

## Combination Drug Therapy for Wound Care

**R**esearchers at the University of South Florida have discovered an effective drug combination therapy to inhibit canonical Wnt signaling, with potential applications in wound healing. This patent pending therapy combines folate and inositol.

The entire wound healing process is a complex series of events that begins at the moment of injury and can continue for months to years.

The Wnt signaling pathway describes a complex network of proteins most well known for their roles in embryogenesis and cancer, but also involved in normal physiological processes in adult animals. Wnt signaling is implicated in many disease states including: developmental disorders such as neural tube defects, limb malformations, and heart defects, developmental disorders associated with alcohol exposure (fetal alcohol syndrome) or exposure to bipolar medications (i.e. lithium), stem cell development and proliferation, wound healing, cancer, Alzheimer's disease, diabetes and osteoporosis.

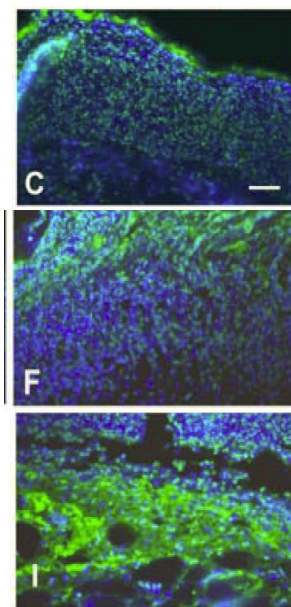
A folate/inositol combination acts synergistically to suppress canonical Wnt signaling, allowing for prevention and/or amelioration of disease. Multiple routes of administration and formulations are possible with this combination including topical (cream, gel, ointment), patches/bandages, and ophthalmic. Wounds of all types and stages would benefit from this therapy including:

- Dermal abrasions and scarring
- Diabetic wounds
- Bed sores
- Surgical wounds (internal and external)
- Corneal abrasions

### ADVANTAGES:

- Low toxicity compounds
- Multiple formulations
- Several therapeutic applications

*Stimulates wound healing and tissue organization*



*Figure: Fibronectin expression and tissue organization in wounds: C = control; F = folate treatment; I = folate and inositol cream*

**Tech ID # 08B126**

**Patent #: [8,883,744](#); [9,308,210](#)**