

INFORMED CONSENT AND RESEARCH AUTHORIZATION

Research Subjects

Photodynamic Therapy-Induced Immune Modulation: PART III

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Sponsor(s) name and address:

WSU Department of Pharmacology and Toxicology
702 Health Sciences Bldg.
3640 Colonel Glenn Hwy.
Dayton, OH 45435

Site(s) where study is to be conducted:

Wright State Physician's Building
725 University Blvd
Dayton Ohio 45435

Phone number for subjects to call for questions: (937) 775-2500

Introduction and Background Information

Your physician has ordered photodynamic therapy (PDT) for your pre-cancerous skin lesions called actinic keratosis (AK). Our previous studies have demonstrated that PDT can result in a decrease in the function of your immune system. This also happens to the immune system after sunlight or tanning bed exposure. This slight decrease in the immune system caused by PDT is not good. We think that if we can stop this effect, we can make PDT work better to remove AKs. This study is to test whether one week treatment of a non-steroidal anti-inflammatory drug (NSAID; includes medicines like Aspirin or Ibuprofen) called celecoxib can block the decreased immune responses associated with PDT. Subjects for this study need to be aged 45 or older, fair-skinned and scheduled to receive PDT to control pre-cancerous skin growths. The study is taking place at the Dermatology clinic at the Wright State Physicians Building. It is conducted by Dr. Jeffrey Travers, Principal Investigator.

Purpose

This study will test if treatment with celecoxib for one week after a standard PDT treatment results in less immunosuppression (decrease in the function of the immune system), as measured by skin testing and blood testing, compared to those subjects given a blank pill (placebo). Both you and the investigators will not know if you got celecoxib or blank pill. At the end of the study, you will know how you were treated. Effects on your immune system will be tested by urine collection, blood samples and skin allergy testing. **This study requires 6 visits to the WSP building.**

You may not participate if you have the following:

- uncontrolled diabetes mellitus (sugar diabetes)

- kidney problems
- any serious health disorder that compromises your immune system or wound healing problems
- abnormal scarring
- are taking any medications that interact with sunlight
- an allergy or abnormal response to any drugs like celecoxib including ibuprofen (Motrin), Naprosyn (Aleve), or aspirin
- history of recent bleeding ulcer
- a clotting problem
- history of strokes or heart attack

This study is not designed to test PDT, as we know it is effective for your skin condition. This study is testing if celecoxib given for one week after PDT blocks the effects of PDT on your immune system.

If you consent to take part you will be one of 24 subjects (12 getting celecoxib, 12 getting blank pill) undergoing PDT to greater than 5% of their skin surface area.

Procedures

All study procedures will be done after discussing and obtaining your written informed consent to participate. The study procedures are detailed below:

DAY -2 Days prior to your PDT treatment

- Explanation of the study and informed consent obtained
- Intended PDT treatment sites will be noted, photographed and recorded
- Numbers of AKs will be counted and mapped on a diagram for future comparisons
- Injections of antigens at two sites on your inner forearm. The injections will be just under your skin like a TB skin test. These antigens are commercially available and are commonly used in allergic responses.
 - Before the injection, each site will be measured non-invasively
 - Calipers to measure skin thickness (or swelling)
 - You will receive 1 injection of 0.1 ml of Candida Antigen
 - You will receive 1 injection of 0.1 ml of Trichophyton antigen (these will be approximately 5 cm-or 1 ½ inches- apart).
 - You will receive 1 injection of 0.1 ml of saline (salt water as control). Photographs will be taken of the injection sites. It is expected that most individuals will react to at least one of these antigens with a small area of redness and swelling of skin (like a positive TB test in a patient who has been exposed to TB). This would be a positive response to the skin test.
- Blood will be drawn (20 ml-or about 4 teaspoons) to look for cells that impact your immune system.

DAY 0 Day of your Photodynamic Therapy

- Prior to your Photodynamic Therapy:
 - Your skin tests will be inspected and measured for thickness.
 - Photographs will be taken of the skin test sites.
 - Urine sample will be collected to look for elements linked to the effects of PDT on skin.

- You will receive your PDT treatment that your physician has ordered. PDT is a standard treatment at the Wright State University Dermatology clinics and about 75-80 procedures are performed here annually. You will sign a separate informed consent for the PDT therapy. You/your insurance company will be responsible for the cost as that treatment is not a part of these research procedures.
- Urine specimen (six) containers and a biohazard bag will be provided for your home use. Urine samples will be collected and placed into the biohazard bag and stored in the freezer. These will be returned at Day 7 study visit.
- You will be given a dispenser with a 7 day supply of celecoxib or blank placebo pills to take 2 times per day. Your first pill will be right after the PDT treatment.

DAY 1-5 Urine Home Collection

- 8 hours after your PDT treatment
- First morning urine
- You will rate the pain associated with the PDT treatment on the Skin Pain Visual Analogue Scale (VAS). The scale will be 0 (no skin pain) to 10 (severe skin pain).

DAY 7

- Urine samples are returned to the research office
- Repeat Candida and Trichophyton and saline control Skin Testing x 2
 - Testing done on a site which was treated with PDT
 - Testing done on a site which was not treated with PDT
- Blood will be drawn (20 ml-or about 4 teaspoons).
- You will be asked to rate the pain in the PDT-treated sites (0-10).

DAY 9

- Candida/Trichophyton skin test results will be measured and photographed

6 Months and 12 Months Follow Up Visits

- Your current number and sites where you have precancerous AK lesions will be marked at your normally scheduled patient visits. These will be compared to your mapping obtained at the start of this study. The comparison of AKs pre-treatment with post-treatment may help to define the effectiveness of your PDT treatment. This information will become part of your medical record.

All study procedures will take place in the Department of Dermatology outpatient clinic at the Wright State Physician's building. Once study procedures are completed you will not have to complete anymore study visits or procedures. Also, no further follow up will be required for this study. We of course encourage you to keep your regular follow-up dermatology clinic appointments if you and your dermatologist feel they are needed.

Biospecimen Sampling for Research:

Research using biospecimens (saliva, blood, tissues, etc.) is an important way to try to understand human disease and functioning. There are several things you should know before allowing your biospecimens to be studied.

The type of specimens that will be stored and where they will be stored: Blood and urine samples will be stored at Dr. Travers' laboratory on the Wright State University Campus.

Identifiability of Biospecimens: The samples will be coded by study number XXXXX followed by subject number 001, 002, 003, etc.

The length of time your biospecimen will be stored until they are destroyed: Your samples will be stored until the analyses are completed. At that time, they will be destroyed.

How to withdraw your biospecimens from the study:

Because your samples will not be linked to your name after they are stored, you cannot withdraw your consent to the use of the samples after they are taken.

Future Use of Biospecimens:

Information or specimens for this research may be used for future research studies or shared with other researchers for future research. If this happens, any information which could identify you will be removed before any information or specimens are shared. Since identifying information will be removed, we cannot ask for your additional consent.

Risks

While on the study, the risks are:

Photography - The risk of photography is the possible loss of privacy. Pictures will not be of recognizable body parts or markings. Photos will be labeled with the study number and a code that does not identify you. Photos will not include any identifying information.

Photodynamic therapy- The risk of the PDT treatments that your dermatologist recommends for you will be discussed between you and your treating physician. The informed consent your physician will provide for you will detail the potential side effects of that treatment.

Skin immune testing – The Candida and Trichophyton skin testing usually results in a small area of inflammation. This will last for a few days then resolve. Rarely, a more significant reaction with even a widespread rash has been reported. However, any long-term effects are not expected. If you do experience a greater than normal reaction, we will not repeat its use with you. These skin testing protocols are commonly used and have been considered as safe procedures to test for allergies and inflammatory responses.

Celecoxib treatment – Celecoxib works like Ibuprofen (Motrin) and Naprosyn (Aleve), however, it is not associated with stomach upset like Ibuprofen and Naprosyn. Long-term treatment (months to years) with celecoxib could result in increased risks of clotting issues like heart attacks and strokes. However, the one week treatment we plan should not have this effect. If you have any kidney problems or have any allergies or sensitivities to these drugs you cannot take part in this study.

Urine testing – This does not have any side effects.

Steps Taken to Reduce Risk of Coronavirus Infection

The following steps are being taken to address the risk of coronavirus infection:

Screening: If you show potential symptoms of COVID-19 (fever, cough, shortness of breath, etc.), you will NOT be permitted to participate in this study at this time. Our study team is required to show no potential symptoms of COVID-19 prior to reporting to work.

Physical distancing: Whenever possible, we will maintain at least 6 feet of distance from you while conducting the study.

Mask/Covering: You and our study team are required to wear a cloth face cover or mask that covers the mouth and nose during the study, even when maintaining at least 6 feet of distance. If you do not have a mask, one will be provided when entering the building. Tissues will be available to cover coughs and sneezes.

Handwashing: You and our study team will wash hands before/during examination or use a hand sanitizer.

Disinfecting materials: When feasible, we will clean and disinfect surfaces between participants, using an EPA-registered disinfectant for hard materials and by laundering soft materials. Disinfected materials will be handled using gloves, paper towel, plastic wrap or storage bags to reduce the chance of re-contamination of materials.

Electronics: Alcohol-based wipes or sprays will be used to disinfect shared touch screens, mice, keyboards, etc. Surfaces will be dried to avoid pooling of liquids.

Benefits of Taking Part in the Study

There are no direct benefits to participating in this study. There are possible indirect benefits such as:

- The research studies could result in a better understanding of PDT effects on the immune system.
- A possible treatment to improve the effectiveness of this treatment.

Moreover, our plans to keep track of the AKs on your skin could assist your dermatologist in managing these pre-cancerous lesions.

Research Subject Costs

There will be no costs to you for any of the treatment or testing done as part of this research study. This study does not pay for the PDT treatment that you and your dermatologist have determined is the best treatment for your AKs. PDT treatment is your routine, standard care and not part of research. The research is looking at the potential effects of PDT treatment.

Compensation & Treatment for Injury

You will be compensated for your participation and completion of study visits.

Breakdown for each event is as follows:

Consent	\$20.00	PDT (\$20)
Venipuncture	\$10.00	PDT (\$20)
Urine collection	\$5.00	PDT (\$35)
Skin testing APPLICATION	\$15.00	PDT (\$45)
Skin testing READING	\$20.00	PDT (\$40)
Bonus for completing study	\$65.00	PDT (\$65)
Follow up visits at 6 and 12 months	\$25.00	PDT (\$50)

If you complete all study visits, you will receive a maximum of **\$275.00**. Compensation is based upon completed study visits and overall study completion. There is no cost for parking at the Wright State Physician's Building.

If you are hurt by being in this research study, medical treatment will be arranged for you. Dr. Travers will provide care at no cost to you, although you may have a pharmacy fee if any prescriptions are needed. You do not give up your legal rights by signing this form. If you think you have a research related injury, please call the investigator at (937) 775-2463 or 775-2500. In addition, you may suffer harms that we have not seen before.

Confidentiality

Total privacy cannot be guaranteed. We will protect your privacy to the extent permitted by law. If the results from this study are published, your name will not be made public. Once your information leaves our institution, we cannot promise that others will keep it private.

Identifiers might be removed from your identifiable private information (or/and identifiable biospecimens). After such removal, the information or biospecimens could be used for future research studies or distributed to another investigator for future research studies without your (or your legally authorized representative's) consent.

Data Security

Data will be kept in locked cabinets in a locked room in the WSP Building or in a password-protected computer in the WSU Department of Pharmacology & Toxicology.

Voluntary Participation

Taking part in this study is completely voluntary. You may choose not to take part. If you decide not to be in this study, you won't be penalized or lose any benefits for which you qualify. If you decide to be in this study, you may change your mind and stop taking part at any time. If you decide to stop taking part, you won't be penalized or lose any benefits for which you qualify. You will be told about any new information learned during the study that could affect your decision to continue in the study.

Termination

The investigator, the IRB or the study sponsor has the right to stop this study at any point. The investigator may take you out of this study with or without your permission. Reasons why this may occur include:

- Pregnancy
- Onset of diabetes
- The need to take a medicine that reacts with sunlight

Your Rights/Responsibilities As A Research Subject

As a subject, your responsibilities include:

- Follow the instructions of the research study staff.
- Keep your study appointments. If it is necessary to miss an appointment, please contact the research study staff to reschedule as soon as you know you will miss the appointment.
- Tell the research study staff about any side effects, doctor visits, or hospitalizations that you may have.
- Tell the research staff if you believe you might be pregnant.
- Ask questions as you think of them.
- Tell the research staff if you change your mind about staying in the study.

You may take part in this study if you are currently in another research study. It is important to let the investigator know if you are in another research study.

Research Subject's Rights, Questions, Concerns, and Complaints

If you have any questions, concerns, or complaints about the research study you may contact the principal investigator Dr. Travers or the research office at 937-775-2500.

If you have any questions about your rights as a study subject, questions, concerns or complaints, you may call the Wright State IRB Office (937) 775-4462 or irb-rsp@wright.edu. You may discuss any questions about your rights as a subject with a member of the IRB or staff. The IRB is an independent group of members from the University community, staff of the institutions, as well as lay members of the community not connected with these institutions. The IRB has reviewed this study.

Authorization to Use and Disclose Your Health Information

State and Federal laws, including the Health Insurance Portability and Accountability Act (HIPAA), require researchers to protect the privacy of your health information. This section of the consent form describes how researchers, with your authorization (permission), may use and release (disclose or share) your protected health information (PHI) for this research study. **Please read this section of the consent form carefully.**

If you sign this document, you give permission to Dr. Travers and his Wright State Physicians Pharmacology Translational Unit research team to use or disclose (release) the following protected health information:

- Your medical records for past medical conditions and medications related to your health
- All information (research records and medical records) created during your participation in this research study

The research team needs this information to conduct the study. This study is testing whether a non-steroidal anti-inflammatory drug (NSAID), celecoxib, treatment can block the decreases in immune system.

To maintain the integrity of this research, you might not have access to any health information developed as part of this study until it is completed. At that point, you generally would have access to your health information.

Disclosure of your protected health information

If you sign this form, the researchers may share your health information during the conduct of the study with:

- Non-Wright State Physicians researchers or organizations working with Wright State Physicians researchers.
- Law enforcement or other agencies, when required by law
- WSU's Institutional Review Board (or other IRB of record), which oversees our research
- The sponsor (the organization paying for) of this research study: National Institutes of Health (NIH)
- Representatives of government agencies in the United States and other countries (i.e. Food and Drug Administration and the Office of Human Research Protection)
- Other authorized Wright State University/Physicians Officials who oversee research and clinical care

The people listed above will use and share your health information to review the quality, safety, and results of the research and may also do additional research.

Please understand that these persons/organizations who may receive your health information may not be required by U.S. Federal privacy laws (such as HIPAA) to protect it and may share your information with others without your permission.

This authorization does not have an expiration date.

However, you can change your mind and cancel this authorization at any time. To cancel this authorization, you must write the study investigator listed at the beginning of this consent form.

If you cancel this authorization, you will no longer be allowed to take part in the research study. If you cancel this authorization, health information you had already allowed us to obtain may still be used and disclosed by researchers in order to maintain the integrity and reliability of the research, and to report any adverse (bad) effects that may have happened to you.

Right to refuse to sign this Authorization

You have the right to refuse to sign and give your authorization. If you do not sign this form, your non-research related treatment, payment or enrollment in any health plans, or your eligibility for other medical benefits at Wright State Physicians will not be affected in any way.

However, if you do not sign this form, you will not be able to participate in this research study.

Signature of Subject

I have read (or someone has read to me) the above information. I have been given an opportunity to ask questions and my questions have been answered to my satisfaction. I agree to participate in this research and authorize the use and disclosure of my protected health information for this study. I will be given a copy of this signed and dated form.

Signature

Date

Printed Name

Signature of Person Obtaining Consent and Authorization

Date

Printed Name of Person Obtaining Consent and Authorization