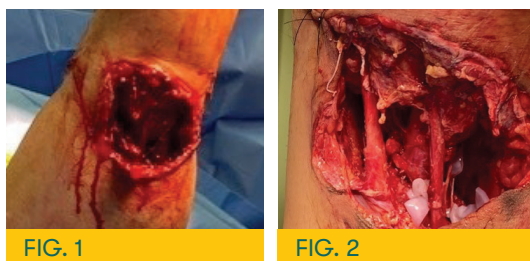


Neox[®] 1K for Traumatic Complex Wound: Posterior Knee Injury

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Why this Study is Relevant

Lower extremity trauma accounts for 32% of all injuries resulting from motor vehicle accidents.¹ Patients with severe lower extremity wounds may face significant complications including infection, wound necrosis, and osteomyelitis, which could potentially lead to limb loss.^{2,3} Local wound management is crucial in reducing such complications, particularly for those with cavity wounds that extend beneath the dermis and may expose underlying structures such as fascia, tendons, muscle, and bone.^{4,5}



Case Example

A 39-year-old male (smoker) involved in a motorcycle accident presented with multiple traumatic injuries including ipsilateral open fractures of the femur, tibial shaft and plafond, femoral neck fracture, and a large, complex wound on the posterior knee measuring 11 x 9 x 4 cm in size with significant soft tissue loss (FIG. 1).



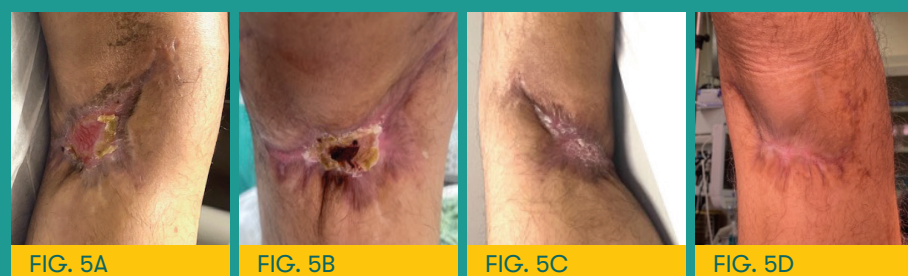
Treatment Procedure

On admittance, the patient was treated with skeletal fixation of his fractures. The wound on the posterior knee was debrided to remove necrotic tissue, and a dressing was applied to control exudate. On Day 3, a Neox 1K cryopreserved, ultra-thick amniotic membrane allograft was placed at the base of the open wound to promote granulation tissue formation (FIG. 2). Negative Pressure Wound Therapy (NPWT) was also used with constant suction. On Day 10, an additional Neox 1K graft was applied with suture over the wound (FIG. 3) to promote epithelialization. Physical therapy was recommended for the patient.

Outcomes

The wound had robust granulation tissue formation by Day 8 (FIG. 3). At 10 and 11 weeks, the base of the wound was flush with the edges, and epithelialization was noted at the borders (FIG. 5A & 5B). At 13 weeks, continued epithelialization was noted, and the Range of Motion (ROM) of the knee was 0-75° degrees, despite not performing physical therapy as recommended (FIG. 5C).

At 34 weeks (7.8 months), the wound had completely epithelialized (FIG. 5D), and the knee demonstrated improved ROM (FIG. 4). In summary, Neox 1K was shown to support wound closure for a traumatic, complex wound and aid in functional recovery as demonstrated by improved ROM.



Surgical Goals

- Help mitigate wound complications.
- Help expedite soft tissue healing.
- Help facilitate functional recovery.

Neox 1K

Neox 1K is an ultra-thick cryopreserved human amniotic membrane allograft derived from umbilical cord that supports improved soft tissue healing and functional recovery with fewer applications.⁶⁻⁸

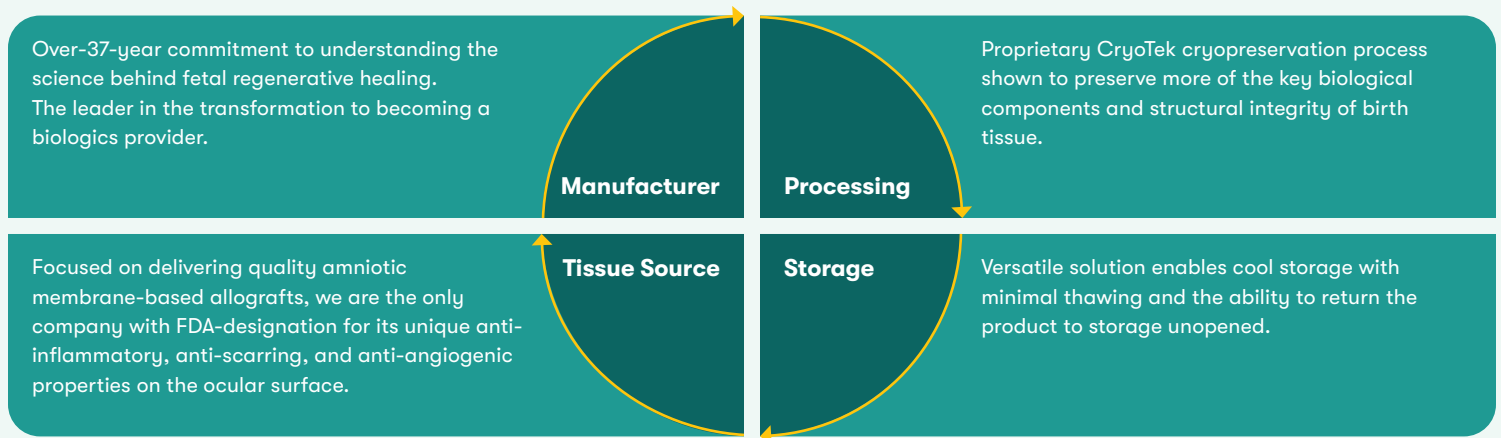
- Traumatic Wounds
- Diabetic Foot Ulcers
- Chronic Wounds
- Venous/Arterial Leg Ulcers
- Pressure Ulcers
- Wound Dehiscence
- Burns

It can be used with Negative Pressure Wound Therapy (NPWT). The allograft does not require edge-to-edge wound coverage for it to be effective. It can be even be cut into strips and applied to a wound.



Neox 1K Cryopreserved Ultra-Thick Amniotic Membrane Allograft	
Product Code	Size
NX-10-2010	2.0 x 1.0 cm
NX-10-2020	2.0 x 2.0 cm
NX-10-3020	3.0 x 2.0 cm
NX-10-3030	3.0 x 3.0 cm
NX-10-4030	4.0 x 3.0 cm
NX-10-6030	6.0 x 3.0 cm
NX-10-8030	8.0 x 3.0 cm

The BioTissue Difference



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