THE EVOLUTION OF WOUND CARE

WOUND VOX
The power of vacuum, the purity of oxygen.

1997
The Birth of NPWT
KCI introduces the V.A.C., revolutionizing care with negative pressure wound therapy.

2000s
Hyperbaric Oxygen (HBOT)
HBOT gains traction but requires specialized facilities and lengthy sessions, creating access barriers.

2010s
Topical Oxygen (TOT)
Portable TOT devices emerge for bedside use, but insurance reimbursement remains a challenge.

2018
Patent Received
US Patent and Trademark Office (USPTO) issued Bechtel Medical's first patent for the combination delivery of NPWT and TOT.

2020
Proof of Concept Validation
Multiple pre-clinical porcine studies demonstrate safety and efficacy of integrated NPWT+TOT prototypes.

2023
VOX Animal Study
Lavery et al. at UTSW observes 2 log decrease in bacterial load using NPWT+TOT in infected porcine model.

2025
Evidence Converges
Meta-analysis (Su et al.) shows NPWT + TOT is associated with a 51% relative increase in the rate of complete wound healing vs. NPWT alone.

2027
Launch
Wound VOX launches, delivering synergistic power in a single, portable system.

NPWT Establishes the Standard: Integrated into clinical practice guidelines, NPWT improves healing outcomes compared to conventional dressings.

Limitations of Continuous NPWT: Higher-pressure, continuous NPWT can create a hypoxic wound environment.

Oxygen Therapy Addressed the Gap: Topical Oxygen Therapy (TOT) increases tissue oxygenation and supports improved wound healing but lacks exudate management.

Combination Therapy Shows Superior Outcomes: NPWT + TOT demonstrates improved results compared to either therapy alone.

Traditional Delivery Creates Burden: Using separate systems increases complexity – more equipment, dressing changes, training and cost.

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VOX is pending clearance and not yet available for sale. Clinical outcomes presented are derived from published scientific literature and studies of other devices and/or treatment protocols combining NPWT and TOT.

THE FUTURE OF WOUND CARE

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