

1. How long does the therapy last?

The duration of therapy depends on the type, stress and history of the wound. An experienced wound care professional can see whether a wound is responding to the therapy after just 2-3 applications. Signs of this are, for example

- Better blood circulation in the wound
- Odor reduction
- Decrease in wound secretion
- Wound surface reduction
- Less pain when changing the dressing.

Regular follow-up treatment may be necessary for wounds such as amputation stumps that are exposed to heavy mechanical stress.

2. How long does a treatment take?

A wound area must be treated for at least 1 minute. Heavily contaminated wounds can be treated for up to 3 minutes per area. The duration also depends on the size of the wound. A maximum area of 70 – 78 cm² can be treated with one spacer, for which the plasma care must be applied 6 times for one minute, i.e. the treatment takes a total of 6 minutes.

3. Which bacteria does cold plasma affect?

Plasma can be used against all bacteria and also MRG. The wound care provider can see whether the wound reacts to the treatment after 2-3 treatments.

4. For which wounds is cold plasma used?

Cold plasma can be used on all wounds. The treatment of heavily bleeding wounds and wounds where the coatings cannot or must not be removed is not recommended, but would be possible in principle. [Link to treatment spectrum.](#)

5. Does cold plasma help with all wounds?

In principle, any wound can be treated with plasma. However, not every wound responds equally well to treatment. Which wounds benefit from the treatment and which do not depends on many factors, some of which have not yet been researched.

6. Can cold plasma also be used postoperatively?

As a general rule, the larger the surgical wound and the longer the procedure, the greater the risk of postoperative wound healing disorders.

Postoperative wounds respond excellently to cold plasma. In the case of postoperative wound healing disorders, treatment with cold plasma ensures healthy wound healing.

They heal significantly faster. This has been observed in particular in wounds in problematic areas that are exposed to high levels of stress and contamination.

7. Can cold plasma be used intraoperatively?

The plasma care® is not approved for intraoperative use.

8. Is cold plasma dangerous for human cells?

If the treatment time of 3 minutes of a wound area is not exceeded, plasma does not affect healthy human cells.

Justification:

During treatment, the cell is exposed to oxidative stress. This stress is a positive stress that primarily stimulates the cell to reproduce and thus leads to cell renewal. However, as the stress is short-term, it is not dangerous. No long-term free radicals are produced.

9. Is the treatment painful?

The treatment itself is not perceived as painful by most patients.

The pre-treatment (dressing change, wound toilet) is often painful. Patients have reported that this pain even subsides after a few cold plasma treatments.

Wound healing pain: There are very rare cases in which patients complain of pain after treatment. This pain is due to the activation of wound healing. The renewed activity of the wound is sometimes perceived as pain. However, the feeling usually subsides after a few treatments.

10. A patient has two wounds, can I treat them with a spacer?

For wounds on different parts of the body (e.g. arm and leg): “No”, as it is then possible for germs to migrate from one wound to the other. If the same spacer were used, cross-contamination would occur.

For neighboring wounds on the same part of the body: “Yes”, because the bacteria and germs spread to both wounds anyway.

11. Why is the spacer a disposable product?

The device has been developed for inpatient and outpatient wound treatment, i.e. even if different users treat different patients with the device at different times and on different wards, it must be 100% ensured that the spacer is safe and sterile; bacteria and germs must not be transferred from one patient to another under any circumstances. This can only be ensured 100% by using a disposable item.

12. Does the spacer have to be disposed of in the infection waste?

Generally no. Please observe the hygiene guidelines that apply to you.

13. How do I treat hard-to-reach areas?

If possible, the plasma care® should be placed directly on the wound (if pain-free) so that a so-called “plasma space” with a high plasma concentration can be created in the spacer.

In anatomically difficult areas (fingers/toes etc.), “enclose” the plasma care® spacer with your fingers or with the aid of compresses

It is essential that deep pockets and fistula tracts are tamponaded and kept open to prevent overgranulation. If this is not possible, cold plasma treatment should be avoided.

14. How long does the battery last?

Around 120 treatments are possible with a fully charged battery. As the battery can discharge when not in use or when exposed to cold, we recommend placing the device in the charging station in the evening.

15. How often does the appliance need to be cleaned?

A superficial wipe disinfection should be carried out after each patient. The plasma source should only be cleaned if there is visible contamination.

A 3-minute movie is available to guide you through the cleaning process.