

**UNIVERSITY OF CALIFORNIA, IRVINE
CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT**

Official title of the study: *Evaluating the Efficacy of the Melanocyte Keratinocyte Transplantation Procedure in the Treatment of Vitiligo (Arm 3)*

Protocol Number: HS#: 2017-3518

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CONSENT TO ACT AS A HUMAN RESEARCH SUBJECT**

Evaluating the Efficacy of the Melanocyte Keratinocyte Transplantation Procedure in the Treatment of Vitiligo (Arm 3)

You are being asked to participate in a research study. Participation is completely voluntary. Please read the information below and ask questions about anything that you do not understand. A researcher listed below will be available to answer your questions.

RESEARCH TEAM

Lead Researcher

Dr. Anand Ganesan, M.D., Ph.D.

Department of Dermatology Telephone Number:

949-824-0606 24-Hour Telephone Number/Pager: 714-506-3967

Other Researchers

Dr. Jessica Shiu, M.D, Ph.D.

Department of Dermatology Telephone Number:

949-824-0606 24-Hour Telephone Number/Pager: 714-506-3967

STUDY LOCATION(S):

UC Irvine Dermatology Clinical Research Center
UC Irvine Health Gottschalk Medical Plaza Department of Dermatology

STUDY SPONSOR(S):

UC Irvine Health Department of Dermatology

WHY IS THIS RESEARCH STUDY BEING DONE?

The purpose of this research study is to understand how effective suction blister grafting without cell dissociation is at treating vitiligo and identify characteristics of the pigment cell that migrates to the skin during the process of repigmentation. This procedure is experimental. The study doctor will offer participants the opportunity to undergo melanocyte keratinocyte transplant procedure, which is one of the possible treatments for vitiligo. This procedure is a method to transplant an area of skin affected by vitiligo with a mixture of prepared pigmented and non-pigmented skin cells that are harvested from the top layer of the skin in an area that is not affected by vitiligo.

If you agree, A normally pigmented area on the upper thigh will be numbed with 1% lidocaine with epinephrine. Using a superficial skin harvesting system which is a suction blister technique, we will remove multiple small portions of the superficial layer of the skin unaffected by vitiligo from a small normal area (5 cm²) on your thigh to obtain the transplantation cells and also using a regular negative pressure instrument for removing four samples, two from the vitiligo area and two from the normal skin. The superficial layer of the skin from the normal skin area (thigh) will then be transplanted on to the area affected by vitiligo that you are interested in grafting. Four samples (two from the normal skin and

two from the vitiligo skin) generated by the negative pressure device will then be sent to identify specific characteristics of the migrating cells responsible for repigmentation.

A dressing will be placed on the grafted area and the area the cells were taken from. You will return to clinic in 1 day, and 1 week for follow up. Then you will return at 1 month, 3 months, and 6 months for follow up photography to quantify your response to the treatment.

HOW MANY PEOPLE WILL TAKE PART IN THIS STUDY?

Approximately 30 participants will take part in this research at UCI.

AM I ELIGIBLE TO PARTICIPATE IN THIS STUDY?

Inclusion Requirements

You can participate in this study if you have been diagnosed by a dermatologist with vitiligo and are a candidate for vitiligo treatment as determined by the lead study doctor. In addition, you need to:

- Be over 18 years of age at time of signing consent form
- Have the ability to understand and agree to participate with the study procedures

Exclusion Requirements

You cannot participate in this study if you:

- If you are not willing or able to understand and carry out the study procedures
- Pregnant or breastfeeding
- Are under 18 years of age at time of signing informed consent form
- Have a history of keloid scars
- Use tobacco products currently
- Have a medical condition that would make it dangerous for you to participate, such as:
 - Poor clotting of your blood. This is the way your body stops bleeding after you have a cut or injury to one of your blood vessels.
 - Difficulty or problems with your healing ability after you have surgery
 - or a medical condition that would make it dangerous for you to participate as determined by the study doctors

HOW LONG WILL THE STUDY GO ON?

The study will take six months in total as you will need to return after six months for follow up photography to determine the response rate.

WHAT PROCEDURES ARE INVOLVED WITH THIS STUDY?

If you choose to participate, you will come to see the study doctor and he will determine the appropriate areas for your skin grafts.

The study doctor will first identify an unaffected area on your body that will be selected for a ***donor (normal skin using for transplantation)*** site. This site is usually on the side of your upper leg or on your buttocks and will be approximately 5 cm². This site will be sterilely cleaned and draped (covered) with sterile surgical towels. The entire harvesting procedure usually takes less than one hour. An anesthetic block (Numbing) will be performed with 1% lidocaine and 1:200,000 epinephrine with sodium bicarbonate. The area will be sterilely draped(covered). Then, we will create multiple micro domes(blisters) with the Cellutome epidermal harvesting system which is an FDA approved suction

blister device. The cellulome epidermal harvesting system is a self-contained instrument package to successfully create suction blisters on skin. The CELLUTOME™ Harvester will be strapped to the donor site (Normal skin used for transplantation). The graft development process is usually completed in 30-45 minutes. The grafts are placed onto a transparent dressing and are then ready to be applied to the area affected by vitiligo. Then, the donor site will be covered with a hydrocolloid (synthetic gelly) dressing, gauze, and an adhesive dressing. As part of the study, a small area from the recipient (vitiligo) site and also the normal skin of the donor site will be removed with a regular suction blister device (4 blisters each 5 mm²). After creating four blisters, we will unroof (cut and remove the top of) the blisters and use the roof skin for histopathological evaluation (pathology lab studies).

The recipient (vitiligo) site will be selected as a single area of 5 cm² to 10 cm² in any area of the body in locations other than the genitals. The recipient transplant (vitiligo) sites will be prepped (cleaned) with povidone iodine and 70% ethanol. The area affected by vitiligo will be anesthetized (numbed) with 1% lidocaine with epinephrine.

The recipient (vitiligo) site will then undergo full thickness epidermal ablation (full superficial skin removal) with an Erbium-YAG laser to remove all the cells affected by vitiligo. The micro domes (blisters) produced by Cellutome epidermal harvesting system from the donor (normal skin for transplant) site will be transferred and put on the recipient (vitiligo) site. This recipient site will then be covered with collagen dressings, sterile gauze and occlusive dressing. The four blisters from the donor site and normal skin will also be used for histopathological study.

You can go home the same day but will need to protect your dressing and avoid soaking it in water. You will follow up with the study doctors in the outpatient clinic in 2 days after the procedure and then again 7 days later to see how you are healing and your response to the transplant treatment. You will return for a final follow up 1 month, 3 months, and 6 months after the procedure.

WHAT ARE THE POSSIBLE SIDE EFFECTS OR RISKS RELATED TO THE STUDY?

Side Effects or Risks of Suction blister grafting without cell dissociation

This is a surgical procedure and involves removing multiple blisters of the top of your skin that will be applied to a vitiligo area on your body. The procedure has the risk of infection, poor wound healing, pain, bleeding, decreased or increased pigmentation, and scarring. There is also a risk that your body will not accept the skin graft and it will not work to treat your vitiligo. This is known as graft failure. The study doctors will make every effort to avoid infection, which includes sterile preparation, appropriate post-surgical site dressings, follow up care, and if necessary, antibiotics. You will receive local anesthetic medicine when you undergo the surgical procedures and post-surgical analgesics, if necessary. The risks of the local anesthetic medicine are very rare but include the possibility of as follows: headache, slow heart rate, low blood pressure, allergic reaction, and tremor.

Breach of Confidentiality

There is a small chance of a breach of confidentiality involving research data. All identifiable information that will be collected about the subject will be removed and replaced with a code. A list linking the code and subject identifiable information will be kept separate from the research data.

Unknown risks:

There may be risks related to the research that we don't know about yet. However, you will be informed of any additional risks to which you may be exposed, and any changes that are made to the study, as a result of any newly-identified risks.

Reproductive Risks:

You should not get pregnant while in this study. The Lidocaine used in this study could harm an unborn baby.

ARE THERE BENEFITS TO PARTICIPATING IN THIS STUDY?

Participant Benefits

Taking part in this study may or may not make your health better. However, it is already known that the melanocyte keratinocyte transplantation is an effective way to treat vitiligo.

Benefits to Others or Society

There may be benefits such as demonstrating that the melanocyte keratinocyte transplant procedure is a useful treatment for vitiligo. Also, we may identify which melanocyte population migrates to repigment the skin. This could lead to improvements in grafting and transplantation or to the development of better drugs to stimulate this population of cells to migrate.

WHAT OTHER CHOICES DO I HAVE IF I DON'T WANT TO PARTICIPATE?

If you decide not to participate, or if you withdraw from this study before it is completed, your other choices may include:

Getting no treatment Getting standard treatment for your condition without being in a study (punch grafting, light therapy).

Getting a different experimental treatment/taking part in another study.

WILL I BE PAID FOR TAKING PART IN THIS STUDY?

You will not be paid for taking part in this study.

WHAT ARE THE COSTS OF TAKING PART IN THIS STUDY?

There is no cost to you or your insurer for your participation in this study. There are no medical and research procedure-related costs to you for participation in this study. You and /or your health plan/insurance will be billed for the costs of any standard medical care you receive to diagnose and/or treat any medical condition(s) outside of this study. You will also be responsible for any deductibles or co-payments that would normally be associated with these standard medical costs.

WHAT HAPPENS IF I AM INJURED BECAUSE I TOOK PART IN THIS STUDY?

It is important that you promptly tell the researchers if you believe that you have been injured because of taking part in this study. You can tell the researcher in person or call him/her at the number listed at the top of this form.

If you are injured as a result of being in this study, UCI will provide necessary medical treatment. The costs of the treatment may be covered by the University of California or billed to you or your insurer just like other medical costs, depending on a number of factors. The University and the study sponsor do not

normally provide any other form of compensation for injury. For more information about this, you may call UCI Human Research Protections (949) 824-6068 or (949) 824-2125 or by e-mail at IRB@research.uci.edu

WHAT HAPPENS IF I WANT TO STOP TAKING PART IN THIS STUDY?

You are free to withdraw from this study at any time. **If you decide to withdraw from this study, you should notify the research team immediately.** The research team may also end your participation in this study if you do not follow instructions, miss scheduled visits or your safety and welfare are at risk.

If you elect to withdraw or are withdrawn from this research study, you may choose to terminate the continued use or disclosure of your protected health information (PHI) for research purposes. The request to end the use or disclosure of your PHI should be made in writing.

If you experience any of the side effects listed above, if your health worsens, or if you are injured during the research, you may need to be withdrawn from the study, even if you would like to continue. The research team will make this decision and let you know if it is not possible for you to continue. The decision may be made to protect your safety and welfare, or because the research plan does not allow people who develop certain conditions to continue to participate.

If you withdraw or are removed from the study, the researcher may ask you to attend a final follow-up visit to complete your participation in this study.

HOW WILL INFORMATION ABOUT ME AND MY PARTICIPATION BE KEPT?

Subject Identifiable Data

All identifiable information that will be collected about you will be removed and replaced with a code. A list linking the code and your identifiable information will be kept separate from the research data.

Data Storage

Data will be stored on research computers and laptops (all secured with passwords). Only authorized individuals will have access to it. There will be no hardcopy data.

Study data might be processed, analyzed and kept on laptops besides the desktop computer but subject identifiable data will not be stored on portable devices.

Data Retention

The researchers intend to keep the research data until the research is published and/or presented. The data associated with this study will be retained for 6 years.

WHO WILL HAVE ACCESS TO MY STUDY DATA?

The research team, authorized UCI personnel and regulatory entities such as the Food and Drug Administration (FDA) and the Office of Human Research Protections (OHRP), may have access to your study records to protect your safety and welfare.

Any information derived from this research project that personally identifies you will not be released or disclosed by these entities without your separate written consent, except as specifically required by law. Research records provided to authorized, non-UCI entities will not contain identifiable information about you. Publications and/or presentations resulting from this study will not include identifiable information about you.

While the research team will make every effort to keep your personal information confidential, it is possible that an unauthorized person might see it. We cannot guarantee total privacy.

Certificate of Confidentiality

To help us protect your privacy, we have obtained a Certificate of Confidentiality from the National Institutes of Health (NIH). With this Certificate, researchers cannot be forced to disclose information that may identify you in any federal, state, or local civil, criminal, administrative, legislative, or other proceedings or be used as evidence, for example, if there is a court subpoena, unless you have consented for this use. Information, documents, or biospecimens protected by this Certificate cannot be disclosed to anyone else who is not connected with the research except, if there is a federal, state, or local law that requires disclosure (such as to report child abuse or communicable diseases but not for federal, state, or local civil, criminal, administrative, legislative, or other proceedings, see below); if you have consented to the disclosure, including for your medical treatment; or if it is used for other scientific research, as allowed by federal regulations protecting research subjects.

The Certificate cannot be used to refuse a request for information from personnel of the United States federal or state government agency sponsoring the project that is needed for auditing or program evaluation by NIH which is funding this project or for information that must be disclosed in order to meet the requirements of the federal Food and Drug Administration (FDA). You should understand that a Certificate of Confidentiality does not prevent you from voluntarily releasing information about yourself or your involvement in this research. If you want your research information released to an insurer, medical care provider, or any other person not connected with the research, you must provide consent to allow the researchers to release it.

ClinicalTrials.gov ClinicalTrials.gov is a Web site that provides information about clinical trials. 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.

ARE THERE OTHER ISSUES TO CONSIDER IN DECIDING WHETHER TO PARTICIPATE IN THIS STUDY?

Use of Specimens

Biospecimens (such as blood, tissue, or saliva) collected from you for this study and/or information obtained from your biospecimens may be used in this research or other research and shared with other organizations. You will not share in any commercial value or profit derived from the use of your biospecimens and/or information obtained from them.

Genetics

In the event of an unexpected breach of confidentiality, a federal law called the Genetic Information Non-Discrimination Act (GINA) will help protect you from health insurance or employment discrimination based on genetic information obtained about you. In California, state law (CalGINA) requires that employers with 5 or more employees may not use your genetic information, obtained from this research when making a decision to hire, promote, or fire you or when setting the terms of your employment. However, these laws do not protect you against discrimination by companies that sell life insurance, disability insurance, or long-term care insurance.

If you would like more information about the federal GINA law go to:

<http://www.genome.gov/Pages/PolicyEthics/GeneticDiscrimination/GINAInfoDoc.pdf> or CalGINA: http://www.leginfo.ca.gov/pub/11-12/bill/sen/sb_0551-0600/sb_559_bill_20110906_chaptered.pdf

Investigator Financial Conflict of Interest

No one on the study team has a disclosable financial interest related to this research project.

Request for Donation of Specimens and/or Data for Future Use

This is a request for donation of your tissue for medical research. Please read each sentence below and think about your choice. After reading each sentence, put your initials in either the "Yes" or "No" box. If you have any questions about this request for donation, please talk to the researchers. If you choose not to donate your specimens, any leftover tissue or blood that is not needed for this study will be thrown away.

1. You may keep my tissue for future research related to vitiligo. My tissue will be stored in a way that does not directly identify me.

YES	NO
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2. You may keep my tissue for future research to learn about, prevent, or treat other health problems such as skin cancer or pigmentary disorders in dermatology. My tissue will be stored in a way that does not directly identify me.

YES	NO
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3. You may share my tissue with other researchers. My tissue will be stored in a way that does not directly identify me.

YES	NO
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So long as your specimens remain identifiable, you are free to withdraw the use of your specimens kept for future research. If you decide to withdraw your specimens from such use, you should notify the research team immediately. Specimens previously provided to researchers and any data generated will continue to be used.

- 4-UCI researchers may contact me in the future to ask me to take part in other research studies.

YES	NO
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WHO CAN ANSWER MY QUESTIONS ABOUT THE STUDY?

If you have any comments, concerns, or questions regarding the conduct of this research, please contact the research team listed at the top of this form.

A 24-hour number is also listed on the top of this form to report any health concerns or unanticipated problems you may experience after normal hours or on weekends.

If you wish to ask questions about the study or your rights as a research participant to someone other than the researchers or if you wish to voice any suggestions, problems or concerns you may have about the study, please contact UCI's Office of Research by phone, (949) 824-6068 or (949) 824-2125, by e-mail at IRB@research.uci.edu or at 141 Innovation Drive, Suite 250, Irvine, CA 92697.

What is an IRB? An Institutional Review Board (IRB) is a committee made up of scientists and non-scientists. The IRB's role is to protect the rights and welfare of human subjects involved in research. The IRB also assures that the research complies with applicable regulations, laws, and institutional policies.

HOW DO I AGREE TO PARTICIPATE IN THIS STUDY?

You should not sign and date this consent form until all of your questions about this study have been answered by a member of the research team listed at the top of this form. You will be given a copy of this signed and dated consent form, and the attached "Experimental Subject's Bill of Rights" to keep.

Participation in this study is voluntary. You may refuse to answer any question or discontinue your involvement at any time without penalty or loss of benefits to which you might otherwise be entitled. Your decision will not affect your future relationship with UCI or your quality of care at the UCI Medical Center.

If, during the course of this study, significant new information becomes available that may relate to your willingness to continue to participate, this information will be provided to you by the research team listed at the top of the form.

Your signature below indicates you have read the information in this consent form and have had a chance to ask any questions you have about this study.

Note: If the research described in this form involves your protected health information (PHI), you will be asked to sign separate UC HIPAA Research Authorization form for the use of your PHI.

I agree to participate in the study.

Subject Signature

Date

Printed Name of Subject

Signature of Person Obtaining Informed Consent

Date

(Individual must be listed on Page 1 of this consent)

Printed Name of Person Obtaining Informed Consent

A witness signature is required on this consent form only if: (Researchers: check which one applies)

- Consent is obtained from the subject via the Short Form process, as approved by the IRB.
- The subject has decision-making capacity, but cannot read, write, talk or is blind.
- The subject's guardian/legally authorized representative (LAR) cannot read, write, talk or is blind.
- The IRB specifically mandated a witness signature for this study (e.g., high risk and/or invasive research procedures).

Note: The witness must be impartial (i.e. not a member of the subject's family, not a member of the study team).

For the witness:

I confirm that the information in this consent form was accurately explained to and understood by the subject or legally authorized representative and that informed consent was given freely.

Witness Signature

Date

(If no witness signature is required, this witness signature section of the consent form may be left blank).

Printed Name of Witness

**UNIVERSITY OF CALIFORNIA, IRVINE
Experimental Subject's Bill of Rights**

The rights listed below are the right of every individual asked to participate in a research study. You have the right:

1. To be told about the nature and purpose of the study.
2. To be told about the procedures to be followed in the research study, and whether any of the drugs, devices, or procedures is different from what would be used in standard practice.
3. To receive a description of any side effects, discomforts, or risks that you can reasonably expect to occur during the study.
4. To be told of any benefits that you may reasonably expect from the participation in the study, if applicable.
5. To receive a description of any alternative procedures, drugs, or devices that might be helpful, and their risks and benefits compared to the proposed procedures, drugs or devices.
6. To be told of what sort of medical treatment, if any, will be available if any complications should arise.
7. To be given a chance to ask any questions concerning the research study both before agreeing to participate and at any time during the course of the study.
8. To refuse to participate in the research study. Participation is voluntary. You may refuse to answer any question or discontinue your involvement at any time without penalty or loss of benefits to which you might otherwise be entitled. Your decision will not affect your right to receive the care you would receive if you were not in the experiment.
9. To receive a copy of the signed and dated written consent form and a copy of this form.
10. To be given the opportunity to freely decide whether or not to consent to the research study without any force, coercion, or undue influence.

If you have any concerns or questions regarding the research study you should contact the research team listed at the top of the consent form.

If you are unable to reach a member of the research team and have general questions, or you have concerns or complaints about the research study, research team, or questions about your rights as a research subject, please contact the UCI's Human Research Protections unit in the Office of Research by calling (949) 824-6068 or (949) 824-2125 Monday – Friday, 8 am – 5 pm; or by e-mail at IRB@research.uci.edu; or by writing us at 141 Innovation Drive, Suite 250, Irvine, CA 92697.