Post Operative Skin Approximation with Cyanoacrylate Based Wound Closure Adhesives

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Contents

DOCUMENT HISTORY

VERSION	DATE	DESCRIPTION
Version 1.0	09-30-2024	Initial Release
Version 2.0	02-05-2025	Edits made to protocol to reflect updated changes.

1.1. Synopsis

Title:	Post Operative Skin Approximation with Cyanoacrylate based Wound Closure Adhesives
Study Description:	The OptiClose surgical adhesive system combines a liquid adhesive with a self-adhering mesh for the closure of surgical incisions and simple lacerations. It acts as a demonstrated non-invasive alternative to skin sutures and staples. The OptiClose and Dermabond topical skin adhesives combine a self-adhering, pressure-sensitive adhesive (PSA), polyester-based mesh (for incisions requiring a mesh), as well as a simple non mesh application system (for incisions that do not require a mesh) for temporarily adjoining the approximated skin edges of an incision, and a 2-octyl cyanoacrylate liquid adhesive formulation for final skin closure. By sparing long intracutaneous sutures, wound closure time is significantly reduced and wound edge ischemia potentially diminished. The purpose of this study is to conduct a two-arm, prospective, randomized control trial by which participants will be randomly assigned to either receive the Dermabond wound closure adhesive or the OptiClose wound closure adhesive in participants undergoing the closure of any subcutaneous tissue following surgical site incisions.
Phase:	
Objectives:	*Primary objective*: To determine the effectiveness of the OptiClose surgical adhesive. *Secondary Objective(s)*: Secondary outcomes include: • The incidence of any surgical site infections (SSI). • The incidence and extent of acute inflammatory reactions is documented by

	the International Contact Dermatitis Research Group (ICDRG) grading system following application until second follow up visit. • Optimal cosmesis score (Modified Hollander Score) • Application/Dry time - liquid adhesive is no longer wet to the touch. • Number of applicator tubes used of each product
Endpoints:	*Primary Endpoint:* Incidence of wound edge apposition without dehiscence or need of re-approximation following wound closure. *Secondary Endpoint*: Secondary endpoints include: • Surgical Site Infections (SSIs) (criteria defined by the CDC), if applicable • Inflammatory reactions as calculated by the International Contact Dermatitis Research Group (ICDRG) grading system (see appendix), if applicable. • Cosmesis as assessed by the Modified Hollander score (see appendix). • Dry time as objectively measured by an observer/end user. • Number of applicator tubes/mesh used.
Study Population:	Participants will be patients undergoing a skin closure of a full thickness surgical incision. For the products tested in this study, a total of 60 participants will be required to complete the study, 30 in each group. Enrollment will continue until the study from the evaluable number of participants (60) is completed. Inclusion Criteria: Individuals who meet all the following criteria will participate in this study: ➢ Healthy individuals ≥ 18 years of age.

- Are able to understand and willing to carry out instructions for this study.
- Full thickness surgical incision requiring subcutaneous closure.

Exclusion criteria:
Individuals who meet any of the following criteria will not be allowed to participate in this study:

- Known sensitivities/allergies to the ingredients contained in the products. Individuals with a self-reported Type IV hypersensitivity reaction to cyanoacrylates (namely acrylates).
- Individuals with a history of incisional site closure using a surgical glue.

Description of Sites/Facilities Enrolling Participants:

The study will be conducted in Nadora Health in Johnstown, Colorado.

Description of Study Intervention:

This prospective study compares the use of OptiClose and Dermabond in the closure of subcutaneous tissue following surgical site incisions. The study has two separate arms. In the first arm, the incision site will large enough to require the use of a mesh, and participants will be randomized into the OptiClose Secure group or the Dermabond Prineo group. In the second arm of the study, the incision site will be small enough not to require a mesh and will use only glue, and participants will be randomized into the OptiClose Rapid group or the Dermabond Advanced group. In both arms of the study, participants will be assessed at three different time points following the surgical procedure: immediately after application following skin closure, and two subsequent visits. These assessments within this study will investigate the cosmesis score, presence of

	possible dehiscence or allergic reactions, dry time, and ease of application. At the conclusion of the final assessment visit (at the end of the final visit), the participants will be dismissed from the study. Participants are free to withdraw from the study, and the principal investigator may also remove the participant if any issues arise that preclude them from continuing.
Study Duration:	Study duration is approximately 4-6 months.
Participant Duration:	The study will take approximately 4-6 weeks to complete.

1.2. Schedule of Activities (SOA)

	Pre-Op	Post Op	Post Op Follow Up 1	Post Op Follow Up 2
Informed Consent/Subject Enrollment	x			
Product Application to surgical site		x		
Dry time recording (with stopwatch)		x		
Number of applicator tubes used		x		
Circulating Nurse notes assessment for adverse events related to allergic reactions. IF applicable, preforms the International Contact Dermatitis Research Group (ICDRG) grading system		x	x	x
Incidence of Surgical Site Infection (SSIs). If applicable performs the CDC criteria for SSI.		x	x	x

Incisional Site Wound Dehiscence Check (inspection of wound edge approximation).			x	x
Incisional Site Cosmesis Score Check using Modified Hollander Scale			x	x
Incisional Site Photos*		x	x	x
Subject Dismissal				x
*Only applies to participants who have consented to incisional site photos.				

2. INTRODUCTION

2.1. Background & Rationale

Closure of surgical site incisions in orthopedic spine procedures may include multiple skin layers.[1] Depending on the depth of the incision, suturing of the adipose layer, dermis, subcutaneous, and epidermal layers may be required.[2] Wound closure of the subcutaneous layer may be accomplished by using different modalities such as staples, sutures, or topical skin adhesives.[3] The decision to use one modality over another is largely based on surgeon preference and the area of the body. Topical skin adhesives, such as Opticlose (Medline Industries, LP) and Dermabond (Johnson & Johnson) are ideal for approximating and adjoining opposing skin edges together from lacerations or incisions. This study will evaluate the durability of the Opticlose topical adhesive regarding its ability to hold wound edges together without dehiscence or need for re-approximation following wound closure. The two arms of the study will entail the comparison of participants randomized into either the OptiClose (Secure and Rapid) groups or the Dermabond (Prineo and Advance) groups for the two incision site lengths (incisions large enough to require a combination of mesh and glue or those small enough to require glue only). Recruitment will continue until a minimum of 30 evaluable participants are enrolled and randomized into each group for a particular incision length. In total, 60 participants will be needed to complete the entire study.

2.2. Study Products (For this round of testing)

The following SKUs will be used in this study:

OptiClose Rapid: MSC091050

OptiClose Secure: MSC091060 (22 cm)

Dermabond Advanced: ETHDNX12

Dermabond Prineo: J-JCLR222US (22CM)

2.3. Risk/Benefit Profile

2.3.1 Potential Study Risks

This study entails minimal risk to study participants for the Opticlose approximation, which includes commercially available products that can be used in the clinical settings and are designated for use as per the study design. There is a possibility of minor skin irritation and redness, sensation of heat and discomfort, or wound dehiscence. However, the magnitude of this should be no greater than what occurs through normal use of the currently marketed topical skin adhesives. The topical adhesives will only be applied to area(s) of surgical incision which should further minimize risk. Each product used in this study would have been tested for its biocompatibility for dermal irritation and within acceptable parameters of the International Organization for Standardization (ISO) 10993-10 requirements. A small but potential risk of allergic skin reaction may occur as a known risk with use of acylate based wound closure devices.

2.3.2 Potential Study Benefits

This study is for research purposes only. There is no direct benefit to the participant. Information learned from the study may help expand the repertoire of topical adhesives used to treat lacerations and surgical incisions.

2.3.3 Assessment of Potential Risk/Benefit Profile

The potential of learning about durability and of Medline's OptiClose outweighs the potential of acquiring a potential superficial skin irritation. This knowledge will help validate the durability of Medline's OptiClose topic adhesive, which may be comfortably used in the clinical and home settings as indicated.

3. END OF STUDY DEFINITION AND STUDY DISCONTINUATION

A participant will be deemed to have successfully completed the study upon completion of all protocol and study procedures. This study may be suspended or prematurely terminated if there is sufficient reasonable cause. Written notification, documenting the reason for study suspension or termination, will be provided by the suspending, or terminating party to the IRB. If the study is prematurely terminated or suspended, the PI or study staff/ personnel will promptly inform the IRB and will provide the reason(s) for the termination or suspension.

Circumstances that may warrant termination or suspension include, but are not limited to:

- Determination of unexpected, significant, or unacceptable risk to participants as determined by adverse events review.

- Insufficient compliance to protocol requirements.
- Data that is not sufficiently complete and/or valuable.

Study may resume once concerns about safety, protocol compliance, and data quality are addressed, and satisfy the IRB.

4. RECRUITMENT STRATEGY

4.1 Strategies for Recruitment

This is an external study to be conducted with external volunteers. As a result, email, and other forms of electronic or physical recruitment methods will be sent by the Clinical Research team. It is a first come, first serve volunteer opportunity. Once the potential participants respond stating their eligibility based on the parameters outlined in the recruitment tools, they will be further evaluated on their first visit. Information regarding logistics for early participant withdrawal from the study and replacement of participants detailed in Section 8: Statistical Considerations.

5. IFORMED CCONSENT, VERIFICATION, AND ELIGIBILITY

5.1 Visit 1: Informed Consent & Screening

5.1.1 Informed Consent

The study will take place at Nadora Healthcare. The study staff will obtain informed consent from the participant prior to participant activities. Consent will be obtained from all participants and documented on an Informed Consent form (ICF) that has received approval from an IRB/Ethics Committee. The signed ICF must be written in accordance with Good Clinical Practices (GCP) and Good Documentation Practices (GDP) and must comply with all elements required by United States (U.S.) Food and Drug Administration (FDA) 21 CFR 50.25 and International Conference on Harmonization (ICH) 4.8, state and local regulations, and additional elements relevant to specific study situations (including a statement that Medline Industries, LP. and relevant authorities have access to participant records). A copy of the signed consent will be given to each participant.

5.1.2 Verification and Eligibility

Following informed consent, the participants will undergo screening based on the inclusion/exclusion criteria detailed in the synopsis (section 1.1) and will receive a unique screening number that will be recorded in the Participant Screening Form (PSF). The reason for participant exclusion will be documented in this form.

Participant responses to screening questions and demographic information will be documented in the Participant Screening Form. Potential participants who satisfy all inclusion/exclusion criteria for the study will be enrolled in the study. Once the participant is enrolled, participants will proceed to the activities described in Section 6.1 where they

will be assigned a unique Participant Identification (PID) at the start of their first study visit activity.

6. STUDY PROCEDURES AND ASSESSMENTS

6.1 Participant Screening and Informed Consent

The pre-visit may take up to 30 minutes. Study staff will screen potential participants and obtain informed consent during this time as described in Section 5.

Participants will be randomized depending on the the predicted incision size. If the incision site is large enough to require the use of the mesh and glue combination, participants will be randomized into the OptiClose Secure group or the Dermabond Prineo group. If the incision site is determined to be small enough that it does not require a mesh, participants will be randomized into the OptiClose Rapid group or the Dermabond Advanced group.

6.2 Post-operative Application of Surgical Site Adhesive

After the completion of the surgical procedure the surgical site will be prepared in a standard fashion using appropriate layered closure. During this time, the products (Opticlose or Dermabond), will be applied to the surgical site incision. Following the application of the products, the time the products take to dry on the surgical site will be recorded using a stopwatch.

For the mesh group, the stopwatch will begin when the package is opened and once the mesh is laid down for initial application. Once the mesh is appropriately applied, the first time stamp will be recorded. The stopwatch will begin again once the glue has been opened and will stop once the glue has sufficiently covered the mesh for a second time stamp. The stopwatch will then start again, and the applicator will touch the application site at 15 second intervals until no glue is detected on the gloved finger. Once dry, the third and final time stamp will be recorded.

For participants assigned to the glue only group, the stopwatch will begin once the glue has been opened and will stop once the target area has been sufficiently covered for the first time stamp. The stopwatch will begin a second time and the applicator will touch the application site at 15 second intervals until no glue is detected on the gloved finger. Once dry, the second time stamp will be recorded.

The number of applicator tubes used when applying the various products will also be recorded during the product application.

Throughout this process, the circulating nurse will be assessing the participants for potential adverse events related to any surgical site infections or any signs of allergic skin

reactions. If an allergic reaction is detected the assessment will include an International Contact Dermatitis Research Group (ICDRG) grading system (see appendix). Following the completion of the assessment, the participants will be allowed to leave and follow up in their next office visits.

6.3 Follow-up post-operative visit (Visit 2 & 3)

In the second and third post-operative visits, the incisional wounds will be assessed for possible dehiscence and the results will be recorded. Moreover, an incisional site cosmetic score will be obtained using the Modified Hollander score for linear scars and will be used to further assess and categorize the current wound state. As with the first visit, the research staff will also assess any potential adverse event that may have resulted from the use of the topical adhesives. Additionally, any incidence of surgical site infections will be noted. Following the assessments during the third visit, the participants will be dismissed from the study. The CDC SSI and ICDRG grading systems will be used if either of the two events are deemed applicable by the study staff.

6.4 Post-Participation Confirmation

After the participants have completed their scheduled visits, (barring earlier termination), they will have successfully completed the study.

6.5 Photographs

During the consenting process, participants will be asked if they agree to have photos of their incision sites taken. Only photos of the incision and product application sites will be taken, no other surrounding patient identifiers will be included (i.e. birthmarks, tattoos, any dermatologic identifiers such as scars, etc.). As the study progress the quantity and quality of photos will be reviewed until it is a deemed a sufficient variety of comparative photographs between products and application site/groups has been taken. This process will allow for an appropriate representation of photos to be gathered without requiring every single patient enrolled to have incisional site photos. This will also allow the participants to continue study enrollment despite opting not to have incisional site photos taken. None of the photographs will be used for statistical comparison.

7 ADVERSE DEVICE EVENTS (ADEs)

7.1 Definition of ADE

The ADE is the adverse event related to the use of an investigational medical apparatus resulting from insufficiencies or inadequacies in the instructions for use, the deployment, installation, the operation, or any malfunction of the investigational medical device or from error use.

7.2 Definition of Serious Adverse Event (SAE) / Serious Adverse Device Event (SADE)

The SADE is the adverse device effect that has resulted in any of the consequences characteristic of a serious adverse event (SAE), such as:

- Death
- A life-threatening adverse event
- Inpatient hospitalization or prolongation of existing hospitalization
- A persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions or,
- A congenital anomaly/birth defect.

Important medical events that may not result in death, be life-threatening, or require hospitalization may be considered serious when, based upon appropriate medical judgment, they may jeopardize the participant and may require medical or surgical intervention to prevent one of the outcomes listed in this definition. All SADE will be reported to the reviewing IRB as necessary according to their rules.

7.3 Definition of Unanticipated Adverse Device Effect (UADE)

Any serious adverse effect on health or safety or any life-threatening problem or death caused by, or associated with, a device, if that effect, problem, or death was not previously identified in nature, severity, or degree of incidence in the investigational plan or application (including a supplementary plan or application), or any other unanticipated serious problem associated with a device that relates to the rights, safety, or welfare of subjects.

7.4.Severity of ADE

- **Grade 1:** Mild; asymptomatic or mild symptoms; clinical or diagnostic observation only; intervention not indicated.
- **Grade 2:** Moderate; minimal, local or noninvasive intervention indicated; limited age-appropriate instrumental activities of daily living.

- **Grade 3:** Severe or medically significant but not immediately life-threatening; hospitalization or prolongation of hospitalization indicated; disabling; limiting activities of daily living involving self-care.
- **Grade 4:** Life threatening consequences; urgent intervention indicated.
- **Grade 5:** Death related to ADE.

7.5 Relatedness of ADE and SADE

- **Unrelated:** This category applies to those ADEs / SADEs which, after careful consideration, are clearly and incontrovertibly due to extraneous causes (disease, environment, etc.)
- **Possible:** This category applies to those ADEs / SADEs for which, after careful medical consideration at the time they are evaluated, a connection with the Investigational Product administration appears unlikely but cannot be ruled out with certainty.
- **Probable:** This category applies to those ADEs / SADEs which, after careful medical consideration at the time they are evaluated, are felt with a high degree of certainty to be related to the Investigational Product.
- **Definite:** This category applies to those ADEs / SADEs which, after careful consideration, are clearly and incontrovertibly due to the Investigational Product.

7.6 Expectedness

The PI will be responsible for determining whether an ADE or SADE is expected or unexpected. An AE / ADE will be considered unexpected if the nature, severity, or frequency of the event is not consistent with the risk information previously described for the study intervention.

7.7 ADE Reporting

Non-serious ADEs are to be reported to the IRB per IRB reporting requirements.

7.8 SADE/UADE reporting

The SADEs will be recorded on the SADE/UADE form (provided by Medline Industries, LP.) by the study personnel and reviewed by the PI. The study personnel or the PI shall submit the completed SADE/UADE form to Medline as soon as possible, but in no event later than 48 hours after the PI first learns of the effect. The study personnel or the PI will be responsible for reporting the event to the IRB per the IRB's reporting requirements, and to the FDA if applicable. Thereafter, the study personnel or the PI shall submit additional reports concerning the effect as the FDA requests.

The PI shall complete a SAE Form no later than 48 hours after the investigator first learns of the effect. The PI shall report the SAE / SADE to the reviewing IRB, if applicable, according to their reporting requirements. The PI, who is responsible for conducting an evaluation of the SAE / SADE, shall report the results of such evaluation to the FDA and to all reviewing IRBs if applicable within 10 working days. Thereafter, the PI shall submit such additional reports concerning the effect as FDA requests.

For questions regarding this process or the event, you may contact your Medline clinical designee or the Clinical Research Scientist:

Name: Gregory J. Gomez
Phone: 224-229-2226
E-mail: gjgomez@medline.com

8 STATISTICAL CONSIDERATIONS

8.1.Sample Size Determination

The purpose of this study is to show non-inferiority between the two products. We are reporting superiority results, as the noninferiority results were indeterminate. A sample size of 30 per incisional length group was estimated based on the secondary outcome of difference in mean "Dry Time" using estimated means (no standard deviations) from the vendor for both OptiClose and Competitor product, and estimation of effect size. The comparison will be made using a one-sided, two-sample unequal-variance t-test, with a Type I error rate (α) of 0.025. The standard deviation for Group 1 is assumed to be 0.01 and the standard deviation for Group 2 is assumed to be 0.01. With sample sizes of 15 in OptiClose Product and 15 in Dermabond, and with 90% power, the corresponding detectable difference in means is 0.02226. Provided exact standard deviations, an exact difference can be adjusted accordingly. The detectable difference was computed using PASS 2024, version 24.0.2.

8.2 Randomization

The order of products tested first or second will be randomly assigned according to a randomization table developed by the biostatistics team. We will conduct a two-arm, prospective, unblinded, randomized prospective control trial by which participants will be randomly assigned to either receive treatment A: the Dermabond wound closure adhesive or the treatment B: OptiClose wound closure adhesive in participants undergoing the closure of any subcutaneous tissue following surgical site incisions. After assignment to treatment arm per incisional length requirements, participants will be randomized using

simple randomization, with 15 participants designated to receive Opticlose and 15 to receive Dermabond. Participants will be patients undergoing a skin closure of a full thickness surgical incision. For the products tested in this study, a total of 60 participants will be required to complete the study, 30 in each incisional length group. If a participant is unable to complete the study, the participant will be replaced such that the new participant will be assigned to the randomization cohort of the replaced participant.

Enrollment will continue until the study from the evaluable number of participants (60) is completed.

8.3 Populations for Analyses

The analyses will be performed on the intent to treat (ITT) population which consists of all subjects who have complete data for all time points and secondary endpoints.

No per protocol, safety, or other analyses groups are planned.

8.4 Protocol Deviations

The list of protocol deviations will be compiled prior to database lock. All deviations will be reviewed and decisions for handling each of the deviations will be made prior to the start of data analysis.

8.5 Demographics, Variables and Covariates

Age will be collected as a continuous measure, with all participants being >=18 years of age. Age strata will be defined as stratum 1: 18-25 years old, stratum 2: 26-41 years old, stratum 3: 42-57 years old, stratum 4: 58-67 years old, stratum 5: 68-76 years old, stratum 6: 77-94 years old, 95+ years old. Age will be considered for secondary analysis.

Sex will be collected as a categorical equal to 0=male and1=female. Sex will be considered for secondary analysis.

Race/Ethnicity has been requested by the division as a covariate and will be considered for secondary analysis.

8.6 Handling of Missing Values

All missing data will be quantified in the final report and possible biases for any missing data will be reported.

8.7 Statistical Analysis of Study Endpoints

Statistical analyses will be conducted in SAS® software, Version 9.4 or higher of the SAS System for Windows (Copyright © 2013 SAS Institute Inc.) or other appropriate statistical software.

All continuous variables will be summarized using the following descriptive statistics: n (non-missing sample size), mean, standard deviation, median, maximum and minimum. The frequency and percentages (based on the non-missing sample size) of observed levels will be reported for all categorical measures. In general, all data will be listed, sorted by site, treatment and subject, and when appropriate by visit number within subject. All summary tables will be structured with a column for each treatment in the order (Control, Experimental) and will be annotated with the total population size relevant to that table/treatment, including any missing observations. 95% confidence intervals will be calculated for all means.

8.8.1 Primary Endpoint

Incidence of wound edge apposition without dehiscence or need of re-approximation following wound closure.

Counts will be collected of participants not requiring wound re-approximation for both Opticlose and Dermabond. A Chi-Square test will be used to compare the observed frequencies of adverse events between the two products. The test statistic is calculated by comparing the observed frequency to the expected frequency under the null hypothesis. The p-value will be obtained to determine the statistical significance of the observed difference.

8.8.2 Secondary Endpoint

Secondary Endpoint: Secondary endpoints include:

Inflammatory Reactions

Inflammatory reactions will be assessed using the International Contact Dermatitis Research Group (ICDRG) grading system. The ICDRG grades reactions on a scale from 0 to 3, where 0 indicates no reaction and 3 indicates a severe reaction. Descriptive statistics, including mean, median, and standard deviation, will be calculated for the ICDRG scores. The distribution of scores will be summarized using frequency tables. Comparative analysis between treatment groups will be performed using non-parametric tests such as the Two-sample T-test or non-parametric alternative test. A Young Aishu, her family, and friends. additionally, the proportion of subjects experiencing each grade of reaction will be compared using Chi-Square tests.

Incidence of Surgical Site Infections

The incidence of surgical site infections (SSIs) will be recorded for each subject (as occurring within 30 days of treatment). Descriptive statistics will include the total number of infections, Comparative analysis between treatment groups will be conducted using Chi-Square tests or Fisher's exact test if the expected frequencies are low.

Cosmesis

Cosmesis will be assessed using a validated scoring system, such as the Modified Hollander Score. The chosen scale will be detailed in the appendix. Descriptive statistics will include mean, median, and standard deviation of the cosmesis scores. The distribution of scores will be summarized using frequency tables. Comparative analysis between treatment groups will be performed using t-tests or ANOVA for normally distributed data, and Mann-Whitney U test or Kruskal-Wallis test for non-normally distributed data. Additionally, the proportion of subjects achieving satisfactory cosmesis (as defined by a predetermined threshold) will be compared using Chi-Square tests.

Number of Applicator Tubes

- A Chi-Square test will be used to compare the observed frequencies of number of tubes between the two products. The test statistic is calculated by comparing the observed frequency to the expected frequency under the null hypothesis. The p-value will be obtained to determine the statistical significance of the observed difference.

Dry Time

- Dry time down to the closest measure in seconds will be summarized using a mean and standard deviation and will be compared across groups with post-hoc comparison tests. Total time with glue time, mesh time, and dry time will be summarized using a mean and standard deviation.

8.8.3 Supplemental Analyses

Not applicable.

8.8.4 Adverse Device Events

All adverse device events will be included in the analyses and report documents, including but not limited to skin irritation, redness, and itching.

9. SUPPORTING DOCUMENTATION AND OPERATIONAL CONSIDERATIONS

9.1. Regulatory and Ethical Considerations

9.1.1. Confidentiality and Privacy

Participant confidentiality and privacy is strictly held in trust by Medline Industries, LP. Therefore, the study protocol, documentation, data, and all other information generated will be held in strict confidence. No information concerning the study, or the data will be released to any unauthorized third party. All study data will be identified with an anonymous participant study number, and all CRFs and other documents containing data will have the participant study number and no identifiable information. One master list linking participant study numbers to participant name and other contact information will be maintained in a secure electronic database by the study (study personnel) in the event identification of a participant is necessary (e.g. due to an ADE). This is the only documentation that will link participant name and participant study number.

Study staff will ensure all source documents for data collection are completed in accordance with Good Documentation Practices (GDP) to ensure accurate interpretation of data. Data will be transferred from CRFs to a secure electronic database and analyzed with SAS® 9.4, which will allow for quality checks to identify data that appear inconsistent, incomplete, or inaccurate.

All study records will be maintained for a minimum of two years following the completion of the final round or final version of the study closeout; records will be maintained for a longer period as required by IRB or other regulations.

9.1.2. Safety Oversight

Safety oversight will consist of monitoring of visit activity, ADE and SADE by the PI, who is suitably qualified and experienced to evaluate any ADEs or SADEs. The PI will review all ADE/SADEs and make any necessary safety determinations or visit activity modification that are in the best interest of the participant as necessary. See also Section 7.0 AEs for reporting and management requirements.

9.1.3. Conflict of Interest Policy

The independence of this study from any actual or perceived influence is critical. Therefore, any actual conflict of interest of persons who have a role in the design, conduct, analysis, publication, or any aspect of this trial will be disclosed and managed.

9.2.Abbreviations

ADE	Adverse Device Event
UADE	Unanticipated Adverse Device Effect
SADE	Serious Adverse Device Event
ICDRG	The International Contact Dermatitis Research Group
CFR	Code of Federal Regulations
CRA	Clinical Research Associate
CRF	Case Report Form
CRO	Contract Research Organization
FDA	Food and Drug Administration
GCP	Good Clinical Practice
GDP	Good Documentation Practice
HIPAA	Health Insurance Portability and Accountability Act
ICF	Informed Consent Form
ICH	International Conference on Harmonization
IRB	Institutional Review Board
ITT	Intent to Treat
LP	Limited Partnership
PI	Principal Investigator
PSF	Participant Screening Form
SAE	Serious Adverse Device Events
SSI	Surgical Site Infection
SOA	Schedule of Activities
U.S.	United States

10. REFERENCES

1. Rosen RD, Manna B. Wound Dehiscence. Treasure Island (FL): StatPearls Publishing; 2024. https://www.ncbi.nlm.nih.gov/books/NBK551712/
2. Singer AJ, Quinn JV, Hollander JE. The cyanoacrylate topical skin adhesives. Am J Emerg Med. 2008;26(4):490-496. doi:10.1016/j.ajem.2007.05.015
3. Singer AJ, Perry L. A comparative study of the surgically relevant mechanical characteristics of the topical skin adhesives. Acad Emerg Med. 2012;19(11):1281-1286. doi:10.1111/acem.12009

11. APPENDIX

Reaction	Definition
+?	Doubtful reaction; faint macular erythema only
+	Weak positive reaction; erythema, infiltration papules
++	Strong positive reaction; erythema, infiltration, papular, vesicles
+++	Extreme positive reaction; intense erythema, infiltration and coalescing vesicles
-	Negative reaction
IR	Irritant reaction
NT	Not tested

ID	**Step-off of borders** (Edges not on the same plane)	**Contour irregularities** (Wrinkled skin near the wound)	**Margin separation** (Gap between the sides)	**Edge inversion** (Wound not properly everted)	**Excessive distortion** (Swelling or infection)	**Patient satisfaction score** (1–10)	**Operator satisfaction score** (1–10)
A							
B							
C							
D							
E							

Is the overall appearance? ☐ Acceptable ☐ Not acceptable

For each wound, please answer Yes or No to each characteristic.
After Hollander JE, Singer AJ, valentine SM, et al. Wound registry: development and validation. Ann Emerg Med 1995;25;675–85.[8]