

Treatment for  
infected wounds  
V.A.C. Instill® Therapy

# V.A.C. Instill® Therapy System

A combined therapeutic solution  
for better wound care

**V.A.C.** instill®



# V.A.C. Instill® Therapy System

## Manage infected wounds while having all benefits of V.A.C.® Therapy

*“Surgical wound infections date back to the beginnings of surgery itself, and are among the most challenging cases to manage.”<sup>1</sup>*

V.A.C. Instill® is an innovative system that combines the benefits of V.A.C.® Therapy with instillation therapy to help promote wound healing. Many acute, chronic and infected wounds can benefit from the automated delivery and drainage of solutions.

### V.A.C. Instill® Therapy System offers a dual therapy combining the benefits of V.A.C.® Therapy with the benefits of instillation therapy:

- Automatic delivery of instillation fluid into the infected wound
- Equal distribution of instillation fluid throughout the V.A.C. Instill® WhiteFoam in the infected wound
- Intermittent removal of used instillation fluid supports the cleaning and drainage of the wound bed and the removal of infectious material<sup>2, 3, 4, 5</sup>
- Provides a closed moist wound healing environment<sup>6</sup>

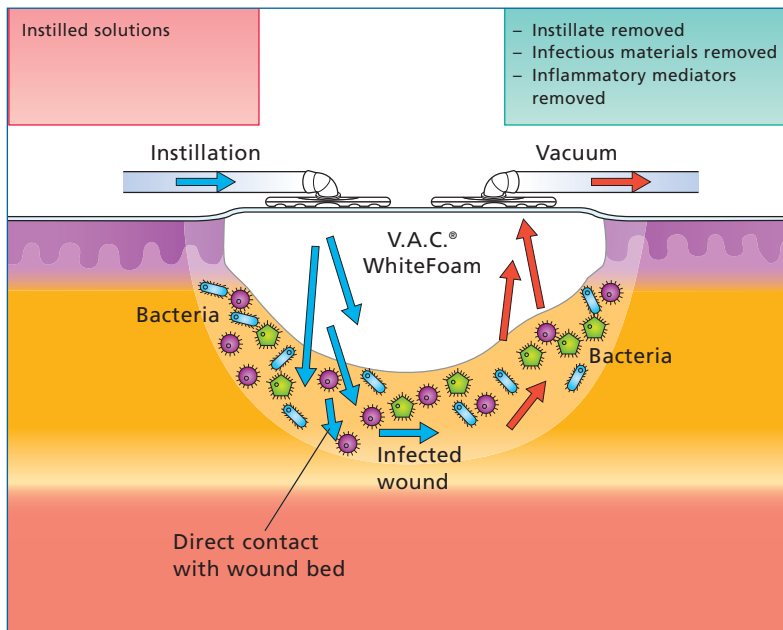
### V.A.C. Instill® can be used with a wide range of topical solutions, including\*:

- Topical cleansers / carriers
- Topical antibiotics
- Topical antifungals
- Topical antiseptics
- Topical anesthetics

\* Intended for use with aqueous solutions in a physiological pH range. Contraindicated for use with hydrogen peroxide and alcohol based solutions. Do not introduce solutions in conflict with manufacturers instructions for use.

1 Furniss D., Banwell P.E., Fleischmann W., Surgical Wound Infection: The Role of Topical Negative Pressure Therapy, Oxford Wound Healing Society, S. 22, 2005  
 2 Bernstein BH, Tam H. 2005. Combination of subatmospheric pressure dressing and gravity feed antibiotic instillation in the treatment of post-surgical diabetic foot wound: a case series. Wounds 17 (2): 37–48  
 3 Fleischmann W., Russ M., Stampehl M. 1998. Die Vakuumversiegelung als Trägersystem für eine gezielte lokale Medikamentenapplikation bei Wundinfektionen. Unfallchirurgie 101:649–654  
 4 Wolvos T. 2004. Wound instillation – the next step in negative pressure wound therapy. Lessons learned from initial experiences. Ostomy Wound Manage 50: 56–66  
 5 Moch D., Fleischmann W., Westhauser A. 1998. [Instillation Vacuum sealing – report of initial experiences]. Langenbecks Arch Chir Suppl Kongressbd 115:1197–1199  
 6 Charles K. Field et al. Overview of Wound Healing in a Moist Environment. American Journal of Surgery, 1994

# Synergetic effects offered in one therapy



- Fluids can be instilled via the solution delivery tubing or a pad. Instillation times can be programmed (1 second to 2 minutes)
- Uniform fluid distribution over the wound bed due to complete contact of the dressing with the infected area, fluid can perform its mode of action
- Desired hold time can be programmed to optimize dwell time (1 second to 1 hour)
- During the vacuum phase, infectious materials and wound exudates can be removed
- Vacuum time can be programmed (5 minutes to 12 hours)
- Cycle of Instillation, Hold and Vacuum will repeat automatically

# V.A.C. Instill® Therapy System

## Convenient for caregivers

### V.A.C. Instill® benefits

- Automatic delivery of solution of your choice, in direct contact with wound bed
- Cleansing and medical treatment of wound beds with instillation fluid of your choice
- Programmed transport of
  - Used instillation fluid
  - Infectious material
  - Wound exudate
- Free programmable interval times for
  - Instillation phase
  - Hold phase
  - Vacuum phase



# Case report

## Introduction

A male patient was admitted to hospital with a severely infected knee prosthesis. The infection, *Staphylococcus Aureus*, was confirmed by tissue swap. Instead of removing the prosthesis, V.A.C. Instill® Therapy was selected to treat the infection to try save the prosthesis. The advantage of the V.A.C. Instill® Therapy is that it combines local treatment of infection with the advantages of standard V.A.C.® Therapy.

- 1 A patient with a severely infected knee, after joint replacement surgery, was selected for treatment with V.A.C. Instill® Therapy.\*
- 2 After thorough debridement the instillation tube was positioned in the depth of the wound.
- 3 Hereafter the V.A.C. Instill® WhiteFoam Dressing with embedded tubing was positioned in the knee, over the positioned instillation tube.
- 4 In this case, two V.A.C. Instill® WhiteFoam Dressings were required due to the size of the wound and infection. The embedded tubing from the dressings was connected to the vacuum part of the V.A.C. Instill® Therapy unit. The instillation tube was connected to the instillation part of the V.A.C. Instill® Therapy unit.
- 5 The wound was instilled with an antiseptic. The instillation time was selected at 15 seconds, the hold time (time agent is in contact with tissue) at 20 minutes and the vacuum time at 60 minutes. This cycle automatically repeats without manual interruption.
- 6 The patient was treated for 6 days and two dressing changes were required. After 6 days the wound swaps were negative for bacterial contamination.

\* Recommendations by Dr. Fleischmann



Clinical pictures by courtesy of Dr. Fleischmann

## Accessories for the treatment of deep wounds



M6275414/5

### V.A.C. Instill® WhiteFoam dressing (10 x 15 cm)

With integrated tubes and a separate instillation tube. The integrated tubes are to be connected with the canister in the therapy unit via the T.R.A.C.® extension tube.

Place the included instillation tube deep in the wound and close to the source of infection, in order to optimize the effect of the fluid instilled. (M6275414/5)



M6275415/5

### V.A.C. Instill® extension tube with 2-way-connector

T.R.A.C.® extension tube with 2-way-connector, which fits with the integrated tubes of the V.A.C. Instill® WhiteFoam.

Position the T.R.A.C.® extension tube in the V.A.C. Instill® Therapy unit vacuum clamp. (M6275415/5)



M6275416/5

### V.A.C. Instill® extension tube 4-way-connector

T.R.A.C.® extension tube with 4-way-connector, to be used when you need to put more than one V.A.C. Instill® WhiteFoam dressing into large wounds.

Position the T.R.A.C.® extension tube in the V.A.C. Instill® Therapy unit vacuum clamp. (M6275416/5)



M6275405/5

### V.A.C. Instill® instillation tube

Instillation tube (embedded)/fluid administration set, which, with its soft part, is placed in the V.A.C. Instill® Therapy unit instillation clamp.

Insert the pin of the fluid administration set into the fluid container and connect the opposite end to the additional instillation tube. (M6275405/5)



M6275420/5

### V.A.C. Instill® Kit for deep wounds

All components, which you need for the instillation therapy of deep wounds, are also available as a kit (without canister). (M6275420/5)

# Accessories for the treatment of superficial wounds

## Instillation tube

Instillation tube/fluid administration set, which is to be placed in the V.A.C. Instill® Therapy unit instillation clamp.

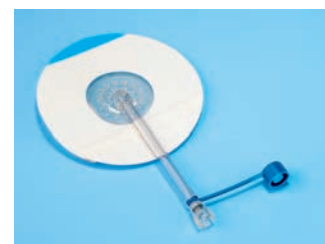
Insert the pin of the fluid administration set into the fluid container and connect the opposite end to the instillation pad.

## Instillation pad

With the instillation pad you can simply and quickly lead the instillation fluid into the foam, where it will be optimally distributed over the wound bed.

## V.A.C. Instill® Set for superficial wounds

Both, the fluid administration set and the instillation pad, are available as V.A.C. Instill® Irrigation Set (M6275413/5). For the instillation therapy of superficial wounds, V.A.C.® GranuFoam® or V.A.C.® WhiteFoam, as well as V.A.C.® Drape will be needed. If you use the V.A.C. Instill® WhiteFoam, you also need the 2-way-connector (page 6, M6275415).



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# Additional accessories for the V.A.C. Instill® Therapy

V.A.C.® WhiteFoam



M6275034/5

V.A.C.® GranuFoam®



M6275053/5

V.A.C.® Drape



M6275009/10

Canister



M6275063/5

Please refer to the relevant price list for the different sizes of V.A.C.® WhiteFoam and V.A.C.® GranuFoam®.

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**Indications for use:**

The V.A.C. Instill® System is indicated for patients who would benefit from V.A.C.® Therapy coupled with controlled delivery and drainage of topical wound treatment solutions and suspensions over the wound bed. This includes patients who would benefit from removal of infectious material or other fluids from wounds under the influence of continuous negative pressures. Types of wounds for which V.A.C.® Therapy has been indicated include:

**chronic, acute, traumatic, and dehisced wounds, diabetic ulcers, pressure ulcers, flaps, grafts and partial thickness burns.**

**Contraindications:**

The V.A.C. Instill® System has known contraindications for patients with:

- **Malignancy** in the wound
- Untreated **osteomyelitis**

*Note: See Precautions Section regarding use of V.A.C.® Therapy for treating osteomyelitis.*

- Non-enteric and unexplored **fistulas**
- Necrotic tissue with **eschar** present

*Note: After debridement of necrotic tissue and complete removal of eschar, V.A.C.® Therapy may be used.*

Do not place V.A.C.® GranuFoam® and V.A.C.® WhiteFoam Dressings over **exposed blood vessels or organs**.

V.A.C.® dressing systems are contraindicated for **hydrogen peroxide** and solutions which are **alcohol based** or contain alcohol.

Do not deliver fluids to the **thoracic cavity** due to the potential risk of changes to core body temperature.

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