Wound Healing

Providing increased blood circulation to promote wound healing naturally from the inside
Increased blood circulation generates a natural healing response

• Chronic wounds, including venous, arterial and diabetic ulcers often have impaired blood flow\(^1,2\)

• Non-healing venous ulcers correlate with impairment of the calf muscle pumps\(^3,4,5\)

• There is evidence that improved blood circulation results in improved wound healing\(^6,7,13\)

• Increasing blood circulation increases Transcutaneous Oxygen Tension (TCpO\(_2\))\(^8\) which is a predictor of tissue viability and ischemic wound healing\(^9\)

• The geko™ device increases venous, arterial and microcirculatory blood flow in the lower limbs\(^{10,15,16}\) reduces oedema\(^{11}\) and maintains TCpO\(_2\) – promoting conditions favourable for wound healing\(^{13,16}\)
The geko™ device, as an adjunctive therapy, is appropriate when:

- A wound has healed less than 30% in 4 weeks of care
- Compression cannot be tolerated or is contraindicated
- Patient has a fixed ankle joint or poor ankle flexion
- Lower limb muscle pumps are impaired or inactive
- Oedema management has been a factor in healing
- Wound, ischemia and oedema may be the underlying cause of pain
- Patient has an increased risk of Venous Thromboembolism

There is a high incidence of chronic wounds$^{12}$
How it works

The geko™ device **stimulates** the common peroneal nerve **activating** the calf and foot muscle pumps, increasing venous, arterial and microcirculatory blood flow.\(^{10,15,16}\)

The increase in blood flow is similar to that achieved by walking, up to 60%.\(^{10}\)

Small, light and comfortable to wear, the self-contained, battery powered geko™ device:

- Has no wires or leads – no tripping hazard
- Weighs just 10g
- Is easy and quick to fit
- Silent operation
Evidence\textsuperscript{14}

Where patients had adhered to the geko™ device treatment plan and severe infection was not present, healing was observed.

HNHB CCAC – 10 year non-healing venous leg ulcer

Prior to treatment

5 months, 1 week

Wound closed

10 months, 5 days

HNHB CCAC – 1 month non-healing diabetic traumatic foot wound

Prior to treatment

One month, 4 days

Wound closed at 3 months

Erie St. Clair CCAC – 6.5 months non-healing venous leg ulcer

Prior to treatment

2 weeks, 1 day

Wound closed, 18 days
Increased blood circulation promotes wound healing from the inside

Self-contained and wearable, the geko™ device is:

- Simple and easy to use\textsuperscript{14}
- Small and light (weighing just 10g) with no leads, or wires enables the patient to be as mobile as possible

Further information available at: \url{www.gekodevices.com}

2. NHS Choices Venous Leg Ulcers March 2015
14. Case studies on file Firstkind Limited