



## Institutional Review Board for Baylor College of Medicine and Affiliated Hospitals

**Protocol Number:** H-42282  
**Status:** Approved  
**Initial Submit Date:** 1/16/2018  
**Approval Period:** 12/3/2019 - 12/29/2020

### Section Aa: Title & PI

#### A1. Main Title

COMPARATIVE EFFECTIVENESS OF TWO ACELLULAR MATRICES PRODUCTS (DERMACELL V. INTEGRA) FOR MANAGEMENT OF DEEP DIABETIC FOOT ULCERS - A RANDOMIZED CLINICAL TRIAL

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#### A3a. Financial Conflict of Interest

Does any member of study personnel (Investigator (including investigator's spouse and/or dependent children)) that are involved in the design, conduct, or reporting of the research have a Significant Financial Interest (SFI) that would reasonably appear to be affected by the research for which funding is sought and/or associated with an entity/business that would reasonably appear to be affected by the research?

No

### Section Ab: General Information

#### A4. Co-Investigators

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**A5. Funding Source:**

Organization: LIFENET HEALTH

**A6a. Institution(s) where work will be performed:**

BCM: Baylor College of Medicine  
Baylor St. Luke's Medical Center (BSLMC)

**A6b. Research conducted outside of the United States:**

Country:  
Facility/Institution:  
Contact/Investigator:  
Phone Number:

If documentation of assurances has not been sent to the Office of Research, please explain:

**A7. Research Category:****A8. Therapeutic Intent**

Does this trial have therapeutic intent?

No

**A9. ClinicalTrials.gov Registration**

Does this trial meet the definition of an Applicable Clinical Trial and require registration on ClinicalTrials.gov?

No, this clinical trial does not meet the definition of an Applicable Clinical Trial. Registration is not required.

**Section B: Exempt Request****B. Exempt From IRB Review**

Not Applicable

**Section C: Background Information**

\*\*\*Please note that this is a reliance protocol\*\*\*

Diabetes-related foot ulcers (DFUs) are a leading cause of hospitalization and amputation worldwide, and account for 33% of all direct costs of diabetes care in the US. Ulcers requiring acute care can result in treatment costs of up to US\$70,000 per event, varying with the severity of the wound. Once the skin is ulcerated, it is susceptible to becoming infected and ultimately amputation in particular in case of deep DFUs. To manage the cost and avoid hospitalization and amputation, wound should be immediately closed. But this is often challenging in diabetic foot with deep ulcers. Wound healing is a dynamic process involving interactions between cells, extracellular matrix (ECM) and growth factors that reconstitutes tissue following injury. ECM plays an important role in tissue regeneration and is the major component of the dermal skin layer. Recognition of the importance of the ECM in wound healing has led to the development of wound products that aim to stimulate or replace the ECM in particular in case of deep tissue destruction because of deep DFUs. It is known from the literature that chronic or hard-to-heal wounds are characterized by a disrupted or damaged ECM that cannot support wound healing. Thus treatment strategies based on use of biologic scaffold materials for management of chronic and deep wounds has increased dramatically during the past two decades. These scaffolds include those comprising an intact extracellular matrix (ECM) or individual components of the ECM, and those comprising hybrids incorporating a synthetic component with a biologic component. DermACELL (LifeNet Health, Virginia Beach, VA) is acellular dermal matrices (ADM), which has been shown to be effective in treating chronic DFUs in a clinical trial.

Another ADM product available in the market is made by Integra® (Bilayer Matrix Wound Dressing, Integra LifeSciences). However, advantages/disadvantages of one compared to the other are unclear. Figure 2 (Please see protocol in section S) illustrates the case showed in the figure 1 treated by both Integra and DermaCell (One of the wound was treated by Integra and the rest were treated by DermaCell). As it can be seen the thickness of Integra is higher than DermalCELL,

which may make it relatively more difficult to apply with potential further complications including likelihood of infection, poor tissue mechanics outcomes (e.g. presence of scarring or tissue biomechanics properties leading to increase in shear or pressure post healing thus increasing likelihood of recurrence of the ulcer), and patient centered outcomes like smell, pain, and comfort.

## Section D: Purpose and Objectives

\*\*\*Please note that this is a reliance protocol\*\*\*

The primary objective of this prospective, randomized trial is to compare the outcomes of DermaCELL with Integra. We assumed that the wounds outcomes (e.g. weekly wound size change, time to heal, time to successful wound granulation) are comparable between DermaCELL and Integra. However, from operation and patient centered outcomes, there may be some noticeable differences. For instance, DermaCELL, thanks to its mesh structure, thin thickness, and no need for hydration, may be easier to apply with shorter time than Integra. The factors are of key importance in operation room (OR) setting and could reduce overall cost of application and needs in using OR resources. Other important outcomes least addressed in prior studies are number of grafts failing, adverse events (e.g. amputation, infection, etc), cost of wound healing treatment, tissue biomechanics, which may lead to recurrence of ulcers (e.g. formation of tissue scarring), and other patient-centered outcomes (e.g. pain, quality of sleeping, wound smelling, etc). For instance, many patients are unhappy with smelling of wounds, which make them embarrassed among their family members like grand kids. Thus reducing wound smelling during activities of daily living is often considered as an important patient centered outcomes.

## Section E: Protocol Risks/Subjects

### E1. Risk Category

Category 1: Research not involving greater than minimum risk.

### E2. Subjects

Gender:

Both

Age:

Adult (18-64 yrs), Geriatric (65+ yrs)

Ethnicity:

All Ethnicities

Primary Language:

English, Spanish

Groups to be recruited will include:

Patients

Which if any of the following vulnerable populations will be recruited as subjects?

Vulnerable populations require special protections. How will you obtain informed consent, protect subject confidentiality, and prevent undue coercion?

### E3. Pregnant woman/fetus

Will pregnant women and/or fetuses (as described in 45 CFR 46 Subpart B) be enrolled in the research?

No

### E4. Neonates

Will neonates of uncertain viability or nonviable neonates (as described in 45 CFR 46 Subpart B) be enrolled in the research?

No

### E5. Children

Will children be enrolled in the research?

No

## Section F: Design/Procedure

### F1. Design

Select one category that most adequately describes your research:

c) Pilot

Discuss the research design including but not limited to such issues as: probability of group assignment, potential for subject to be randomized to placebo group, use of control subjects, etc.

Thirty four (n=50) patients with diabetes (age 18 years or older) with non-infected deep wounds (grades 2 in the Wagner Ulcer classification) will be randomized into two groups, 17 subjects per group each. The group one will be treated by Meshed DermaCELL and group two will be treated by Meshed Integra template.

The primary outcomes are time to granulation, successful granulation at 8 weeks, and number of failures (e.g. amputation, infection, rejection, re-application) within 8 weeks. Secondary outcomes include time to apply, weekly speed of wound healing after successful granulation and transition to standard wound therapy, success of wound healing at 12 weeks and @16 weeks, cost of wound treatment upto 16weeks (based on patient electronic record), tissue biomechanics after wound healing (e.g. presence of scarring or tissue biomechanics properties leading to increase in shear or pressure post healing), change in skin perfusion (assessed with SPP), change in thermography response, recurrence of ulcers up to 6 months post healing, and other patient centered outcomes including perception of pain, physiological stress response as surrogate of pain (e.g. heart rate variability during dressing change), sleep quality (assessed by PSQI and sensor-based sleep quality index), wound smelling (assessed by Likert scale), and patient perception of benefit (assessed by technology acceptance model, TAM based on perception of benefit and attribute of benefits).

Inclusion Criteria:

\*Type II Diabetes or Peripheral Artery disease \*Non-infected deep wounds (Grade 2 in the Wagner Ulcer classification) \*18 years or older

Exclusion Criteria:

\*No minors will be consented. \*Active infection \*Gangrene or osteomyelitis \*Major vascular problems (ABI lower than 0.5, or ABI greater than 1.3) \*Unlikely to fully comply with the follow-up protocol (e.g. long distance travel) \*Unable or unwilling to provide informed consent

### F2. Procedure

\*\* Reliance protocol \*\* There are a total of 17 study visits.

Medical History: The presence of diabetes will be determined based on American Diabetes Association criteria. This will include: duration and type of diabetes, type of diabetes medication (insulin, oral, combination therapy, diet), previous history of foot ulcers, amputation (toe, foot), lower extremity bypass, lower extremity angioplasty, Coronary artery bypass surgery, cardiac angioplasty, arthritis, liver disease, osteoporosis, malignancy, and bone tumors. We will use the Kaplan co-morbidity index to record disease severity.

Social and Economic Factors: We will evaluate the following factors: marital status, years of education, type of work, tobacco history (pack years, current smoker, current use of chewing tobacco, previous smoker, no tobacco history), drug history (current, previous history, no drug history), and alcohol history. Also we will collect cost information for the subject's treatment up to 6 months after the subject enrolls in the study.

Questionnaires: Quality of Life, Frailty Status, Sleep Quality, Cognitive Status and Device Acceptability: To evaluate functional status we will use well-accepted questionnaires, SF-12 for Quality of Life, Sleep Quality questionnaire (PSQI), MOCA and TSFI for frailty status. In addition, at each visit, we will interview the subject about their concern with their wound and product (e.g. wound drainage, smell, pain, etc.), use of any medications for pain or sleeping, the cost of transport to the clinic, any adverse events (e.g. infection, need to visit a specialist, etc), etc. To see the timeline for each questionnaire, please refer the table included in the ICF attached.

Pain Intensity Assessment (VAS): Researchers will provide a numerical pain scale where subject will report their pain intensity. Researchers will document pain level.

Adverse Event Reporting: Researchers will document and report any study/non study related incident as per institution regulations.

Device Acceptability Questionnaire: The subject will be handed a questionnaire to evaluate the study device and provide feedback to the research team. We will be asking about level of satisfaction with the product. These may be questions about the time spent to apply the product, the level of comfort, appearance of the product, the appearance of the healed wound (e.g. presence of scarring), ease of walking or standing with the product and after healing, etc.

Matrix Application: During the subject's wound treatment (either in OR or outpatient clinic), the physician will apply the dermal matrix from the group they were placed. The researchers will write down the duration needed for full application of the product. For accurate estimation of time needed for preparation and application, the whole process may be video-recorded for offline estimate of each time.

**Vascular Assessment:** We will assess perfusion of the macro-circulation with arterial Doppler studies and micro-circulation with Skin Perfusion Pressure measurements. Ankle Brachial Index (ABI) will be measured on both extremities. We will also use the SensiLase system (Väsamed) to measure Skin Perfusion Pressure (SPP) in mmHg. Additionally, we may use the LUNA or SPY Device for Indocyanine Green Fluorescence Imaging. For this purpose a fluorescent agent may be injected into the subject's body to allow us observe the blood circulation to the wound. Indocyanine Green Fluorescence Imaging (SPY or Luna) may be performed based on the medical judgment of the physician. Highly qualified medical/clinical staff will perform this measurement. If so, measurement will take place only during baseline and treatment day.

**Wound Photo:** At every visit, the Medical/Researcher using a standard digital camera will take a digital photo of the wound. We will ask the subject's permission to take photos/video.

**Wound Assessment:** Evaluations will be based on data collected from wound assessments and photographs. We use acetate tracings and digital photos. Additionally, we will use thermal imaging to track inflammation.

**Thermal Image:** A thermal camera will be used to obtain an image of the wound and observe swelling.

**Wifi Wound Classification:** Podiatrist or vascular surgeon will evaluate the health and wellness of the subject's feet in compliance of standard of care

**Granulation Assessment:** The physician will be looking at how the wound heals. Specifically, they will look at the reddish tissue developing on the wound. A digital photograph will be taken and comments made by the physician will be recorded.

**Wound Care:** The physician will schedule regular visits after the surgery to provide care to the wound as according to standard of care

**Dressing Change:** Medical and/or clinical staff will change the subject's dressing weekly or as needed.

**Peripheral Neuropathy:** We will use Vibration Perception Threshold (VPT) Testing to quantify neuropathy severity. VPT will be evaluated at the distal great toe and 5th metatarsal head using a Biothesiometer.

**Upper Extremity Assessment:** Investigators will measure the subject's arm motion using wearable sensors (LegSys). One sensor will be placed around the wrist and elbow. While being at a comfortable position, they will be asked to flex and extend their arm for 20 s at a fast speed. We will ask to repeat this task but counting backwards (dual task).

**Optional Assessments** √ These may occur at any visit. However, they do not need to be performed.

**Physical Exam:** The researchers will place 5 sensors named Legsys and Balanses (one on lower back, 2 on each upper thigh, and 2 on each shin) attached with elastic straps to test balance and record your walking patterns. Researchers will ensure that the straps are not too tight to avoid poor circulation

**Physical activity:** The researchers will provide you with a small sensor (Pamsys) that will be measuring physical activity for 48 hrs. It will record number of steps taken, duration of sitting, standing, walking, and lying. At the end of the visit, the subject will be given the sensor, which will be worn, around the neck. Researchers will provide a pre-paid envelope where they may place the device and send it back to the investigating team after 48 hrs

**Heart Rate Monitoring:** A comfortable chest worn sensor (Zephyr BioHarness, Medtronic or BioStamp RC, MC10) will be used to measure physiological signs such as heart rate, skin temperature, and physical activity. This device will be comfortable placed on the chest attached either with 2 electrodes or with elastic straps if the subject has sensitive skin. Researchers will attach this device on the subject for the duration of the visit or during 24 hours

The description of every visit is below. Screening/Baseline Visit \*duration of visit 90 minutes This visit will take place at Baylor St. Lukes Medical Center during your surgery day. The researchers will perform as described above: Medical History, Questionnaires (Pain, Social Factors, and Quality of Life, Sleep Quality, Cognitive Assessment, Frailty), Matrix application, Upper Extremity Test, Peripheral Neuropathy, Thermal Image, Vascular Assessment, Wound Assessment, Wifi Wound Classification, and Wound photo.

**Visit 1, One Week Later** \*duration 50 minutes This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Pain Questionnaire, Adverse Event Reporting, Dressing Change, Wound Photo, and Wound Care.

**Visit 2, Two Weeks Later** \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Wound Assessment, Thermal Image, Dressing Change, Wound Photo, and Wound Care.

**Visit 3, Three Weeks Later** \*duration 50 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo, and Wound Care.

**Visit 4, Four Weeks Later** \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment.

The researchers will perform as described above: Pain Questionnaire, Adverse Event Reporting, Sleep Quality Questionnaire, Wound Assessment, Dressing Change, Wound Photo, Thermal Image, and Wound Care.

Visit 5, Five Weeks Later \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo, Granulation Assessment, and Wound Care.

Visit 6, Six Weeks Later \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Thermal Image, Wound Photo, Granulation Assessment, and Wound Care.

Visit 7, Seven Weeks Later \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo, Granulation Assessment, and Wound Care.

Visit 8, Eight Weeks Later \*duration 90 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Pain Questionnaire, Sleep Quality Questionnaire, Device Acceptability Questionnaire, Adverse Event Reporting, Dressing Change, Wound Photo, Wound Assessment, Granulation Assessment, Wound Care, Wifi Wound Classification, Thermal Image, and Upper Extremity Assessment.

Visit 9, Nine Weeks Later \*duration 40 min This visit will take place at Baylor Clinic for a study-only follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo.

Visit 10, Ten Weeks Later \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Thermal Image, Wound Photo, Wound Care, Wound Assessment.

Visit 11, Eleven Weeks Later \*duration 40 min This visit will take place at Baylor Clinic for a study-only follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo.

Visit 12, Twelve Weeks Later \*duration 75 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Pain Questionnaire, Sleep Quality Questionnaire, Adverse Event Reporting, Dressing Change, Wound Photo, Wound Assessment, Thermal Image, Wound Care.

Visit 13, Thirteen Weeks Later \*duration 40 min This visit will take place at Baylor Clinic for a study-only follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo.

Visit 14, Fourteen Weeks Later \*duration 70 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Thermal Image, Wound Photo, Wound Care, Wound Assessment.

Visit 15, Fifteen Weeks Later \*duration 40 min This visit will take place at Baylor Clinic for a study-only follow up appointment. The researchers will perform as described above: Adverse Event Reporting, Dressing Change, Wound Photo.

Visit 16, Sixteen Weeks Later \*duration 90 min This visit will take place at Baylor Clinic for a regular follow up appointment. The researchers will perform as described above: Pain Questionnaire, Sleep Quality Questionnaire, Device Acceptability Questionnaire, Adverse Event Reporting, Dressing Change, Wound Photo, Thermal Image, Wound Assessment, Vascular Assessment, Granulation Assessment, Wound Care, Wifi Wound Classification, Upper Extremity Assessment.

## Section G: Sample Size/Data Analysis

### G1. Sample Size

How many subjects (or specimens, or charts) will be used in this study?

Local: 50                  Worldwide: 50

Please indicate why you chose the sample size proposed:

There is no prior studies to report the major primary outcomes for comparison between DermaCELL and Integra. Based on interviewing our podiatrist who worked with both Integra and DermaCELL, we estimated the time needed to apply each matrices in the OR. We hypothesized that time needed to apply DermallCELL is approximately 3±2 min while the time needed to apply Integra is estimated to be 5±2min (Cohen's effect size d=1). Assuming an alpha of 5% and power of 80% and two tailed t-test comparison, 17 subjects per group needed to be recruited to observe a significant difference between two groups from point of view of application time. We anticipate that this sample size should be also sufficient to observe noticeable trend in other outcomes. Based on results of this study, another RCT may be addressed to clinically validate the

observed noticeable trends. Alternatively, the sample size may be increased upon available of budget, approval of sponsor, and noticeable observed trend based on the first 20 recruited subjects (ten per group).

## G2. Data Analysis

Provide a description of your plan for data analysis. State the types of comparisons you plan (e.g. comparison of means, comparison of proportions, regressions, analysis of variance). Which is the PRIMARY comparison/analysis? How will the analyses proposed relate to the primary purposes of your study?

The primary outcomes are time to granulation, successful granulation at 8 weeks, and number of failures (e.g. amputation, infection, rejection, re-application) within 8 weeks. Mixed models accommodate the longitudinal design; allow for testing differences between groups in patterns over time as well as at specific time points; are consistent with an intention to treat analysis (9), and are valid for data which are missing completely at random or at random (10). Number of failures as well as number of recurrence of ulcers over the 6 month follow-up will be modelled with a generalized linear model using an appropriate count outcome (Poisson, zero-inflated Poisson, negative binomial for overdispersion). Rate ratios comparing intervention arms will be estimated from this model. Appropriate mixed models (linear or generalized linear, for non-continuous outcomes or logistic regression for binary data) will be used to test the intervention effect for each of the secondary outcomes (e.g. tissue biomechanics, mobility, patient centered outcomes, recurrence of ulcers, etc). A Kaplan-Meier survivorship analysis will be used for estimating time to event for none successful healing probability over time by treatment and the p-value will be calculated using the Log-rank (Mantel-Cox) test. Hazard ratios will be used to indicate the probability of closure at any given point in time for Derma-Cell v. Integra treatment. Univariate logistic regression analyses will be performed to delineate predictive factors of successful granulation at 8 weeks, successful wound healing at 12 weeks, and successful wound healing at 16 weeks. Results will be controlled for potential confounding variables including age, sex, BMI, HbA1c, neuropathy severity, vascular status, frailty, mobility status, and initial wound size. The p-values for weekly % wound area and % wound area reduction through 16 weeks will be calculated using t tests. All p-values, for both the categorical and continuous data, will be calculated using a two-sided alpha of 0.05.

## Section H: Potential Risks/Discomforts

### H1. Potential Risks/Discomforts

Describe and assess any potential risks/discomforts; (physical, psychological, social, legal, or other) and assess the likelihood and seriousness of such risks:

The study devices and assessment tools that will be used in the study are non-invasive, safe, non-toxic and do not emit any radiation. However, like any battery-powered system, there is also a minimum risk of device malfunctioning and overheating. We will inform the subject to contact the research staff immediately if they experience overheating or device malfunctioning. In addition, the study devices are not waterproof, and although they use a low powered battery (similar to a cell-phone battery), they should not be submerged in water. We will inform the subjects to remove the device when ever they go swimming or take a shower.

Subjects will not be charged for any damage or loss of the device. We will inform them to contact us immediately. The device may be replaced upon availability.

There is a minimal risk of interference from Zephyr Bioharness in the functionality of pacemaker/ICD devices. Therefore, to avoid any adverse events, it is recommend by the American Heart Associates to avoid the use of this wearable device on subjects with a pacemaker/IDC. There are no hazards or adverse events reported regarding Zephyr Bioharness.

A vibration perception device will be used to monitor progress and diagnose severity of DPN in lower extremities. The vibration range will be from 0-50 Volts. Participants may feel slight discomfort from the vibration. This device is compliant with medical electrical device safety according to IEC 601-1.

### H2. Data and safety monitoring plan

Do the study activities impart greater than minimal risk to subjects?

No

### H3. Coordination of information among sites for multi-site research

Is the BCM Principal Investigator acting as the SPONSOR-INVESTIGATOR for this multi-site research?

No or Not Applicable

Is BCM the COORDINATING CENTER for this multi-site research?

No or Not Applicable

## Section I: Potential Benefits

Describe potential benefit(s) to be gained by the individual subject as a result of participating in the planned work.

There may be no direct benefit to the subject by being in this study. What the researchers find out from this study may help other people with deep and/or chronic wounds. This research compares two dermal matrices after being applied to a deep

wound.

Describe potential benefit(s) to society of the planned work.

It is part of a larger prevention initiative to reduce the high number of diabetic amputations

The body of work in this area suggests opportunities for better patient care by comparing two dermal matrices.

Do anticipated benefits outweigh potential risks? Discuss the risk-to-benefit ratio.

Although there some risks involved in this study associated with the procedures involved, they are minimal and the study does provide the possibility of benefit to subjects. Therefore, the benefits outweigh the risks involved.

## Section J: Consent Procedures

### J1. Waiver of Consent

Will any portion of this research require a waiver of consent and authorization?

Yes

Please describe the portion of the research for which a waiver is required. (Example: chart review to determine subject eligibility)

We will be screening our patient charts for screening and to determine eligibility.

Explain why the research and the use or disclosure of protected health information involves no more than minimal risk (including privacy risks) to the individuals.

The PHI will not be reused or disclosed to (shared with) any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of the PHI would be permitted under the Privacy Rule.

This is a minimal risk study. There is the possibility for loss of confidentiality. However, the PI and his team will employ ample measures to ensure that the data is coded as much as possible and that it is stored under lock and key at all times. Also, electronic data will only be kept on our network password protected computers.

Explain why the waiver will not adversely affect the privacy rights and the welfare of the research subjects.

Patients will receive the same standard of care whether or not they participate in the research. Subjects are patients of the Co-PI in his clinic. So, their participation will not affect the current or future care in the clinic by their physician.

Explain why the research could not practicably be conducted without the waiver and could not practicably be conducted without access to and use of the protected health information.

If we are not allowed to search our patient's records, we cannot identify and recruit the patients that are eligible for the study. We have to be able to access the patient chart including their medical information from other physicians in order to verify their eligibility for this study.

This research will not affect the subject's care as they are receiving the standard of care.

Describe how an adequate plan exists in order to protect identifiers from improper use and disclosure.

As there is a possibility of a loss of confidentiality in this study, the PI and his team will employ ample measures such as coding as much of the data as possible. In addition all physical information will be kept in locked file cabinets. All electronic data will be stored on our network password protected computers.

Describe how an adequate plan exists in order to destroy identifiers at the earliest opportunity consistent with conduct of the research, unless there is a health or research justification for retaining the identifiers or such retention is otherwise required by law.

We will destroy identifiers at the earliest opportunity consistent with conduct of the research absent a health or research justification for retaining them or a legal requirement to do so. The use or disclosure of PHI involves no more than minimal risk to the individuals and the waiver will not adversely affect the privacy rights and the welfare of the individuals. PHI is not disclosed to any other person or entity except for the authorized oversight of the research study by the PI and the clinical database administrator. The Division uniformly adheres to all patient and patient data security and confidentiality rules and regulations set forth by the College.

Describe how adequate written assurances exist in order to ensure that the PHI will not be reused or disclosed to (shared with) any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of the PHI would be permitted under the Privacy Rule.

The PHI will not be reused or disclosed to (shared with) any other person or entity, except as required by law, for authorized oversight of the research study, or for other research for which the use or disclosure of the PHI would be permitted under the Privacy Rule.

Information from health records such as diagnoses, progress notes, medications, lab or radiology findings, etc.

Yes

Specific information concerning alcohol abuse:

No

Specific information concerning drug abuse:

No

Specific information concerning sickle cell anemia:

No

Specific information concerning HIV:

No

Specific information concerning psychiatry notes:

No

Demographic information (name, D.O.B., age, gender, race, etc.):

Yes

Full Social Security #:

No

Partial Social Security # (Last four digits):

No

Billing or financial records:

No

Photographs, videotapes, and/or audiotapes of you:

Yes

Other:

No

Will additional pertinent information be provided to subjects after participation?

No

If No, explain why providing subjects additional pertinent information after participation is not appropriate.

If a patient was screened and was not enrolled, they will not receive any study information. Those patients who were enrolled will have access to that information once the study has been completed.

## **J1a. Waiver of requirement for written documentation of Consent**

Will this research require a waiver of the requirement for written documentation of informed consent?

No

## **J2. Consent Procedures**

Who will recruit subjects for this study?

PI

PI's staff

Describe how research population will be identified, recruitment procedures, any waiting period between informing the prospective participant and obtaining consent, steps taken to minimize the possibility of coercion or undue influence and consent procedures in detail.

Research Staff will be located at Baylor Clinic and the study sites for several days of the week in order to recruit participants.

Subjects will be recruited from the Co-PI's own practices. We may get some referrals from their colleagues that work in the same clinic. We have included a Waiver of Partial Consent to cover our screening process. The Co-PIs will identify eligible subjects and alert the coordinator. The coordinator will review all the details of the study with the subject and/or their family. If the subject agrees to participate in the study, they will be screened and then enrolled into the study.

Please note that all subjects will be consented before any screening procedures are done.

Spanish speakers will be consented using a full Spanish version of the consent. We are currently waiting for the Spanish ICF to be sent from WIRB. No Spanish speakers will be consented before this consent form has been submitted and approved.

Are foreign language consent forms required for this protocol?

Yes

Which of the following ways will you document informed consent in languages other than English?

A full-length informed consent document

### **J3. Privacy and Intrusiveness**

Will the research involve observation or intrusion in situations where the subjects would normally have an expectation of privacy?

No

### **J4. Children**

Will children be enrolled in the research?

No

### **J5. Neonates**

Will non-viable neonates or neonates of uncertain viability be involved in research?

No

### **J6. Consent Capacity - Adults who lack capacity**

Will Adult subjects who lack the capacity to give informed consent be enrolled in the research?

No

### **J7. Prisoners**

Will Prisoners be enrolled in the research?

No

## **Section K: Research Related Health Information and Confidentiality**

Will research data include identifiable subject information?

Yes

Information from health records such as diagnoses, progress notes, medications, lab or radiology findings, etc.

Yes

Specific information concerning alcohol abuse:

Yes

Specific information concerning drug abuse:

Yes

Specific information concerning sickle cell anemia:

No

Specific information concerning HIV:

No

Specific information concerning psychiatry notes:

No

Demographic information (name, D.O.B., age, gender, race, etc.):

Yes

Full Social Security #:

Yes

Partial Social Security # (Last four digits):

No

Billing or financial records:

Yes

Photographs, videotapes, and/or audiotapes of you:

Yes

Other:

No

At what institution will the physical research data be kept?

The physical research will be kept in our BCM offices housed in the Mcnair Building room B10.401.

How will such physical research data be secured?

Data will be kept in locked file cabinets that only the research team has access to.

At what institution will the electronic research data be kept?

Electronic data will be kept on network computers in our BCM offices, under the password protected server. Address :

\\discovery1.ad.bcm.edu\bcm-dept-icamp

Such electronic research data will be secured via BCM IT Services- provided secured network storage of electronic research data (Non-Portable devices only):

Yes

Such electronic research data will be secured via Other:

No

Will there be anyone besides the PI, the study staff, the IRB and the sponsor, who will have access to identifiable research data?

Yes, identify the classes of the persons:

No

Please describe the methods of transmission of any research data (including PHI, sensitive, and non-sensitive data) to sponsors and/or collaborators.

Transmissions, if any, will only happen via secure emails.

Will you obtain a Certificate of Confidentiality for this study?

No

Please further discuss any potential confidentiality issues related to this study.

NA

## Section L: Cost/Payment

Delineate clinical procedures from research procedures. Will subject's insurance (or subject) be responsible for research related costs? If so state for which items subject's insurance (or subject) will be responsible (surgery, device, drugs, etc). If appropriate, discuss the availability of financial counseling.

Participating in this study will take the subject's time and will not involve any direct cost to him/her. The subject's medical insurance will be billed for all standard of care related expenses.

If subjects will be paid (money, gift certificates, coupons, etc.) to participate in this research project, please note the total dollar amount (or dollar value amount) and distribution plan (one payment, pro-rated payment, paid upon completion, etc) of the payment.

Dollar Amount:

1275

Distribution Plan:

Subjects will be compensated \$75 per visit. We will be covering their transportation for those subjects who need it. We will be providing parking validations for those who park in the facilities.

Payments will be done using the ClinCard method. Their SSN will be requested for the research team to issue the payments. The research study will also cover the subject's parking or transportation expenses to go to their research visits.

More information has been attached to section S.

## Section M: Genetics

How would you classify your genetic study?

Discuss the potential for psychological, social, and/or physical harm subsequent to participation in this research. Please

discuss, considering the following areas: risks to privacy, confidentiality, insurability, employability, immigration status, paternity status, educational opportunities, or social stigma.

Will subjects be offered any type of genetic education or counseling, and if so, who will provide the education or counseling and under what conditions will it be provided? If there is the possibility that a family's pedigree will be presented or published, please describe how you will protect family member's confidentiality?

## Section N: Sample Collection

None

## Section O: Drug Studies

Does the research involve the use of ANY drug\* or biologic? (\*A drug is defined as any substance that is used to elicit a pharmacologic or physiologic response whether it is for treatment or diagnostic purposes)

No

Does the research involve the use of ANY gene transfer agent for human gene transfer research?

No

### O1. Current Drugs

Is this study placebo-controlled?

No

Will the research involve a radioactive drug that is not approved by the FDA?

No

## Section P: Device Studies

Does this research study involve the use of ANY device?

Yes

[Device 1: Legsys](#)

[Device 2: Balansens](#)

[Device 3: Pamsys](#)

[Device 4: Sensilase](#)

## Section Q. Consent Form(s)

None

## Section R: Advertisements

**Mode of Advertising: Other: Bulletin board, communities**

Exact language of Advertisement:

H-42282 COMPARATIVE EFFECTIVENESS OF TWO ACELLULAR MATRICES PRODUCTS (DERMACELL VS INTEGRA) FOR MANAGEMENT OF DEEP DIABETIC FOOT ULCERS - A RANDOMIZED CLINICAL TRIAL

Do you have a deep wound?

Join a clinical research that may help your wound

We are conducting a study to compare two treatments for deep wounds which may increase the speed of your wound

healing and may prevent amputation.

\*Your time and transportation will be compensated.

Benefits of participation include \*Potential to speed your wound healing and prevent amputation \*You would help improve the knowledge about the proposed treatments

For more information please contact the research coordinator list in the following

Ivan Marin Research Coordinator (713)798-7538

Louie Morsy Research Coordinator (713) 798-8714

Michael E. DeBakey Department of Surgery 7200 Cambridge St, B01.529 Houston, Texas 77030 Phone: (713) 798-7537  
Fax: (713) 798-8460 [www.bcm.edu/icamp](http://www.bcm.edu/icamp)

Diabetic Ulcer Study 713-798-8714