



Patient Information Leaflet
Photorejuvenation



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If you are considering **photorejuvenation**, we recommend that you read the following information. This will help you to be fully prepared and know what questions to ask. Prior to treatment, you should have a face-to-face consultation with your treating practitioner or therapist and have a test patch carried out at least 48 hours prior to treatment. Make sure you have had all your questions answered and you are confident that the treatment is right for you.

What is photorejuvenation?

Photorejuvenation is a non-invasive cosmetic treatment designed to improve the appearance of the skin by reducing signs of ageing, sun damage and other skin irregularities. It uses light-based technologies, typically intense pulsed light (IPL) or laser therapy, to target specific skin issues.

Benefits of photorejuvenation include reduction of hyperpigmentation to treat sunspots and age spots, improvements in skin texture to reduce roughness and to improve fine lines and minor wrinkles. It can also help with redness and rosacea to minimise facial redness, broken capillaries and vascular lesions. Photorejuvenation is used to diminish acne-related redness and scars and can stimulate collagen production leading to skin tightening. However, its effectiveness depends on factors like skin type, the specific condition being treated and the technology used. Most people see visible improvement after 3-5 sessions spaced 3-4 weeks apart. The results are gradual as collagen builds up and pigmentation fades over time.

Ask what photorejuvenation device and technology your practitioner/therapist is using and why?

What areas can be treated?

Photorejuvenation can be used on multiple areas of the body, but it is most commonly performed on sun-exposed areas where signs of ageing, pigmentation or redness appear.

- ✓ Face
- ✓ Neck
- ✓ Chest (décolletage)
- ✓ Hands
- ✓ Arms, shoulders and back
- ✓ Legs

Areas where photorejuvenation are less effective is for deep wrinkles, sagging skin, tattooed areas as the treatment can fade or distort tattoo ink and in those with darker skin types as there may be a risk of hyperpigmentation and burns.

Make sure that you have a test patch prior to treatment.

How does it work?

Understanding the science behind photorejuvenation, including wavelengths and chromophores, provides insight into its effectiveness and safety.

- ✓ **Wavelengths:** The specific wavelengths of light used are crucial as they determine the depth of penetration and the type of chromophore targeted.
- ✓ **Chromophores:** Molecules within the skin that absorb light, converting it into heat, which leads to therapeutic effects.

Different wavelengths target specific chromophores:

- ✓ **Melanin (400-700 nm):** Absorbs visible light, targeting pigmented lesions like freckles, age spots and sunspots.
- ✓ **Oxyhaemoglobin (500-600 nm):** Absorbs green to yellow light, effective for vascular lesions like spider veins and redness.

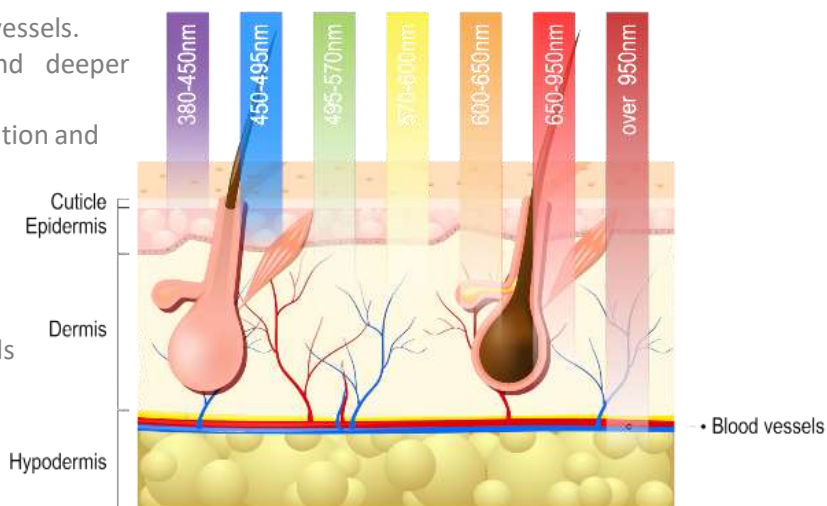
The effectiveness of photorejuvenation depends on the specific device and wavelengths used where a handheld device delivers broad-spectrum IPL or laser energy to the skin.

IPL (Intense Pulsed Light): Utilises broad-spectrum light (500–1200 nm), allowing for the treatment of multiple chromophores. Filters can be applied to focus on specific concerns:

- ✓ **515-550 nm:** Targets pigmentation and superficial vessels.
- ✓ **560-590 nm:** Effective for vascular lesions and deeper pigmentation.
- ✓ **600-700 nm:** Penetrates deeper for collagen stimulation and reducing wrinkles.

Lasers: Emit a single wavelength, allowing for precise targeting:

- ✓ **532 nm (KTP Laser):** Targets superficial blood vessels and pigmentation.
- ✓ **585-595 nm (Pulsed Dye Laser):** Ideal for redness, rosacea, and vascular lesions.
- ✓ **755 nm (Alexandrite Laser):** Effective for pigmentation and hair removal.
- ✓ **1064 nm (Nd:YAG Laser):** Penetrates deeply, targeting larger vessels and promoting collagen.



Lasers and IPL can exert their clinical effect by one of the following methods:

- ✓ **Photothermal Effect:** Light energy is absorbed by chromophores, converting into heat and causing controlled thermal damage.
- ✓ **Photochemical Effect:** Triggers a chemical change in skin cells, promoting collagen production and cell turnover.

Finally, there are often additional features that can affect effectiveness, safety and comfort during the procedure. These include energy level, cooling mechanisms, pulse length, duration and modulation, number of pulses and spot size and shape.

Is it painful?

Many patients report that the procedure feels like a series of light pulses on the skin, with some comparing it to the snap of a rubber band. While the sensation may be uncomfortable for some, it is typically not described as painful. The intensity of the treatment can be adjusted by your practitioner or therapist to ensure your comfort during the session.

Most people find that the sensation decreases significantly once the treatment starts. Although you may experience a mild warm or tingling feeling, any discomfort is usually brief and well-tolerated. After the treatment, some redness or mild swelling can occur, but this typically subsides within a few hours to a few days.

Rarely, to help minimise discomfort, topical numbing creams can be applied before the procedure if you find the treatment intolerable.

Is it safe?

Generally, photorejuvenation is considered safe for most patients when performed by a trained and experienced professional. However, as with any cosmetic procedure, there are risks and considerations to keep in mind.

Like any cosmetic procedure, photorejuvenation comes with some risks. The treatment is typically well-tolerated, but side-effects can occur, including temporary redness, swelling, or mild discomfort. In rare cases, more severe side effects such as blistering, hyperpigmentation, or scarring may occur. To minimise these risks, it is important to ensure that you undergo the treatment with a qualified practitioner who understands your skin type and can tailor the settings accordingly. A thorough consultation is essential before the procedure, where your medical history, skin condition and expectations will be discussed.

The safety of photorejuvenation is also enhanced by advancements in technology, which provide precise control over the energy delivered to the skin, making treatments more comfortable and effective. Additionally, IPL devices have built-in safety features that help avoid damage to the skin. If you have certain conditions such as active acne, a recent tan, or a history of skin cancer, photorejuvenation may not be recommended, or modifications to the treatment plan may be needed.

Side-effects may be more likely due to the following factors:

- ✓ **Patient factors:** Unrealistic expectations, skin type, medical conditions, medication,
- ✓ **Practitioner factors:** Training, years of experience, number of procedures performed.
- ✓ **Premises factors:** Suitability of the premises, laser precautions, registered with local authority.

Ensure that you are provided with an out of hours number in case of an emergency.

While photorejuvenation (IPL) is generally considered safe, like all treatments, it carries potential risks and side effects. Understanding these helps ensure that you can make informed decisions and take appropriate precautions to minimise the chances of complications.

- ❖ **Redness and Swelling:** Mild redness and swelling are common after photorejuvenation and typically subside within a few hours to a few days. This can be managed by applying cool compresses to the treated areas, and avoiding heat, strenuous exercise or hot showers for 24-48 hours post-treatment. If redness persists, topical corticosteroids or antihistamines may be recommended by your practitioner.
- ❖ **Hyperpigmentation (Dark Spots):** Rarely, treatment can result in hyperpigmentation, particularly in individuals with darker skin tones. This occurs due to excessive melanin production in response to the heat. To reduce the risk of hyperpigmentation, it is essential to avoid sun exposure before and after the treatment. Your practitioner or therapist should perform a test patch on a small area of skin to assess how your skin reacts to the treatment. For those with darker skin, a lower intensity setting can be used to minimise the risk. If

hyperpigmentation occurs, it often fades over several weeks to months and treatment with topical lightening agents or lasers may be suggested.

- ❖ **Hypopigmentation (Light Spots):** Lightening of the skin, can occur if too much heat is applied to the skin during the procedure, affecting the melanin-producing cells. This is a rare side effect but can happen, especially in sensitive skin. To help prevent hypopigmentation, ensure that your practitioner or therapist carefully adjusts the settings based on your skin type and ensure broad-spectrum sunscreen is used post-treatment to prevent further skin damage.
- ❖ **Blistering and Scarring:** Excessive heat from the IPL device can cause skin damage, leading to blistering or scarring. This is more likely if the treatment is not properly calibrated or if the skin is exposed to sun immediately after treatment. To avoid blistering, always ensure that the procedure is performed by a qualified and experienced practitioner or therapist. Post-treatment care should include strict sun avoidance for at least two weeks and the use of sunscreen with high SPF. If blisters occur, they should be left to heal naturally without popping them. Scarring is rare, but if it does occur, it can usually be treated with scar therapies or lasers.
- ❖ **Pain or Discomfort:** While treatment is not typically painful, some patients may experience discomfort in the form of a snapping sensation or warmth during the procedure. A topical numbing cream can be applied before treatment to reduce discomfort if needed. Discuss your pain tolerance with the practitioner or therapist, and if needed, they can adjust the settings to make the procedure more comfortable. After treatment, discomfort can be alleviated with cool compresses or over-the-counter pain relievers.
- ❖ **Eye Injury:** The light emitted by IPL devices and lasers can cause eye injury if appropriate eye protection is not used. It is crucial to wear protective goggles or eye shields during treatment to protect your eyes from the wavelengths emitted by the device. Your practitioner or therapist should ensure that safety measures are in place to protect your eyes.
- ❖ **Acne or Skin Breakouts:** Some people may experience minor breakouts or acne-like pimples after treatment, especially if their skin is oily or prone to breakouts. To prevent this, ensure your practitioner or therapist performs an assessment to understand your skin type and any predispositions to acne. Post-treatment care should include avoiding makeup for at least 24 hours and using a gentle skincare routine. If breakouts occur, topical acne treatments may be recommended by your provider. Rarely, you may have an outbreak of cold-sores, if this occurs contact your treating practitioner or therapist for advice on management, which may include medication.

While side effects are rare, being proactive about skin care and following the correct procedure guidelines can significantly reduce the risk of complications and help you achieve the best possible results from photorejuvenation.

If you develop any unexpected side-effects after treatment, it is important to contact your practitioner or therapist for a review as soon as possible, as they may be able to offer some corrective treatment. Although you may be contacted by telephone or video call initially or you may send your own photographs, this is no substitute for a face-to-face review to provide an accurate diagnosis.



What does the procedure involve?

Prior to your treatment you should be given a full consultation, complete a medical questionnaire and be offered a cooling off period to enable you to make an informed decision with full disclosure of the possible risks and side effects specific to you. You should also be given an indication of the cost of the treatment. Before you receive any treatment, you will be required to sign a consent form, this may be on paper or electronic and be given the opportunity to ask any further questions. Photographs may be taken and kept as part of your medical record. These should not be used for any other purpose without your explicit permission.

Ensure treatment is carried out in a clinical or salon setting with appropriate laser safety measures.

Prior to treatment, the skin should be cleansed to remove all makeup and a disinfectant applied. Although unnecessary for most modern devices, numbing cream may be applied if needed. If a numbing cream is used, this will be applied for several minutes to allow it to work and then removed before the procedure takes place. A clear cooling gel is usually applied, this has several actions, it provides cooling and comfort preventing excessive heat buildup, it acts as a

coupling medium ensuring light energy is transmitted to the skin and allows the treatment head to glide more easily on the skin. You will wear protective eyewear to shield your eyes from the light energy and your practitioner or therapist will also wear appropriate protection. Laser or IPL should only be performed in a light-tight room with no reflective surfaces and the room should be locked when the machine is in operation.

Device settings will be altered according to your test patch, your skin colour, the treatment indication and comfort. The settings may be adjusted during your treatment according to the area being treated and to minimise any discomfort. The laser or IPL device will be applied to the skin, emitting short pulses of light. You may feel some warmth or heat or a sensation like a rubber band snapping against the skin. The session typically lasts between 20 to 45 minutes, depending on the treatment area.

Following treatment, any excess gel will be removed and often a cooling mask or soothing cream may be applied to help reduce heat and redness and to minimise any discomfort. Finally, your practitioner or therapist should apply a high factor SPF to the skin and this should be continued according to your aftercare instructions.

A high factor SPF should be applied post-treatment.

Am I suitable for treatment?

The best candidate for laser or IPL photorejuvenation is someone who has fair to medium skin tones, only has mild to moderate skin concerns, generally has healthy skin, willing to commit to multiple sessions and follows aftercare instructions, including judicious use of sun protection.

You may not be suitable for treatment if any of the following apply:

- ✓ Photorejuvenation should not be performed on pregnant or breast-feeding women and is not recommended if you are actively trying to get pregnant or undergoing IVF as safety has not been established.
- ✓ If you have suffered complications or pigmentation from previous photorejuvenation treatment.
- ✓ If you are suffering from any skin infection or open wounds in or near the treatment area, including cold sores.
- ✓ If you have active skin cancer or a history of undiagnosed abnormal skin lesions.
- ✓ If you are currently taking photosensitising medications, such as certain antibiotics, isotretinoin, anti-inflammatory tablets. If you are unsure, seek advice from your practitioner or therapist.
- ✓ If you suffer from keloid scarring or have active skin conditions, such as acne or psoriasis.
- ✓ If you have a very dark skin tone, although it may be possible with more modern devices and technology.
- ✓ If you have an active skin tan, from sun exposure, tanning beds or self-tanning products.
- ✓ If you have certain medical conditions, such as diabetes, rheumatoid arthritis, autoimmune conditions, blood clotting disorders, cancer, immunosuppression (either medical or drug-related).
- ✓ If you have epilepsy or a history of seizures triggered by flashing lights.
- ✓ If you have an autoimmune disease affecting the skin, such as lupus or vitiligo.
- ✓ If you are unwell, including coughs and colds, on the day of treatment.
- ✓ If you are taking any blood-thinning medication, such as aspirin or warfarin, or have a condition affecting clotting.
- ✓ If you have recently had a chemical peel, microdermabrasion or other skin treatment or recent use of retinoids, AHA/BHA acids or other exfoliants. If in doubt, discuss this with your practitioner or therapist.
- ✓ If you have had oral Roaccutane or isotretinoin in the past 6 months.
- ✓ If your practitioner does not feel they can meet your treatment expectations.

It is important to be honest about your medical history, previous aesthetic treatments, skincare products used and any medication taken, so that you can have a safe and effective treatment.

Pre-treatment advice

- ✓ Avoid excessive sun exposure, do not sunbathe, use tanning beds or apply self-tanning products for 4 weeks.
- ✓ Discontinue any photosensitising medications or over the counter remedies that can cause photosensitivity 4 weeks prior to treatment (if safe to do so, seek medical advice if unsure).

- ✓ Avoid exfoliating skin products, such as retinoids, AHA/BHAs, and other aesthetic treatments for 2 weeks prior to your photorejuvenation, unless otherwise advised by your practitioner or therapist.
- ✓ Avoid hair removal treatments, including waxing, plucking or electrolysis, in the treatment area for 2 weeks.
- ✓ If there is unwanted hair, shave the area 24 hours before photorejuvenation to allow better light penetration.
- ✓ Arrive with clean, product-free skin and wear loose, comfortable clothing.
- ✓ Ensure your practitioner is informed if there are any changes in your medical history or medication taken before receiving any treatment.
- ✓ Make sure you have allowed some days after treatment for downtime for any side-effects to settle.

Post-treatment advice

Many practitioners advise the following:

- ✓ Expect some mild redness and warmth, this can be helped with a cool compress.
- ✓ Do not apply make-up for 12 hours after treatment to reduce the risk of infection.
- ✓ Apply at least a SPF 30 factor sunscreen for 4 weeks and avoid tanning and self-tanning products.
- ✓ Use a gentle, hydrating moisturiser to help calm the skin and keep well-hydrated.
- ✓ Darkened spots or mild crusting may appear, avoid touching, picking or scratching the treated area.
- ✓ Avoid vigorous exercise for 48 hours to prevent excessive sweating.
- ✓ Avoid hot baths, saunas and steam rooms until it has settled.
- ✓ Do not use harsh skincare products, such as retinoids and exfoliants, until advised to do so.
- ✓ Follow your practitioner's or therapist's recommended skincare routine to support healing and enhance results.
- ✓ Contact your practitioner if you experience any unwanted side-effects.

Following your post-treatment instructions will result in a lower risk of complications and better result.

Choosing your practitioner/therapist

Ensure you know the following information:

- ✓ Practitioner's or therapist's full name
- ✓ Practitioner's or therapist's qualification
- ✓ Practitioner's or therapist's contact details (address, telephone number, and email)
- ✓ An emergency contact number in case a complication occurs.



Practitioners and therapist are legally required to have indemnity insurance in place for all the treatments they perform, and you can ask for them to provide evidence of this prior to commencing any procedure.

If you are not happy with your treatment outcome, you should attempt to resolve this with your treating practitioner or therapist in the first instance. If you need to see a different practitioner or therapist, you are entitled to receive a copy of your treatment record outlining the device used and settings, as well as any photographs that were taken, to have your concerns addressed safely. However, remedial treatment may not always be possible and sometimes it may be necessary to allow time for the treatment to wear off.

ACE Group World was formed to help improve patient safety in medical aesthetics by producing evidence-based, peer-reviewed guidelines for the management of a wide variety of complications in non-surgical aesthetic practice. We also aim to provide help and advice for practitioners who encounter a problem.

ACE Group World hosts a forum for practitioners to share advice on the management of complications. It also provides an Emergency Helpline, email support and on-line educational modules for its members. The members also benefit from workshops, conferences, and a faculty of national and international experts.

ACE Group World works with aesthetic organisations, professional bodies, media, pharmaceutical companies, patient groups, insurers and regulatory bodies to provide professional advice and benefit for its members. Our mission is to improve regulation in the medical aesthetics sector and to provide ACE Group World Patient Information Leaflets to inform the public about what to expect and what questions to ask. We constantly strive to raise standards and improve patient safety.

Check your practitioner is a member of ACE Group World:

uk.acegroup.online

