



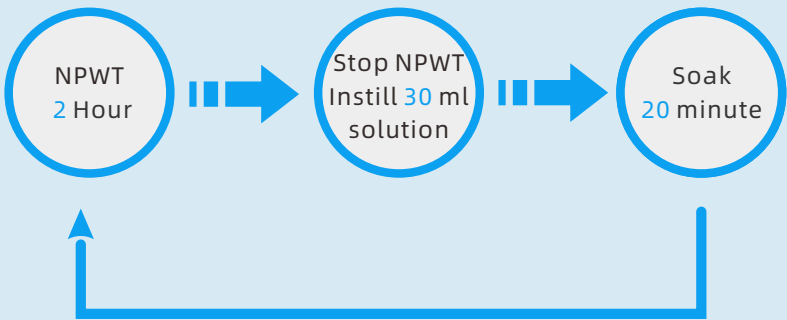
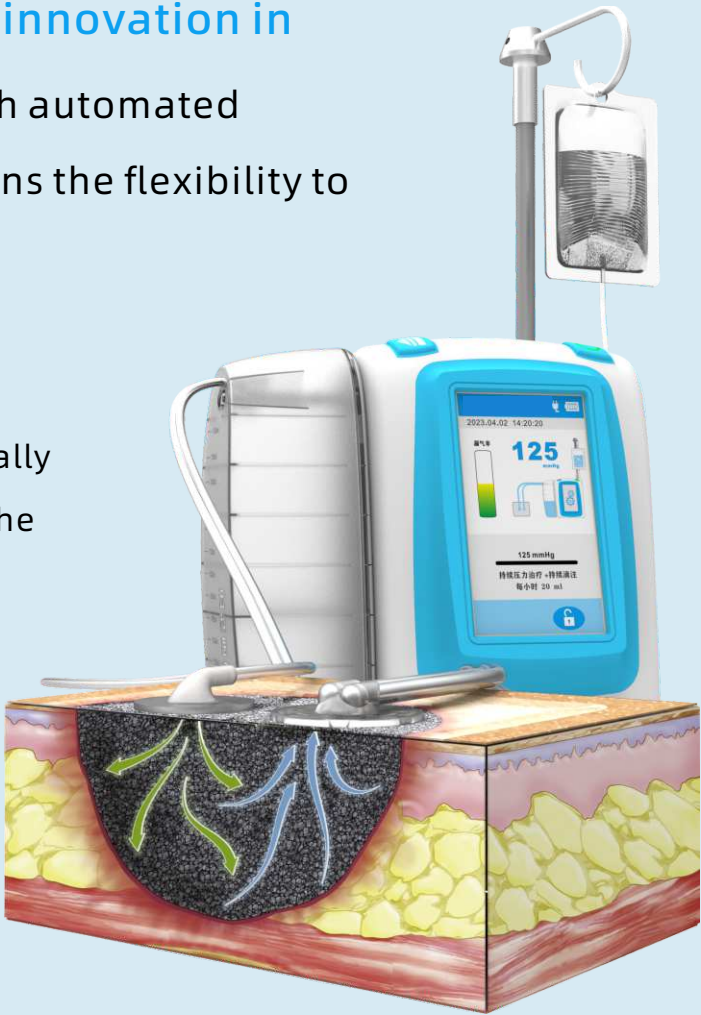
NPWTi

NPWT + instillation

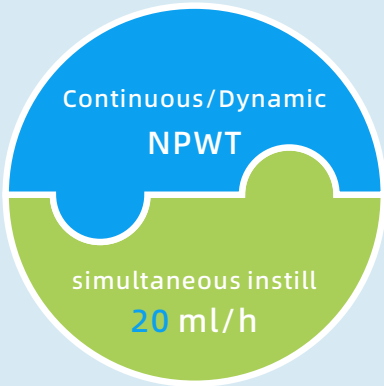
What is NPWTi Therapy System

The NPWTi Therapy System is an innovation in NPWT, combining NPWT Therapy with automated instillation features .It allows clinicians the flexibility to apply three treatment options:

- NPWT Therapy.
- NPWTi-d (dwell) Therapy, which Cyclically delive,dwell,&remove topical solutions to the wound.
- NPWTi-s (simultaneous) Therapy, which Continuous instill and remove topical solutions across the wound bed during treatment.



NPWTi-d



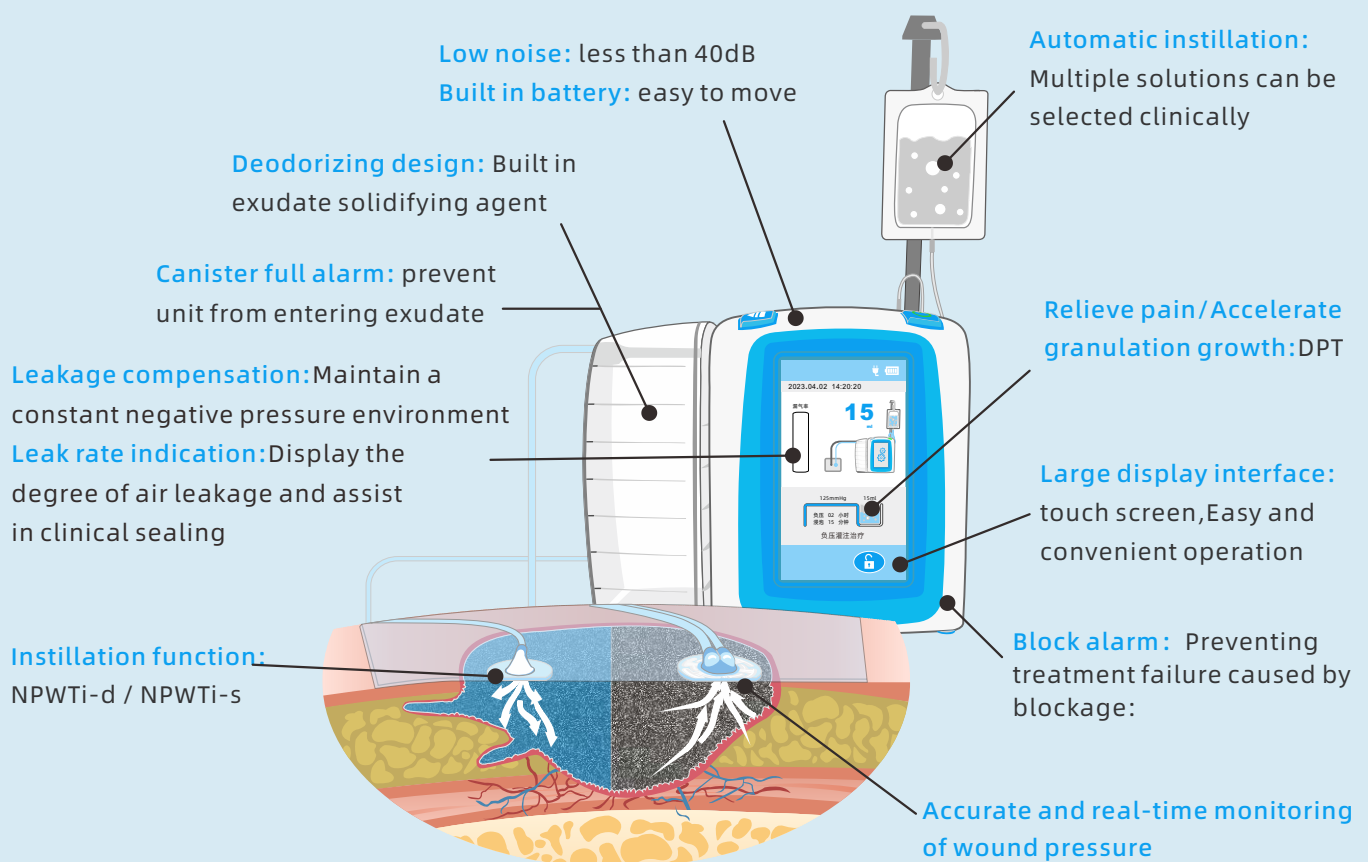
NPWTi-s

New features of NPWTi System

The NPWTi Therapy System is the next-generation Therapy Units in wound care hospitals.

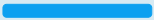
It allows the users to select a variety of therapy parameters:

- Instillation solution: per clinician preference, although solution container must accept a standard spike for connection to the therapy unit.
- Fill volume: between 10 and 150 mL
- Soak time: 10 to 30 min
- Negative pressure time between instillation cycles:
 - 0.5 to 8 hrs
 - Negative pressure range: -50 to -225mmHg



New features of NPWTi System

The NPWTi Therapy unit offers **five therapy modes**:



Continuous



Dynamic



NPWTi-d



Continuous NPWTi-s



Dynamic NPWTi-s

About Dynamic Pressure Therapy (DPT):

DPT is the next evolution of intermittent therapy. Rather than dropping the pressure to 0mmHg between therapy cycles, DPT maintains a low level of negative pressure (-25mmHg) between cycles ,which helps to prevent leaks and fluid accumulation that can occur when there is no negative pressure at the wound site. DPT may also assist in minimizing patient discomfort from foam expansion and compression that can occur when negative pressure returns to 0mmHg.

About NPWTi-s (simultaneous) :

NPWTi-s is an alternative solution to NPWTi-d. Rather than dropping the pressure to 0mmHg and maintain for a period of time between NPWTi-d therapy cycles, NPWTi-s is always in a state of negative pressure ,which helps to prevent leaks and fluid accumulation that can occur when there is no negative pressure at the wound site. During NPWTi-d treatment, the wound bed needs to be kept facing upward, otherwise the solution will not be able to soak the wound bed. while NPWTi-s does not have this restriction. Downward-facing wounds cannot be treated with NPWTi-d, but they can considered for NPWTi-s.

The new system accessories for NPWTi



The NPWTi Canister:

It has a volume of 1200ml. When choosing standard NPWTi-d treatment (e.g. 2 hours of negative pressure followed by 15 minutes of soaking, 20ml of solution each cycle), the Canister can generally be used for more than 4 days.

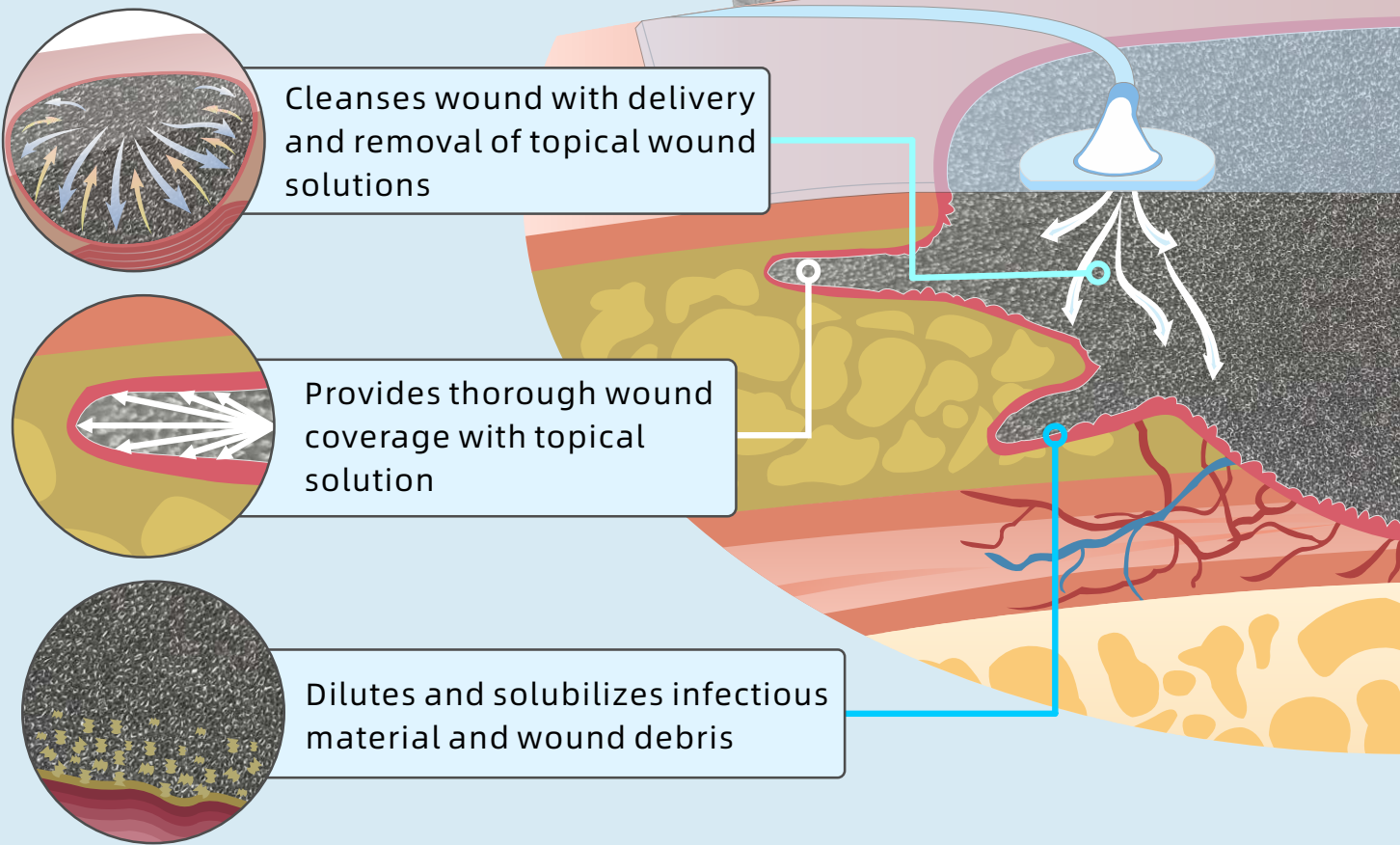
NPWTi tube Pad:

NPWTi tube Pad is a single pad that tubing for fluid delivery. It needs to be connected to the fluid pump behind the device. Be careful not to connect it in reverse.



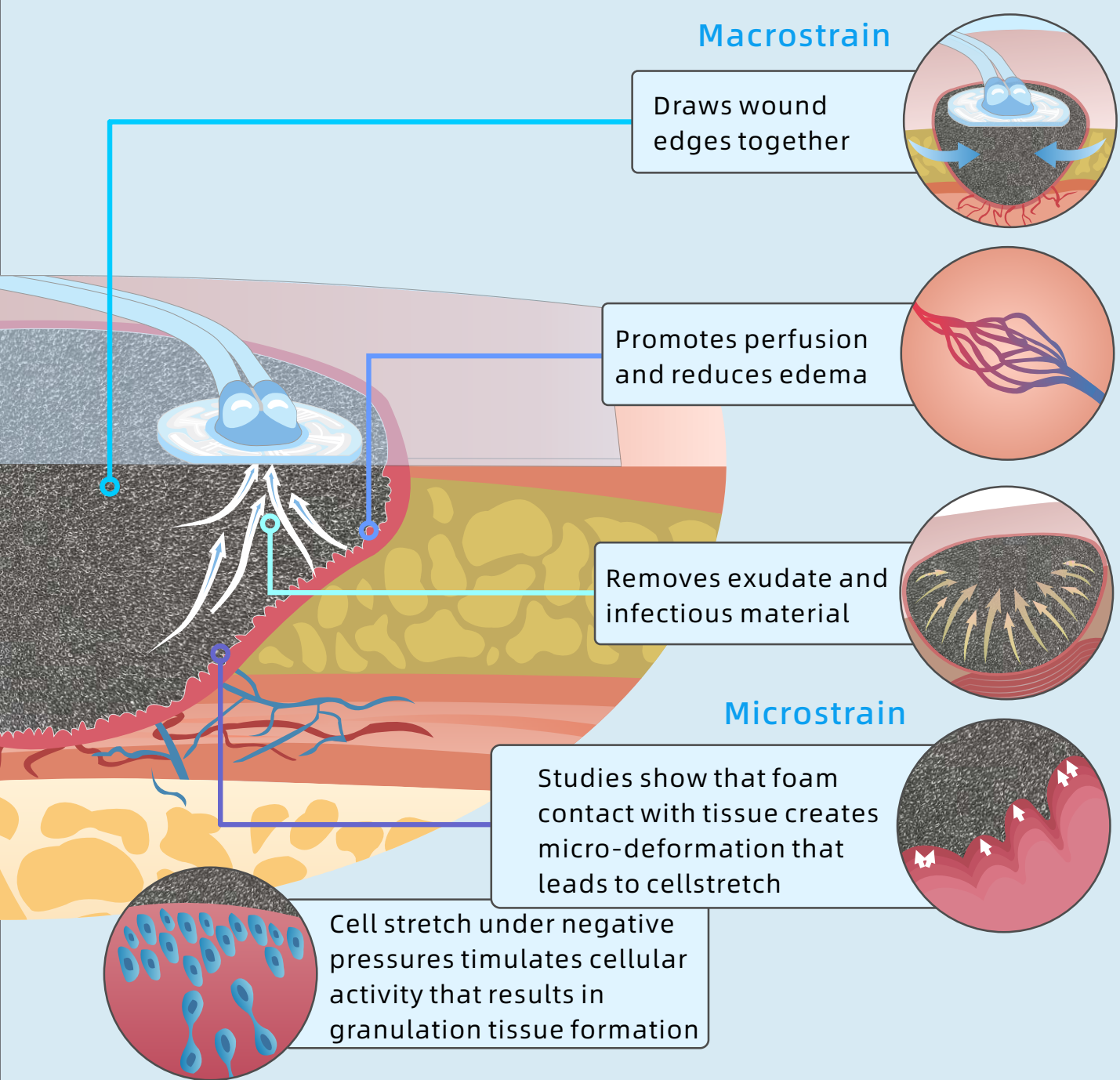
NPWTi clinical mechanism

When Instilled

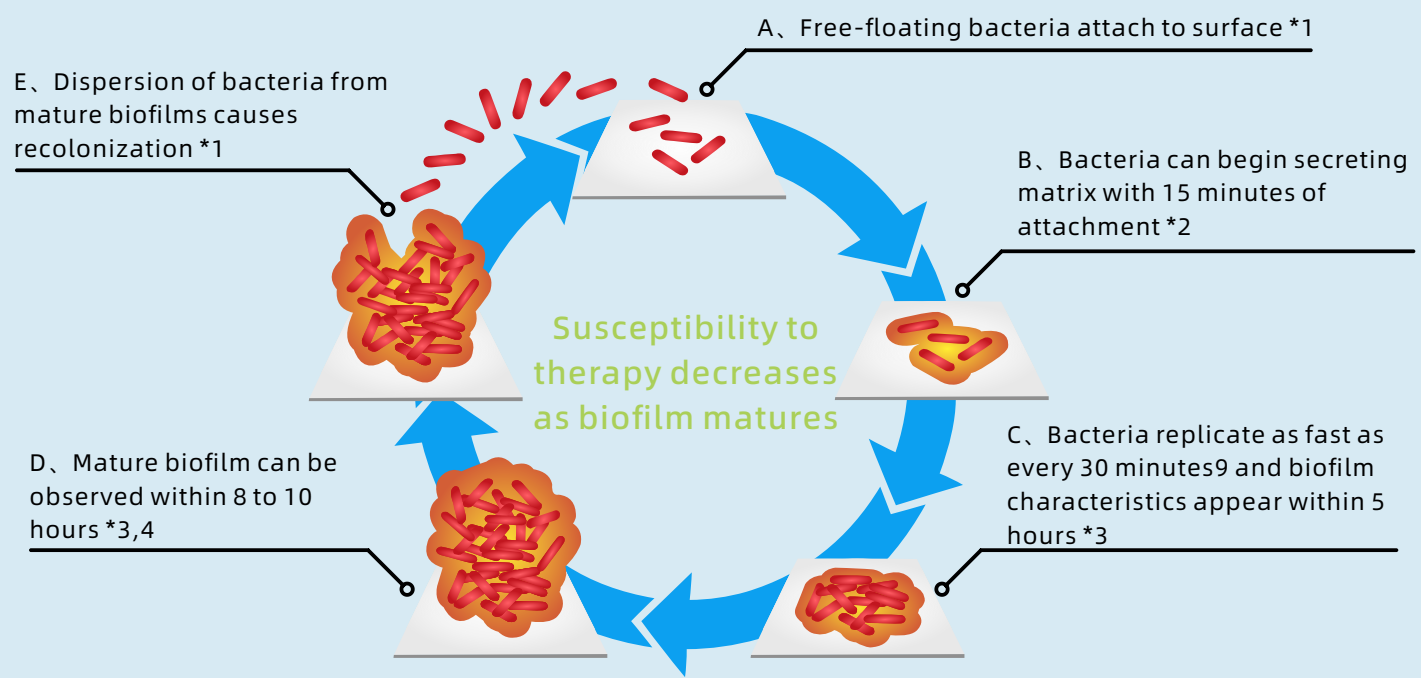


NPWTi clinical mechanism

When NPWT Therapy



NPWTi manage bioburden



NPWTi helps reduce bioburden through delivery and removal of topical wound solutions



Cleanse

Provides thorough wound coverage with topical solution to help dilute and solubilize infectious material



Remove

Removes solubilized wound debris and infectious materials, under negative pressure to lower bioburden



Promote

Promotes granulation tissue formation and perfusion to prepare the wound for closure

1. Costerton JW, Stewart PS, Greenberg EP. Bacterial Biofilms: A Common Cause of Persistent Infection. Science. 1999; 284 (5418):1318-1322.

2. Davies DG, Geesey GG. Regulation of the Alginate Biosynthesis Gene algC in Pseudomonas aeruginosa during Biofilm Development in Continuous Culture. Appl Environ Microbiol. 1995; 61(3):860-867.

3. Harrison-Balestra C, Cazzaniga BS, Davis SC, et al. A Wound-Isolated Pseudomonas aeruginosa Grows a Biofilm In Vitro Within 10 Hours and Is Visualized by Light Microscopy. Dermatol Surg. 2003; 29(6):631-635.

4. Schaber JA, Triffo WJ, Suh SJ, et al. Pseudomonas aeruginosa Forms Biofilms in Acute Infection Independent of Cell-to-Cell Signaling. Infect Immun. 2007; 75(8):3715-3721.

5. Wolcott RD, Rumbaugh KP, James G, et al. Biofilm maturity studies indicate sharp debridement opens a time-dependent therapeutic window. J Wound Care. 2010; 19(8):320-328.

NPWTi clinical outcomes

NPWTi Therapy can provide improved clinical outcomes over standard of care in various wound types.

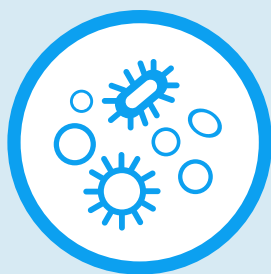
A systematic review of comparative studies and meta-analysis evaluated the performance of NPWTi Therapy versus control in 13 studies and 720 patients in various wound types. Results of the analysis revealed Veraflo Therapy delivered significant advantages over standard of care.



>50% reduced length of therapy
(9.88 days vs 21.8 days, p=0.02)



Ready for closure almost twice as fast
(7.88 days vs 14.36 days, p=0.003)



Reduced bacterial count from baseline
(Odds were 4.4 times greater p=0.003)



Wounds were 2.39 times more likely to close
(p=0.01)



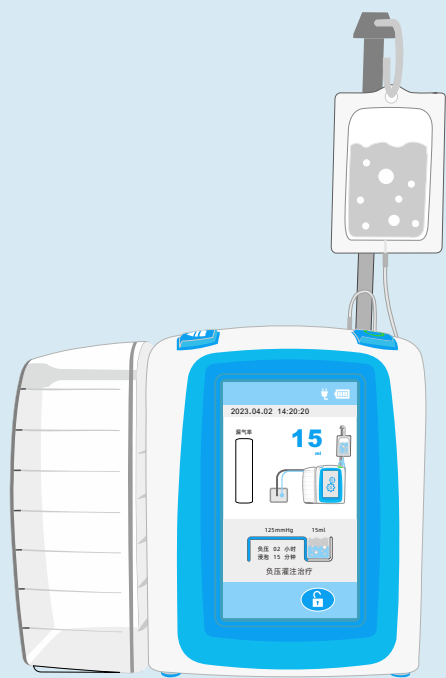
>30% Fewer surgical debridements
(1.77 debridements vs 2.69, p=0.008)

1.Gabriel A, Camardo M, O’Rorke E, Gold R, Kim PJ. Effects of Negative-Pressure Wound Therapy With Instillation versus Standard of Care in Multiple Wound Types: Systematic Literature Review and Meta-Analysis. *Plast Reconstr Surg.* 2021 ;147(1S-1):68S-76S.

2.Kim PJ, Lookess S, Bongards C, Griffin LP, Gabriel A. Economic model to estimate cost of negative pressure wound therapy with instillation vs control therapies for hospitalised patients in the United States, Germany, and United Kingdom. *Int Wound J.* 2021;1-7.

3.Collinsworth AW, Griffin LP. The effect of timing of instillation therapy on outcomes and costs for patients receiving negative pressure wound therapy. *Wounds.* 2022;34(11):269-275. doi:10.25270/wnds/22013

NPWTi & iNPWT



NPWTi For inpatient



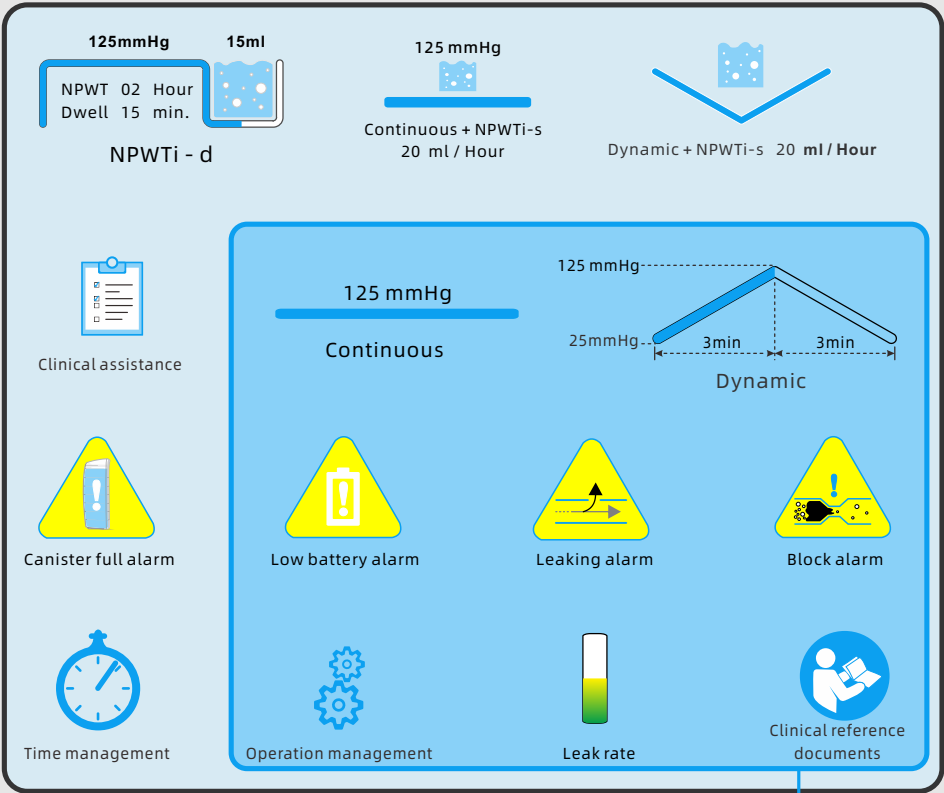
iNPWT For Homecare

- For inpatients/bedridden wounds
- Patients with other underlying diseases that hinder wound healing
- Early stage of treatment for chronic wounds with higher grades
- Severely contaminated wounds or severe trauma
- Large area wounds
- High exudative wounds
- Other clinically applicable wounds

- For movable patients in hospital
- For patients of outpatient/homecare
- Patients with no/or with minor underlying diseases that hinder wound healing
- Late stage of treatment for severe chronic wounds
- Chronic wounds with lower grades
- Small wounds
- Low exudation wounds
- Other clinically applicable wounds

NPWTi Vs iNPWT

More features



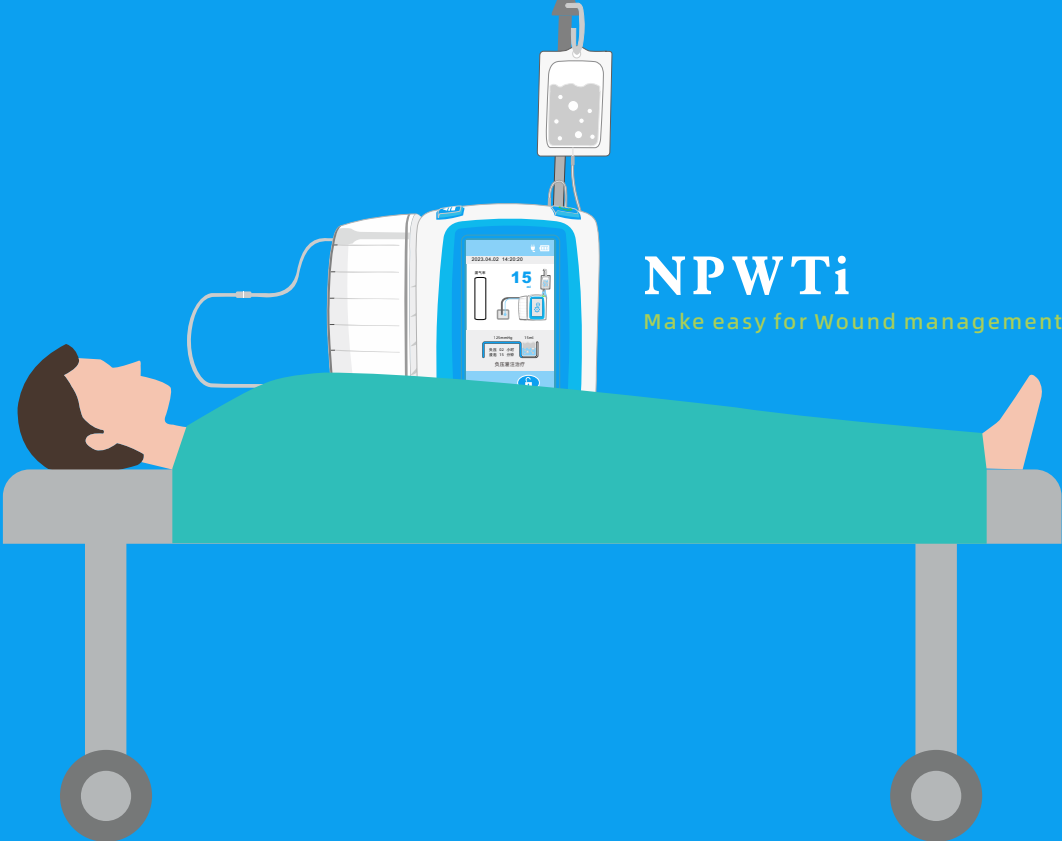
Greater airflow
Larger volume
of Canister



Bigger and heavier

The internal battery can
be used for 1.5 hours
240×195×170mm 2Kg

The internal battery can
be used for 16 hours
Portable
146×135×77mm 0.75Kg



NPWTi
Make easy for Wound management