**Publication summary** 

# **Smith**Nephew

PICO Single Use Negative Pressure Wound Therapy System (sNPWT) helped to reduce groin wound complications in patients undergoing peripheral vascular surgery compared with standard dressings

Fleming CA, Kuteva M, O'Hanlon K, O'Brien G, McGreal G. Routine use of PICO dressings may reduce overall groin wound complication rates following peripheral vascular surgery. J Hosp Infect. 2018;99:75-80.

Available at: Journal of Hospital Infection (R



### Key points

Compared with standard dressings, PICO resulted in:



Reduction in mean time to resolve wound complications



#### Overview

• Retrospective analysis of wound complications that occurred up to six weeks postoperatively in patients who underwent peripheral vascular surgery of the lower limb at a single center in Ireland

- Patients (mean age, 71 years; mean BMI, 27 kg/m²) received either prophylactic PICO sNPWT (n=73) or standard dressings (n=78)
- The PICO sNPWT group included more smokers (45.2 vs 29.5%, p=0.034) and femoral endarterectomy cases (65.8 vs 33.3%, p=0.001) than the standard dressing group

#### Results

- Significantly fewer wound complications occurred with PICO sNPWT than with standard dressings (8.2 vs 19.2%, p=0.042; Figure 1)
- Seroma incidence was lower with PICO sNPWT than with standard dressings (1.4 vs 7.7%, p=0.069; Figure 1)
- Incidences of infection, hematoma, and dehiscence were similar in both groups
- Mean length of hospital stay for readmissions was shorter with PICO sNPWT (3 patients, 2.83 days) than with standard dressings (6 patients, 5.67 days, p=0.465)
  - Mean time to resolution of wound complications was also reduced (52 vs 96 days, p=0.015)
- PICO sNPWT use was estimated to reduce total cost of treatment by estimated \$43,439 compared with standard dressings (\$43,749 vs \$87,189)

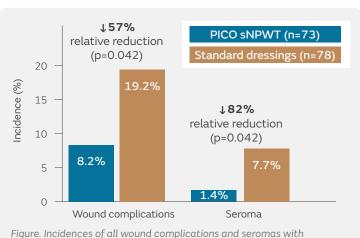


Figure. Incidences of all wound complications and seromas with PICO sNPWT and standard dressings

## **Conclusions**

PICO sNPWT helped to significantly reduce the incidence of groin wound complications in patients undergoing vascular surgery. Mean hospital length of stay and time to resolution of wound complications were shorter with PICO sNPWT than with standard dressings for readmitted patients, which contributed to cost savings

#### Considerations

 Cost analyses included bed days for patients who were readmitted for wound complications and overall cost of PICO sNPWT dressings, but excluded other costs, such as community nursing, operating room, and staff costs

The information herein is intended for healthcare professionals. The PICO pump contains a MAGNET. Keep the PICO pump at least 4 inches (10 cm) away from other medical devices at all times. Failure to do so can cause the other medical devices to fail which can result in serious harm including death. Excessive bleeding is a serious risk associated with the application of suction to wounds, which may result in death or serious injury. The risk information provided herein is not comprehensive. For full product and safety information, please see the Instructions for Use