*Protocol Title*

Principal Investigator:

*Co-Investigator(s):*

Date: *Month XX, XXXX*

Draft or Version: *X.X*

Confidential – Proprietary Information

Protocol Synopsis

|  |  |
| --- | --- |
| Protocol Title: |  |
| Clinical Study Device: |  |
| Study Purpose: | *[Provide a brief justification for the study, study objectives, and hypothesis]* |
| Brief Study Overview: | *[Describe the overall study design e.g., total number of subjects, different treatment groups (if any), study treatment (including Renuvion treatment details), study visits (baseline, Procedure, Follow-up Day 1, Day 3, Day 7, Day 30, Day 90, Day 180, etc.]* |
| Number of Sites Enrolling Participants: |  |
| Sample Size: | N = |
| Subject Population: |  |
| Inclusion Criteria: |  |
| Exclusion Criteria: |  |
| Primary Endpoint: |  |
| Additional Endpoints: |  |
| Study Duration: | *Describe the anticipated length of the study from recruitment to last study subject visit.* |
| Study Location(s):  *List one site per row* | Office Name:  Office Address:  Site Contact Name:  Site Contact Phone Number:  Site Contact Email: |
| Funding: | Apyx Medical Corporation  5115 Ulmerton Road  Clearwater, FL 33760  800-537-2790  clinicalresearch@apyxmedical.com |
| IRB: |  |
| *Laboratory, statistician, etc. List any other outside companies involved in the study. List one per row.* |  |

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# 1. Introduction: Background and Study Device

## 1.1 Background Information & Rationale

*Provide the scientific background of the medical condition of concern, current treatment strategies and limitations, and the justification for the study.*

## 1.2 Study Device

*Describe the study device (Renuvion system) planned for use in the study. Details may be found for this section in the generator or handpiece IFU.*

# 2. Study Purpose

*Describe the specific aims, objectives, and/or hypothesis for the study.*

# 3. Study Design and Endpoints

## 3.1 Description of the Study Design

*Describe the overall study design e.g., total number of subjects, different treatment groups (if any), study treatment (including Renuvion treatment details), study visits (baseline, Procedure, Follow-up Day 1, Day 3, Day 7, Day 30, Day 90, Day 180, etc.).*

## 3.2 Duration of Study

*Describe the anticipated length of the study from recruitment to last study subject visit.*

## 3.3 Study Endpoints

### 3.3.1 Primary Endpoint

*Describe the primary endpoint to be analyzed in the study. This endpoint can be efficacy or safety.*

### 3.3.2 Additional Endpoints

*Describe any additional efficacy or safety endpoints to be analyzed in the study.*

# 4. SUBJECT ENROLLMENT AND WITHDRAWAL

## 4.1 Study Population

*Describe the target subject population.*

## Informed Consent

Informed consent will be obtained from all subjects prior to study participation. *Describe informed consent process.*

## 4.3 Inclusion Criteria

Subjects must meet the following criteria for study enrollment:

* *Detail inclusion here*

## 4.4 Exclusion Criteria

Subjects will be excluded if they meet any of the following criteria:

* *Detail exclusion here*

## 4.5 Strategies for Recruitment and Retention

*Describe how subjects will be recruited for the study (e.g., social media, referring physicians, other advertisements, etc.).*

## 4.6 Withdrawal

*<sample text>*

*Participating subjects who develop an adverse event, complications that confound the study results or whose expected outcome worsens irrespective of treatment, or simply express a desire to end their participation in the study without reason, will be withdrawn from the study. They will still be included in the trial numbers and data analyses.*

*Participating subjects will be withdrawn from the study and an appropriate standard of care will be used to assess any adverse event by the PI or sub-investigator. Copies of records of the withdrawal assessment will be retained with study information for reference and data purposes. Serious adverse events (SAEs) will also be described in narratives as part of the study report.*

# 5. STUDY PROCEDURES AND SCHEDULE

*Describe all study procedures and evaluations to be done as part of the study. Possible content includes:*

* *Baseline visit evaluations, lab work, etc.*
* *Study procedure visit details including Renuvion procedure details*
* *Follow-up frames and safety and efficacy evaluations done at each visit*
* *Any other procedures or evaluations that are part of the study*

# 6. ASSESSMENT OF SAFETY

*<sample text>*

*Safety will be assessed by subject-reported adverse events and examination of the treatment area by the investigator during the procedure and at all follow-up visits. A Numerical Pain Scale from 0 (no pain) to 10 (worst pain possible) will be used to assess the severity of pain post-procedure and at all follow-up visits.*

## 6.1 Definition of an Adverse Event (AE)

*<sample text>*

*An* ***adverse event*** *(AE) is any untoward or unfavorable medical occurrence in a human subject, including any abnormal sign (for example, abnormal physical exam or laboratory finding), symptom, or disease temporally associated with the subject’s participation in the research, whether or not considered related to the subject’s participation in the research.*

## 6.2 Definition of Serious Adverse Event (SAE)

*<sample text>*

*An adverse event should be classified as serious if it meets any of the following criteria:*

1. *Death*

*Death was an outcome of the adverse event.*

1. *Life-threatening*

*The subject was at substantial risk of dying at the time of the adverse event or use or continued use of the device.*

1. *Hospitalization (initial or prolonged)*

*Admission to the hospital or prolongation of hospitalization was a result of the adverse event.*

1. *Disability or Permanent Damage*

*The adverse event resulted in a substantial disruption of a person's ability to conduct normal life functions, i.e., the adverse event resulted in a significant, persistent or permanent change, impairment, damage or disruption in the patient's body function/structure, physical activities and/or quality of life.*

1. *Congenital Anomaly/Birth Defect*

*Exposure to a medical product prior to conception or during pregnancy may have resulted in an adverse outcome in the child.*

1. *Required Intervention to Prevent Permanent Impairment or Damage (Devices)*

*Medical or surgical intervention was necessary to preclude permanent impairment of a body function, or prevent permanent damage to a body structure, either situation suspected to be due to the use of a medical product.*

1. *Other Serious (Important Medical Events)*

*The event does not fit the other outcomes, but the event may jeopardize the subject and may require medical or surgical intervention (treatment) to prevent one of the other outcomes.*

*Non-serious adverse events are all events that do not meet the criteria for a “serious” adverse event.*

## 6.3 Adverse Event Severity Grades

*<sample text>*

*AEs severity will be graded as follows:*

* *Mild: Sign or symptom, usually transient, requiring no special treatment and generally not interfering with usual activities.*
* *Moderate: Sign or symptom, which may be ameliorated by simple therapeutic measures, may interfere with usual activity.*
* *Severe: Sign or symptom that is intense or debilitating and that interferes with usual activities and/or requires hospitalization.*

## 6.4 Adverse Event Reporting Procedures

*<sample text>*

*The AEs reported during the trial will be graded, documented, and assessed considering their clinical significance and relationship to the study. In addition, the following information regarding the AE must be obtained: AE description, start date, end date (if applicable) or ongoing, severity, seriousness, relationship to study, outcome (e.g., resolved / unresolved), and action taken. AE monitoring will be conducted throughout subject’s participation up to one year after study procedure. All reports of adverse events will be reported to Apyx Medical Corporation who will forward them to the Food and Drug Administration, as required. Serious adverse events will be reported to the IRB/EC.*

# 7. Risks and benefits

*Discuss why the risks to subjects, if any, are reasonable in relation to the anticipated benefits and/or knowledge that might reasonably be expected from the results.*

*<additional sample text>*

*Risks associated with the use of the Renuvion system for subdermal coagulation may include: helium embolism into the surgical site due to inadvertent introduction into the venous or arterial blood supply system, unintended burns, pneumothorax, temporary or permanent nerve injury, ischemia, fibrosis, infection, pain, discomfort, gas buildup resulting in temporary and transient crepitus or pain, bleeding, hematoma, seroma, subcutaneous induration, pigmentation changes, increased healing time, unsatisfactory scarring, asymmetry and/or unacceptable cosmetic result.*

*Risks associated with the use of the Renuvion Dermal System include but are not limited to hypertrophic scarring, milia/acne, telangiectasia (spider veins), skin discoloration/ hypopigmentation, dormant infection reactivation, infection, bruising or bleeding.*

# 8. Statistical Methodology

## 8.1 Statistical and Analytical Plans

*Describe how the data will be summarized and analyzed.*

*<sample text>*

*Descriptive statistics will be calculated for all endpoints and additional statistical analyses may be run on study endpoint data as deemed necessary during data analysis.*

# *Et*hics/PROTECTION OF HUMAN SUBJECTS

## 9.1 Ethical Standard

*<sample text>*

*This clinical study will be conducted in accordance with the Protection of Human Subjects Regulations, including Subpart B Informed Consent of Human Subjects (21 CFR Part 50); the Institutional Review Board Regulations (21 CFR Part 56); the Financial Disclosure by Clinical Investigators Regulations (21 CFR Part 54); and the Investigational Device Exemptions Regulations (21 CRF Part 812), and the ICH E6.*

## 9.2 Institutional Review Board/Ethics Committee

*<sample text>*

*Prior to initiation of any study procedures, the protocol, informed consent, and recruitment materials, and all participant materials will be submitted to a duly constituted IRB/EC for view and approval. In addition, any amendments to the protocol or Informed Consent Form will be reviewed and approved by the IRB/EC. The Investigator-Sponsor must receive a letter documenting IRB/EC approval at the clinical site prior to the initiation of the study. The Investigator-Sponsor is responsible for reporting study progress and final report to IRB/EC as per the specific IRB/EC requirements.*

# 10. STUDY RECORDS

*<sample text>*

*All study records, including but not limited to the study protocol, clinical trial agreement, screening records, raw data, and data verification, will be retained for a 5-year period by the Investigator-Sponsor and made available for inspection by the FDA, or similar Federal Agent, upon request at any time during this period.*

## 10.1 Data Sharing

*See FDA Guidance: “*[*Identifying an Applicable Clinical Trial” under FDAAA*](https://grants.nih.gov/ClinicalTrials_fdaaa/docs/Flow_chart-ACT_only.pdf)*” to determine If study registration and results posting on ClinicalTrials.gov or other registry is required.*

*<sample text>*

*The Investigator-Sponsor ensures that the study is registered, and study results are disclosed in at least one public clinical study registry, in accordance with national/international regulations and other requirements.*

# 11. LITERATURE REFERENCES