Negative Pressure Wound Therapy System

The ONLY system to combine negative pressure wound therapy with Hydrofiber® Technology
User Guide

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Please refer to the Avelle™ Negative Pressure Wound Therapy System (NPWT) pack insert for complete instructions for use, pump operation and troubleshooting guide.
The Avelle™ Negative Pressure Wound Therapy (NPWT) System

NEGATIVE PRESSURE WOUND THERAPY DELIVERED IN A SIMPLE, DISCRETE, CANISTER-LESS SYSTEM:

- Easy to use
- Small and portable
- 30 day pump lifespan†
- Disposable pump
- Simple indicator lights (no audible alarms)
- Single button control
- Hydrofiber® dressing with gentle silicone border

† Battery change may be required during pump lifetime

Indications

THE AVELLE™ NPWT SYSTEM CAN BE USED ON A BROAD RANGE OF WOUND TYPES

- Surgically closed wounds
- Acute wounds
- Traumatic wounds
- Subacute and dehisced wounds
- Flaps and grafts
- Chronic wounds eg. pressure, venous or diabetic foot ulcer

Please refer to pack insert for full list of contraindications.
The Avelle™ NPWT System brings together Negative Pressure Wound Therapy with the power of Hydrofiber® Technology which is designed to help create a beneficial moist wound environment for healing.*

Hydrofiber® dressing core gels on contact with wound fluid locking in exudate and the bacteria it contains. Channels in the Hydrofiber® core are designed to allow fluid to move throughout the dressing ensuring exudate is locked away.*

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### The Avelle™ NPWT Pump

<table>
<thead>
<tr>
<th>Feature</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pocket sized</td>
<td>30 day lifespan†</td>
</tr>
<tr>
<td>Ergonomic design to fit body contours</td>
<td>Simple, one button operation</td>
</tr>
<tr>
<td>Battery-powered (lithium battery powered)</td>
<td>80mmHg negative pressure continuously applied</td>
</tr>
<tr>
<td>Indicator Lights:</td>
<td><img src="image1" alt="Operating correctly" />  <img src="image2" alt="Leak" />  <img src="image3" alt="Low battery" /></td>
</tr>
</tbody>
</table>

Pocket sized (lithium battery powered) 30 day lifespan† Battery change may be required during pump lifetime

*Battery change may be required during pump lifetime

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### The Avelle™ NPWT Dressing

UNIQUE HYDROFIBER® DRESSING DESIGNED TO DELIVER CANISTER-LESS NPWT†

Ergonomic design to fit body contours

Simple, one button operation

Battery-powered (lithium battery powered)

80mmHg negative pressure continuously applied

Indicator Lights:  
- ![Operating correctly](image1)
- ![Leak](image2)
- ![Low battery](image3)

Pocket sized 30 day lifespan†

Battery change may be required during pump lifetime

*As demonstrated in vitro
**The Avelle™ NPWT Dressing**

1. Gentle silicone adhesive border*, secures the dressing in place.
2. Stitch-bonded Hydrofiber® wound contact layer gels on contact with wound fluid and is designed to maintain dressing integrity on removal.¹*
3. Hydrofiber® core gels on contact with wound fluid locking in exudate and the bacteria it contains.²³⁴.⁵ Channels in the Hydrofiber® core are designed to allow fluid to move throughout the dressing ensuring exudate is locked away.⁶*
4. Foam layer is designed to aid distribution of negative pressure across the dressing.¹
5. Film layer provides a bacterial and viral barrier, is showerproof, and permits evaporation of exudate aiding overall fluid handling.⁷*
6. Port and soft tubing designed to create a vacuum and contour closely to the body.
7. The dressing tubing is fitted with a one way valve that enables the dressing to maintain vacuum for approximately 60 minutes after disconnection from the pump.⁸*

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**Application Guide**

10. Assessing Suitability
11. Wound Area Preparation
12. Dressing Selection
14. Applying the Fixation Strips
14. Connecting the Pump
15. Applying Negative Pressure
16. Changing the Dressing
17. Replacing the Batteries
18. Disposal and Recycling

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*As demonstrated in vitro
**Patient Suitability**

**CONSIDER THE FOLLOWING BEFORE APPLYING AVELLE™ NPWT SYSTEM**

1. **ENSURE THE PATIENT (AND/OR CARER)**
   - Is aware of their treatment goals and agrees with their wound management plan
   - Will be concordant with their therapy and are capable of operating the system
   - Can identify when to contact a health care professional
   - Has an appropriate care setting/home environment to support their therapy

   **Yes** → Continue to application of the Avelle™ NPWT System

   **No** → Consider Alternative Treatment

2. **ENSURE THE WOUND**
   - Has low to moderate levels of exudate
   - Is no greater than 2cms in depth
   - Can fit comfortably within the pad area allowing for the port to be positioned over intact skin
   - Is within the Avelle™ NPWT System indications
     - Surgically closed incision
     - Acute wound
     - Traumatic wound
     - Subacute and dehisced wound
     - Flap or graft
     - Chronic wound eg. Pressure, venous or diabetic foot ulcer

   **Yes** → Continue to application of the Avelle™ NPWT System

   **No** → Consider Alternative Treatment

**Wound Area Preparation**

To optimise dressing performance and to ensure a good seal is achieved, the following steps should be taken to maintain good contact between the peri-wound skin and the adhesive of adhesive border and fixation strips.

- Always ensure the peri-wound skin is dry.
- If required, remove excess hair from the peri-wound skin.
- Sensi-Care™ Sting Free Barrier can be used for more support, using in accordance with its IFU and allow skin to dry completely before application of dressing.

**WOUND FILLERS, CONTACT LAYERS & COMPRESSION**

- For shallow wounds (up to 0.5cm in depth) the Avelle™ NPWT System does not need to be used with a filler dressing.
- For deeper wounds, up to 2.0cm, a filler may be used such as AQUACEL® Extra™ or AQUACEL® dressings. If unavailable, standard gauze may be used. Fillers should be changed along with the Avelle™ dressing.
- The Avelle™ NPWT System can be used in conjunction with compression therapy if required. Care should be taken to ensure that the tubing is routed outside the bandage.
- Only fill to 80% when using AQUACEL® ribbon dressing, and leave 2.5cm outside the wound for easy removal.
When selecting the dressing, please ensure the following:

- The port should be positioned over intact skin
- The port should be positioned away from the wound
- For the wounds with surface area, the wound area is no more than 25% of pad area
- There is a 1 cm overlap of the pad on to the peri-wound skin

Refer to the Avelle™ NPWT System product swatch to aid dressing size selection.

<table>
<thead>
<tr>
<th>Incision Length</th>
<th>Avelle Dressing Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-16cm / 3.9-6.3in.</td>
<td>12 x 31cm</td>
</tr>
<tr>
<td>8-12cm / 3.1-4.7in.</td>
<td>12 x 31cm</td>
</tr>
<tr>
<td>6-8cm / 2.4-3.1in.</td>
<td>12 x 31cm</td>
</tr>
<tr>
<td>7-15cm / 2.8-5.9in.</td>
<td>12 x 31cm</td>
</tr>
<tr>
<td>20-25cm / 7.9-9.8in.</td>
<td>12 x 41cm</td>
</tr>
<tr>
<td>10-20cm / 3.9-7.9in.</td>
<td>12 x 31cm / 12 x 41cm</td>
</tr>
<tr>
<td>12cm / 4.7in.</td>
<td>12 x 21cm / 12 x 31cm</td>
</tr>
<tr>
<td>5-10cm / 2.0-3.9in.</td>
<td>12 x 21cm / 12 x 31cm</td>
</tr>
<tr>
<td>15-20cm / 5.9-7.8in.</td>
<td>12 x 31cm / 12 x 41cm</td>
</tr>
<tr>
<td>3-4cm / 1.2-1.6in.</td>
<td>12 x 21cm</td>
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</tbody>
</table>
**Applying the Fixation Strips**

Fixation strips should be used to ensure a seal is maintained over the wear time of the dressing.

- Apply fixation strips to all 4 sides of the dressing, for example, you could use ConvaTec Hydrocolloid Sealing Strips.
- Position the strip and remove the handles labelled 2. Finally remove the tip carrier 3. Ensure there is a 1cm overlap to all sides of the dressing. Take care not to rap the tubing.

**Connecting the Pump**

- Remove the pump, pump tubing and batteries from the tray. Securely join the tubing to the pump and the dressing by twisting together the connectors on the tubing. Take care not to over tighten.
- Insert 3x AAA batteries in the back of the pump & secure the battery cover. All indicator lights flash once to confirm batteries inserted correctly.
- The dressing can be connected directly to the pump if a shorter connection is preferred.

**Applying Negative Pressure**

- Press and hold the blue button on the front of the pump for 3 seconds to start. The dressing flattens when negative pressure has been achieved.
- The green 'ü' indicator light will start to flash to confirm the pump is working. It will take up to 30 seconds to establish negative pressure; the pump can be heard functioning during this time.
- The yellow '!' indicator light will illuminate if negative pressure is not established, or an air leak has been detected. Check the dressing seal and smooth out any creases. Check the tubing connections.
Changing the Dressing

- Maximum dressing wear time is 7 days
- A typical dressing wear time is 3-4 days

Turn off the pump by pressing and holding the blue button for 3 seconds.

Disconnect the pump tubing from the dressing before a dressing change.

- The dressing should be changed as clinically indicated. The dressing should also be changed if there are signs of leakage, pooling around the port, or loss of adhesion.
- Depending on wound exudate level or other clinical indicators, a more frequent dressing change may be required.

Replacing the Batteries

- The pump is designed to operate for 30 days from start of negative pressure therapy.
- Replacement batteries may be required within the 30 days. Lithium batteries are recommended.
- The yellow indicator light will illuminate when battery power is low.

When replacing the batteries ensure that the pump unit is switched off by pressing the blue button for 3 seconds. Change all batteries and press and hold the blue button for 3 seconds to reinitiate therapy.

- After 30 days all indicator lights will stop illuminating.
- When the pump has expired, pressing the blue button causes both yellow indicator lights to flash, the pump unit will not start.
- To change the pump, disconnect the pump tubing from the dressing by untwisting the connectors and connect the new pump and new tubing.

AVELLE™ NPWT System Accessories

- AVELLE™ NPWT SPARE TUBES
  - If during the course of treatment the tubing is damaged, spare tubes are available.
- AVELLE™ NPWT CARRY BAG
  - The Avelle™ NPWT pump should not be placed in direct contact with the skin for prolonged periods of time and should be positioned adjacent to the patient; ideally within the Avelle™ NPWT bag.
Disposal and Recycling

Dressings: Used dressings should be disposed of as clinical waste in accordance with local clinical protocols.

Batteries: Used batteries should be removed and recycled in accordance with local regulations and the Waste Electrical and Electronic Equipment directive.

Pumps: Where possible, pump units should be decontaminated and recycled. If contaminated with bodily fluids, wipe with a non-flammable antimicrobial wash. For additional guidance, the patient or carer should visit www.convatec.com or contact ConvaTec. If decontamination is not possible, pumps should be disposed of as clinical waste in accordance with local clinical guidelines.

Cleaning the Pump

Do not immerse the pump in fluids. To clean the pump unit’s outer surfaces, wipe with a soft, lint-free cloth dampened with mild soapy water. If contaminated with bodily fluids, wipe with a soft lint-free cloth dampened with a non-flammable antimicrobial wash.

The Avelle™ NPWT pump is MRI Unsafe and could affect or be affected by CT scanning/X-ray equipment. The Avelle™ NPWT pump must be disconnected from the dressing prior entry into MRI suite/X-ray suite/CT scanning suite. The dressing can remain in place.

Use the Avelle™ NPWT system with caution when located within close distance of electronic equipment such as metal detectors, Radio Frequency Identification Readers or anti-theft equipment as the potential of EMC interference in all settings cannot be eliminated.

• Ensure all tubing is free from kinks where possible as not to block the flow of negative pressure.

• Care should be taken at all times to ensure the tubing and pump are not trapped in clothing/bedding/bandages, in a position where they could cause pressure damage to the patient or placed where they could be a trip or strangulation hazard.

• Tubing should remain free of fluid at all times, if you see fluid of any kind in the tubing, replace immediately.

• Do not over tighten lure lock connectors when connecting the dressing, pump and pump extension tubing (if required).

• Do not cover the Avelle™ NPWT dressing with cling films and drapes as this would negatively impact dressing performance.

CAUTION

A light shower is possible. Prior to showering turn off the pump and disconnect the pump tubing from the dressing as shown. Re-connect the dressing and switch the pump back on to reinstate therapy as shown.

*As demonstrated in vitro
# Product Range and Order Codes

Order separate pump and dressing packs for flexibility.

## Pumps

<table>
<thead>
<tr>
<th></th>
<th>Size (cm)</th>
<th>Pack Size</th>
<th>Product Code</th>
<th>NHSSC Code</th>
<th>PIP Code</th>
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<tbody>
<tr>
<td>Avelle™ Pump</td>
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<td>421551</td>
<td>ELZ853</td>
<td>404-7866</td>
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## Accessories

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<th>PIP Code</th>
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## ConvaTec Hydrocolloid Sealing Strips

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<td>NA</td>
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## Dressings

<table>
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<th>Dressings</th>
<th>Size (cm)</th>
<th>Pack Size</th>
<th>Product Code</th>
<th>NHSSC Code</th>
<th>PIP Code</th>
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<tbody>
<tr>
<td>Avelle™ Dressing</td>
<td>12x21</td>
<td>5</td>
<td>421554</td>
<td>ELZ855</td>
<td>404-8013</td>
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<tr>
<td>Avelle™ Dressing</td>
<td>12x31</td>
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<td>421555</td>
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<tr>
<td>Avelle™ Dressing</td>
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<td>ELZ965</td>
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<td>Avelle™ Dressing</td>
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### Pump Operating and Troubleshooting

#### NORMAL OPERATION

<table>
<thead>
<tr>
<th>Visual Indicators</th>
<th>Status</th>
<th>Possible Cause(s)</th>
<th>Corrective Action &amp; Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>No indicator lights illuminated.</td>
<td>The pump unit is turned off.</td>
<td>If none of the indicator lights are flashing then press the blue button for 3 seconds. If the pump does not restart, and none of the indicator lights flash, then try changing the batteries.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>The pump unit has exceeded its life span.</td>
<td></td>
<td>Pressing the blue button causes both yellow indicator lights to flash, but the pump unit will not start. After the life span of 30 days, the pump unit will stop operating. A new pump will need to be applied.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>Green '✔' indicator light flashes.</td>
<td></td>
<td>Note that the pump will run intermittently to ensure the negative pressure is maintained at the wound. Creases or lumps in the dressing may cause the pump to run more frequently.</td>
</tr>
</tbody>
</table>

#### ALERTS

<table>
<thead>
<tr>
<th>Visual Indicators</th>
<th>Status</th>
<th>Possible Cause(s)</th>
<th>Corrective Action &amp; Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>Yellow '!' indicator light flashes.</td>
<td>There is an air leak and negative pressure cannot be applied. Note that kinks in the tubing will not cause the '!' lights to flash.</td>
<td>The pump will turn off after 10 seconds if the target negative pressure has not been established. Check for possible air leaks and smooth out any creases in the dressing adhesive border. Press the blue button for 3 seconds to initiate therapy. The green '✔' indicator light will flash as pressure is established.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>Green '✔' indicator light flashes Yellow battery indicator light flashes</td>
<td>The pump unit is operating correctly. Battery power is low.</td>
<td>Change the batteries within 24 hours.</td>
</tr>
<tr>
<td><img src="image" alt="Lights" /></td>
<td>Yellow '!' indicator light flashes. Green '✔' indicator light flashes Yellow battery indicator light flashes</td>
<td>There is an air leak and negative pressure cannot be applied. Battery power is low</td>
<td>Address air leak as detailed above. Change batteries within 24 hours.</td>
</tr>
</tbody>
</table>
Contacting ConvaTec

Please contact ConvaTec if you require assistance in setting up, using or maintaining the Avelle™ NPWT System, or if any unexpected alerts, faults or events are noted with the system.

To learn more about Avelle™ NPWT System or to arrange a visit from your ConvaTec representative, please call 0800 289 738 (UK) or 1800 946 938 (ROI).

Need More Information?

YOUR LOCAL ACCOUNT MANAGER IS:

Name

Phone

Email

REFERENCES