nuon
The Logic of Cosmetics

COMPANY PROFILE
2026

www.nuonmedical.com

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800+
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I. About Us

Innovative Solutions for Cosmetics

Nuon Medical empowers beauty brands with science-backed technologies that elevate and boost product performance. Our innovations are clinically tested, results-driven, and meticulously designed to integrate seamlessly into modern cosmetic formulations.

Nuon Medical is a pioneer in cosmetic enhancement technologies, driven by innovation and grounded in **over 18 years** of medical device expertise.

Our journey began with a clear mission: to elevate the cosmetic experience through engineered applicators and devices equipped with technologies that maximize efficacy and deliver measurable results.

We offer a diverse portfolio of proprietary technologies—including phototherapy, microcurrents, ultrasonic vibrations, and precision-controlled heating—each designed for performance, reliability, and user satisfaction.

Sustainability is core to our operations. We integrate eco-conscious practices across every stage of development and manufacturing, ensuring our technologies meet the expectations of today's conscious consumers and responsible brands.

As a trusted partner to over 100 global beauty brands, Nuon Medical brings quiet strength to product innovation—offering tools that redefine how cosmetics perform, feel, and deliver results.

II. Cosmetic-Enhancing Technologies

Our innovative technologies are the logical next step in cosmetics, designed to significantly enhance results, backed by clinical trials and proven research.

01. Phototherapy

Targeted light wavelengths provide cosmetic benefits such as antibacterial effects, collagen stimulation, calming and balancing, and advanced results through combined light programs, supporting skin health, rejuvenation, and optimized treatment protocols in a single, efficient approach.

02. Electrical Therapies

Current-based technologies—including microcurrent, EMS, galvanic, iontophoresis, and TENS—enhance ingredient delivery, stimulate cellular activity, support lifting and toning, and promote lymphatic flow, offering comprehensive skin benefits and improved treatment outcomes in one integrated approach.

03. Heating & Cooling

Thermal elements integrated into applicators—including ceramic instant heating, carbon heating, and Peltier cooling—enable cryo- and thermo-therapy, enhance ingredient absorption, and provide sensorial treatment experiences, delivering comprehensive skin benefits and elevated cosmetic results in one approach.

04. PEMF (Pulsed Electromagnetic Fields)

Electromagnetic pulses penetrate deeper tissues, supporting recovery, reducing inflammation, and offering premium positioning for wellness integration, delivering advanced cosmetic and therapeutic benefits in a single, effective approach.

05. Microneedling

Physical stimulation with fine needle systems—including microneedling, nano needling, hydronic needling, and PLA needling—creates absorption pathways, accelerates skin renewal, and supports regenerative claims, providing advanced cosmetic benefits and enhanced treatment outcomes in a single approach.

06. Vibration

Mechanical stimulation through applicators—including ultrasonic and acoustic vibration—improves cleansing, promotes circulation, and enhances product penetration, delivering comprehensive cosmetic benefits and optimized treatment outcomes in a single, efficient approach.

07. Skin Measurement

A dedicated diagnostic capability—including hydration, sebum, elasticity, pH, melanin, UV, and temperature measurement—enables personalized treatments, supports data-driven claims, and enhances brand credibility, delivering measurable results and comprehensive cosmetic benefits in a single, integrated approach.

01 Phototherapy

Harnessing the Power of Light

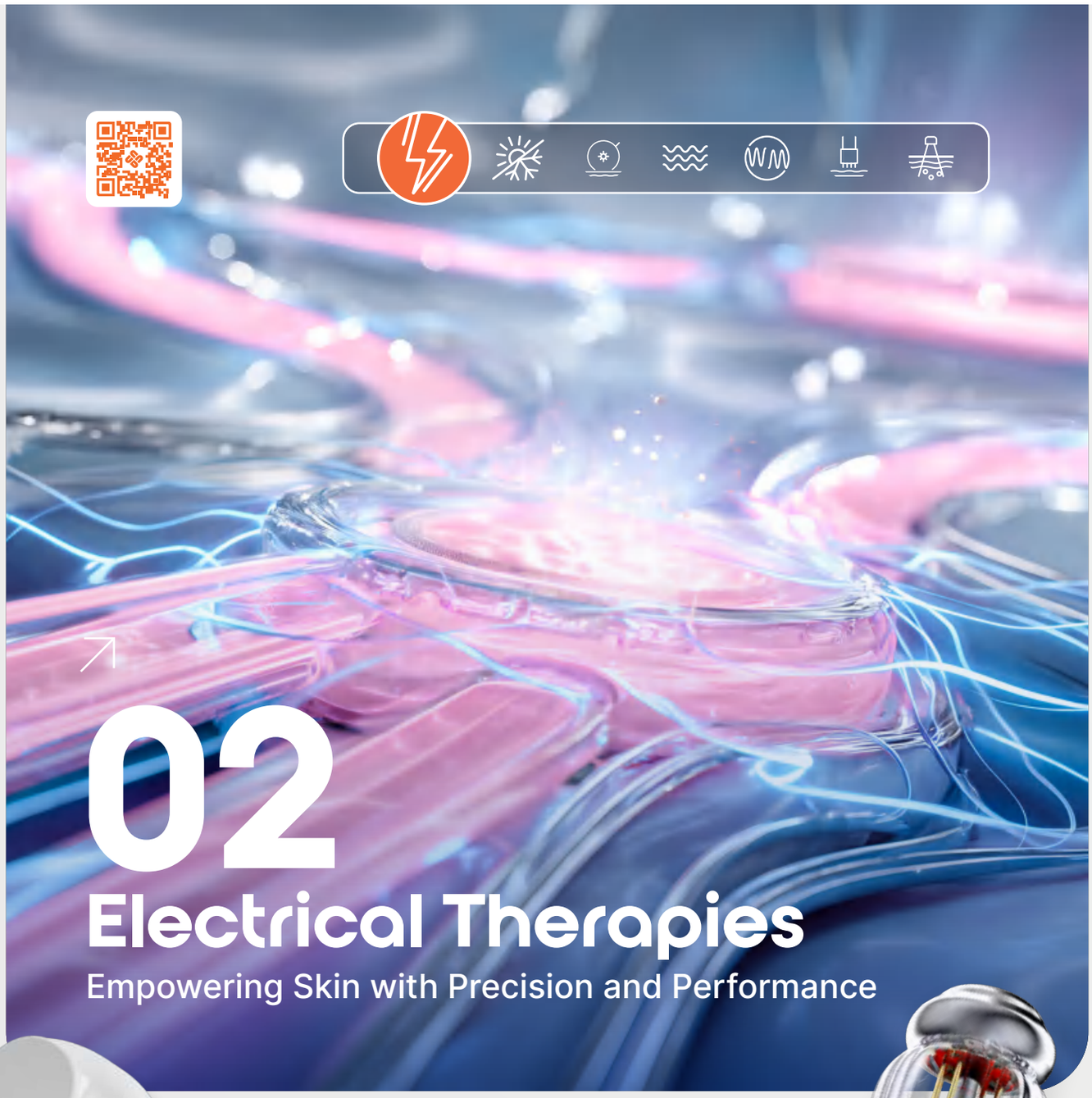
Light therapy, or Phototherapy, is the use of specific wavelengths of light to stimulate and support natural biological functions. Backed by **more than 9,000** published studies, this technology has earned the trust of dermatologists, wellness experts, and even celebrities for its proven safety and effectiveness.

The core benefits of light therapy include improving blood flow, boosting cellular energy (ATP), and reducing inflammation. In simple terms, the body has the power to heal itself—light provides the extra energy it needs to accelerate that process.

Different wavelengths of light create different effects and penetrate the body at varying depths. For instance, red light supports skin repair and rejuvenation, while ultraviolet light is used primarily for disinfection. Selecting the right spectrum and dose is critical to achieving optimal, targeted results.

Nuon Medical is the worldwide leader in Phototherapy. Our cutting-edge technology is unmatched in the field, and with **18+ years** expertise behind us, we deliver the highest quality phototherapy on the market.

Light Spectrum	FDA Claims	Additional Facts
UV Light 100nm - 400nm	• Treats psoriasis and vitiligo. • Used in disinfection and sterilization.	• Requires careful dosage control. • Generates Vitamin D in the body.
Blue Light 415nm - 465nm	• Reduce Acne Vulgaris. • Reduces inflammatory acne lesions.	• Brightens skin tone. • Reduces pimples. • Reduces sebum production. • Reduces infection incidence.
Blue + Red Combo 415nm + 630nm	• Reduces skin inflammation. • Combats acne and skin redness.	• Combination wavelengths are proven to boost results compared to individual wavelengths.
Yellow Light 590nm	• Reduces wrinkles and rhytides. • Relaxes skin cells.	• Used for anti-aging treatments. • Targets fine lines around the eyes.
Yellow + Infrared 590nm + 825nm	• Stimulates production of collagen. • Skin rejuvenation. • Removes wrinkles and rhytides.	• Combination therapies are proven to boost results compared to individual wavelengths alone. • Infrared penetrates deeper into the skin, complimenting the yellow light effect on the surface.
Red Light 630nm	• Improves skin texture. • Removes wrinkles. • Increases collagen production.	• The most popular wavelength for skin surface applications. • Improves the skin's elastin, appearance, firmness, and texture.
Deep Red Light 650nm - 660nm	• Stimulates hair follicles and aids in hair growth.	• The most popular wavelengths for hair growth, thickness, and recovery.
Near Infrared Light (NIR) 810nm - 980nm	• Provides pain relief. • Stimulates blood flow. • Accelerates wound healing. • Boosts muscle recovery and growth.	• Targets musco-skeletal layer underneath the skin. • Provides a tactile warm heat but invisible to the eyes. • The most popular wavelength for pain relief and muscle improvement.
Red + Infrared 630nm + 810nm	• Stimulated blood flow. • Treats wrinkles and rhytides. • Provides pain relief.	• The most popular combination wavelengths for skin & muscle. • Red light aids skin surface while NIR penetrates to muscle layer. • Rejuvenates skin layers from surface to deep epidermis.
Transcranial NIR 1064nm - 1072nm	• Boosts cerebral blood flow. • Treats herpes.	• The deepest penetrating wavelength for muscle and skeletal applications. • Provides pain relief for wide range of use cases.



02 Electrical Therapies

Empowering Skin with Precision and Performance

> The stimulation of skin cells by low currents of electricity can trigger a cascade of positive benefits, ranging from collagen production, to boosting blood circulation, to muscle toning, and beyond. Electrical therapies are a cutting-edge modality that can now be integrated directly into consumer devices to provide at-home use.

Therapy Types	FDA Claims	Additional Benefits
Microcurrents	**Skin Repair:** Microcurrents mimic the body's natural electric conditions to promote cellular activity "Electric Microcurrent Therapy is an effective, safe treatment for improving wound area, healing time, and pain." **Muscle toning and wrinkles:** Stimulates facial muscles helping to improve facial contours and reduce signs of aging and wrinkles.	**Non-Invasive Therapy:** Provides a non-invasive option for skin rejuvenation and muscle toning. **Improves Blood Circulation:** Enhances blood flow, leading to healthier, more radiant skin while reducing inflammation of the site.
EMS (Electrical Muscle Stimulation)	**Muscle Contraction:** FDA claim for causing muscle contraction, which aids in muscle toning and rehabilitation.	**Toning and Strengthening:** "EMS seems to be a safe and reasonable modality for improving physical fitness in healthy individuals." **Enhances Muscle Recovery:** "EMS improved functional performances more effectively than voluntary training and counteracted fast type muscle fibre atrophy, typically associated with sarcopenia."
TENS (Transcutaneous Electrical Nerve Stimulation)	**Pain Relief:** Used for pain relief by delivering electrical impulses through the skin to target nerves, helping reduce pain Perception.	**Non-Invasive Pain Treatment:** The meta-analysis reveals "There was moderate-certainty evidence that pain intensity is lower during or immediately after TENS compared with placebo and without serious adverse events."
Galvanic Therapy	**Enhanced Product Absorption:** Accepted FDA claims for better product absorption.	**Improves Skin Hydration:** Enhances the penetration of hydrating products, leaving the skin more supple and moisturized. **Detoxifies Skin:** Helps in deep cleansing and detoxifying the skin by driving out impurities.
Iontophoresis	**Drug Delivery:** FDA claim for using electrical currents to deliver drugs or other substances through the skin.	**Boosts Product Absorption:** "The amount of delivered therapeutic molecules is about 10–2000 times greater than conventional forms of delivery."
Electrolysis	**Controlled pH Modulation:** Recognized by the FDA as safe for use in liquid processing applications. They operate under controlled conditions to ensure consistent, reliable results.	Enables **precise pH adjustment** in liquid formulations, from acidic to neutral or alkaline. Supports **formulation stability and performance** by modulating pH without additional chemicals.

03 Heating & Cooling

Control Temperature, Control Results

HEATING TECHNOLOGIES

01. Ceramic Instant Heating

FDA Claims:

- **Fast Therapeutic Heat:** Used to deliver therapeutic heat quickly, which can help relax muscles and reduce stiffness, while aiding in ingredient activation and absorption.

Additional Benefits:

- **Comfort Heating:** Provides a gentle and even distribution of heat, enhancing comfort during application and use.
- **Ingredient Activation:** Facilitates the activation of skincare ingredients, improving their efficacy and overall absorption rates.

02. Tungsten Heating Element

FDA Claims:

- **Fast Therapeutic Heat:** FDA claim for providing efficient and consistent heating, particularly beneficial for improving outcomes in targeted areas.

Additional Benefits:

- **Focused Heat:** Offers targeted heat delivery, making it ideal for spot treatments that require precision on a small applicator surface.
- **Durable and Reliable:** Tungsten heating elements are known for their durability and quality, ensuring long-lasting performance.

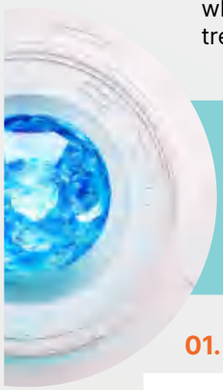
03. Carbon Heating Element

FDA Claims:

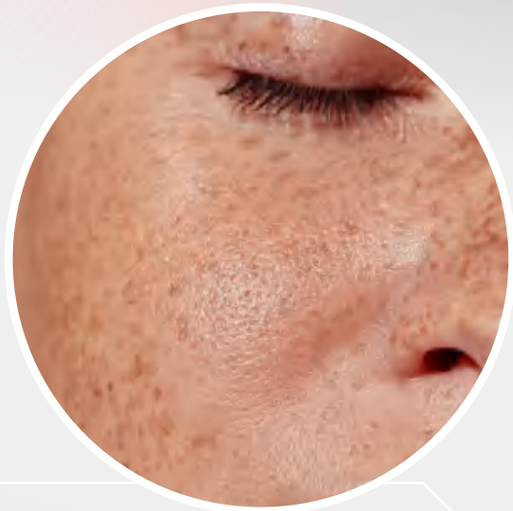
- **Even Heat Distribution:** FDA claim for providing gentle and even heat distribution, reducing the risk of overheating or burns.

Additional Benefits:

- **Gentle Warming:** The carbon heating element offers a softer and more gentle warming experience, ideal for sensitive skin types across a wider range of surface area.
- **Consistent Heat:** Ensures a stable temperature, which is crucial for maintaining skin safety during treatments and triggers thermogenesis.



COOLING TECHNOLOGIES



01. Thermal Conduction Materials

FDA Claims

- **Contact Cooling:** FDA claim for providing rapid cooling to the skin 'intended for the disruption of adipocyte cells intended for non-invasive aesthetic use.'

Additional Benefits:

- **Disrupts Fat Cells:** "single sessions of tissue cryotherapy lead to significant loss of tissue volume in the time frame of hours," leading to aesthetic improvements.
- **Cooling Comfort:** Metal cooling is designed for fast-acting relief and simple usage for results.

03. Cooling for Benign Pigmented Lesion

Controlled local cooling is effective for treating hyperpigmentation disorders such as lentigines, freckles, melasma, and post inflammatory hyperpigmentation.

02. Peltier Cooling

FDA Claims:

- **Precise Skin Cooling:** Peltier cooling technology has secured an FDA claim for delivering precise temperature control, enhancing skin comfort during treatments.
- **Inflammation Reduction:** Used to reduce skin inflammation and discomfort during dermatological procedures.

Additional Benefits:

- **Inflammation Relief:** Reduces histamine vasodilation in cold skin; "local cooling to 14° C substantially attenuates histaminergic vasodilation in normal subjects."
- **Controlled Temperature:** Ensures consistent cooling, which is essential for delicate skin treatments.

04

PEMF (Pulsed Electromagnetic Frequencies)

PEMF technology is the use of **Pulsed Electromagnetic Frequencies** to stimulate, heal, and boost cellular function. This pulsed field is generated by electrical current passing through a conductor, then directed at the target site to stimulate the cells. The applications of PEMF are far-reaching, from promoting the healing of tissue, to boosting blood flow, to reducing inflammation, and improving the production of collagen.

FDA Claims

01. Promotes Healing of Tissue

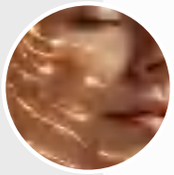
PEMF boosts the healing of soft tissue including the recovery of wounds; “In this study, PEMF therapy seemed to accelerate wound healing and improve microcirculation.” as well as preventing cartilage degeneration and aiding in rotator cuff healing.

02. Enhances Blood Microcirculation

The cellular stimulation by PEMF boosts the microcirculation of the body and dilates arteries; “Pulsed electromagnetic field stimulation significantly dilated cerebral arterioles...”. These pusled fields are also shown to improve overall vascular function & blood pressure; “...PEMF therapy can improve endothelial vascular function and blood pressure in hypertensive individuals.

03. Reduces Pain & Inflammation

Studies show PEMF-therapy has “has clinically significant effects on pain in patients with osteoarthritis” by “limiting the catabolic effects of pro-inflammatory cytokines and increasing extracellular matrix production, cytokine release, and chondrocyte proliferation.” as well as providing anti-inflammatory effects reduced knee pain.



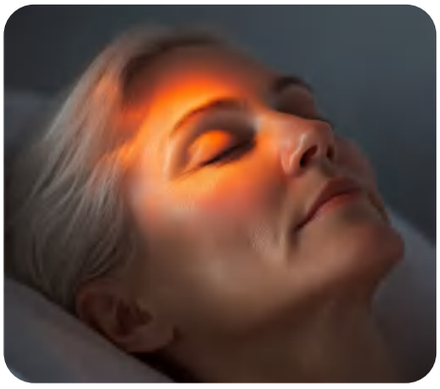
04. Rejuvenates Skin & Boosts Collagen

PEMF therapy increases the production of collagen; “In conclusion, PEMF can significantly increase collagen fibre in the early phase of diabetic wound healing, which is associated with the enhancement of myofibroblast population” as well as rejuvenation; “Significant improvement in skin laxity was observed in all eleven patients (100%)” with high satisfaction of patients.

At Nuon Medical, our devices provide precision PEMF therapy to the skin through device integration.

Bone growth stimulation: The FDA has approved pulsed electromagnetic fields (PEMFs) as a safe and effective treatment for nonunions of bone. Studies show; “PEMF can increase the structural integrity of bone and cartilage ECM, enhancing repair, and alter the homeostatic balance of signaling cytokines, producing anti-inflammatory effects” This healing assistance is accompanied by anti-inflammatory effects.

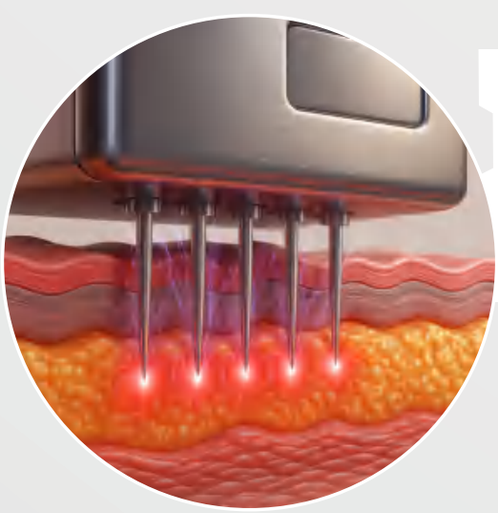
Additional Research-Backed Benefits



Sleep Improvements: The wide range of PEMF applications include a drug-free means of improving sleep quality; “Frequencies like 2 Hz can improve sleep, while 50 Hz can reduce pain and inflammation, and 200-300 Hz can aid in bone growth. Short pulse durations are ideal for acute pain relief, and longer pulses benefit chronic conditions.”

05 Microneedling

Boost Absorption & Skin Renewal with Precision



1. PLA Needling:

FDA Claims:

- **Biocompatible and Biodegradable:** Made from PLA, a plant-derived material that breaks down into lactic acid naturally found in the body. It offers high tissue compatibility, reducing the risk of immune reactions.
- **Clinically Proven Rejuvenation:** Stimulates long-term collagen regeneration with effects lasting over 25 months; clinical studies show a 26.1% increase in skin thickness.

Additional Benefits:

- **Enhanced Mechanical Strength:** Optimized material blends and structure increase bending strength by 50%, minimizing the risk of microneedle breakage during use.
- **Advanced Delivery Potential:** Enables controlled, stimuli-responsive release and multifunctional use—such as combining drug delivery with skin monitoring—boosting efficacy and user convenience.

Take your skincare routine to the next level with microneedling. This technology creates microchannels in the upper skin layer, improving the absorption of cream while also stimulating cell proliferation and collagen production.

02. Microneedling

FDA Claims:

- **Stimulates Collagen Production:** promoting collagen production, which helps in skin rejuvenation and reducing the appearance of fine lines and wrinkles.
- **Improves Skin Texture:** improving skin texture by reducing scars, large pores, and uneven skin tone.

Additional Benefits:

- **Wide-Ranging Results:** Clinicals show; "Studies demonstrate microneedling efficacy and safety for the treatment of scars, acne, melasma, photodamage, skin rejuvenation, hyperhidrosis and alopecia and for facilitation of transdermal drug delivery."
- **Enhances Absorption:** Microneedling creates micro-channels that enhance the absorption of topical skincare products, increasing their efficacy.

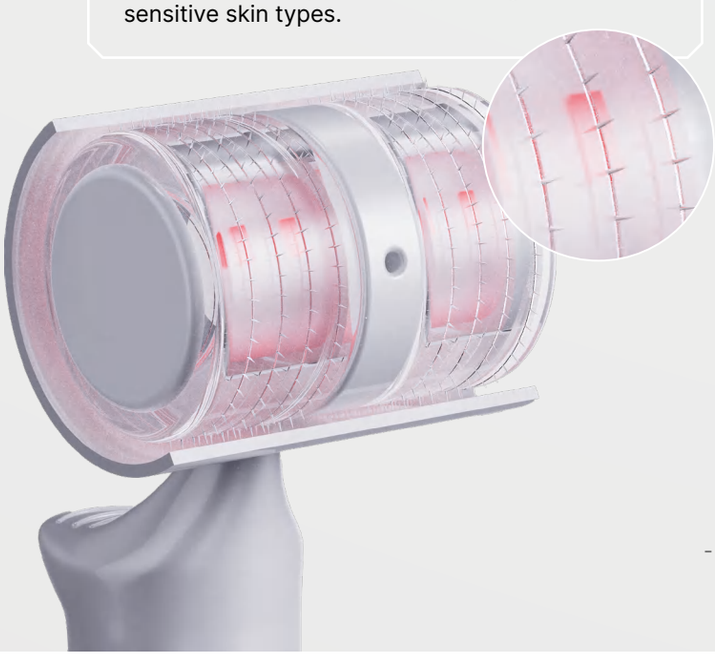
03. Micro Penetration

FDA Claims:

- **Enhances Product Absorption:** enhancing the absorption of skincare products without the invasive procedures.

Additional Benefits:

- **Improves Skin Firmness:** By improving product absorption, micro penetration helps in maintaining skin firmness and elasticity.
- **Gentle on Skin:** Provides a gentler alternative to more invasive procedures, making it ideal for sensitive skin types.



04. Nano Needling

FDA Claims:

- **Delivers Active Ingredients:** delivering active ingredients directly into the skin, ensuring deeper penetration and effectiveness.

Additional Benefits:

- **Targeted Treatment:** Clinical studies show: "This cutting-edge technique employs ultra-fine, nano-sized needles that create micro-channels with minimal trauma, thereby enhancing the delivery of therapeutic agents."
- **Non-Invasive Hydration Boost:** Enhances the skin's hydration levels, leading to a plumper, more youthful appearance with minimal skin penetration.

05. Vacuum Applicator

FDA Claims:

- **Rapid Cooling:** FDA claim for providing rapid cooling to the skin, which helps in soothing and calming the skin post-treatment.

Additional Benefits:

- **Reduces Redness and Swelling:** The cooling effect helps in reducing redness and swelling, particularly after needling procedures.
- **Enhances Comfort:** Provides a more comfortable experience during and after treatment by quickly reducing skin temperature.

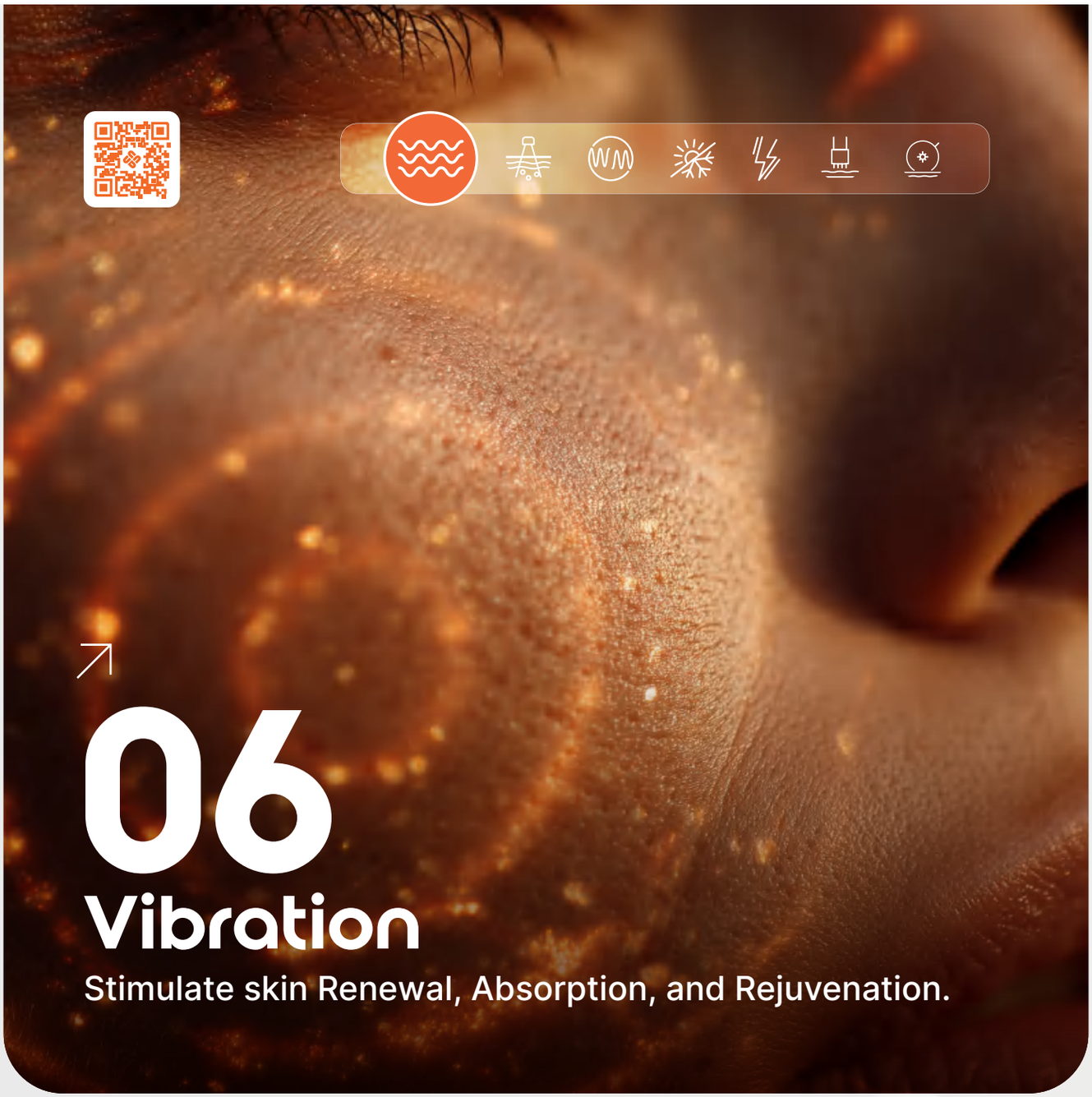
06. Hydronic Needling

FDA Claims:

- **Enhances Hydration:** Hydronic needling infuses hydration deep into the skin while stimulating collagen production, improving overall skin texture and appearance.

Additional Benefits:

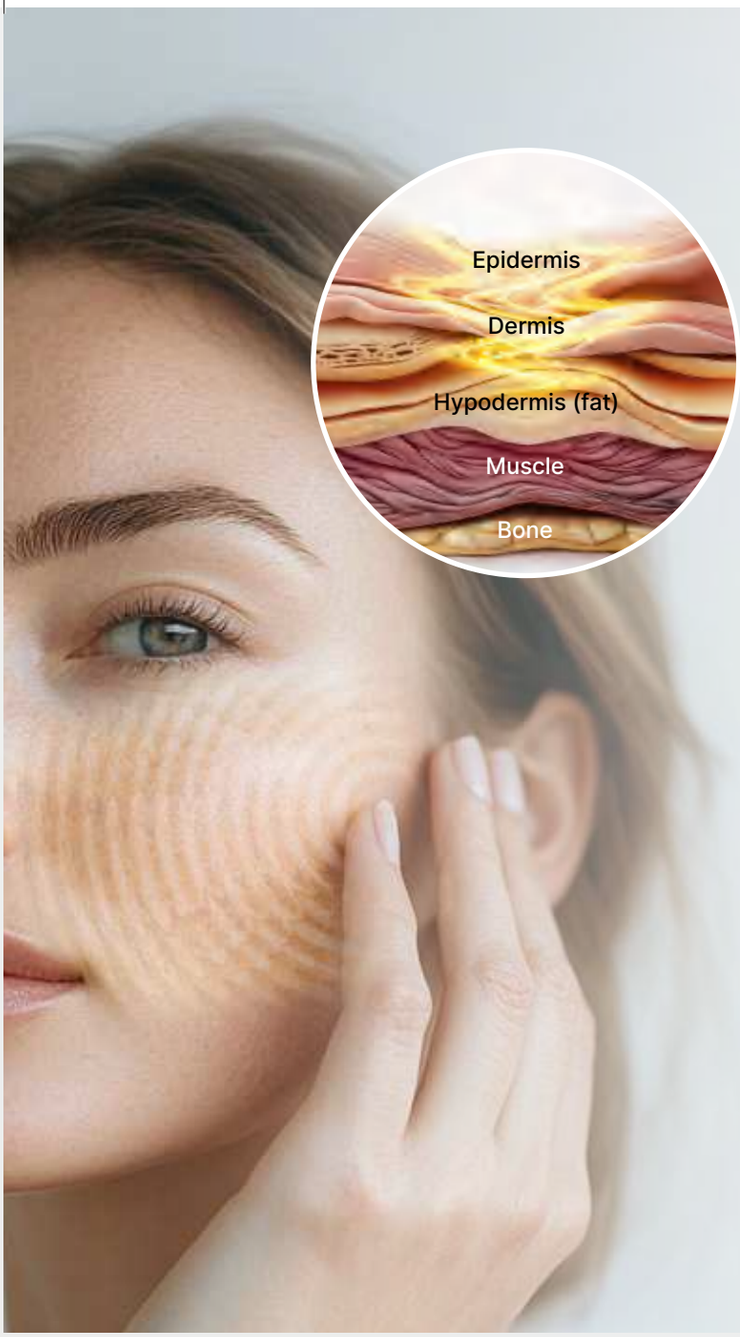
- **Increased Absorption:** By creating microchannels, Hydronic needling allows for enhanced penetration of active ingredients, leading to a more effective skincare routine.
- **Plumper, Rejuvenated Skin:** The added hydration and collagen boost result in a firmer, youthful, and more radiant complexion.



06 Vibration

Stimulate skin Renewal, Absorption, and Rejuvenation.

> Applied vibration is proven to have an anti-aging effect, especially in combination with specially developed facial creams. The clinical science shows: “We found that combining the massaging device with a skin anti-aging formulation amplified the beneficial effects of the cream.”



01. Ultrasonic Vibration

Technical Specifications:
Ultrasonic waves at **1–3 MHz (1,000,000–3,000,000 Hz)** are applied for **deep skin cleansing,** effectively loosening impurities and cleaning acne-prone areas. Ultrasonic vibration can **penetrate the skin surface without discomfort.**

FDA Claims:
- **Deep Cleans Pores:** Sonic cleansing provides a chemical-free method to remove harmful toxin buildup from the pores, such as dirt, debris, air pollution, and sebum.
- **Promotes Cellular Renewal:** Ultrasonic vibration is cleared for stimulating cellular renewal; "ultrasonic technology has been found to reverse skin aging by activating cell proliferation and cellular activity, increasing the expression of both collagen I and III."

Additional Benefits:
- **Improves Skin Texture:** By promoting cellular turnover and triggering expression of collagen I & III, ultrasonic vibration improves overall skin texture and appearance.
- **Increases Blood Circulation:** The gentle vibrations help improve blood circulation, contributing to healthier-looking skin while reducing inflammation.

02. Acoustic Vibration

Technical Specifications:
Our technology use **precisely calibrated vibration motors** in the **low-frequency acoustic range (20–200 Hz).** These vibrations stimulate **skin and underlying muscles,** supporting **collagen production and skin firmness.**

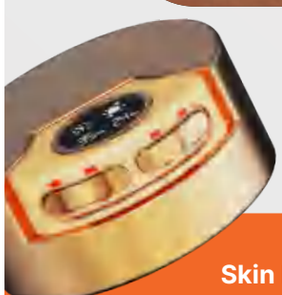
FDA Claims:
- **Delivers Therapeutic Effects:** Acoustic vibration therapy is cleared for delivering therapeutic sound waves that can relieve muscle tension and stress, contributing to an overall sense of well-being.

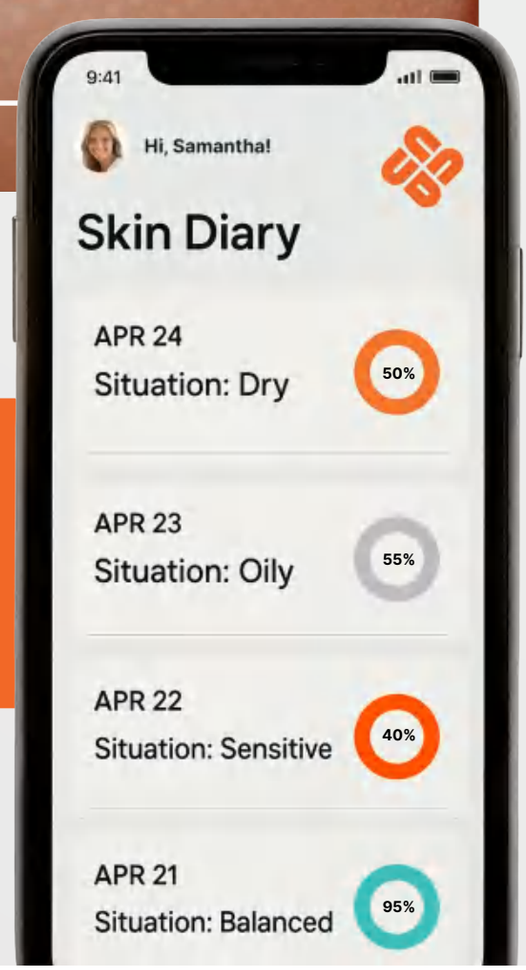
Additional Benefits:
- **Promotes Growth & Healing:** Clinical results show; "that infrasound enhances bone growth and osteogenic differentiation, while low-frequency audible sound at 100 Hz boosts fibroblast migration, and frequencies at 10 and 20 kHz accelerate epidermal healing by affecting keratinocyte activity."
- **Supports Skin Firmness:** Acoustic vibrations can help in maintaining skin firmness by promoting collagen production.

07

Skin Measuring

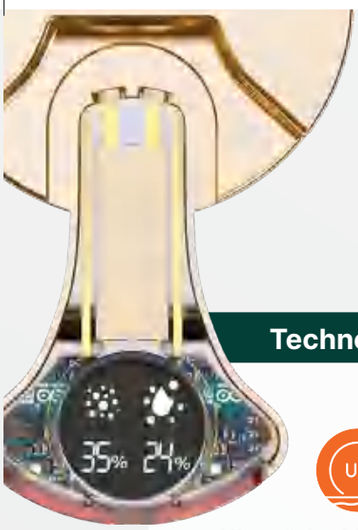
Unlocking the Science of Skin for Tailored Care



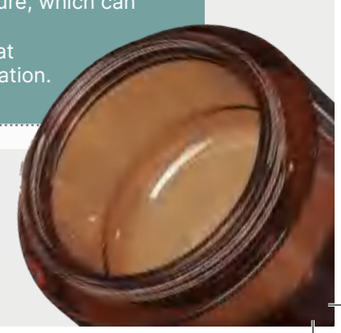


Skin Diary

Enhance your clients' experience with the **Skin Diary.** After each measurement, their results are automatically logged in a personal account, creating a **daily record of skin condition.** This empowers clients to **track their progress over time,** encourages repeated use, and **builds loyalty** by turning skincare into a personalized, interactive experience.



Technologies	Uses & Benefits
Ultraviolet Measurement	• **Sun Protection Monitoring:** Provides real-time data on UV magnitude, helping users understand their skin's UV exposure levels and maintain safe exposure levels. • **Prevents UV Damage:** Assists in applying the correct coverage and amount of sunscreen to prevent sunburn and long-term damage. • **Personalized Sun Care:** Tailors safe sun routines based on the individual's skin phototype, reducing the risk of skin cancer and premature skin ageing.
Skin Color Analysis	• **Flawless Complexion:** Helps in creating customized cosmetic products that match individual skin tones for a natural, blended look. • **Pigmentation Control:** Assists in managing pigmentation issues by providing precise data on skin tone, color, and dermatological mapping. • **Enhances Makeup Matching:** Improves the accuracy of color-matching foundations and concealers for seamless coverage.
Skin Oil Measurement	• **Customized Solutions:** Provides personalized data for customizing skincare routines to regulate oil production, prevent acne, and optimize the skin aesthetics. • **Controls Breakouts:** Helps in the prevention of clogged pores and breakouts by managing excess oil buildup and balancing the skin's oil levels.
Skin Moisture Measurement	• **Personalized Skincare:** Helps tailor products to maintain optimal moisture balance based on the individual user requirements. • **Prevents Dryness:** By monitoring skin hydration levels, users can prevent dryness and associated skin issues before they become an issue. • **Improves Product Efficacy:** Ensures that moisturizers and hydrating products are working effectively by measuring skin results.
Skin pH Measurement	• **Maintains Skin Barrier:** Ensures that the skin's pH level is balanced, which is critical for maintaining the protective barrier against bacteria and environmental factors. • **Reduces Irritation:** Helps in preventing irritation and inflammation by helping the user reach their optimal pH balance.
Skin Tension Measurement	• **Anti-Aging Insights:** Provides valuable data for developing products that combat sagging and wrinkles, aiding in anti-aging treatments. • **Improves Skin Elasticity:** Assesses skin firmness and elasticity, offering insights for treatments that enhance skin tightness and providing measurable outcomes. • **Tailored Treatments:** Enables the customization of anti-aging products to individual needs based on their own unique skin tension levels.
Skin Temperature Measurement	• **Regulates Product Effectiveness:** Assesses how skincare products affect the skin's temperature, which can impact comfort and efficacy. • **Monitors Inflammation:** Provides data on skin surface temperature, which can indicate inflammation and overall skin health. • **Optimizes Treatment Comfort:** Helps in developing products that maintain a comfortable skin temperature during and after application.



Charging Methods
for Applicators

MAGNETIC CHARGING

A convenient, cordless charging solution with **magnetic connectors** that align and secure the applicator. **Waterproof design** ensures safe, seamless, and efficient charging without the need for precise alignment.

NON-RECHARGEABLE BATTERY

Applicators powered by **non-rechargeable batteries** offer the advantage of immediate use without the need for charging. These are ideal for disposable or single-use applicators, ensuring **consistent performance** throughout their lifespan.

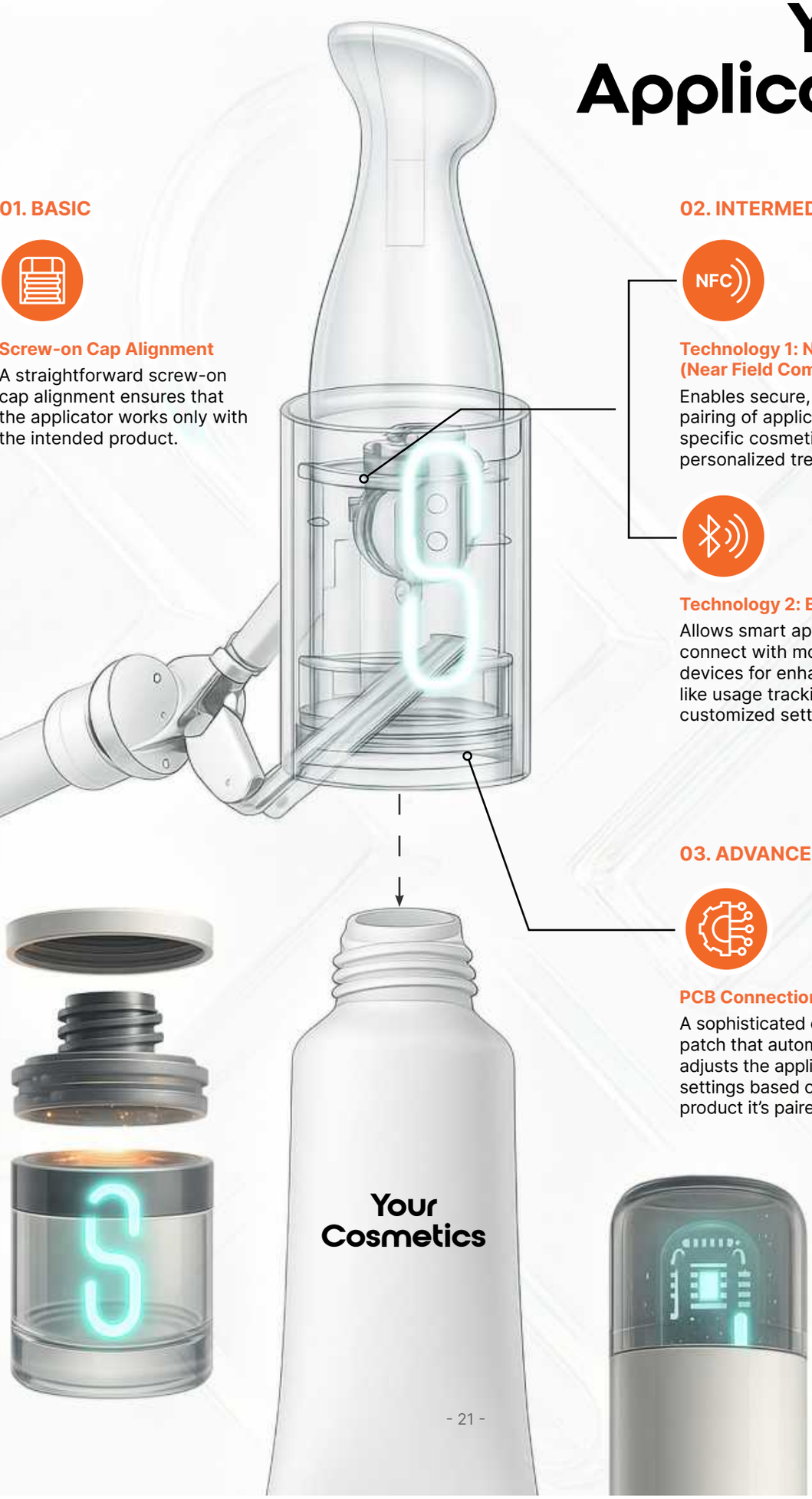
USB-C CHARGING

A universal charging solution that allows applicators to be charged using a USB-C cable, **compatible with various power sources** such as adapters, computers, and power banks. This method provides flexibility and convenience for users on the go.

SUPERCAPACITOR CHARGING

A cutting-edge option that provides **ultra-fast charging in just 2 seconds**, suitable for short-term use. This lifetime charging solution is **travel-friendly**, as it can be easily brought on planes, and is ideal for quick, one-time applications.

Your Applicator



01. BASIC

Screw-on Cap Alignment

A straightforward screw-on cap alignment ensures that the applicator works only with the intended product.

02. INTERMEDIATE

Technology 1: NFC (Near Field Communication)

Enables secure, contactless pairing of applicators with specific cosmetic products for personalized treatment.

Technology 2: Bluetooth

Allows smart applicators to connect with mobile apps or devices for enhanced features like usage tracking and customized settings.

03. ADVANCED

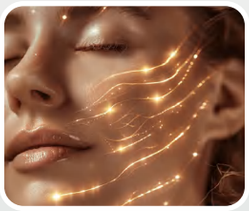
PCB Connection Patch

A sophisticated connection patch that automatically adjusts the applicator's settings based on the specific product it's paired with.

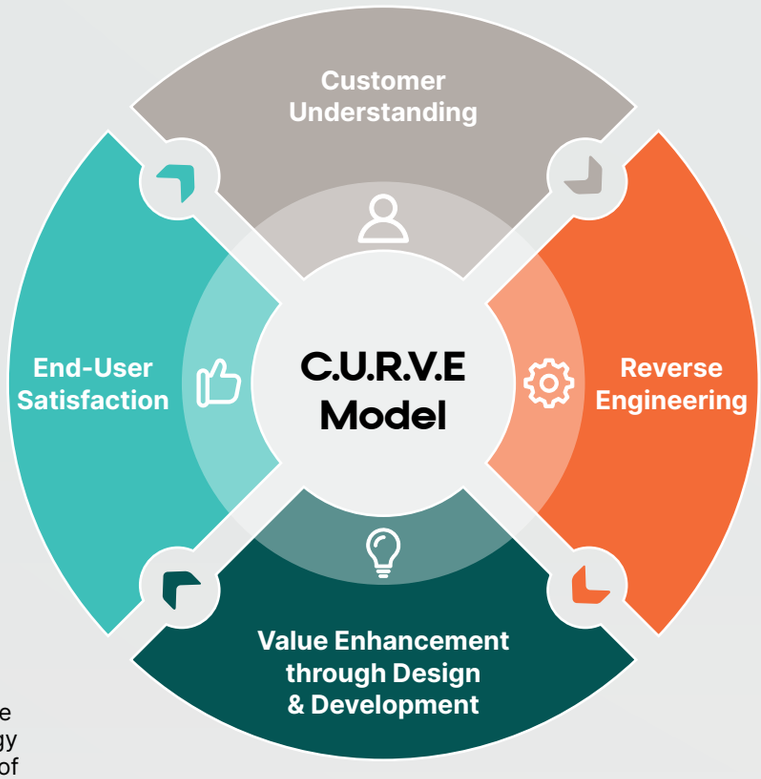
III. Why Nuon Medical

Innovative Approach & Advanced Manufacturing

At Nuon Medical, we pride ourselves on our forward-thinking approach to product development and production. Our **C.U.R.V.E. Model** ensures every project begins with deep customer understanding, followed by strategic reverse-engineering to enhance product value—guaranteeing solutions that are both innovative and aligned with market demands. Backed by state-of-the-art manufacturing facilities, we can handle complex production requirements including mass production, packaging, and final assembly. These advanced capabilities allow us to deliver high-quality products at scale with consistency and reliability in every unit.



C.U.R.V.E Model



Customer Understanding (C.U)

Start by understanding the end user's needs and preferences. For a cosmetic product, identify the primary use, desired results (instant or long-term), and any specific concerns or preferences.

Reverse Engineering (R)

Analyze the product's composition and ingredients. Determine what the product is made of and how it currently achieves its results.

Value Enhancement through Design & Development (V)

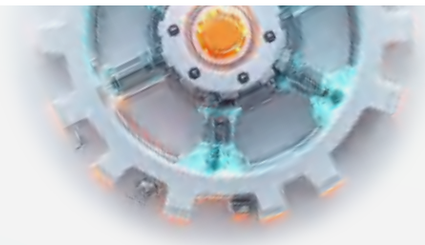
Explore which technologies can enhance the product's effectiveness. Consider technology options, for cosmetic enhancement, speed of absorption, ease of use, or comfort to enhance features and stimulate better results.

Collaborate with the customer's team to design a product that incorporates logical technologies for the cosmetic, while also focusing on user experience. Ensure the design is intuitive, aesthetically pleasing, and functional.

End-User Satisfaction (E)

Finalize the product with regulatory compliance and user testing to ensure it meets all standards and delivers on its promises. The goal is to end with a product that delights and justifies the end users and expectations effectively.

Development Process



1. First introduction to Nuon Medical

Tradeshow/ (cold) Lead generation

Company introduction

1. **C.U.R.V.E** model
2. Compliance Process
3. Cosmetics Enhancing Tech
4. Applicators introduction to stimulate ideas

2. Onboarding questions for product and C.U.R.V.E development

C.U.R.V.E onboarding document

C.U.R.V.E onboarding document

1. Identify **C.U.R.V.E** products
2. Identify consumer preferences
3. Identify enhancement possibilities
4. Identify goal/focus/viscosity of cosmetics
5. Identify solution or user experience
6. Identify 3 unique selling points
7. Identify 3 possible improvement
8. Identify positioning of the products
9. Determine what Nuon Medical's tech is needed
10. Specific design/material/tech needed
11. Example design/material if possible
12. Cosmetic container dimensions
13. Specific Compliance Process needed

3. Pitch the product v0.1 created with C.U.R.V.E

Presentation of v0.1 draft products

C.U.R.V.E model

Per Product Presentation + Renders:

1. 3 possible improvements
2. 3 unique selling points
3. Goal/focus/viscosity challenges
4. Compliance
5. Specific design + Material
6. Nuon Medical solution inside

FTO (Freedom To Operate) Check

4. Pitch the product update proposal v1.0

Development stage:

- Cosmetic sample request (tube or other)
- Sample creation
- Testing
- Indication pricing

5. Golden Sample stage

Golden Sample stage:

- Confirmation of golden samples
- Order confirmation
- Compliance actioned
- Invoice Approval

6. Production stage

Production stage:

- Golden sample production
- ETD

Scan to schedule your appointment now!

Industrial Design

From concept to the tangible product, industrial design focuses on aesthetics, functionality, and user experience, crucially transforming creativity into innovative products.

01. Aesthetics

- **Design Philosophy:** Emphasizes sleek, modern, and minimalistic aesthetics. The visual appeal of our products is carefully crafted to resonate with both consumers and professionals, reflecting the premium nature of our technologies.
- **Material Selection:** High-quality materials such as medical-grade plastics, anodized aluminum, and sustainable alternatives where possible. These materials are not only chosen for their durability but also for their ability to convey a sense of luxury and precision.
- **Color and Finish:** Color palettes we employ are thoughtfully selected to align with the brand identity of our partners, ensuring that the products seamlessly integrate into their existing lines. Finishes range from matte to high gloss, depending on the intended user experience and market positioning.

02. Functionality

Ergonomics:
Industrial design process begins with an in-depth analysis of how users interact with our devices. Ergonomics is a key consideration, ensuring that all products are comfortable to hold, easy to use, and intuitively designed to reduce user fatigue.

Technology Integration:
Each product is designed with the latest technological advancements in mind. Whether it's integrating wireless charging capabilities, smart sensors, or modular components, we ensure that the functionality of the product is cutting-edge and user-centric.

Innovative Mechanisms:
We incorporate innovative mechanisms, ranging from magnetic closures, to pressure-sensitive buttons, and adaptive grips that enhance the usability of our products. These features are meticulously tested to ensure they consistently provide the best real-world benefits.

03. User Experience

Intuitive Interface Design:
User interfaces are designed to be straightforward, with clear instructions and minimal steps required to operate. For devices with screens, high-contrast displays are used with large, legible fonts and icons.

Customization: Many products feature customizable settings that allow users to tailor their experience to their personal needs. This includes adjustable intensity levels, programmable timers, and personalized treatment routines.

Feedback Mechanisms:
We prioritize the inclusion of feedback mechanisms, such as haptic feedback, LED indicators, and audible alerts, to ensure users are aware of the device's status and any actions they need to take.

Award-winning Designs

- Our testing protocols exceed industry standards to ensure that products perform as expected, ensuring compatibility and maximizing the synergy between technology and formula.
- We provide comprehensive validation, including real-world testing, to guarantee that products perform effectively and safely.

Compliance Process

1 Product Development & Testing

Objective

Meet the highest regulatory standards from the outset.

Design Verification

Confirm that product designs meet all specified requirements.

Prototype Testing

Conduct rigorous trials to ensure functionality and safety.

Regulatory Alignment

Align with ISO, FDA, and other relevant standards.

2 Certification & Audit

Objective

Secure necessary certifications and pass audits.

Documentation Preparation

Compile detailed compliance and testing documents.

Certification Submission

Audit Readiness

Maintain readiness for both scheduled and surprise audits.

3 Continuous Monitoring & Improvement

Objective

Ensure ongoing compliance and quality.

Ongoing Surveillance

Regularly monitor products for compliance with updated standards.

Quality Control Checks

Conduct periodic QC checks to catch any issues early.

Feedback Loop

Implement a system to gather and act on feedback from users and regulators.

Clinical Support

1 Study Design & Planning

Objective

Develop a comprehensive study framework.

- **Define Objectives:** Clarify what the study aims to achieve.
- **Select Study Type:** Choose between usability studies, clinical trials, etc.
- **Develop Protocol:** Create detailed procedures and methods.

2 Participant Recruitment & Screening

Objective

Ensure the right participants are involved.

- **Criteria Development:** Set inclusion and exclusion criteria.
- **Recruitment Strategy:** Use targeted channels to recruit participants.
- **Screening Process:** Conduct initial evaluations to select suitable candidates.

3 Data Collection & Monitoring

Objective

Gather accurate and reliable data.

- **Training:** Ensure all staff are trained on study protocols.
- **Monitoring:** Regular checks to ensure compliance and accuracy.
- **Data Entry:** Input data into secure databases for analysis.

4 Data Analysis & Interpretation

Objective

Extract meaningful insights from the data.

- **Statistical Analysis:** Use appropriate methods to analyze data.
- **Interpretation:** Translate results into actionable insights.
- **Reporting:** Prepare detailed reports for regulatory submission.

5 Regulatory Submission & Approval

Objective

Secure approval from regulatory bodies.

- **Documentation:** Compile all necessary documentation for submission.
- **Review Process:** Engage with regulatory bodies to review study results.
- **Approval:** Obtain required approvals before moving to the next phase.

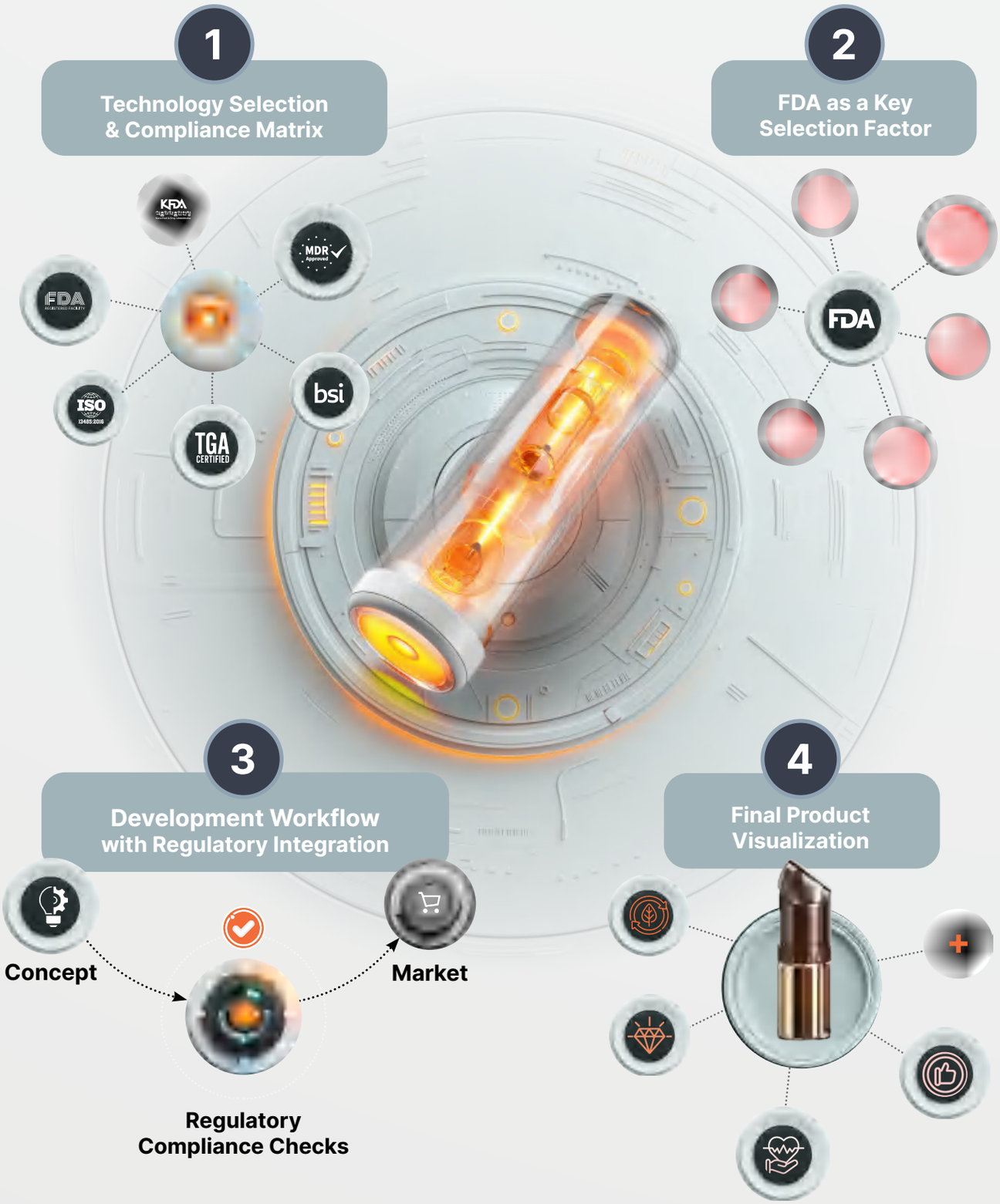
Regulatory Excellence

1. Certification Achievement	Actions
MDSAP (Medical Device Single Audit Program) Compliance: Achieve and maintain a unified quality management system that satisfies the requirements of multiple regulatory bodies, including the US FDA, Health Canada, and others.	• **Regular Audits:** Conduct internal audits aligned with MDSAP guidelines to ensure ongoing compliance and maintain certification readiness. • **Quality System Maintenance:** Continuously update and refine the quality management system to address any findings from audits and to align with evolving regulations.
ISO 13485:2016 Certification: Demonstrate a commitment to global standards for medical device quality management systems, ensuring consistent design, development, production, and delivery.	• **Document Control:** Maintain detailed records of all processes and changes to ensure traceability and compliance. (example: DHF file) • **Risk Management:** Implement comprehensive risk management processes throughout the product lifecycle, from design to post-market surveillance.

2. Sustainability & Ethical Standards	Actions
Sedex Membership: Adhere to ethical business practices that ensure responsible sourcing and sustainability across the supply chain.	• **Supplier Audits**: Regularly audit suppliers to ensure compliance with Sedex ethical standards. • **Sustainable Practices:** Implement and promote sustainable practices in product development, manufacturing, and packaging.
BSCI (Business Social Compliance Initiative) Compliance: Reflect a commitment to social responsibility, ensuring that labor conditions in the supply chain are fair and ethical.	• **Code of Conduct Implementation:** Enforce a strict code of conduct for all suppliers and partners, aligned with BSCI standards. • **Worker Welfare Programs:** Develop and support programs that enhance worker safety, health, and overall well-being in the supply chain.

3. International Recognition	Actions
FDA & Health Canada Approvals: Ensure all products meet the strict safety and efficacy requirements set by these regulatory bodies, enabling market access in North America.	• **Pre-market Submissions:** Prepare and submit thorough 510(k) or PMA applications, including clinical data and technical documentation. • **Post-market Surveillance:** Engage in ongoing monitoring of product performance and adverse event reporting to maintain market approval.
TGA (Therapeutic Goods Administration): Certification: Secure certification that allows Nuon Medical to market products with medical claims in Australia, expanding its global reach.	• **Compliance Documentation:** Prepare and maintain detailed technical files that meet TGA requirements. • **Market Surveillance:** Monitor the Australian market for any regulatory updates or changes that might affect product compliance.

Regulatory Excellence
in Product Development



Our Sustainability Philosophy: Built to Keep, Not to Discard

True Sustainability Begins with Reusability

At Nuon Medical, we believe the most powerful sustainability tool is a product people never throw away. Our technology-integrated packaging and applicators are designed as high-performance, keepsake devices—**built to last, re-use, and be loved.**

1 Keepsake Design = Real Impact

Our cosmetic packaging isn't meant to be tossed after one use.

Instead, we engineer durable, precision-made devices that integrate advanced technologies like light therapy, vibration, or microcurrent. These make each product not just functional, but desirable to keep—transforming waste into value.

- **Long-lasting components reduce landfill waste**
- **Refillable packaging systems support circular consumption**
- **No tradeoff between performance and sustainability**

2 Sustainability by Design

From day one, our teams build sustainability into the development process.

- **Material optimization:** Minimal plastics usage, smart geometries
- **Modular construction:** Enables partial replacements, not full disposals
- **Pre/post sorting recycling:** All scraps are categorized, recycled or reused

Certified B Corporation

Nuon Medical

Is affiliated to Kaiyan Medical, a certified B corporation

Certified B-Corp: A Verified Commitment

Nuon Medical is proud to be a certified B-Corporation —one of the few in our category.

This means we meet rigorous, externally verified standards for:

- **Environmental Performance –** Including sustainable material use, waste control, and clean energy.
- **Governance –** Transparency and accountability across every department.
- **Worker Welfare –** Ethical labor conditions, as well as employee development.
- **Customer Impact –** Delivering real value and responsible innovation to our partners.
- **Community Contribution –** Local manufacturing partnerships, traceable supply chains.

Why it matters:

Unlike self-declared green claims, B-Corp certification is **independently verified and reviewed.** It's not a label—it's proof.

Nuon Medical is not just innovating for our clients—we're building a responsible model for the future of the beauty-tech industry.

"Our keepsake-first approach delivers on both performance and purpose."

Engineering the Sustainable Supply Chain

Technology-Backed. Proven. Measurable

Sustainability is not a marketing checkbox—it's engineered into every Nuon Medical facility, system, and component. From manufacturing to supply chain audits, we measure impact and design for improvement.

Energy-Efficient Manufacturing

Every Nuon factory is built with long-term energy strategy in mind.

- **Advanced optimized manufacturing methods and systems**
- **Heat recovery systems and optimized cooling**

Waste & Water Optimization

We believe sustainability is also about precision and control.

- **Zero-waste scrap policies in production**
- **Minimal water footprint across manufacturing**

Biocompatible, Biodegradable Materials

Where possible, we integrate advanced medical-grade biodegradable materials like:

- **PLA (Polylactic Acid): Naturally degradable**
- **PBAT (Polybutylene Adipate Terephthalate):** Flexible, safe, and compostable

These are not used as a gimmick, but only when they meet performance and safety standards required in cosmetic-medical hybrid devices.

Regulatory Advantage under PPWR

The upcoming European Packaging and Packaging Waste Regulation (PPWR) sets strict limits on cosmetic packaging materials—particularly those considered non-essential or non-sustainable in luxury formats. While these rules will restrict many cosmetic brands from using premium materials, Nuon Medical's technology-integrated packaging falls under medical device classification.

This distinction allows our partners to:

- Continue leveraging luxury-grade materials and finishes without conflict.
- Navigate EU regulations confidently, with Nuon ensuring compliance under the correct framework.
- Combine sustainability with premium positioning, avoiding trade-offs between performance, luxury, and regulation.

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Nuon Medical offers comprehensive, start-to-finish solutions, covering design, engineering, manufacturing, formulation, filling, and logistics, ensuring seamless integration and execution at every stage.