mesotherapy solutions
by mesoestetic®
pharmacological effect

physical stimulation

micro-doses
Mesotherapy is a medical technique whereby active substances are introduced into the skin surface by numerous micro-injections to correct aesthetic disorders such as skin aging, cellulite, flaccidity and alopecia, among others. The physical reaction is caused by the mechanical stimulus (the effect of the needle), while there is also a pharmacological effect due to the micro-doses of the substances introduced. Provided it is performed in adequate conditions and with the correct substances, it is a very effective procedure.

This technique ensures optimum penetration of substances in the dermis with superior effects to those achieved with other methods of application.

This local medical procedure is performed on the dermis, regardless of the histological location of the lesion. The risk of side effects is extremely minor and is a non-obtrusive treatment requiring no preparation time meaning that patients can immediately resume their daily activities.

“Little, rarely and in the right place”.
Dr. Michel Pistor
1. mesoestetic® solution: mesohyal

mesohyal is the widest range of class III medical devices for intradermal administration for face and body treatments with the CE marking. They are adaptable, safe, efficient products and are used for personalised correction of skin aging and the most specific figure concerns. They improve the appearance of the skin immediately and progressively and have lasting effects. The range is ideal for combining with and optimising the results of other medical procedures (botulinum toxin, fillers, laser, IPL, etc.).

### 100% adaptable

A comprehensive range of products that can be applied individually or as part of personalised cocktails.

All the products in the mesohyal range can be combined.

Initially, the skin’s specific requirements are diagnosed, then the most suitable active substances are selected and a tailor-made treatment programme is designed on a session-by-session basis.

### 100% safe

CE Mark: a guarantee of quality, safety and efficacy.

mesohyal products bear the CE mark, which certifies that they comply with the European Council Directive 93/42/EEC concerning medical devices. The CE mark guarantees that a comprehensive quality assurance system and suitable product design, production, marketing and distribution procedures are used. The result of these methods are products that are safe and suitable for the purposes for which they are intended.

ISO 13485:2012

Mesoestetic Pharma Group also holds the ISO 13485:2012 standard that certifies compliance with the quality assurance system requirements demanded by medical device directives.

### 100% efficient

Hyaluronic acid, a fundamental component of the skin, is the entire line’s main active ingredient. It is of biotechnological, non-animal origin and is non-crosslinked.

It is capable of retaining thousands of times its weight in water, enabling it to compensate for natural loss of hyaluronic acid. It also helps to support collagen and elastin fibres, restoring density to thinner areas and providing support to cells.

mesohyal products combine hyaluronic acid with active substances with recognised therapeutic efficacy such as vitamins, natural extracts, coenzymes, amino acids, mineral salts, etc. They are highly tolerable, biocompatible, are totally reabsorbed and integrate naturally in the dermis.
2. Product range

<table>
<thead>
<tr>
<th>Skin re-moisturising and rejuvenation</th>
<th>Intensive cell bio revitalisation</th>
</tr>
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<tbody>
<tr>
<td><strong>mesohyal HYALURONIC</strong></td>
<td><strong>mesohyal NCTC 109</strong></td>
</tr>
<tr>
<td>Non-crosslinked hyaluronic acid 45 mg.</td>
<td>Hyaluronic acid + biorevitalising cocktail (vitamins, amino acids, mineral salts and coenzymes). Provides the micronutrients that intervene in cell repair.</td>
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<tr>
<td>Nourishes and moisturises the treatment area, enhancing skin elasticity, reducing fine and superficial wrinkles.</td>
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<th>Elasticity and firmness</th>
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<td><strong>mesohyal DMAE</strong></td>
</tr>
<tr>
<td>Hyaluronic acid + Dimethylaminoethanol (3%). Restores firmness to tissues undergoing the aging process, effectively counteracting flaccidity.</td>
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<th>Antioxidant and brightening action</th>
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<td><strong>mesohyal VITAMIN C</strong></td>
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<tr>
<td>Hyaluronic acid + vitamin C (20%) and mineral salts. Prevents and palliates oxidative damage to epidermal cells caused by UV radiation. Lightens the skin and improves pigmented lesions of different origins.</td>
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<tr>
<th>Skin tissue regeneration and restructuring</th>
<th>Stimulation of the extracellular dermal matrix</th>
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<td><strong>mesohyal ORGANIC SILICON</strong></td>
<td><strong>mesohyal OLIGOELEMENTS</strong></td>
</tr>
<tr>
<td>Hyaluronic acid + silicon.</td>
<td>Hyaluronic acid + 9 oligoelements.</td>
</tr>
<tr>
<td>It acts to stabilise and maintain the skin tissue structure, stimulating fibroblast production and enhancing biosynthesis of collagen fibres, elastin and proteoglycans.</td>
<td>Activates skin metabolic processes and encourages growth and biological cell functions, improving the structure of the skin and reducing the signs of aging.</td>
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<tr>
<th>Reactivation of skin cell and scalp metabolism</th>
<th>Speeds up metabolism of fatty acids</th>
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<td><strong>mesohyal BIOTIN</strong></td>
<td><strong>mesohyal CARNITINE</strong></td>
</tr>
<tr>
<td>Hyaluronic acid + biotin, other group B vitamins and mineral salts. Compensates for nutritional deficit of the scalp responsible for hair weakness and early hair loss.</td>
<td>Hyaluronic acid + L-carnitine (20%). L-carnitine transports fatty acids to the mitochondria, where oxidation and subsequent energy release occur.</td>
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<th>Detoxifying and draining effect</th>
<th>Activates microcirculation</th>
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<td><strong>mesohyal ARTICHOKE</strong></td>
<td><strong>mesohyal MELILOT</strong></td>
</tr>
<tr>
<td>Hyaluronic acid + artichoke extract and mineral salts. It has a cleansing action that stimulates the lymph draining system, reducing the retention of fluids built up in the tissues, oedema and the feeling of swelling.</td>
<td>Hyaluronic acid + melilot extract, troxerutin and mineral salts. Enhances the microcirculation and reduces fluid retention. Encourages lymph draining and activates return venous flow.</td>
</tr>
</tbody>
</table>
3. Basic protocol

Skin preparation
Remove make up from the treatment area with hydra milk cleanser and apply an anaesthetic cream (optional). Disinfect the skin with a little alcohol, hydrogen peroxide or chlorhexidine.

Optional phase
Depending on the skin type and desired results, a surface chemical peel with mesopeel may be recommended immediately before the mesotherapy session to improve the level of therapeutic response.

Mixing cocktails
It is possible to create the most suitable cocktail for each session.
- The active substances can be mixed with an 18 G needle in the syringe you will use during the session.
- For cocktails containing mesohyal HYALURONIC, load this first due to its high viscosity. This will allow you to obtain a homogenous mixture.

Injection techniques
mesohyal products can be applied manually or with a multi-puncture gun, using three-body syringes with Luer-Lock connection and 30G needles for 4 mm deep injections for normal use and/or 8 to 12 mm for specific techniques, injecting these into the superficial dermis using the most suitable mesotherapy technique:

- **Intradermal nappage:** maximum number of injections (every 5/6 mm), with a minimum quantity of product at a depth of less than 4 mm.
- **Point by point:** numerous injections with a larger quantity of the product.

- **Intradermal papule:** localised deposit of product creating a small papule.
- **Tracer mesotherapy:** the needle is placed parallel to the skin and the product is inserted as the needle is withdrawn.

Optional final phase
To soothe, repair and decongest the skin, apply the post-peel crystal fiber mask and then recommend the use of a high sun protection factor cream moisturising sun protection SPF50 or compact foundation SPF50.

Post-treatment recommendation
Patients should avoid direct exposure to the sun, saunas, swimming pools and gyms for a few hours following the session.
### Treatment areas:

- wrinkles on the forehead and glabella
- periorbital area
- periorcular area
- preauricular area
- neck
- hands
- neckline
- facial contours
- nasolabial fold
- lip area

### Recommended syringe:
1 or 2 ml

### Injection techniques:
The best facial mesotherapy results are achieved by combining the 4 injection techniques:
- generalised nappage technique over entire treatment area.
- point by point to boost the effects of nappage in certain areas.
- intradermal papules in cheeks, preauricular area, corners of the mouth and facial contour.
- tracer mesotherapy in areas with skin fracture generating chemical tension threads (with 30G ½ and 12 mm long needle or cannula).

It is recommended you start the facial mesotherapy treatment by providing the micro-nutrients essential to the dermis with a moisturising-revitalising cocktail comprising mesohyal HYALURONIC y mesohyal NCTC 109, to stimulate the dermal substrate, thus optimising the effect of the active substances administered in subsequent sessions.

At home, boost and prolong the results of the mesotherapy with collagen 360° elixir drinkable nutricosmetics for a firming effect, radiance DNA elixir with an overall antiaging effect or ultimate W+ whitening elixir to lighten and unify skin tone.

### Suggestions for facial cocktails

<table>
<thead>
<tr>
<th>Re-moisturising biorevitalisation</th>
<th>Biorevitalising antioxidant</th>
<th>Skin reaffirmation and restructuring</th>
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<tr>
<td>mesohyal HYALURONIC</td>
<td>mesohyal BIOTIN</td>
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<td>mesohyal ORGANIC SILICON</td>
<td>mesohyal VITAMIN C</td>
<td>mesohyal ORGANIC SILICON or DMAE</td>
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<td>mesohyal OLIGOELEMENTS</td>
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### Intensive Restructuring
mesohyal BIOTIN
mesohyal ORGANIC SILICON
mesohyal OLIGOELEMENTS

### Scalp stimulation
mesohyal BIOTIN
mesohyal NCTC 109
mesohyal VITAMIN C or OLIGOELEMENTS

### Overall rejuvenation treatment
Select the cocktail and application sequence according to medical criteria, the patient’s needs and the desired result.
Treatment areas:

- arms
- back
- abdomen
- lumbar region
- flanks
- buttocks
- thighs
- knees

Recommended syringe:
5 o 10 ml

Injection techniques:
- point by point.
- papule technique injections.

mesohyal MELILOT is a recommended ingredient of all body mesotherapy cocktails, because it stimulates blood flow and is ideal for treating all types of cellulite.

The following steps are recommended for the first mesotherapy body treatment session:
1. stimulate blood microflow with the mesohyal MELILOT (2 ml) injection in the cutaneous projections over the vascular axes of the upper and lower limbs and the paravertebral areas to treat.
2. use the recommended cocktail according to the types of cellulite diagnosed.

At home, complement the treatment with grascontrol artichoke cleansing nutritional supplement to enhance the therapeutic response to the treatment.

Suggestions for body cocktails

- Compact or fibrous cellulite:
  - mesohyal CARNITINE
  - mesohyal MELILOT
  - mesohyal ARTICHOKE

- Flaccid and soft cellulite:
  - mesohyal ARTICHOKE
  - mesohyal MELILOT
  - mesohyal ORGANIC SILICON or CARNITINE

- Oedematous cellulite with a vascular component:
  - mesohyal MELILOT
  - mesohyal ARTICHOKE
  - mesohyal CARNITINE

- according to the evolution of previous treatments:
  - Compact or fibrous cellulite:
    - mesohyal CARNITINE
    - mesohyal MELILOT
    - mesohyal ORGANIC SILICON

  - Flaccid and soft cellulite:
    - mesohyal MELILOT
    - mesohyal ORGANIC SILICON
    - mesohyal DMAE

  - Oedematous cellulite with a vascular component:
    - mesohyal MELILOT
    - mesohyal CARNITINE
    - mesohyal ORGANIC SILICON or DMAE
4. Progressive and visible results

The duration of a session is from 20 to 30 minutes.

Number of recommended sessions:

- Facial: between 5 and 10 sessions at two-week intervals.
- Body: between 8 and 12 sessions at seven-day intervals.

Follow-up:
Patients are required to follow the usual hygienic-dietary guidelines and to have regular top-up treatments to maintain the effects every 6 to 8 months. This period can be longer or shorter according to the patient’s therapeutic response and the desired result.

Photographs taken before and after a 10-session treatment with mesohyal carried out in every seven days.

Photographs taken before and after a five-session treatment with mesohyal carried out in weeks 1, 2, 3, 5 and 7.
## 4. Product characteristics

<table>
<thead>
<tr>
<th>mesohyal HYALURONIC</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Skin re-moisturising and rejuvenation.</td>
<td>Gel solution with highly concentrated non-crosslinked hyaluronic acid (45 mg / vial).</td>
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<tr>
<th>mesohyal NCTC 109</th>
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<tbody>
<tr>
<td>Intensive cell biorevitalisation.</td>
<td>Revitalising solution packed with vitamins, amino acids, mineral salts, coenzymes in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal VITAMIN C</th>
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<tr>
<td>Antioxidant and brightening effect.</td>
<td>Antioxidant, brightening solution with concentrated ascorbic acid (vitamin C) and mineral salts and a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal DMAE</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>Elasticity and firmness.</td>
<td>Firming solution with concentrated dimethylaminoethanol (DMAE), with a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal ORGANIC SILICON</th>
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<tr>
<td>Skin tissue regeneration and restructuring.</td>
<td>Regenerating, restructuring solution with concentrated organic silicon in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal OLIGOELEMENTS</th>
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<tbody>
<tr>
<td>Stimulation of the extracellular dermal matrix.</td>
<td>Revitalising solution combining numerous oligoelements in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal BIOTIN</th>
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<tr>
<td>Reactivation of skin cell and scalp metabolism.</td>
<td>Revitalising solution with concentrated vitamins and mineral salts in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal CARNITINE</th>
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<tbody>
<tr>
<td>Speeds up metabolism of fatty acids.</td>
<td>Anticellulite solution with concentrated L-carnitine in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal ARTICHOKE</th>
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<tr>
<td>Detoxifying and draining effect.</td>
<td>Draining, detoxifying anticellulite solution with extract of artichoke in a base of hyaluronic acid.</td>
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<tr>
<th>mesohyal MELILOT</th>
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<tbody>
<tr>
<td>Activates microcirculation.</td>
<td>Anticellulite solution combining extract of melilot, troxerutin and a base of hyaluronic acid.</td>
</tr>
<tr>
<td>INDICATIONS</td>
<td>COMPOSITION</td>
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</tbody>
</table>
| · intensive hydration of the superficial dermis and epidermis  
· correction of fine wrinkles  
· skin rejuvenation | Hyaluronic acid (HA): 15 mg/ml  
   Biorevitalising cocktail (vitamins, amino acids, mineral salts and coenzymes)  
   Ascorbic acid / vitamin C (20%) and mineral salts  
   DMAE / Dimethylaminoethanol (3%)  
   Silicon.  
   9 oligoelements (zinc, magnesium, molybdenum, nickel, cobalt, selenium, copper, manganese and vanadium)  
   Biotin, other group B vitamins and mineral salts  
   L-carnitine (20%)  
   Artichoke extract and mineral salts  
   Melilot extract, troxerutin and mineral salts | face, neck, neckline and backs of hands, as well as the arms, back, chest, abdomen, periumbilical area, flanks and thighs.  
   face, neck, neckline and backs of hands, as well as the arms, back, thorax, abdomen, periumbilical area, flanks, thighs and scalp.  
   face, neck, neckline and backs of hands, as well as the arms, back, thorax, abdomen, periumbilical area, flanks, thighs and scalp.  
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   face, neck, necklace and backs of hands, as well as the arms, back, chest, abdomen, periumbilical area, flanks, thighs and scalp.  
   areas most commonly affected by compact cellulite: thighs, buttocks, abdomen, back and arms.  
   thighs, buttocks, abdomen, back and arms.  
   areas most often affected by circulatory disorders: thighs, buttocks, abdomen, back and arms. | 5 x 3 ml vials  
   5 x 5 ml vials  
   20 x 5 ml ampoules  
   20 x 5 ml ampoules  
   20 x 5 ml ampoules  
   20 x 5 ml ampoules  
   20 x 5 ml ampoules  
   20 x 2 ml ampoules  
   20 x 5 ml ampoules  
   20 x 2 ml ampoules |
• The most comprehensive and widest range of intradermal medical devices.

• CE mark: a guarantee of quality, safety and efficacy.

• Versatile treatment, designed for individual application or for creation of personalised cocktails for treatment of numerous areas.

• Exclusive formula based on hyaluronic acid and active substances with recognised therapeutic efficacy.

• Ideal for combining with other medical procedures (botulinum toxin, fillers, laser, IPL, etc.).