**Evidence in focus**

**Poster summary**

**LEAF® Patient Monitoring System helped significantly reduce the risk of pressure injuries (PIs), compared with the standard of care, in a meta-analysis of clinical publications**

Nherera L. Meta-analysis shows patient wearable sensor reduces incidence of hospital acquired pressure injuries in critically ill patients. Poster presented at: Symposium on Advanced Wound Care Fall 2022; October 14–16 2022; Las Vegas, NV, USA.

**Key points**

- In a meta-analysis of clinical studies, compared with standard of care, the LEAF System resulted in a:
  - 94% reduction in PI risk across 3,935 patients overall (relative risk [RR]: 0.06; p<0.02)
  - Significant reduction in PI risk irrespective of study design (sensitivity analysis; p<0.01)

**Overview**

- Systematic literature review to identify full clinical publications comparing the LEAF System with standard of care for PI prevention, in acutely ill hospitalized or nursing home patients, followed by meta-analysis of PI incidence
- Standard of care included traditional turning care and following PI guidelines
- RR for PI was assessed with the LEAF System versus standard of care for all included publications (primary analysis) and by study design (sensitivity analysis)
- Of the 658 studies identified, three were included (n=3,935 patients); one randomized controlled trial (RCT) and two observational studies
  - Most patients were older than 75 years

**Results**

- The LEAF System significantly reduced the risk of PI by 94%, compared with standard of care (p<0.02; Figure)
- Sensitivity analyses showed that, in comparison to standard of care, the LEAF System was associated with a reduced risk of PI irrespective of study design (Figure):
  - A 72% reduction in risk of PI was observed in the RCT study (p=0.01)
  - A 97% reduction in risk of PI was revealed in observational studies (p<0.00001)

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<th>Risk ratio (95% CI)</th>
<th>Risk of PI with the LEAF System versus standard of care</th>
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<tr>
<td>Total (n=3,935)</td>
<td>0.06 (0.01–0.66)</td>
<td>94%</td>
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<tr>
<td>RCT (n=1,226)</td>
<td>0.28 (0.2–0.75)</td>
<td>72%</td>
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<tr>
<td>Observational studies (n=2,709)</td>
<td>0.03 (0.01–0.15)</td>
<td>97%</td>
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**Figure. Relative risk of PI development with the LEAF System compared with standard care across different study groups**

CI: confidence interval

**Conclusions**

The LEAF System helped to significantly reduce the risk of PIs, compared with standard of care, across 3,935 hospitalized and nursing home patients in a meta-analysis of clinical publications. A significant reduction in PI risk was seen across clinical study designs assessed.

For detailed product information, including indications for use, contraindications, precautions and warnings, please consult the product's applicable Instructions for Use (IFU) prior to use.