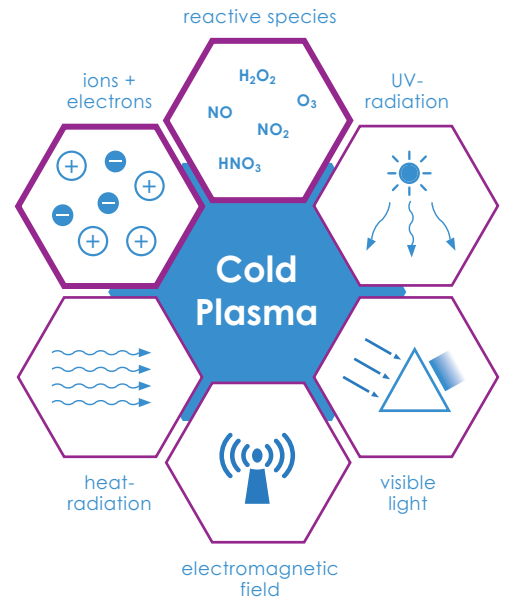


Cold plasma therapy in wound treatment

mobile. simple. effective.

The **plasma care®** is a handy, mobile medical device for the treatment of either acute, as well as infected and chronic wounds.

It uses cold atmospheric plasma for the inactivation of microorganisms – including multi-resistant pathogens – and activation of wound healing.



The cold plasma therapy with the **plasma care®** device is the result of 12 years of research by the Max Planck Institute. Numerous clinical case studies have proven its effectiveness over the past 4 years. Please ask for our documented case studies.

Cold plasma works with reactive species

Plasma is the fourth state of matter generated by adding energy to a gas.

For wound treatment, cold plasma (< 40 C°) is generated from the ambient air working essentially with reactive oxygen and nitrogen species, such as O₃, H₂O₂, and NO₂, as therapeutic components.

The 2-fold effect of cold plasma

The active components (reactive species) generated by cold atmospheric plasma can interact with cells in different ways. The effects are endogenous physical or chemical processes.

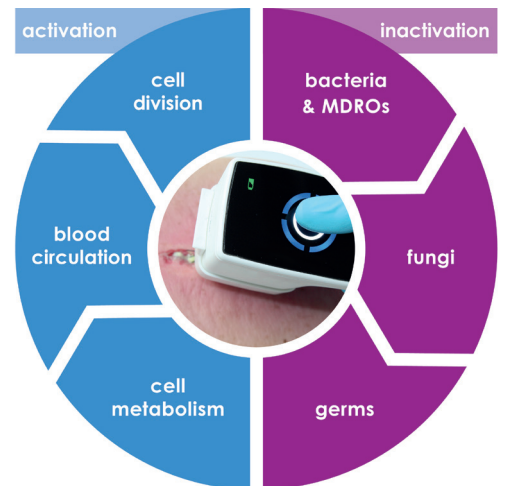
1. Stimulation of wound healing

The reactive species interact with healthy human cells. Intracellular processes that promote wound healing are stimulated. The release of cytokines triggers growth of cells and stimulation of angiogenesis improves blood flow to wound and its environment.

2. Bactericidal effect

In prokaryotic cells these processes result in a destruction of their cellular macromolecules, including DNA, thus inactivating the bacteria, fungi or germs.

Antibiotic resistance or allergies become insignificant.



When to use plasma care®?

- All types of **chronic wounds** – the sooner the better.
- **Acute wounds** – to promote wound healing
- **Surgical wounds** – to prevent wound healing disorders
- Entry ports, such as CVC, IV-lines, drainages, urinary catheters (suprapubic)

Due to its physical effect, cold plasma therapy can in general be applied to all types of wounds, i.e. it is effective independent from the cause of the wound development.



SAFE - NO TISSUE DAMAGE KNOWN



SUITABLE FOR PATIENTS WITH PACEMAKER



MOBILE USE AND EASY TO USE

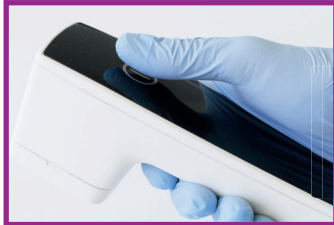


ACTIVATION OF WOUND HEALING

Treatment and device

Easy to use:

- **Sterile spacer** (single-use, disposable)
- **Quick treatment** (1 – 3 min. per wound area)
- **Treatment area per spacer up to 73 cm²**
- **Safe:** Consistent application of constant plasma cocktail due to defined spacer volume.
- **Device stops automatically:** no overdose or misuse



1. Switch on the device via touch button



2. Attach spacer to the device



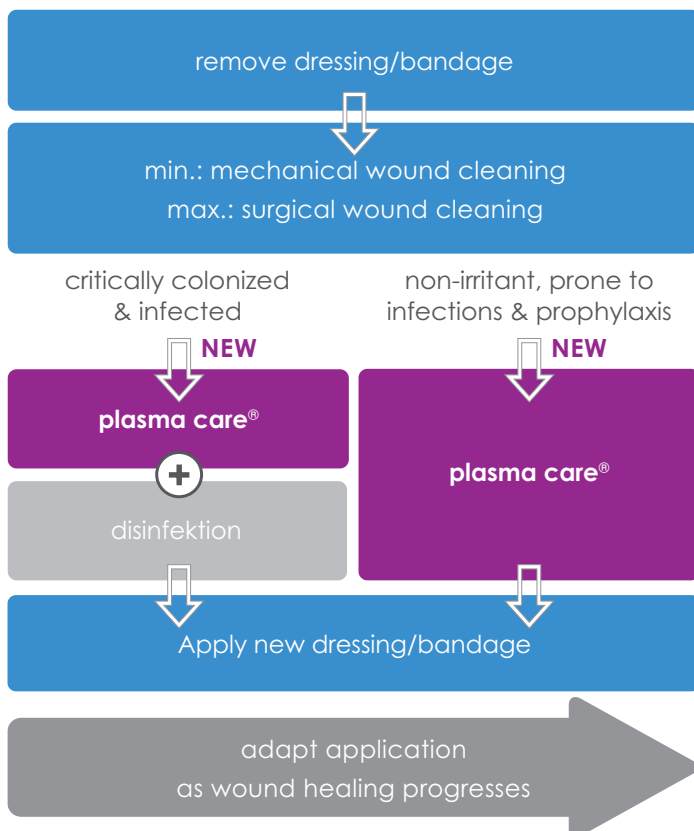
3. Place spacer-equipped device on the wound



4. Start treatment by pushing touch button

The wound treatment process

The **plasma care®** can be easily integrated into your standard wound treatment process.



The device

Weight	610 g
Measures	16 cm x 5 cm
Battery charging time	10 – 12 h
Operating time	max. 4 – 6 h, 240 – 360 applications
Spacer	one sterile spacer per patient/treatment
Treatment duration	60 sec. per treatment area (4x4cm), larger wounds: 6 intervals of 60 sec each are possible per spacer (= max. wound size up to 73 cm ²).
Frequency of use	2 – 3 times/week