

REDUCED WOUND TISSUE DISRUPTION

SILVERCEL™ NON-ADHERENT Dressing *VS* AQUACEL® Ag Dressing (IN VIVO)

In an *in-vivo* study on porcine exudating partial-thickness wounds, SILVERCEL™ NON-ADHERENT Dressing was compared with AQUACEL® Ag.

Each dressing was compared in 8 replicate wounds. The wounds were secondarily dressed with an adhesive film dressing, and a protective gauze pad. Dressings and wound sites were assessed at days 2, 4 and 7, and the wound sites were harvested at day 7 for histological assessment.

On day 2 the AQUACEL® Ag dressing's structure was lost, forming a gel or disintegrating completely. It was assessed as difficult to remove in entirety, leaving high levels of debris. On day 4 the AQUACEL® Ag dressing formed a sticky gel and was again difficult to remove. On day 7 the AQUACEL® Ag dressing fibers dried into wound surface, requiring careful removal.

The SILVERCEL™ NON-ADHERENT Dressing retained its structure on day 2 and was lifted off easily in entirety. Also in days 4 and 7 SILVERCEL™ NON-ADHERENT's Dressing structure was retained throughout, and even in less hydrated conditions there was no adherence or fiber incorporation into the wounds - enabling rapid and clean removal.

After final dressing removal on day 7 there was significantly more:

- Debris in wounds treated with AQUACEL® Ag ($p < 0.001$)
- Foreign body reactions in AQUACEL® Ag treated wounds ($p = 0.007$)
- Tissue disruption in wounds treated with AQUACEL® Ag ($p < 0.001$)

Fig 1: Dressing removal



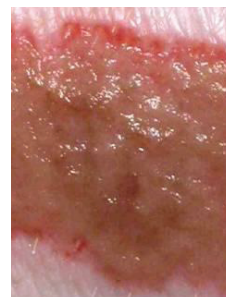
Day 2. AQUACEL® Ag



Day 2. SILVERCEL™ NON-ADHERENT Dressing

Fig 2: Wounds after saline cleaning

SILVERCEL™ NON ADHERENT Dressing treated wounds had less debris on wound surface:



AQUACEL® Ag Dressing



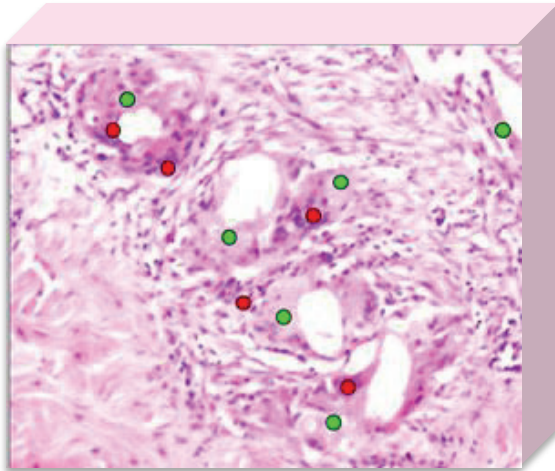
SILVERCEL™ NON-ADHERENT Dressing

Fig 3: Cross section histology sample from wound dressed with AQUACEL® Ag and SILVERCEL™ NON-ADHERENT Dressing

AQUACEL® Ag Dressing

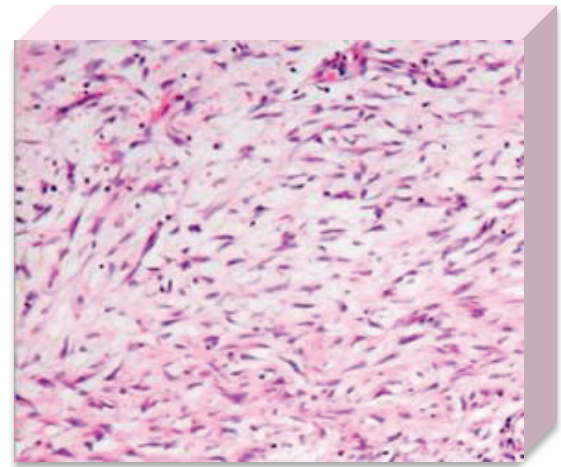
Caused substantial debris entrapment, tissue reactions and tissue disruption

● Dressing Derived Debris ● Foreign Body Reactions



SILVERCEL™ NON-ADHERENT Dressing

Minimal debris entrapment, tissue reactions and tissue disruption



Biopsy (100µm)

The *in vivo* observations and potential clinical benefits of: **SILVERCEL™ NON-ADHERENT Dressing vs. AQUACEL® Ag** can be summarized as follows:

Stage	Observations	Potential Clinical Benefits
Live	<ul style="list-style-type: none"> • Lower adherence to wound surface • Lower wound surface debris 	<ul style="list-style-type: none"> • Reduced damage to wound surface • Reduced patient discomfort • Faster dressing change
Histology	<ul style="list-style-type: none"> • Reduced debris in wound tissues • Reduced foreign body reactions • Reduced tissue disruption 	<ul style="list-style-type: none"> • Reduced inflammation • Less impediment to progression of repair

Hart J, Bell A. Evaluation of a novel non-adherent antimicrobial silver alginate/CMC wound dressing in the porcine partial-thickness excisional wound model. *Wounds UK* 2009.

To learn more about the benefits of SILVERCEL™ NON-ADHERENT Dressing contact your Acelity™ representative or visit acelity.com