues until no cancer cells remain. Because it removes only the tissue that contains cancer, Mohs surgery has very high cure rates and preserves as much healthy skin as possible. It's often used for skin cancers on the face or other areas where saving healthy tissue is especially important. A small portion of the tumor will be saved and sent to the tissue bank. Finally, you will follow up with us one (1) week after surgery to remove sutures and then every year as per standard of care.

Group A - Routine Current Standard of Care - Follow Up Schedule



Group B: Intralesional 5-Fluorouracil injection only

Group B – Intralesional 5FU Only – Study Schedule



This group will come once a month for 4 months, during which time 0.5 ml of 5-Fluorouracil will be injected directly into the tumor lesion. This will occur on day 0, day 28, and day 56. A photograph and measurement of the lesion will be taken during each visit. The first visit (day 0) will consist of your initial consult, consent, ECOG evaluation, pregnancy test if needed, an injection of anesthetic (lidocaine) to locally numb the area around the lesion and a 2mm sample of your lesion will be obtained by punch biopsy and your first dose of 5FU. Following injection of local anesthetic (lidocaine), a single injection of 0.5 ml of 50mg/ml 5FU will be administered. At the 2nd appointment (day 28), again after anesthetizing the site, a single injection of 0.5 ml of 50mg/ml 5FU will be administered. At the 3rd visit (day 56), after anesthetizing the site, a single injection of 0.5 ml of 50mg/ml 5FU will be administered. However, prior to the 5FU injection a 2mm punch biopsy sample of your lesion will be obtained. This specimen sample will be retained in a tissue bank for future studies. On the 4th visit your lesion site will be locally anesthetized and the tumor lesion will be biopsied with a 4 mm punch technique. A small, 2 mm punch biopsy portion of the tumor will be saved and sent to the tissue bank. If the biopsy is positive for cancer, you will undergo surgery as per standard of care which will be Mohs surgery or standard excision based on location. Mohs surgery (also called Mohs micrographic surgery) is a highly precise procedure used to treat certain types of skin cancer. During the surgery, the doctor removes the visible cancer and then examines it under a microscope right away. If cancer cells are still present, they remove another very thin layer and check again. This step-by-step process continues until no cancer cells remain. Because it removes only the tissue that contains cancer, Mohs surgery has very high cure rates and preserves as much healthy skin as possible.

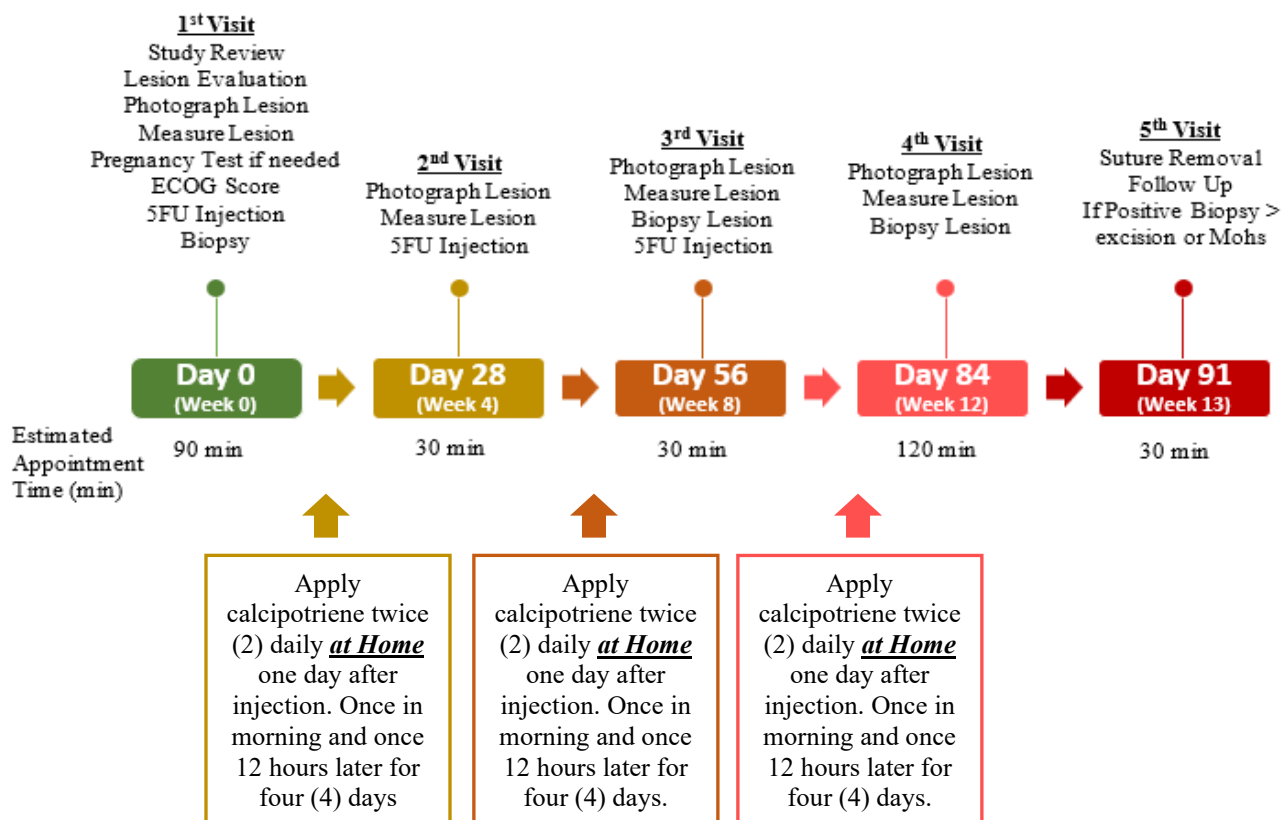
It's often used for skin cancers on the face or other areas where saving healthy tissue is especially important. If the biopsy is negative, you will undergo clinical observation as per standard of care. Finally, you will follow up with us one (1) week after surgery to remove sutures and then every 6 months for two years to ensure resolution of the skin cancer.

Group B - Routine Current Standard of Care - Follow Up Schedule



Group C: Intralesional 5-Fluorouracil injection and application of topical calcipotriene

Group C - Intralesional 5FU + 0.005% Calcipotriene – Study Schedule

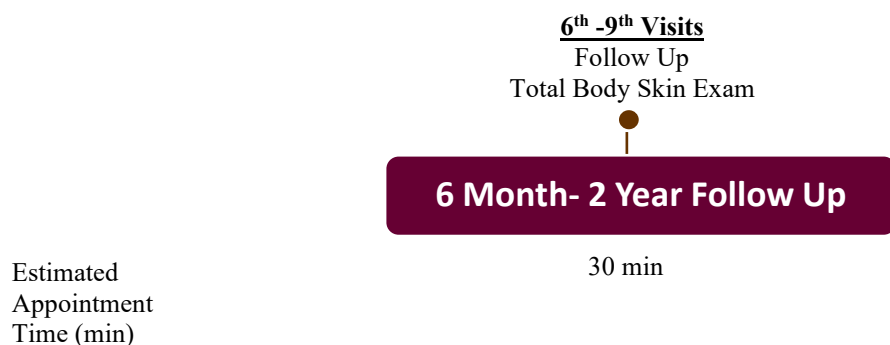


This group will come once a month for 4 months, during which time 0.5 ml of 50mg/ml 5-Fluorouracil will be injected directly into the tumor lesion. This will occur on day 0, day 28, and day 56. A photograph and measurement of the lesion will be taken during each visit. The first visit (day 0) will consist of your initial consult initial consult, consent, ECOG evaluation, pregnancy test if needed and your first dose of 5FU. Following injection of local anesthetic (lidocaine), an injection of anesthetic (lidocaine) to locally numb the area around the lesion and a 2mm sample of your lesion will be obtained by punch biopsy and a single injection of 0.5 ml of 50mg/ml 5FU will be administered. At the 2nd appointment (day 28), again after anesthetizing the site, a single injection of 0.5 ml of 50mg/ml 5FU will be administered. At the 3rd visit (day 56), after anesthetizing the site, a single injection of 0.5 ml of 50mg/ml 5FU will be administered. However, prior to the 5FU injection a 2mm punch biopsy sample of your lesion

will be obtained. This specimen sample will be retained in a tissue bank for future studies. On the 4th visit your lesion site will be locally anesthetized and the tumor lesion will be biopsied with a 4 mm punch technique. A small, 2 mm punch biopsy portion of the tumor will be saved and sent to the tissue bank. If the biopsy is positive for cancer, you will undergo surgery as per standard of care which will be Mohs surgery or standard excision based on location. Mohs surgery (also called Mohs micrographic surgery) is a highly precise procedure used to treat certain types of skin cancer. During the surgery, the doctor removes the visible cancer and then examines it under a microscope right away. If cancer cells are still present, they remove another very thin layer and check again. This step-by-step process continues until no cancer cells remain. Because it removes only the tissue that contains cancer, Mohs surgery has very high cure rates and preserves as much healthy skin as possible. It's often used for skin cancers on the face or other areas where saving healthy tissue is especially important. If the biopsy is negative, you will undergo clinical observation as per standard of care. Finally, you will follow up with us one (1) week after surgery to remove sutures and then every 6 months for two years to ensure resolution of the skin cancer.

In addition to the weekly injections, we will prescribe you a cream containing a medicine called calcipotriene, that you will apply to the non-open areas of the remaining tumor two (2) times daily for four (4) days one (1) day after each of three (3) 5FU injections. We will review with you how to apply the cream at the monthly visits and provide you with written instructions.

Group C - Routine Current Standard of Care - Follow Up Schedule



Tissue Bank: The samples submitted to the Tissue Bank will be stored indefinitely by the Tissue Bank and/or any of the investigators that work with the Tissue Bank. If you agree to participate in this research study, your medical history will be linked to your tissues in the tissue bank by assigning an anonymous code to your sample. Tissue banking will not have an effect on your standard medical care; therefore, neither you, your family, nor your doctor will receive results of the scientific studies on the tissue samples in the Tissue Bank, and they will not become a part of your medical record. The research laboratory testing your biological sample and genetic material is not approved by the Clinical Laboratory Improvement Act (CLIA). Therefore, the data collected cannot yet be interpreted or applied in a clinically relevant or meaningful manner.

Thus, we will not routinely give you the results of any test performed on your tissue sample. If you agree to participate in the research project, your biologic samples and genetic material sent to the Tissue Bank will become the property of the University of Pittsburgh, Department of Dermatology, and the use of your biologic sample and genetic material will be under the control of the investigators conducting this research study. If you agree to participate in the research project, your biologic samples and genetic material may be given to other researchers and will be shared without identifiers.

Photographs will be taken to document changes in skin/lesions and may be used in publications and for academic teaching purposes.

What are the possible risks, side effects, and discomforts of this research study?

The risks of being in this study are primarily related to side effects commonly seen with the medications being studied.

If you agree to participate in the study, you will be assigned by chance (like flipping a coin), to one of the three study groups. The goal of the study is to determine whether 5FU injections and/or Calcipotriene cream are safe and effective non-surgical treatments for squamous cell carcinoma on the legs. With any new medication, there is sometimes a risk of an allergic reaction, including anaphylaxis (difficulty breathing, lip and throat swelling). If you experience these events, you should proceed to the nearest emergency room and let them know that you were given a medication as part of this study. You should also let your study team know as soon as possible. Additionally, depending on which medication you are given, you may experience the following risks:

Group A: Standard of Care + 2mm punch biopsy at 2 weeks into the study: Normal, standard of care except the 2mm punch biopsy. The 2mm punch biopsy is done after injecting you with a numbing medicine called lidocaine mixed with epinephrine. A 2mm (less than 1/12 of an inch) round piece of skin will be taken from your tumor using a small cookie-cutter-like tool. Small amount of bleeding and pain associated with the procedure is expected. There are also rare risks of infection, unexpectedly severe bleeding, unexpectedly severe pain, scarring, and numbness. Rarely, you may also experience adverse reactions due to the numbing injection of lidocaine and epinephrine, including allergic reactions such as itching hives, drowsiness, dizziness, euphoria, palpitations, fainting, low blood pressure.

Group B: Standard of Care + 3 weekly 5FU injections + 2mm punch biopsy at 2 weeks into the study: In addition to the standard of care and 2mm punch biopsy as explained under Group A, you will receive 3 weekly injections of 5FU into the tumor. You will also receive a 4 mm punch biopsy taken at visit 4 to determine if the cancer is gone. If the biopsy is negative, you will undergo clinical observation. If the biopsy is positive, you will undergo surgical excision or Mohs surgery as is standard of care. Many people who receive 5FU injections experience mild redness, swelling, and pain at the injection site. Rarely, you may experience bleeding, sores/ulcers, color change, and significant pain at the injection site. Systemic side effects are rare and not expected, but the following are reported side effects in people receiving 5FU intravenously (through their veins):

- Low blood cell count
- Gastrointestinal: gastrointestinal ulceration, nausea, vomiting
- Allergic Reactions: anaphylaxis and generalized allergic reactions
- Neurologic: headache, twitching of the eyes
- Dermatologic: dry skin; fine cracking of the skin; sensitivity to sunlight, as manifested by redness or increased tanning of the skin; darkening of the veins
- Ophthalmic: tear duct narrowing, visual changes, tearing, difficulty seeing in bright lights
- Psychiatric: euphoria
- Miscellaneous: inflammation of veins, nosebleed, nail changes (including loss of nails)
- In rare cases a condition known as dihydropyrimidine dehydrogenase (DPD) deficiency may exist in the patient. Without DPD, the chemotherapy drug builds up in the body causing more severe side effects than usual.

These include:

- lowering the number of blood cells available causing increased risk of infections, anemia, bleeding and bruising
- diarrhea
- a sore mouth
- feeling and being sick
- rarely, people can die from these effects

Seek medical attention immediately if you experience symptoms such as: chest pain, shortness of breath or trouble breathing, uncontrolled pain.

Group C: Standard of Care + 3 weekly 5FU injections + calcipotriene cream application two (2) times daily for four (4) days one (1) day after each of three (3) 5FU injections + 2mm punch biopsy 2 weeks into the study. You will also receive a 4 mm punch biopsy taken at visit 4 to determine if the cancer is gone. If the biopsy is negative, you will undergo clinical observation. If the biopsy is positive, you will undergo surgical excision or Mohs surgery as is standard of care. In this group, in addition to the 5FU injections described under group B and the 2mm punch biopsy described under group A, 0.005% calcipotriene cream will be provided to you to apply to the tumor three times per week. It is common to experience some redness, swelling, itching, burning, and pain at the site of application. Other reactions are rare. The full list of reported adverse effects is as below:

Dermatologic: Application site reaction:

- pruritus
- skin irritation
- burning sensation
- xeroderma (dry skin)
- abnormal desquamation
- rash
- psoriasis exacerbation

- erythema (redness)
- pain
- dermatitis

Additional rare side effects include:

- Skin thinning/discoloration
- Stretch marks
- Hair bumps
- Unusual tiredness
- Mental/mood changes
- Unexplained constipation

Lidocaine:

Lidocaine is prescribed for local or regional anesthesia (loss of sensation) during surgical procedures as well as for control of ventricular arrhythmias associated with heart attack or cardiac surgery.

Side effects vary by dose and site of administration. The most common adverse reactions include:

- low heart rate
- low blood pressure
- backache
- dizziness
- lightheadedness
- numbness

Additional side effects include:

- shivering
- tingling
- sedation
- blurry vision
- confusion
- nervousness
- euphoria

Rare, but serious side effects include:

- cardiac arrest
- methemoglobinemia (impairment in red blood cells to release oxygen)
- breakdown of cartilage
- seizure
- loss of consciousness

Some side effects can be serious. If you experience any of these symptoms, call your doctor immediately: skin breakdown or ulcers/sores that may have drainage, especially during the first week of treatment, flu-like symptoms such as nausea, fever, chills, tiredness, and muscle weakness or pain. Also seek medical attention immediately if you experience symptoms such as: chest pain, shortness of breath or trouble breathing, uncontrolled pain.

You will be asked questions about any side effects you may have experienced, both during the time of injections of 5FU (if applicable) and applications of Calcipotriene 5% cream (if applicable), as well as during days to weeks after. You will also be asked to come back 4 weeks after the excision surgery to follow up and be asked about any symptoms you experienced.

Participation in this study will require the subject to wait 4 weeks before surgical excision of the tumor. 4 weeks is within the current typical wait time between diagnosis and surgical excision. If you opt against participating in the study, you may be able to find a surgeon who can perform the surgical excision sooner than 4 weeks. Receiving surgical excision sooner may mean that the resected tumor is smaller and less invasive, improving healing and reducing the likelihood of recurrence and complications.

Any time information or biological specimen is collected for a study, there is a small risk of breach of confidentiality. This could affect future insurability, employability, or reproduction plans, or have a negative impact on family relationships and/or result in paternity suits or stigmatization.

To minimize the risk, your identity will not be revealed, and your name/identifying information will not be attached to any research data (including photographs) and biological specimens. They will be identified by a unique study code rather than your name or other identifiable personal information, and all measures allowed by law to protect your confidentiality will be taken by the research staff. Access to your photographs will be restricted only to the study staff and investigators directly involved in this clinical trial. All photographs will be stored electronically with restricted, password protection. Your photographs will be treated in a secure manner. The codebook linking the code to your name will be kept secure by the study coordinator.

What are the possible benefits from taking part in this research study?

Depending on the study group you are placed in, you may experience resolution or shrinkage of the squamous cell carcinoma as a result of injections of 5-fluorouracil and/or application of topical Calcipotriene. This will, in turn, make the surgery to remove the tumor smaller and less prone to complications. Your participation in the study could also help us determine the best treatment for squamous cell carcinomas like yours and provide a new, non-surgical approach to the treatment of squamous cell carcinoma on the lower legs. The collection and storage of your biologic samples for the tissue banking portion of this study will not give you direct benefit. Because of your participation, there may be future advancement of our knowledge about cancer or there may be potential future benefit to society as a whole.

Will my insurance provider be charged for the costs of any procedures performed as part of this research study?

Some of the services you will receive during this research study, most notably the initial biopsy to confirm diagnosis of SCC and the excision surgery, are considered to be “routine clinical services” that you would have received even if you were not participating in the research study. These services will be billed to your health insurance company, and you will be responsible for paying any deductibles, co-payments or co-insurance that are a normal part of your health insurance plan. If you do not have health insurance, you will be responsible for those costs. To obtain more detailed information about what routine clinical services your health insurance is likely to pay for, contact a UPMC financial counselor.

The study medications (5-fluorouracil and Calipotriene cream), the procedures (the injections of 5-fluorouracil and the 2 mm punch biopsies which will occur during the study schedule are not considered “routine clinical services”), as well as the weekly study visits and the post-excision follow up visit will not be billed to your insurance or to you.

Will I be paid if I take part in this research study?

Yes. You will receive \$20 Vincent card for each of the first five study visits, up to \$100 per person if all five study visits are completed. The total funds will be dispersed at the last study visit, either visit five if you complete the entire study or the last visit that you complete. Payment will be in the form of a prepaid gift card.

Payment to participants is considered taxable income regardless of the amount. If a participant receives \$2000 or more in a calendar year from one organization, that organization is required by law to file a “Form 1099 – Miscellaneous” with the IRS and provide a copy to the taxpayer. We are required to give your name and social security number to the Accounting Office. Participants who do not provide a social security number may still participate in the research, but the IRS requires that 24% of the payment be sent by the institution to the IRS for ‘backup withholding;’ thus you would only receive 76% of the expected payment.

Your data or specimens used in this research study may contribute to a new discovery or treatment. In some instances, these discoveries or treatments may be of commercial value and may be sold, patented, or licensed by the investigators and the University of Pittsburgh for use in other research or the development of new products. You will not retain any property rights, nor will you share in any money that the investigators, the University of Pittsburgh, or outside agencies may receive.

Who will know about my participation in this research study?

Any information about you obtained from this research will be kept as confidential (private) as possible. All records related to your involvement in this research study will be stored in a locked file cabinet. Your identity on these records will be indicated by a case number code rather than by your name, and the information linking these case numbers with your identity will be kept separate from the research records. You will not be identified by name in any publication of the research results unless you sign a separate consent form giving your permission (release).

All biological sample will be deidentified and only identifiable by a case number code which will be recorded and kept separated from the research records in a locked filing cabinet.

We will use your information only for the purposes of this study. Your personal information will not be given out unless required by law.

Who will pay if I am injured as a result of taking part in this research study?

University of Pittsburgh researchers and their associates who provide services at University of Pittsburgh Medical Center (UPMC) recognize the importance of your voluntary participation in their research studies. These individuals and their staffs will make reasonable efforts to minimize, control, and treat any injuries that may arise as a result of this research. If you believe that you are injured as a result of the research procedures being performed, please contact immediately one of the Principal Investigators listed on the first page of this form.

Emergency medical treatment for injuries solely and directly related to your participation in this research study will be provided to you by the hospitals of UPMC. It is possible that UPMC may bill your insurance provider for the costs of this emergency treatment, but none of these costs will be charged directly to you. If your research-related injury requires medical care beyond this emergency treatment, you will be responsible for the costs of this follow-up care unless otherwise specifically stated below. There is no plan for monetary compensation. You do not, however, waive any legal rights by signing this form.

May I have access to my medical information that results from my participation in this research study?

In accordance with the UPMC Notices of Privacy Practices document that you have been provided, you are permitted access to information (including information that may result from your participation in this research study) contained within your medical records filed with your health care providers.

Will I be informed of the findings of this research study that are clinically relevant to me?

If we make discoveries that are relevant to your ongoing care, we will make an effort to incorporate the new information in your ongoing care. For instance, we may change how we treat any future squamous cell carcinomas you develop based on the results of this study. We will also make an effort to answer any of your questions regarding our findings. However, we cannot guarantee that you will be notified of results that might affect your personal health or healthcare decisions. Some of the findings may result years later or through further work by other researchers, and its direct relevance to your healthcare may not be immediately apparent.

Will there be any genetic sequencing of my tissue (skin, tumor) samples?

The skin sample from the 2mm punch biopsy and the skin/tumor sample from the excision surgery may be sent to the tissue bank, as explained previously. If you choose to participate,

researchers may conduct whole genome sequencing and other genetic analysis on the specimens stored in the tissue bank.

Will this research study involve the use or disclosure of my identifiable medical information?

This research study will involve the recording of current and identifiable medical information from your hospital and/or other (e.g., physician office) records. Medical record information for all admissions and procedures will be reviewed which will not be limited to just your records from the department of dermatology. This information will include your age, sex, date of birth, medical history, allergies, and medication history. Medical information that will be extracted from the medical chart will also include findings from the dermatology pathology reports.

Who will have access to my identifiable information related to my participation in this research study?

Your samples, genomic data and health information may be stored and shared with other researchers. The samples and information will be available for any research question, such as research to understand what causes certain diseases (for example heart disease, cancer, or psychiatric disorders), development of new scientific methods, or the study of where different groups of people may have come from.

In addition to the investigators listed on the first page of this authorization (consent) form and their research staff, the following individuals will or may have access to information (which may include your identifiable medical information) related to your participation in this research study:

Authorized representatives of the UPMC hospitals or other affiliated health care providers may have access to identifiable information (which may include your identifiable medical information) related to your participation in this research study for the purpose of (1) fulfilling orders, made by the investigators, for hospital and health care services (e.g., laboratory tests, diagnostic procedures) associated with research study participation; (2) addressing correct payment for tests and procedures ordered by the investigators; and/or (3) for internal hospital operations (i.e., quality assurance).

Authorized representatives of the University of Pittsburgh Office of Research Protections may review your identifiable research information for the purpose of ensuring the appropriate conduct of this research study.

Your research information and data may be shared with investigators conducting other research. This information may be identifiable.

In unusual cases, the investigators may be required to release identifiable information (which may include your identifiable medical information) related to your participation in this research study in response to an order from a court of law. If the investigators learn that you or someone with whom you are involved is in serious danger or potential harm, they will need to inform, as required by Pennsylvania law, the appropriate agencies.

Per University of Pittsburgh policy all research records must be maintained for at least 7 years following final reporting or publication of a project. For projects involving children, records must be maintained for 5 years past age of majority (age 23 per PA State law) after study participation ends.

For how long will the investigators be permitted to use and disclose identifiable information related to my participation in this research study?

The investigators may continue to use and disclose, for the purposes described above, identifiable information (which may include your identifiable medical record information) related to your participation in this research study for an indefinite period of time.

Is my participation in this study voluntary?

Your participation in this research study, to include the use and disclosure of your identifiable information for the purposes described above, is completely voluntary. (Note, however, that if you do not provide your consent for the use and disclosure of your identifiable information for the purposes described above, you will not be allowed to participate in the research study.) Whether or not you provide your consent for participation in this research study will have no effect on your current or future relationship with the University of Pittsburgh or on your current or future medical care at a UPMC hospital or affiliated health care provider or your current or future relationship with a health care insurance provider.

When the investigator is also the care-provider:

Your doctor may be involved as an investigator in this research study. As both your doctor and a research investigator, s/he is interested both in your medical care and the conduct of this research study. Before agreeing to participate in this research study, or at any time during your study participation, you may discuss your care with another doctor who is not associated with this research study. You are not under any obligation to participate in any research study offered by your doctor.

May I withdraw, at a future date, my consent for participation in this research study?

You may withdraw, at any time, your consent for participation in this research study, to include the use and disclosure of your identifiable information for the purposes described above. (Note, however, that if you withdraw your consent for the use and disclosure of your identifiable medical record information for the purposes described above, you will also be withdrawn, in general, from further participation in this research study.) All research or medical information recorded for, or resulting from, your participation in this research study prior to the date that you formally withdrew your consent may continue to be used and disclosed by the investigators for the purposes described above.

To formally withdraw from this research study, you should provide a written and dated notice of this decision to the principal or sub-investigator of this research study at the address listed on the first page of this form.

If I agree to take part in this research study, can I be removed from the research study without my consent?

The investigators may remove you from this research study if they feel it is in your best interest or if it is decided by the sponsor to end the study early. A reason for removing you from the study would be if you were improperly enrolled to participate.

VOLUNTARY CONSENT:

All of the above has been explained to me and all of my current questions have been answered. I understand that I am encouraged to ask questions about any aspect of this research study during the course of this study, and that such future questions will be answered by the researchers listed on the first page of this form. Any questions that I have about my rights as a research participant will be answered by the Human Subjects Protection Advocate of the IRB Office, University of Pittsburgh (1-866-212-2668).

By signing this form, I consent to participate in this research study and provide my authorization to share my medical records with the research team.

Participant's Signature

Date/Time

Participant's Printed Name

CERTIFICATION OF INFORMED CONSENT:

I certify that I have explained the nature and purpose of this research study to the above-named individual(s), and I have discussed the potential benefits and possible risks of study participation. Any questions the individual(s) have about this study have been answered, and we will always be available to address future questions as they arise. I further certify that no research component of this protocol was begun until after this consent form was signed.

Printed Name of Person Obtaining Consent

Role in Research Study

Signature of Person Obtaining Consent

Date/Time