BACTOSITE™

Hydrogel Wound Dressing
with NANOSILVER

InnoHub
PUTRA SCIENCE PARK

PATENT NO. PI 2019000741 TRADEMARK: TM2021031163

The technology highlights an effective bacterial nanocellulose preparation, which was locally isolated from the rotten fruit and incorporated with the nanomaterial synthesized by green methods to produce green nanocomposite wound dressing. The fabrication of wound dressings with efficient antimicrobial activities accompanied by healing-promoting biomaterials by a green and economic process to potentially treat chronic & extensive traumas.

Problem being Solved

It discloses the use of a green wound dressing for healing minor and intensive injuries in diabetic patients. The dressing comprises bacterial nanocellulose and at least one green synthesized inorganic nanoparticle. This is a **safe wound dressing** with remarkable **antimicrobial** activities and **fast healing** properties.

Potential Customers

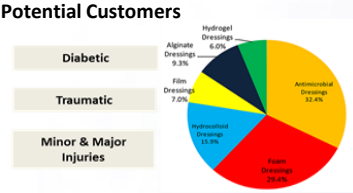


Figure 1: Active Wound Care Market Share (%) by Segment: Market Shares (%), 2026

This innovation can be applied in the health industry as a medical device.

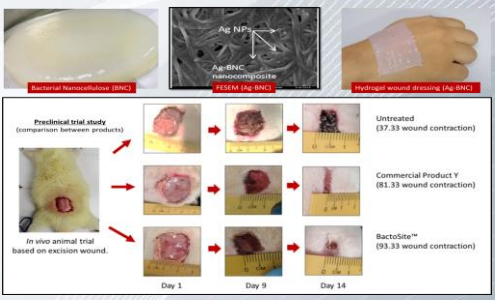
What we do

Wound dressings with efficient antimicrobial activities accompanied by healing-promoting biomaterials by a green and economic process to potentially treat the human chronic wound, extensive traumas, and diabetic patients.

How are we better than competitors

Our product is an economical process using green approaches. Its environment-friendly, simple procedure, fast healing (antimicrobial properties) and is scientifically proven. It has a great potential application to be used by the wound care industry. First technology in Malaysia using bacterial nanocellulose incorporated with nanomaterial synthesized as wound dressing material.

MARKET VALIDATION



Wounded animal with **BACTOSITE™** application showed fast healing within 14 days of treatment.

NEXT MILESTONE

Ready to collaborate with industry partners / companies / investors in commercialization of the advanced research.
Fund allocation required = RM 1 000 000

ACHIEVEMENTS

RM75,000 Putra IPS-Grants from UPM; RM161,200 PRGS Grant from the Ministry of Higher Education Malaysia; RM80,000 Market Validation Study Grant, InnoHub, UPM.

Gold medal won in **ITEX2019** (International Invention, Innovation & Technology, Exhibition, Malaysia Competition 2019).

Research findings and discovery were featured in local mass media (Astro, RTM, TV3, TV9, NST, Metro, Berita Harian, Utusan Malaysia, Malay Mail & local radio stations).

Bronze medal won in **SIIF 2021** (Seoul International Invention Fair 2021).

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