

#### **TECH OFFER**

### Therapy for Diabetic Foot Ulcers with Foot Cover and Disinfection System



### **KEY INFORMATION**

TECHNOLOGY CATEGORY: Healthcare - Medical Devices Healthcare - Pharmaceuticals & Therapeutics TECHNOLOGY READINESS LEVEL (TRL): TRL4 COUNTRY: JAPAN ID NUMBER: TO175191

### **OVERVIEW**

Diabetic foot ulcers (DFUs) are a serious and common complication of diabetes, often leading to infections, amputations, and prolonged hospitalizations. Even with current standard of care, treatment of DFUs is still challenging, and may not always prevent severe outcomes.

This therapy system integrates advanced wound management techniques, focusing on enhancing wound healing, off-loading pressure from vulnerable areas, and improving infection control. Traditional treatments lack comprehensive solutions for wound healing enhancement, pressure off-loading, and effective infection control. This therapy system combines these features into a single solution, offering accelerated healing while its integrated disinfection mechanism helps manage infections with ease. The therapy system is efficient and user-friendly, suitable for deployment in various healthcare settings.

Ideal collaboration partners include medical device manufacturers, wound care specialists, and healthcare institutions focused on innovative treatment solutions.

For more information, contact techscout@ipi-singapore.org



### **TECHNOLOGY FEATURES & SPECIFICATIONS**

The technology includes a novel therapy system that integrates wound healing enhancement with pressure off-loading and advanced infection control mechanisms. It is designed to be easy to apply, providing significant improvements over traditional methods, particularly in treating chronic and complex foot wounds.

The therapy system comprises of 2 key components:

Foot cover system - enables off-loading and enhance,emt of wound healing

**Disinfection system** – can be used to provide various types of medications for the treatment of different infections. It can help treat bacterial/ biofilms

# POTENTIAL APPLICATIONS

This technology is applicable within the healthcare industry, specifically for the treatment of chronic wounds such as diabetic foot ulcers. It can be utilized in hospitals, outpatient clinics, and specialized wound care centres, offering a more effective solution for managing foot wounds and improving patient outcomes. A simplied device will be used for treatment at home without infection.

## UNIQUE VALUE PROPOSITION

This therapy system presents a significant improvement over current treatment options by combining multiple critical aspects of wound care into one cohesive approach. Its design focuses on providing comprehensive care that includes:

- 1. Enhanced wound healing,
- 2. Effective pressure off-loading, and
- 3. Superior infection control, setting it apart from existing technologies.

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