An easy-to-apply spray that assists in wound healing and protects from microbial contamination

Hyaluronic Acid and Metallic Silver

DUAL ACTION TO PREVENT MICROBIAL CONTAMINATION AND ASSIST WOUND HEALING

HYAL® Control Spray
Assisted healing and protection from microbial contamination

Hyaluronic acid\(^1\)
- Creates a moist environment for optimal tissue repair based on its high water-binding capacity\(^1\)
- Regulates cell adhesion, growth, and migration\(^2\)
- Increases keratinocyte and fibroblast proliferation and promotes angiogenesis\(^2\)
- Well-established activity supported by experimental and clinical studies\(^2\)
- Mediates production of the antimicrobial peptide beta-defensin\(^2\) by wound keratinocytes\(^3\)

Metallic silver\(^1\)
- Release of Ag\(^+\) ions\(^1\)
- Prevents additional microbial contamination\(^1\)
- Broad spectrum of antimicrobial activity including antibiotic-resistant bacteria and fungi\(^1,2\)
- Well tolerated\(^1\)
Silver provides an effective barrier to microbial penetration in acute and chronic wounds.

**SCIENTIFICALLY demonstrated**

**INDICATIONS**: for temporary local management of non-infected cutaneous (i.e. abrasions, excoriation, fissured skin, cuts, minor surgical wounds, localised first and second degree burns) lesions and to provide a moist environment protected against exogenous additional bacterial sources.

1. **Hyaluronic acid**
2. **Metallic silver**

### **Hyalo4® Control Spray**

Spray powder for local use containing:

- **0.2% hyaluronic acid**
- **2% metallic silver**

**Bacteria**:

- **Pseudomonas aeruginosa**
- **Staphilococcus aureus**
- **Escherichia coli**
- **Klebsiella**
- **Candida albicans**
- **MRSA** (Methicillin-resistant Staphilococcus aureus)
- **VRE** (Vancomycin-resistant Enterococcus)
Hyalogic® Control Spray: documented efficacy

Clinical study in 54 patients with non-healing wounds of different etiology

The study was carried out in 54 patients with chronic (n=30) and superficial traumatic wounds (n=24). The spray formulation of hyaluronic acid and silver was applied for 3-7 days in patients with chronic wounds and for 3 days in those with acute lesions.

- No signs of infection during the observation period
- No relapse occurred by 6 months after end of study
- Easy to apply and remove independently of wound size and conformation
- Favorable compliance

PERCENTAGE OF HEALED CHRONIC LESIONS
Improves the clinical signs of bacterial infection

Woman, 85-years-old, with hypertension, chronic venous insufficiency (CVI) and a history of recurrent leg ulcers. Daily application under compressive bandage for 28 days.

RESULTS

Baseline
The patient showed an ulcer of 13.5 cm² (stage C6 CEAP) characterized by a fibrinous background, cellulitis, lymphangitis, pain, minimal odor, and a moderate perilesional erythema. Suspect of heavy bacterial contamination.

Final observation time (28 days)
Healing of the lesion with a high degree of patient satisfaction (VAS= 95).

Key points

Hyalofine® Control Spray is an effective solution for local management of cutaneous lesions combining the properties of hyaluronic acid and metallic silver

- Powerful antibacterial action
- Easy to apply and remove
- Promotes healing
- Favorable compliance
**Product description**

Hyalo4® Control Spray is a topical spray powder dressing containing hyaluronic acid sodium salt and metallic silver, for preventing microbial contamination in the wound environment. The hyaluronic acid allows the rapid diffusion of water soluble molecules and cell migration. The medicinal substance metallic silver prevents microbial contamination of dressing, and keeps the wound environment free from other hexogen bacteria sources. The hyaluronic acid and silver are joined to a matrix with absorbent properties (light kaolin and silica dioxide).

**Indications**

Hyalo4® Control Spray is indicated for local, management of non infected cutaneous lesions e.g. abrasions, excoriations, fissured skin, cuts, minor surgical wounds, localised first and second degree burns and provide a moist environment protected against additional hexogen bacterial sources.

**Advantages**

- Dual action: control of bacterial load and promotion of healing.
- Metallic silver: prevents bacterial contamination and preserves against hexogen bacteria.
- Hyaluronic acid: creates the ideal conditions for fast healing.
- Light kaolin and silica dioxide: matrix for essudates control.
- Easy to apply.
- Highly efficient dispenser.

**Mechanism of action**

Hyaluronic acid is a biointeractive molecule: during the healing process hyaluronic acid enables the rapid diffusion of the solutes and cell migration. Given its high hygroscopic level, hyaluronic acid guarantees the essential moist environment for optimal tissue repair. Metallic silver has very high antimicrobial properties, in a spectrum that includes very common microorganisms in skin wounds: S. aureus, S. aureus methicillin-resistant, P. aeruginosa, fungi (candida albicans), anaerobic bacteria. Thanks to its multiple action mechanism, it helps to prevent the risk of microbial contamination.

**Composition**

- Hyaluronic acid, sodium salt (0.2%)
- Metallic silver (2.0%)
- Light kaolin, silica dioxide, and n-butane as propellant.

**Product description Format Articles per pack**

<table>
<thead>
<tr>
<th>Product description</th>
<th>Format</th>
<th>Articles per pack</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hyalo4® Control Spray</td>
<td>125 ml spray can</td>
<td>1</td>
</tr>
<tr>
<td>Hyalo4® Control Spray</td>
<td>50 ml spray can</td>
<td>1</td>
</tr>
</tbody>
</table>

**REFERENCES:**

1. **Hyalo4® Control Spray.** Instructions for use. Rev 4.