

# Transderm® Ionto System Overview

**MacLean, VA**  
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Mattioli Engineering of Florence Italy, Leader in microdermabrasion for more than a decade, is proud to introduce the new **Transderm® Ionto System** for transdermal delivery of ionic drug solutions.

**Transderm® Ionto System** is a powered drug delivery system that is indicated for the local administration of ionic drug solutions into the body for medical purposes and can be used as an alternative to injections.



**Transderm® Ionto System** uses **Dermoelectroporation®** Technology that causes the skin to create “channels” to allow ionic drug solutions to penetrate due to controlled “electroporation-like” continuous reversed polarity electrical pulses increasing the skin permeability and allowing transdermal delivery of drugs as occurs in classical Iontophoresis, even if the average current value is zero. This pulsed Iontophoresis with safe, current-limited, pulsed “Electroporation-like” waveforms allows either micro-molecules and **macro-molecules** to be delivered into the body **without either modification** of the ionic drug solutions pH and **avoiding** either electrolytic effect at the electrodes and electrolysis of the ionic solution itself.. This means the technology works like an injection and it is not invasive as any injection is.



**Is Transderm® Ionto System FDA cleared?**

**Yes.** **Transderm® Ionto System** got FDA clearance in Dec. 2003 and had an additional vibratory feature cleared in Oct. 2004.

**How about the use of the device?**

**Transderm® Ionto System** is an FDA cleared medical device for use by doctors (or under doctor's supervision) and with FDA approved ionic drug solution for Iontophoresis. As a matter of fact all Iontophoresis devices have to be used with drugs cleared from FDA for Iontophoresis use. Therefore, to choose the proper ionic drug solution best suited for the specific application refer to the existing medical literature.

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## \*What Ionic drug solutions can be used with the Transderm® Ionto System?



Transderm Ionto System can be used by doctors with any FDA approved ionic drug solution and in the US, the product officially cleared by FDA for iontophoretic use, is a brand of Lidocaine hydrochloride 2% with 1:100,000 epinephrine topical solution.

At the present time, the only brand name officially FDA cleared is Iontocaine® (lidocaine hydrochloride 2% and 1:100,000 epinephrine type) from Iomed Inc for iontophoretic use

Any other use (different ionic drug solutions) is under doctor's indication considering that the device is, from an FDA standpoint, recognized as an alternative to Injections.



## What Transderm® Ionto System is not:

- An ultrasound device
- An Aesthetic-multi purpose unit
- A Home based cosmetic device
- A massager
- A micro-current device

## How will the Transderm® Ionto System benefit my practice?

**Dermoelectroporation®** technology offers several great advantages over classical Iontophoresis equipment because it is capable to transdermally deliver macromolecules, where classical Iontophoresis devices cannot. Furthermore, because **Dermoelectroporation®** can be used right after microdermabrasion, this combination allows for ionic drug solutions to be quickly delivered through the dermis. (*This combination is not possible with Iontophoresis due to the alterations in the pH of the skin and the subsequent increase risk of side effects.*)

## Selected Advantages of the Transderm® Ionto System vs. Traditional Iontophoresis

Able to treat the same surface in about **half of the time** or deliver double the dosage of ionic drug solution

Capability of Transdermal Delivery of ionic solution of drugs.

Capability of Transdermal Delivery for the first time ever of ionic solution of **macromolecules**.

**No electrolysis** of ionic drug solutions.

**No variation** in the ionic drug solution pH.

**Both positive and negative ions** of the drug are transdermally delivered at the same time.

Promotes transdermal delivery rate by means of microdermabrasion and pulses delivery.

**Reproducibility** of dose delivered due to preliminary microdermabrasion.

**Vibration feature** to minimize the electrical pulses perception on patients.

**Non-Invasive** action. No trauma from injections.