

VAUGHTER WELLNESS®
OWNDOC.COM

DERMANEEDLING GUIDELINES

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Nothing in this document is medical advice. Its authors are not medical professionals. The content of this document should be taken as **suggestions** by experienced, knowledgeable fellow "home-needlers". It is provided under the condition that the reader does further literature research and assumes full liability for the outcome of any skin treatment the reader performs.

Get the latest version here:

https://owndoc.com/dermaneedling-guidelines.pdf

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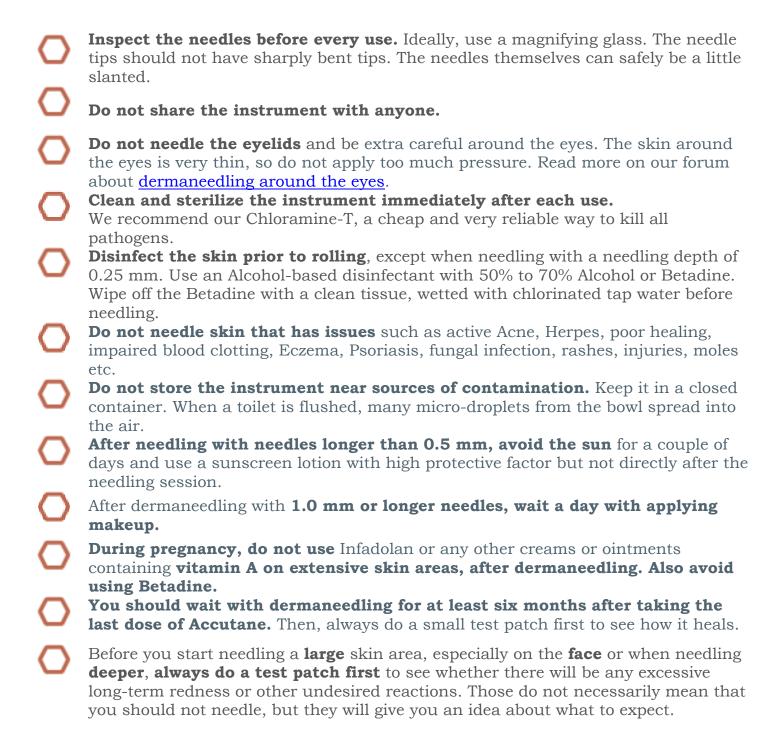
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0.25 mm needling depth can be used at most every second day on the same skin area.
 0.5 mm needling depth can be used at most three times a week on the same skin area.
 1.0 mm needling depth can be used at most every ten days on the same skin area.
 1.5 mm needling depth can be used at most every three weeks on the same skin area.
 2.0 mm and above can only be used once every five weeks on the same skin area, and only if you have the knowledge to judge which parts of the skin are thick enough to safely use this needling depth.

These are general, conservative guidelines. Males generally have thicker skin and can needle a little more often. Some parts of the body such as the back and buttocks have thicker skin than other areas, and there you can shorten the interval somewhat. You can needle shallower in between deeper-needling sessions.

There exist recommendations for (much) shorter intervals. We think this is based on clinics' desire for fast results and higher revenues, ignoring the risk of long-term negative effects. Also vendors have an interest in short intervals, since the needles will blunt faster, start hurting more and have to be replaced sooner, generating more sales.

If you have various large skin areas to treat, you can needle for example the arms on the first week of every month, the legs on the second week of every month, the stomach on the third week of every month and the chest on the fourth week of every month.





O Step 1: Removing blood from the instrument



All needling instruments with more than one needle can get blood "creeping up" and remaining between the needles and the plastic or between the plastic disks they stick out of. Needle cartridges, incl. those for our Derminator, even can get liquids, incl. blood, sucked into their Silicone spring-shroud when things get truly messy.

Except in case where blood ends up inside the aforementioned Silicone spring-shroud, blood can be easily removed when immediately targeted with a plant mister set to a forceful stream.

Take a plant sprayer and set it to spray a small, tight stream of water. Then spray the instrument while holding it needles-side up. This cleans it out completely in a matter of seconds. Target the bloody spots.

Consider using a shorter needle size next time so that you don't bleed, because bleeding is not necessary to achieve good results.

A Derminator needle cartridge must be treated carefully as you gently push its plunger, pushing the needles only a few mm past the cartridge rim. If you push them too hard or too far, the plunger will slide into the Silicone spring-shroud or it will

shove over its mounting point and in both cases, the cartridge will be permanently unusable and irregular needling or too shallow needling will result. The Derminator user manual has more details and shows examples of where the cartridge can damage.

O Step 2: Cleaning the instrument

Alcohols and Chloramine-T do not dissolve proteins found in blood and skin so you'll need to use a detergent. Wash the dermaneedling instrument or needle cartridge in warm water and a couple of drops of dishwashing liquid, taking care not to touch the needles or hit them against anything. You can shake it gently in a **soft plastic** food container filled with warm soapy water but take care not to damage the needles. Never use a dishwasher or boiling water because it will damage the instrument. **This washing stage merely cleans the instrument, preparing it for the sterilization stage - it does not sterilize it**.

O Step 3: Sterilization with our Chloramine-T

Chloramine-T comes as a relatively cheap powder. It kills all pathogens rapidly and smells rather strongly of Chlorine. It is by far the most economical and reliable way to sterilize medical instruments – superior to alcohol. **Sterilization is always done after dermaneedling, not before**. Our needling instruments all come Ethylene-Oxide sterilized in their unopened packaging.

O Making and using a 1% Chloramine-T solution

A roughly 1% solution is made by stirring a gram into 100 ml (3.5 fluid ounces) of lukewarm water. You'll not even need half of that to sterilize a Derminator needle cartridge in an Espresso cup. A Chloramine-T solution lasts two weeks in the fridge but only a single day when kept outside the fridge. It should be kept in a closed and clean container made of plastic or glass. Always discard used solution – never reuse it. Use this solution to sterilize your dermaneedling instrument with. This only takes one hour. Do not fret over accuracy with the dilution because a 1% solution sterilizes already within just 30 minutes of soaking.

After sterilization, rinse the Chloramine-T residue off the instrument with chlorinated tap water, or a white residue will remain that might hurt you when you start needling.

Then put it back into its container but keep the lid off until it is 100 % air-dried. You can clean its container with hot water and dishwashing liquid. Do not use an unwashed cloth or sponge to clean the instrument's container to avoid contamination with bacteria. Do not store the instrument near a potential source of airborne contamination.



O Step 3 (alternative): Sterilization with 60% to 80% Ethanol or 40% Isopropyl Alcohol

After step 1 and 2, soak the instrument for an hour in a 60 to 80% Ethanol solution or a maximum of 40% Isopropanol solution. Then take the instrument out and let it air-dry in its storage container (with the lid off until it's dry). Do not rinse it. This type of sterilization also depends on bacteria getting lysed during the drying process and that process goes too fast when there is insufficient water in the solution.

You can clean its container with hot water and dishwashing liquid. Do not use an unwashed cloth or sponge to clean the instrument's container to avoid contamination with bacteria. Do not store the instrument near a potential source of airborne contamination.

O Don't use Milton Fluid

Milton fluid aggressively corrodes metal due to the presence of free Chlorine.





The needles will become blunt after a certain time. Apart from needle quality (all our needles are of medical-grade stainless steel), this depends on how often you needle the skin, the size of the needled skin areas, how many pricks per in² or cm² you create, how tough and thick your skin is and how deep you needle. Male skin is thicker than female skin. Scar tissue is harder than ordinary skin, facial skin is soft and thin, etc.

It should be clear by now that this question is impossible to answer. Instead, simply follow the following rule of thumb, replace the needle cartridge, dermastamp or dermaroller when:

When you feel that the needles don't penetrate as easily as they did, or

When the needling hurts more than the first time you used that instrument, or

When you experience more pin-point bleeding than normal at the same depth.

All needles will blunt sooner or later, especially those in a needling cartridge, since those only have a dozen or so needles (those with more needles use <u>fake "needles" that damage</u> the skin) and potentially make thousands of skin pricks each, per treatment session.



When using needles longer than 1 mm, you may experience some pinpoint bleeding. This is normal and harmless. Clean the area with disinfecting alcohol. Apart from the occasional pinpoint bleeding, you will not bleed after needling, neither will your face swell up for days. Some minor swelling and redness for a day or two could occur.

The needled area will be red (like sunburn) for an hour or two.

The needled area might start "peeling" a little after some days. Don't pick at the loose skin.

The full cycle of Collagen production is a very slow, multistage process which can't be rushed. Don't expect quick miracles. It can take up to ten months to achieve substantial results. It is essential to stick to the schedule and don't give up after a few treatments. Because progress will be slow but certain, make pictures of your skin before and during dermaneedling treatment and judge your progress from those.

It is not true that the more frequently you needle, the better results you obtain. The skin has to be regenerated after each treatment and the initially induced new Collagen will eventually get transformed into a different type. Good results often start to appear only after approximately ten months. After that, with every passing month, if you keep needling, the results will improve. So if you want substantial, permanent results, you need to treat at least for about 15 to 20 months.

We received many emails saying that it took a long time to achieve improvement (of various skin conditions) but the improvement finally arrived after all. **Some said they started to see significant improvement only after one and half year or even two years of dermaneedling.** Some said they wanted to give up after one year but decided not to and it was worth it. Do not give up too soon! Other customers got results after only a couple of months and they used the same size needle instrument, the same frequency of rolling or needling and the same products as those who had to treat for over a year to see improvement. How quickly results become visible depends on the individual.



O Dry-brushing

Buy a medium hard brush. You can also use a new toothbrush (also an electric one) if the to-be-treated areas aren't too large. Neither wet the brush, nor the skin. Dry-brush the skin to make the skin easier to needle, to increase the penetrability of the skin to skin care products and to increase blood flow.

Dry brushing by itself brings some improvement to certain scars and stretch marks and makes the skin very smooth and glowing.

Two to four weeks before starting a dermaneedling session, dry-brush the skin two or three times a week until it gets red. **Don't brush the breasts or face too hard!** Don't brush around the eyes.

O Vitamin C

For optimal absorption, apply vitamin C serum (preparation instructions in the next chapter) immediately after brushing. It may prick a little because it is acidic, but it should not burn. If it burns too much, add more water to your vitamin C serum or apply it later after dry brushing.

After brushing, wash the brush with dish-washing liquid in near-boiling water or put it in the dishwasher. Store the brush in a place where it can dry quickly.

If your facial skin is sensitive, do not dry-brush. Instead, exfoliate your face or body in the shower with a fine salt (mixed with soap or almond oil if you wish). If the salt is irritating or rough on your skin, use baking soda or ground coffee.



O Washing, rinsing and drying the treated skin

After needling, shower the treated skin (**not a bath due to risk of infection**) and gently wash the treated skin with water only, no soap.

Use lukewarm water - not too hot.

Do not dry with a towel, air dry only - again to prevent infection.

Do not expose the skin to excessive levels of UV light at least one week before, and two weeks after dermarneedling with a needling depth from 1.0 mm onwards. This includes sunbathing and using a solarium.

O Infadolan ointment

When the skin has dried, apply a very small amount of our occlusive Infadolan ointment onto the needled area and continue applying for at least 14 days. (If you use it on your face and you are very prone to acne, use it only for a couple of days). The skin should be made slightly oily, no need to make it too greasy. Infadolan contains Retinyl Acetate (vitamin A) and Ergocalciferol (vitamin D2) in a special (oil-based, non-alcohol) formulation. These are both very beneficial for the formation of healthy new skin, especially for collagen and Elastin formation. Infadolan speeds up skin turnover and prevents freshly needled skin from drying out. Keep the tube closed when not used, to prevent air or microbes getting in. Because it is not a cream but an ointment of which the base doesn't get absorbed, much less is needed.

Read more about why we chose this vitamin A & D ointment.

O Vitamin C application

Do not apply vit. C serum immediately after rolling but restart applying vitamin C serum a day or two after needling. If the skin is still "raw" wait more days, especially after aggressive needling.

Vitamin C is water-soluble and any oils will prevent its penetration into the skin. Therefore you should gently remove any products (including the Infadolan) from your skin with an oil-free cleanser, then apply vitamin C serum and about half an hour later apply Infadolan. **Use very little Infadolan, no need for greasy skin.** Slightly oily is enough because the base does not get absorbed (the vitamins in it however do).



Vitamin A and C are essential for collagen production and sun damage prevention and reversal. However, you can't obtain high skin concentrations of vitamin C by taking it orally, this is why you need to apply it to the skin directly.

However, additional oral intake of vitamin C is highly recommended. The oral vitamin C can be made much less acidic whilst retaining its beneficial properties by mixing it with baking soda (Sodium bicarbonate). But the skin serum has to be acidic (low pH) to be absorbed, so **don't mix it**

with baking soda or use so-called "buffered" vitamin C!

Pre-treat your skin with vitamin C four days before rolling / needling to achieve maximum skin concentration.

Applying vitamin C every second or third day suffices. Vitamin C remains in the skin for several days, gradually diminishing in concentration. Vitamin C is not fat-soluble so before you apply it you must remove oils from your skin, otherwise the vitamin C will not be able to penetrate your skin through the oily layer.

Apply vitamin C in the evening since it is sensitive to sunlight.

Use your hand or a cotton pad to apply it and wash it off the next morning.

Recommendation: Wash your skin with oil-free cleanser or soap, apply vitamin C serum, wait for half an hour or so and then apply our Infadolan ointment.

If the vitamin C serum is too irritating to your skin, add more water. If your skin shows no irritation you can add more vitamin C powder to your container.



If you decide to apply vitamin c serum to freshly rolled, "open" skin, try with a much more diluted solution first (and/or do a small test patch first) because some people can experience a burning reaction. Gradually increase the strength until you know your skin can handle it.

O How to make a 5% vitamin C solution

To make your own vitamin C serum, which is extremely beneficial to the skin, you need:

Water. Boil the water to expel dissolved oxygen before you dissolve the vitamin C when the water has cooled off so that you can put a finger in it.

L-Ascorbic acid (powdered crystals of vitamin C) can be <u>bought in our web store</u>. Do NOT use vitamin C tablets of any kind. Only 100 % pure crystals of L-Ascorbic acid should be used.

A sealable container. It must be possible to close air-tight because vitamin C oxidizes easily. It is degraded by air, light and heat. It will last at least a month in a nearly full, sealed container in the fridge. Even without heeding the advised precautions it should last two weeks. We sell small dark glass spray bottles, perfect to keep vitamin C serum fresh.

Put half of a flat teaspoon of vitamin C into the small brown bottle we sell and add ten flat teaspoons of hot water.

With "flat" it is meant that the vitamin C should not be heaped onto the spoon but lying flat, just like the water in the teaspoon. If you wish to prepare a larger quantity to be stored in a larger container, use 19 teaspoons of water and 1 flat spoon of vitamin C. Alternatively, you can use table spoons instead of teaspoons, or any other method to reliable add one part of vitamin C to 19 parts of water. Shake until the crystals have dissolved. The warmer the water, the faster this goes. This 5 % vitamin C solution still has the consistency of water and tastes slightly acidic. There is no need to worry that warm water will degrade the vitamin C. Vitamin C is degraded by food enzymes at lukewarm temperature ranges, and regardless, the water will cool off while you spoon it into the container. It is best to use very hot water, because the warmer the water has been heated, the less dissolved oxygen it contains and oxygen degrades vitamin C much more than hot water does. Vitamin C dissolves poorly in cold water.

Prepare small quantities of vitamin C serum at a time and keep it in the fridge, to ensure it is always fresh and un-oxidized. You should make a new batch approximately once every twenty days. If the vitamin C serum is too irritating to your skin, add more water.



Wipe the rolling environment (e.g. table) with a disinfecting Alcohol-based solution.
 Soften the skin to make it easier for the needles to penetrate and keep the needle sharp the longest. Do this by having a hot bath or long hot shower just before needling. You can also steam your face when needling the face.
 Wash the to-be-needled skin area with water and soap and dry it with a fresh towel.
 Wipe the to-be-needled skin and your hands with a disinfecting Alcohol solution or Betadine. Don't use Betadine when pregnant or breastfeeding and do not use it to disinfect needling instruments. Alcohol solutions evaporate in a few minutes. You don't have to disinfect the skin if you needle to depths up to 0.5 mm, but clean the skin before you roll.
 If you prefer, apply an ice-pack or numbing cream. Remove the numbing cream with a disinfecting Alcohol solution before needling. When using ice-packs, clean them with a disinfecting Alcohol solution before use.



O How to use a dermastamp or Derminator cartridges on the Slow speed

You should create around 250 pricks per cm² (1,500 pricks per square inch). Our dermastamps have either 12 or 35 needles and Derminator cartridges have 1, 9 or 12 needles. On the **Slow** setting, the Derminator makes three downward motions per second, on **Medium** five downward motions per second and on **Fast** twenty-five downward motions per second. Multiply that with the number of needles in the cartridge to know how many pricks are made per second. The Derminator's **Timer function** (explained in its manual) can also be used for small scars but you'd have to tell it that the scar is say 1 x 1 cm in size. In inches, even 1 x 1 inch is already larger than an Acne scar.

If you heal well, you can needle slightly more densely the next time, especially if you have seriously deep scars. You have to experiment.

O How to use the Derminator

How to mount the cartridges (video)

How the buttons work (video)

Derminator Quick-Start Guide (optimized for smartphones, horizontal view)

Derminator user manual (optimized for smartphones, horizontal view)

Derminator user manual, PDF

How to attach the rubber feet

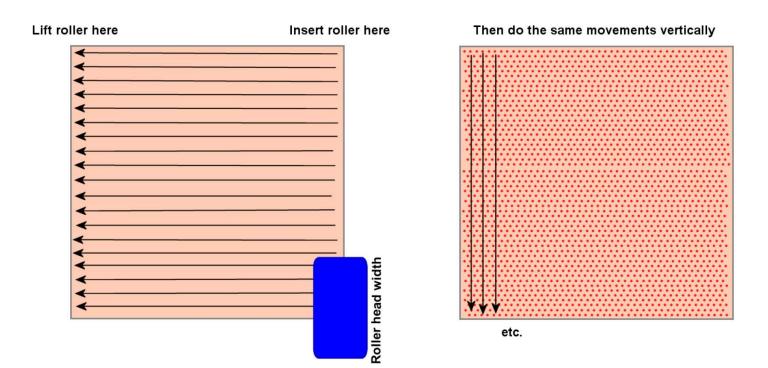
O How to use a dermaroller

Our full-width rollers have 192 needles and <u>do not ruin the skin</u>. Read our article with microscope photos on how most popular rollers and electric needling devices use **stamped knives** instead of real needles! The article exposes a huge scandal in Dermaneedling.

Assume we intend to achieve a slightly conservative prick density of 200 pricks per cm² (1290 pricks per in²). And that the skin area is 5 * 10 cm, making 50 cm² (7.75 in²).

This means we'll need to make a total of 50 * 200 = 10,000 pricks (1290 * 7.75 also is 10,000.)

Since the roller makes 192 pricks per revolution, we need to let the roller make 10,000 / 192 = 52 full rotations over the to-be treated skin. If you're a beginner, you could use a permanent marker to mark the side(s) of the roller so you can observe how many revolutions are made and practice on getting them as uniform as possible. To avoid the "red bands" effect, lift the roller before every new rolling motion. For optimal uniformity, alternate rolling horizontally and vertically. To prevent serious non-uniform prick density, do not roll in a star pattern.



Never needle Keloid scars! Do a Google Image search for examples of Keloid scars.



IDEAL METHOD

Roller repositioned after each movement.

SUB-OPTIMAL METHOD

Roller kept on the skin after each movement.





The needling depths recommended here for individual skin conditions are not the only ones that can be effective for these conditions. The following advice is to help you make a choice based on our experience but that doesn't mean other depths will not work.

The skin consists of the epidermis and the dermis. Its thickness varies, depending on the location on the body and this also varies with the individual. The epidermis is about 0.1 to 0.2 mm thick. The dermis is around 1 to 2 mm thick. Right underneath the skin there's mostly fat tissue.

Search our old dermaneedling forum for thousands of answers to dermaneedling questions:





Our digital DERMINATOR® 2 device replaces all manual dermaneedling instruments of all needle lengths: Dermarollers, dermastamps and single needles.

If you planned to buy several dermarollers/stamps to treat longer than a year, it's cheaper to buy a Derminator instead. It also hurts much less than manual instruments because its needles are much thinner and move faster. Lifetime warranty!

Details at https://derminator.com

O Acne scars

Use 1.5 mm. You do not have to treat all acne scars in the same session. You could do one cheek thoroughly, let it heal and then do the other cheek.

If you have the rolling type of acne scars or your scars have not responded to dermaneedling after one year, add our <u>subcision-suction method</u> with <u>our suction pump</u> to loosen the tethering.



For **post-acne pigmentation/spots** or to help preventing acne formation, use 0.5 mm.

For **shallow scars**, use 1 mm.



Acne/Chickenpox scars or individual wrinkles: Sparse needling with a single needle

NEVER NEEDLE ACTIVE (INFECTED) ACNE!

With the Derminator on the **low** setting, make 10 to 20 pricks into the scar/wrinkle with the single needle cartridge, depending on the size of the scar / wrinkle even more. The pricks should be each in a slightly different place in the scar/wrinkle, and be made under different angles. The approximate pricking depth should be 2 mm. You may see pinpoint bleeding and it will hurt. If you stretch the skin with your other hand, the needle will go even deeper. Repeat the procedure every month. **Do not use too many pricks per cm²**. The principle behind this needling procedure is to induce new collagen to fill the scar.

Once a month, roll the entire skin area (scars plus surrounding skin) at 1.5 mm to stimulate the surrounding tissue.

Some people have a very rare condition that causes even tiny skin injuries to heal in the form of a scar. You should first test on one single scar only and see how it heals. The healing time varies per individual and depends on the skin type- and area, it can vary between five and ten days. If it heals well you can do the rest of the scars or wrinkles and be rougher with them with the needle.

If your test needling heals well, you can start thoroughly pricking several scars or wrinkles a day. The pricks should be rather dense and between 1 and 2 mm deep. Be much more gentle on sensitive areas with thin skin such as the breasts. Wherever you prick always start off gently, if it heals well you can start being more vigorous.

Do not single-needle the same stretch mark, scar or wrinkle more than once a month. If you prick the skin quite densely and vigorously, do this only once every six to eight weeks.

Do not go deeper than occasional pinpoint bleeding. Some people get pinpoint bleeding at a depth of 1 mm. Others at a much deeper depth. Wipe the blood off with a tissue with some alcohol.

Don't expect that your stretch marks, scars or wrinkles will fully disappear. They will not disappear but they will become much less visible. Be patient and persevere! A dermaroller, dermastamp or Derminator cartridge can't do this because it would make too many pricks in the "good" surrounding skin, damaging it.

The scar might start peeling - don't pick at it.

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Regularly needle the entire area (scars and surrounding skin).

In case of white scars or stretch marks, when you will have needled all scars at least twice and they have healed, you can gradually expose the scars to the sun. With some luck, they might tan a bit, due to newly-formed Melanocytes as well as needling-induced revascularisation.

O Stretch marks and scars: Dense abrasion with a single needle

NEVER NEEDLE KELOID SCARS! Do a Google Image search for examples of Keloids.

You need many more pricks than with acne scars, depending on how wide and long the scar is. This is why our <u>Derminator</u> device is ideal for single-needling. The idea is to get many more pricks in, per surface area, than a dermaroller or dermastamp can – and also deeper. The purpose is to break old scar tissue and remove damaged collagen. This dense needling is called **needle abrasion**.

Don't forget to needle the edges of the scar – go a little outside of the borders of the scar.

You can try to needle-abrade even raised scars but do a test first because the results with raised scars are more unpredictable. This technique should only be used on already scarred skin, and then the effect will be beneficial. It is a slow process but you can work on your scars whenever you have the time.

Make very many pricks – just be sure not to treat the same skin more than once a month. Don't forget to stretch the skin!



O Scars on the nose

All invasive skin treatments on the nose are risky because this area reacts and heals unpredictably and could even worsen in appearance. You can try a 1 mm but never perform any aggressive needling on the nose. Start slowly and try a small area first.

O Serious burn scars

Use 2 mm.

O Enlarged pores

Dermaneedling works very effectively on acne scars but pores are not scars. Pores are ducts in the skin and their size is genetically determined.

There is currently no method that can reliably and permanently make pores smaller. Very few of our customers managed to make their pores smaller through dermaneedling.

You can try a 0.25 mm or 0.5 mm to thicken the epidermis. A thickened epidermis could make pores look smaller because the pore size is the smallest on the skin's surface and as you go deeper into the skin, the pore channel widens.

O Uneven skin texture/tone without scars present

Use 0.5 mm.

O Elongated scars (tummy tuck, Cesarean, injuries)

Use 1.5 or 2 mm. You may want to use a single needle.



O Wrinkles

Wrinkles between the eyebrows ("11's"): Use 1.5 mm with a single needle.

Wrinkles around the eyes can be treated with 0.5 mm or a 1 mm.

The wrinkles around the lips can be treated with 1.5 mm or 2 mm. This area is very sensitive!

For general rejuvenation of the entire face, use 0.5 mm, 1 mm or 1.5 mm. For the neck, use 1 mm and avoid the Adam's apple.

O Nasolabial fold

Deepening of skin folds is caused by:

- Loosening of ligaments that attach the skin to the underlying tissues and to the bone
- Loss of skin elasticity
- Loss of subcutaneous fat
- Gravitational forces

Dermaneedling can improve skin elasticity and trigger collagen but it cannot solve the other causes so there should no miraculous results be expected for the nasolabial fold.

Treat the fold densely every three weeks at 1.5 mm. You can add a treatment of the entire face to 1 mm for an overall tightening of the skin.

O Stretch marks

Stretch marks are not just "marks" – they're actually rather deep scars.

Generally, use a regular 1.5 mm or a 2 mm depth in combination with a more intensive and targeted tool such as the Derminator's single needle.

The skin on the upper arms is thin, so needling sometimes causes bruising. Preferably use 1 mm on that area.



O Shorter scars (liposuction, vaccination, injuries)

Also use 1.5 to 2 mm.

O Many scars, spread over a large skin area

Also use 1.5 to 2 mm.

O Scars on the wrist

Due to the thinner skin on the wrists, use 1 mm.

O Lost elasticity or sun-damaged skin

From our experience, the best results for crêpey/sagging skin is the combination of a shorter needles (to speed up the turnover of the skin) and longer needles (to trigger the formation of new Collagen and Elastin). We recommend using 0.5 mm (up to three times a week) and a 1.5 mm (roll very densely every three weeks). This should also help with age/sun spots. Do not expect miracles though. The biggest problem of aging skin is that the subcutaneous fat that makes the skin nicely plumped up is disappearing. Dermaneedling cannot trigger fat production; it can only affect the skin and slightly thicken and tighten it.

Needling at 1 mm every ten to 14 days is also useful.

If you have visible veins at the back of your hands, use 1 mm. <u>Our Infadolan ointment</u> is excellent for the daily application on the back of the hands. Apply just a little.





O Thinning hair

Use 0.25 mm for product penetration. In combination with Minoxidil, the results will last much longer. Dermaneedling greatly enhances the penetration of skin- or hair products so do not apply too much Minoxidil in the beginning, especially not high percentages to avoid (possible, albeit rare) dangerous side effects. If everything goes well, you can slowly increase the application and treated skin surface.

You can use 0.5 mm or 1 mm to enhance the blood flow to the hair follicles.

We publish here an extremely extensive guide on how to treat baldness.

O Melasma

Melasma can both improve and worsen after dermaneedling because Melasma is a very unpredictable condition. Any skin procedure or any "intervention" onto the skin (very cold, very hot, strong wind, certain creams, massage etc.) can theoretically make Melasma worse because the skin may react to it by producing more pigment. Everyone reacts differently and what worsens Melasma in one person can improve it or do nothing for the other. You should avoid sun exposure as much as possible.

What can be very useful is a 0.25 mm deep needling to enhance the absorption of Hydroquinone or other lightening products to the deeper skin layers but you should only do this for three months and then take a one month break.

You can try needling at 0.5 mm or a 1 mm (which reaches the dermis part of the skin where dermal Melasma resides) in combination with skin lightening products (three months on, one month off, etc.) but do this initially on only a small area for at least three weeks to see how your skin reacts.



O Cellulite

Dermaneedling has a <u>limited effect on cellulite</u>.

Needling at 0.25 or 0.5 mm enhances the penetration of anti-cellulite creams. Needling at 1.5 mm or 2 mm thickens the skin.

For various rare skin conditions, please search our dermaneedling forum.

O Pigmentations

If you have red skin due to dilated veins, dermaneedling will not help. Try a vascular laser for this.

Standard pigmentation is caused by the overproduction or uneven distribution of the Melanin pigment. Melanin is normally present in the skin and it is our natural protection against Ultraviolet radiation from the sun. The darker the skin, the more Melanin it contains. Sun exposure triggers Melanin production but the skin also sometimes produces Melanin as a reaction to certain stimuli, such as long-term inflammation (typical for acne for example) or certain types of skin injury (burns, for example). Often, the reason for the excessive or uneven distribution of Melanin is unknown, such as in Melasma or Chloasma.

The response of pigmentation to dermaneedling depends on how deep the pigmentation is. The shallower, the easier to address it. Dermaneedling speeds up the turnover of the skin and that improves pigmentations. In general, relatively shallow dermaneedling done more frequently is effective for "ordinary" pigmentation.

Use either a 0.5 mm up to three times a week or 1 mm once a week.

We have customers who improved pigmentation in six months even with a mere 0.25 mm needling depth, used at most every second day.

For sun damaged, pigmented skin on the forearms or legs, give the skin a good scrub with a pumice stone prior to dermaneedling. Roll when the pumice scrub has healed.

Applying skin lightening products right after dermaneedling will greatly increase the likelihood for improvement of sun- or age spots, Melasma and brownish pigmentations.



O Hypopigmentation

Skin pigment (Melanin) is produced by Melanocyte cells. They reside at the lower part of the Epidermis, which thickness is 0.1 to 0.3 mm. When these cells produce too much Melanin in any location, the result is Hyperpigmentation. And when they produce sufficient Melanin or are destroyed or damaged, the result is Hypopigmentation.

Scar tissue differs from normal skin and one of the differences is that it has no, or badly functioning Melanocytes.

Dermaneedling often triggers the activity of Melanocytes or "wakes up" existing dormant Melanocytes. In some cases the color turns completely back to normal (especially if there is hypopigmentation but no scar tissue, such as in Vitiligo) and in some cases the color improves but the scars remain a lighter shade than the surrounding skin.

If you have **hypopigmented patches**, use 1 mm needling depth every ten to 14 days. If you have a **hypopigmented**, **hardened scar or if it is on an area with thick skin** (such as the knees), use 1.5 mm.

Needle the hypopigmented areas and also needle slightly outside of its borders to **enable the migration of Melanocytes** from the surrounding normal skin into the hypo-pigmented areas.

Large hypopigmented areas:

Needle up to three times a week to 0.5 mm depth. Needle over the hypopigmentation and needle beyond the hypopigmented boundary to hopefully "harvest" some Melanocytes onto the needles and needle back over the hypopigmentation, effectively "injecting" functional Melanocytes into the area, which could "take root" there. When the skin is healed from dermaneedling, expose the Hypopigmented and needled area to the sun because Melanin is produced as a reaction to UV - **provided there are Melanocyte cells present to produce it.**



O Keloid and hypertrophic scars

Use <u>our Silicone sheets</u> to prevent and treat hypertrophic or Keloid scars. Effective (proven in many medical studies) for the management of both existing and new hypertrophic or Keloid scars on closed wounds (or after dermaneedling) or to prevent the formation of hypertrophic or Keloid scarring.



DERMANEEDLI NGGUIDELINES



- 1. Wash hands before use.
- **2.** Gently clean the scar and the surrounding skin with a mild soap and rinse in clean, warm water. Thoroughly dry the scar and surrounding skin with a clean cloth or tissue.
- **3.** Take the Silicone sheet from its protective cover and if required, cut off a piece that will fit over the scar, leaving a little extra to overlap the skin that surrounds the scar.
- **4.** Remove the protective release film from the Silicone sheet.
- **5.** Apply the Silicone sheet to the scar, without stretching or with only minor stretching (otherwise it may detach eventually), adhesive side down. If necessary, a light bandage or adhesive tape may be used to help keep the silicone sheet in place.
- **6.** Wash both sides of the Silicone gel sheet, the scar and the surrounding skin at least twice daily (more often in case of excessive perspiration) with mild soap and rinse in clean, warm water. Dry thoroughly. Do not use paper-based products to dry the sheet as fibers may stick to it. Do not use irritating soap since this can lead to skin sensitivity. When care is taken, in many cases the Silicone sheet can be reused for 2 to 4 weeks. When the Silicone sheet begins to deteriorate or cleaning is difficult, it should be replaced.
- **7.** The Silicone sheet should be applied at least 12 hours / day. The optimum is at least 20 hours / day. Ideally, the sheet is applied all the time, except during cleaning.
- **8.** For better skin acclimatization, begin with applying the sheet for 4 hours / day for the first 2 days, 8 hours / day for the next 2 days and increase usage time by 2 hours per day until the optimum 24 hours / day therapy time is obtained.
- **9.** Try to avoid ointments on the scar during use because they may lead to reduced pressure on the scar and it is the constant pressure and constant occlusive moisturizing that achieves the anti-Keloid / hypertrophic scar effect. When using ointments, apply a thin layer, and only on the scar itself not on the surrounding skin.
- **10.** A treatment duration between 2 and 4 months yields optimal results.
- **11.** When a rash occurs, reduce daily therapy time. If the rash persist, discontinue use and consult a physician.

DO NOT USE ON OPEN WOUNDS OR WHEN ALLERGIC TO SILICONE.