

General information

Technique	Micromolecules Delivery	Macromolecule Delivery	Applications		FDA	Fast (1-15min)	Slow (>15min)	Penetration rate
			Medical	Aesthetic				
Transderm	yes	yes	yes	No	Yes	Yes		fast
Ultrasounds	yes	No	No	Yes	No	Yes		Slow
Galvanic I.	yes	No	yes	No	Yes		Yes	Slow
Pulsed I.	yes	No	No	Yes	No		Yes	Slow
Microcurrent	yes	No	No	Yes	No		Yes	Slow
Cosmetic Dev.	yes	No	No	Yes	No		Yes	Slow
Electroporation	yes	yes	yes	No	No	Yes		fast

Absorption information

Technique	Micromolecules Absorption Lvl	Macromolecules Absorption Lvl	Delivery Mechanism
Transderm	Good	Good	Controlled peak pulsed current electroporation
Ultrasounds	Good	Poor	Vibration
Galvanic I.	Good	Poor	Low DC current electrical repulsion
Pulsed I.	Good	Poor	Low/pls peak curr.electrical repulsion
Microcurrent	Low	None	Very low DC current electrical repulsion
Cosmetic Dev.	Low	None	Very low DC current electrical repulsion
Electroporation	Good	Good	High peak current electrical repulsion & Poration

Side Effects information

Technique	Side Effect electrolysis	Side Effect Ph change	Side Effect Temp increase	Side Effect Burns
Transderm	No	No	No	No
Ultrasounds	No	No	No	No
Galvanic I.	yes	yes	Yes	maybe
Pulsed I.	No	No	Yes	maybe
Microcurrent	yes	yes	No	No
Cosmetic Dev.	yes	yes	No	No
Electroporation	yes	yes	Yes	Yes