





Mesoporation • Cryo • Heat





MCH Mezoporation • Cryo • Heat

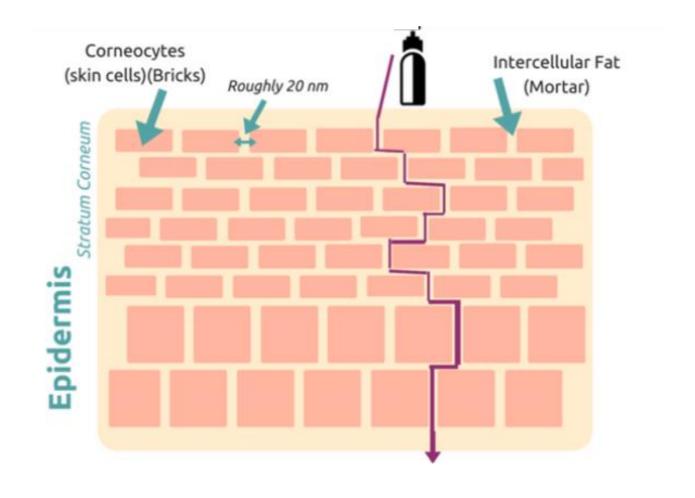
EFFECTIVE PENETRATION TECHNOLOGY

- Mesoporation
- Cryo
- Heat



ONLY 0.3% OF COSMETICS PENETRATE THE SKIN

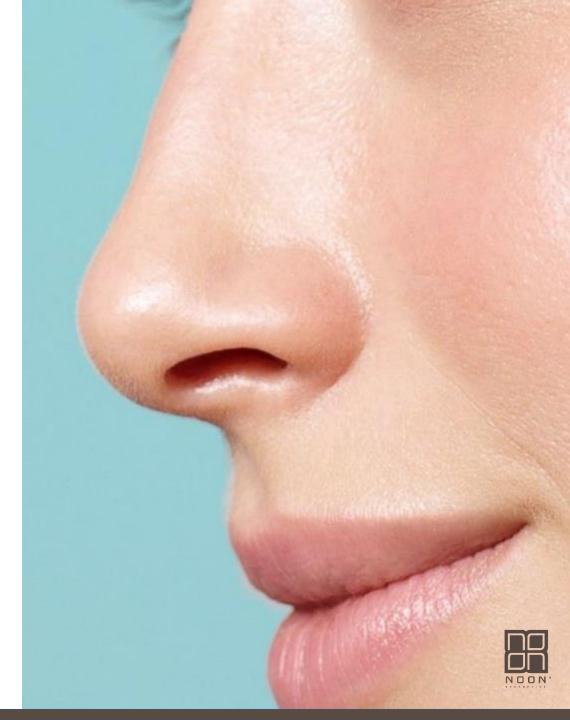
What are the factors affecting penetration?



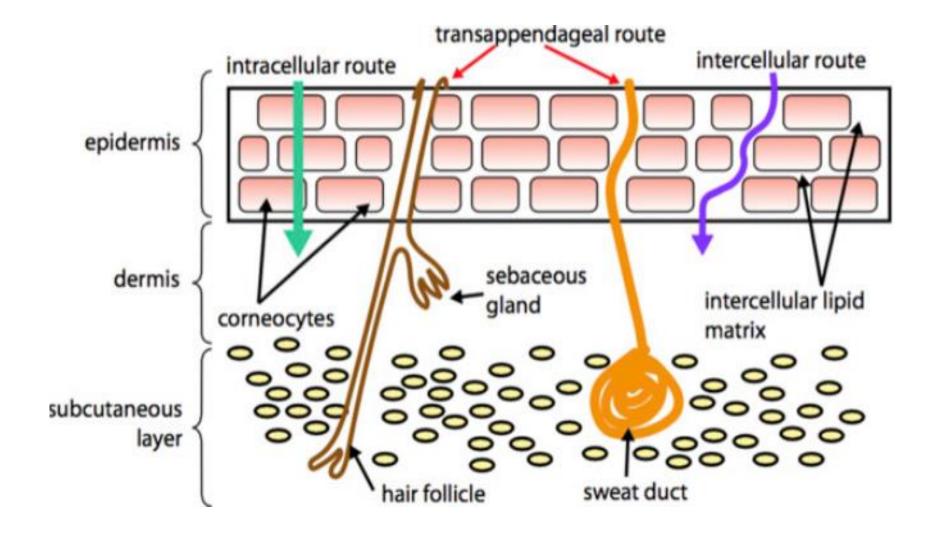


Factors Affecting Penetration

- Molecule's Affinity to the surface of the skin
- Molecule size & weight (<500 Dalton)</p>
- Solubility of the molecule
- The charge of the molecule
- The skin's health condition
- Area: the epidermis varies in thickness
- Skin's Moisture Level
- Skin's temperature



Pathways for Skin Penetration

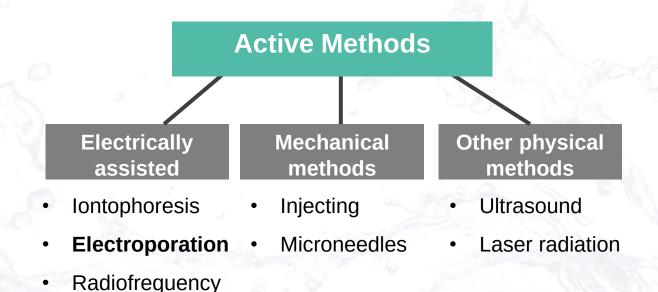




Popular Transdermal Delivery Methods

Passive Methods Optimization of formulation

- Patch technology
- Gels, Creams, Ointments
- Vesicles (liposomes, nano particles.)



- Kalluri H, Banga AK. Transdermal delivery of proteins. AAPS PharmSciTech. (2011)
- B.W. Barry. Novel mechanisms and devices to enable successful transdermal drug delivery. European Journal of Pharmaceutical Sciences (2001)



Microneedle - Cosmetic roller 0.25-0.5 mm

Advantages

- Reduces fine lines and wrinkles
- Rejuvenating and reviving the skin
- Tightens the skin- encourage collagen build-up
- Improves appearance of damaged skin & scars
- Improves sun spots and patchy pigmentation

Disadvantages & Risks

- Effective needling stimulation but penetration quantity of substance unknown
- Skin irritation
- Local inflammation
- Sensitivity/ Reactivity
- Swelling & Itching, Redness & Bruising
- Not recommended to high Fitzpatrick type
- Not recommended to skin with healing problems
- Risk for Infection due to low hygiene at handling

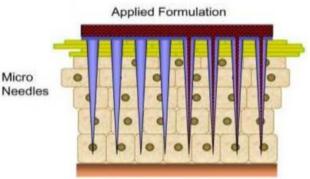
Mesotherapy – Medical Syringe 0.6-1.6 mm

Advantages

- · Reduces fine lines and wrinkles
- Rejuvenating and reviving the skin
- Tightens the skin- encourage collagen build-up
- Improves appearance of damaged skin & scars
- Improves sun spots and patchy pigmentation
- Effective measured penetration
- Continues flowing of release
- Controlled release
- Safer handling

Disadvantages & Risks

- Local inflammation
- Skin irritation
- Expensive
- Sensitivity
- Swelling & Itching
- Redness & Bruising

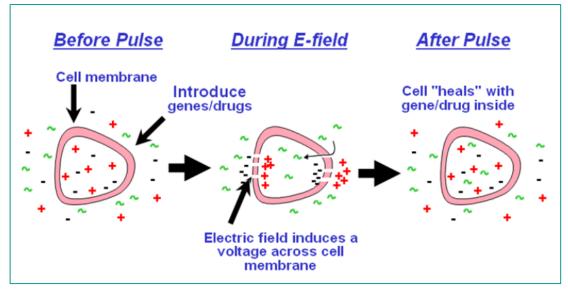




Electroporation

20 times more powerful then with other existing electrical equipment Electroporation is technique provides each cell with ingredients while altering the cell membrane to allow insertion.

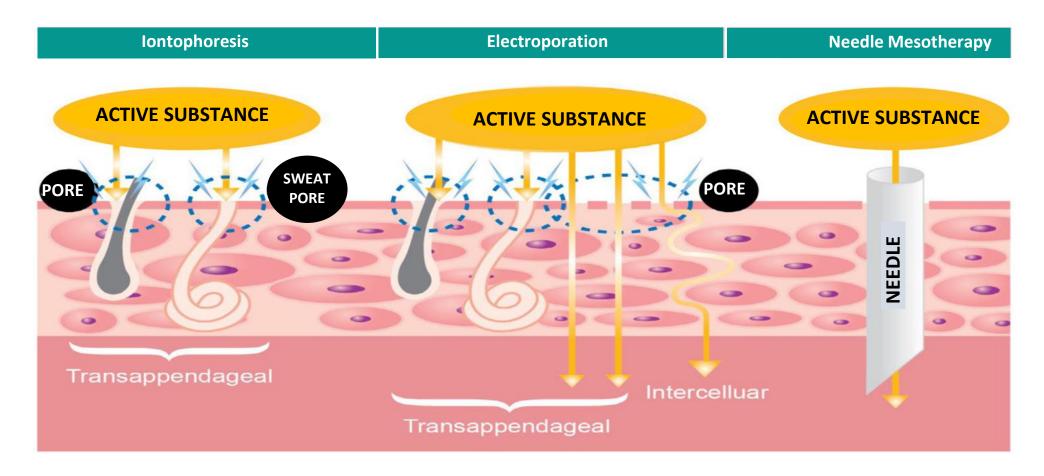
- Needle Free Mesotherapy
- insertion ratio: 70~80%
- Nobel prize winning technology
- Used in research labs and hospitals



Effective substance penetration



Substance penetration methods



- Kalluri H, Banga AK. Transdermal delivery of proteins. AAPS PharmSciTech. (2011)
- B.W. Barry. Novel mechanisms and devices to enable successful transdermal drug delivery. European Journal of Pharmaceutical Sciences (2001)



FROM THE MEDICAL WORLD TO THE AESTHETIC FIELD



Needle Free = Pain free!

Effective mesoporation for all Fitzpatrick types



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- Mesoporation
- Cryo
- Heat



Iontophoresis vs **Electroporation**

Comparison	Normal Cosmetics	Iontophoresis	Triple MCH Electroporation
Voltage		DC 5V	20-40V
Skin permeability	Natural skin absorption	Pores, Sweat pores	Pores, sweat pores, temporary passageways through the skin cells to the dermis
Substance permeability ratio	0.3%	10-15%	70-80%
Substance type	A range of active substances	Active substances - ionic compounds only	A range of active substances
Molecular size	Dalton	Dalton 3000	Dalton 40,000
Absorption efficacy	Limited penetration dependent on the molecular size of the active substance	Penetration through pores and sweat pores which comprise 1% of the skin	Penetration of active substances through skin pores, sweat pores, and creation of passageways in the cell membrane between the lipids



Innovative Treatment Device





Triple MCH = advanced skin's physiotherapy system

Electroporation with cooling functions

MESO-PORATION



CRYO-THERAPY

Effective penetration of active substances + cooling functions



Cryo-cooling function

Multi-powered cooling

A certain percent of the absorbed substances trans-dermal penetrations "escape" to the blood cells!

The goal: Leave the active substances in the cells during Mesoporation treatment **The technology:** Cryo – contraction of the blood cells through cooling in order to maximize the containing amount of inserted substance within skin tissue.

Approved by FDA: Cold Cap for preventing hair loss in chemotherapy patients

Cryo Therapy in the medical field-preventing hair loss in cancer patients.

The FDA approved a new cold cap that is cooling the scalp. The cooling effect, contracting the blood vessels and preventing from the chemotherapy substance

from penetrating the hair follicle.

The result : no hair loss during chemotherapy treatments!



Advantages of Triple MCH Electroporation

Active substance penetration using electrical pulses ranging between (+) pulse and (-) pulse

Substances inserted between (-) pulse and (+) pulse or between (+) and (-)

Triple MCH can control two types of pulses

Pulse (+)

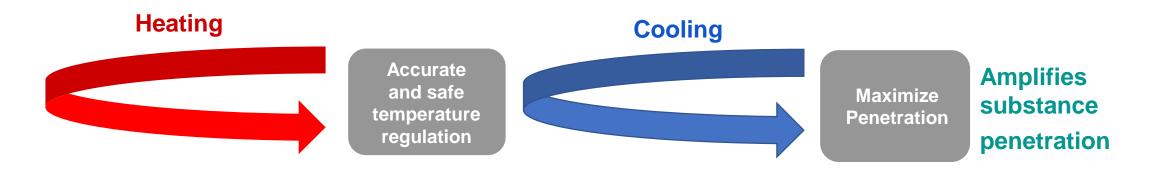
Pulse (-)

compared other Mesoporation devices that allow only one type of pulse.

As a result Triple MCH can provide various effective solutions including providing active substances that necessitate both types of pulses



Triple MCH - Smart Innovative System



- Triple MCH's electrical pulse allows for insertion of 40,000 Dalton of active substance
- Needle free = pain free effective mesoporation for all Fitzpatrick types
- Active substance is contained in an ampoule = control over the amount of substance releases
- Triple MCH has a winning formula: Heating, then cooling more effective penetration!
- Triple MCH control two types of pulses pulse (+) or pulse (-)
- Heating function useful also as a preparation for pore extractions
- Cooling Function- useful also for soothing red and irritated skin



Triple MCH more Advantage Points

- The active substance is contained in an ampoule allows to control the amount of substance releases
- Ampoules containing active ingredients designed for different treatments
- Temperature modifies itself to suit each body temperature in order to maximize treatment efficacy
- The device has 'alarm' functions that deliver information on the machine's status
- The device's titanium coat provides high durability
- Touch screen (7 inch) provides simple and easy-to-use functionality
- The device is small and compact, allowing for mobility and comfort of use



Cryo Electroporation Devices Comparison

	Triple MCH	Other Devices	
Intensity	0~100	0~50	
Pulse	Adjustable 500Hz ~ 10kHz Active : 50~1000us Rest : 50~1000us	Fixed 500Hz Active : 100us Rest : 100us	
Cool	-20 ~ 20°C	-15 ~ 20°C	
Heat	30 ~ 43°C	30 ~ 40°C	
Display	Digital - 7" LCD Touch Screen	Analog - 7" Segment Type	
Case	Vaccum casting _ Strong Material	Injection Molding	
Target Market	Professional Doctors and Beauticians	Beautician who looks for Economical Device	



Treatment steps – General Description



6-10 treatments once a week. Possible to use in any single treatment

- 1. Face cleanse using C Foam Cleanser
- 2. Peeling stage- such as G Peel
- 3. Apply Thermogel using the handle's heating function to massage the treated area.
- 4. Drainage pores extractions
- **5. Cryo-mesoporation treatment** Apply initial amount of selected ampoule using Cryo function on pulse (+) mode. Continue applying ampoules contents during treatment
- 6. Mask
- 7. Finishing products
- 8. Sun protection





Lift & Whitening Complex

TripleMCH MCH Mezoporation • Cryo • Heat

6-10 treatments once a week. Possible to use in any single treatment







- 1. Face cleanse using C Foam Cleanser
- 2. G Peel/G Peel Nanoconstructed- Glycolic peeling (AHA)
- 3. Apply Thermogel using the handle's heating function to massage the treated area
- **4. Drainage** –pores extractions if necessary
- 5. Cryo-mesoporation treatment-

Apply initial amount of Lift & Whitening Peptide Complex ampoule using

Cryo function on pulse (+) mode. Continue applying ampoules contents during treatment

- 6. J peel Delicate in thin layer for 2 min and then place TrioLift mask on top for 10-15 minutes.
- 7. In-Depth Filler Serum + LactoCeramide-15 + In-Depth Filler Cream
- 8. Sun protection (Brush & Go) during relevant hours



Hydrocalming & Vit Complex

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6-10 treatments once a week. Possible to use in any single treatment







- 1. Face cleanse using C Foam Cleanser
- **2. G Peel -** Glycolic peeling (AHA)
- 3. Apply Thermogel using the handle's heating function to massage the treated area
- 4. Drainage pores extractions
- **5. Cryo-mesoporation treatment-** Apply initial amount of Hydrocalming & Vit Complex ampoule using Cryo function on pulse (+) mode. Continue applying ampoules contents during treatment
- **6. J peel Delicate** in thin layer for 2 min and then place Igloo mask on top for 10-15 minutes.
- 7. Hydrocalming & Vit Complex ampoule + Lacto-10 + In-DepthFiller Cream / Igloo Moist
- 8. Sun protection (Brush & Go) during relevant hours



Acne treatment - AcNo Complex



6-10 treatments once a week. Possible to use in any single treatment







- 1. Face cleanse using C Foam Cleanser
- 2. G Peel Nanoconstructed- Glycolic peeling (AHA)
- 3. Apply Thermogel using the handle's heating function to massage the treated area
- **4. Drainage** –pores extractions
- **5. Cryo-mesoporation treatment-** Apply initial amount of AcNo Complex ampoule using Cryo function on pulse minus (-) mode. Continue applying ampoules contents during treatment
- 6. MediClay mask for 10-15 minutes.
- 7. Apply S Peel in one thin layer and leave on for at least 6 hours
- 8. Brush & Go



Lift & Whitening Complex | Active Ingredients

Palmitoyl Tripeptide-38 –a new generation of Matrixyl

High concentration of Metrixyl Synthe '6 -a firming booster- Significantly firming skin an filling wrinkles Biomimetic peptide that stimulates synthesis of 6 major molecules (Hyaluronic Acid, Collagen I, III and VI, Iamininis and fibronectin)

Cyclopeptide-24 Aminocyclohexane –

A biomimetic peptide, mimic the natural processes of skin communication and repair.

Counteracts wrinkles and fine lines

- Oligopeptide-68 A biomimetic peptide for brightening the skin .
 reduces the appearance of dark spots
- Swertia chirata An innovative ingredient made from Indian Gentian leaves.
 rejuvenate and thickens the skin
- Sodium Hyaluronate high purity Hyaluronic acid provides deep hydration
- Sodium PCA natural component of the NMF (epidermis natural moistening factor)





Hydro Calming & Vit Complex | Active Ingredients

Sodium Hyaluronate-

Acting as water reservoir - high purity Hyaluronic acid help retaining water at the surface of the skin, provides deep hydration - strong hygroscopic properties(

- Alteromonas Ferment Extract

 An excellent hydrating agent.

 Restores Hyaluronic Acid secretion in aging skin cells.
 Stimulates lipid synthesis, supports the Dermo-Epidermal junction
- Aphanizomenon Flos. Blue-green algae-Anti-inflammatory, anti-oxidant. acts like a natural retinoid, smoothing the skin without unwanted side affects. Helps maintain skin hydration and liberates NMF (epidermis natural moistening factor)





Acno Complex | Active Ingredients

Niacinamide- Vitamin B 3-

Significantly reduces sebum excretion, anti-inflammatory, anti-bacterial

Dipotassium Glycyrrhizinate -

A natural extract of liquorices root. soothing, anti-inflammatory, anti-irritant

Alteromonas Ferment Extract-

An excellent hydrating agent. Restores Hyaluronic Acid secretion in aging skin cells. Stimulates lipid synthesis, supports the Dermo-Epidermal junction

- Oligopeptide10 A patented antimicrobial peptide, excellent activity against treating
 P. acne bacteria, replace antibiotics in long term acne treatment
- Botanical Extracts Complex (Oryza Stavia Barn Extract, Bosswellia Serrata Extract- fights inflammation)





Precautions



- 1. Each patient is different pick the appropriate treatment potency.
- 2. Make sure the electrode is connected in order to generate an electrical current.
- 3. Sometimes it is necessary to decrease the treatment's potency working near the jaw (chin)
- 4. Monitor the patient during treatment and change the potency at any discomfort
- 5. Set the temperature between 0c and 20c for cooling treatment functions, and between 20c and 40c for heating treatment functions.
- 6. Do **not** treat peeling skin.
- 7. Medical restrictions-do not treat: pacemaker, epilepsy, pregnancy, generally under the weather



Protocol | Mesoporation treatment



Type of Treatment	Active Substance	Potency	Duration
Lifting & Whitening	Palmitoyl Tripeptide-38 Cyclopeptide-24 Aminocyclohexane Oligopeptide-68 Swertia chirata Sodium Hyaluronate Sodium PCA	+	10-15 minutes
Hydrocalming & Vit Complex	Sodium Hyaluronate Alteromonas Ferment Extract Aphanizomenon Flos (Blue-green algae)	+	10-15 minutes
Acne	Niacinamide- Vitamin B 3 Dipotassium Glycyrrhizinate Alteromonas Ferment Extract Oligopeptide10 Botanical Extracts Complex	_	10-15 minutes





Thank You!

For More Information info@noonaesthetics.com

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