

PetCellpen®

cordless
mobile

Direct cold plasma therapy for
small animal medicine



PetCellpen®

Selected indications

Dermatology

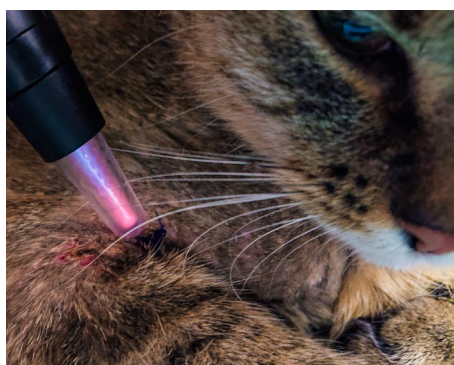
- Acne
- Decubitus ulcer
- Dermatophytosis
- Scars
- Otitis externa
- Pyoderma
- Hotspots
- Problems with wound healing
- Burns

Orthopaedics

- Arthritis
- Distensions
- Hyperextension syndrome (carpus)
- Myositis
- Spondylosis of the lumbar spine
- Tendinitis

Physiotherapy

- Muscle spasms of the spine
- Trigger points
- Post-operative healing
- Hematomas
- Muscle relaxation



The PetCellpen® and its functions



Place the interchangeable electrode of your choice directly on the patient's skin to transmit the electrical impulses. No need for shearing or use of a contact agent.

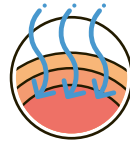
Why the PetCellpen[®] is ideal for your veterinary practice

- The pen is easily manageable, easy to use and requires no auxiliary materials.
- Thanks to application-specific electrodes and variable settings, the range of its uses is very broad.
- Interruption-free work thanks to a long operating time and replaceable battery.
- The electrodes' small treatment surfaces are perfectly suited for small animals.
- With its numerous indications, the pen is ideal for day-to-day practice.
- Because it supports you efficiently in the fight against multiresistant microorganisms and can therefore be used for every wound and all infectious skin diseases.



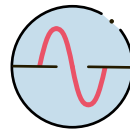
The Impulse/s setting determines the pulse frequency from 10 to 100 Hz according to the indication and recommendations in the Therapy Guide.

The rotary "Amplitude" control is used to switch the device on and off. Turning the control determines the device's output power and consequently the intensity of the therapy.



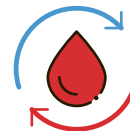
Principle of action: direct cold atmospheric plasma (dCAP)

The cordless pen successfully generates a high voltage from the power of a small 3,7-volt battery to produce therapeutic dCAP. The plasma current can be directed precisely onto the skin surface to be treated with the help of variously shaped electrodes. The medical effect of dCAP has been proven in numerous studies.



Cell activity stimulation: promotes healing and inhibits inflammation

dCAP directly stimulates the body's cells and changes their behaviour. Healing processes are promoted through increased cell proliferation, inflammation is reduced by influencing the formation of cellular mediators, and the immune system is boosted. Tissue remodelling is improved.



Promotion of blood circulation leads to faster healing

dCAP has an immediate and lasting hyperaemic effect on the treated tissue. The formation of new blood vessels is also stimulated. This improves the metabolism and accelerates healing.



Antimicrobial and anti-parasitic effect

The reactive species of dCAP, which contains ozone, hydrogen peroxide and other oxygen and nitrogen radicals, have a powerful antiseptic effect that does not encounter any resistance problems and is therefore effective against multiresistant microorganisms (MRSA). dCAP also has a fungicidal effect and has been shown to impair parasites (lice, demodex).

Available steel core electrode



Ear
Art. CP-100.260
 Optimised for use in the external auditory canal for the treatment of otitis externa and other dermatological indications. Can also be used in perforated eardrums

PetCellpen® Set Art. PET-100



- Transport Case
- PetCellpen®
- Battery charging station with power adapter cable
- 2 rechargeable batteries
- Space for 5 electrodes
- Quick Guide PetCellpen®
- Therapy Guide PetCellpen®

Technical data

- Medical plasma source in accordance with DIN SPEC 91315, tested by INP (Leibniz-Institut für Plasmaforschung und Technologie e.V.)
- Cordless high-voltage generator for generating cold atmospheric plasma (CAP)
- Plasma is generated through direct dielectric barrier discharge (dDBD)
- Antibacterial device coating
- Battery insert on the back of the unit, exchangeable

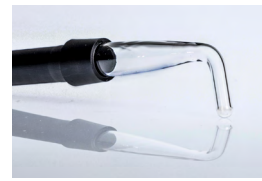
PetCell® is a Business Unit of

ActivCell
 Group

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 5600 Lenzburg, Switzerland

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www.petcell.ch

Available glass electrodes



Curved
Art. CP-100.210
 Intense, spot-focused impact with improved depth of penetration, especially for orthopaedics



Straight
Art. CP-100.220
 Universal use, spot-focused or wide-area (lateral) application, dermatology and orthopaedics



Comb
Art. CP-100.230
 Especially suitable for longer coats and for multi-point use: muscles, back conditions



Disc
Art. CP-100.240
 Especially for dermatology, wide-area, gentler effect, for sensitive, painful areas



2-year
 guarantee



Made in
 Switzerland

| | |
|-----------------------------------|--------------------------|
| Length (without electrode) | 24,5 cm |
| Weight (without electrode) | 200 g |
| Pulse range | 10 – 100 Hz |
| Maximum output voltage | 25 kVAC |
| Maximum output power | 140 mW/cm ² * |
| Battery runtime | 30 – 60 min |
| Battery charging time | 90 min |

* straight electrode



Ear electrode for the PetCellpen®



Art. CP-100.260

- Innovative, unbreakable technology: synthetic-coated steel core
- Use for otitis externa¹ and other dermatological indications
- Can also be used for perforated eardrums
- Replaces daily local treatment

Treatment Otitis externa

- 2× weekly
- Pulse frequency: 100 Hz
- Amplitude: 6
- 2 minutes

This ear electrode revolutionises otitis externa therapy



Reference:

¹ Bakir A, Nett-Mettler CS, Ulutas B. Therapeutic efficacy of cold atmospheric plasma in four golden retrievers with acute otitis externa. Vet Dermatol. 2024 Dec;35(6):745-749. PMID: 39140276. doi: 10.1111/vde.13287



2-year
guarantee



Made in
Switzerland

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Group

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www.activcellgroup.com
www.petcell.ch

Cold plasma therapy: effective for all infected skin diseases and wounds



Antiseptic effect of cold plasma therapy:

- Formation of reactive species in tissue with direct cold plasma source²
- Effective and fast oxidative disinfection by the reactive species²
- «Ion etching» with pore formation up to denaturation of the cell membran³
- Non-specific mechanism of action is unaffected by multidrug resistance⁴
- Biofilms are degraded⁵
- Deep action at least into hair follicles⁶

The PetCellpen® was tested at the Leibniz-Institute for Plasma Science and Technology e.V. (INP) in Germany according DIN Spec 91315:

- Defines the requirements for medical plasma sources
- Physical performance testing (patient leakage current, temperature, radiation, ozone)
- Testing of chemical specifications (pH value, hydrogen peroxide, nitrates/nitrite)
- Biological effects (antiseptis, cytotoxicity)

Inoculated untreated (0 min) and plasma-treated agar plates (for one example); from left to right – 0 min (untreated control) to 5 min plasma treatment time with the plasma source EquCellpen for the respective microorganism (*Staphylococcus aureus* DSM 799/ATCC 6538, *Staphylococcus epidermidis* DSM 20044/ATCC 14990, *Escherichia coli* K-12 DSM 11250/NCTC 10538, *Pseudomonas aeruginosa* DSM 50071/ATCC 10145, *Candida albicans* DSM 1386/ATCC 10321).

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Antiseptic spectrum of cold plasma therapy:

- Bacteria⁷
- Viruses⁸
- Prions⁹
- Parasites¹⁰
- Fungi¹¹

In vitro testing of the antiseptic effect of the PetCellpen® (DIN Spec 91315):

