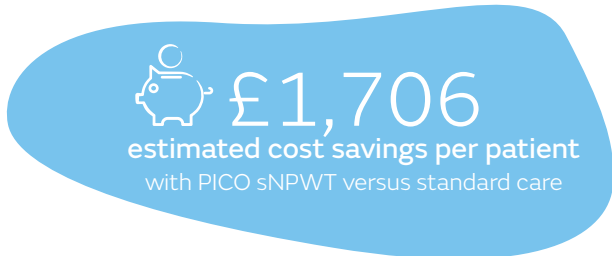


# PICO<sup>◇</sup> Single Use Negative Pressure Wound Therapy System (sNPWT) was estimated to be cost effective compared with standard care in prepectoral breast reconstruction

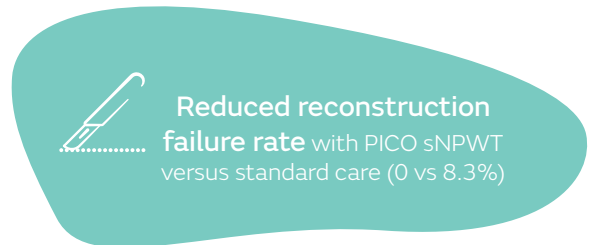
Murphy JA, Myers D, Trueman P, Searle R. Cost-effectiveness of single-use negative-pressure therapy compared with standard care for prevention of reconstruction failure in prepectoral breast reconstruction. *BJS Open*. 2021;5(2):zraa042.

Available at: [BJS Open](#) 

## Key points



**£1,706**  
estimated cost savings per patient  
with PICO sNPWT versus standard care



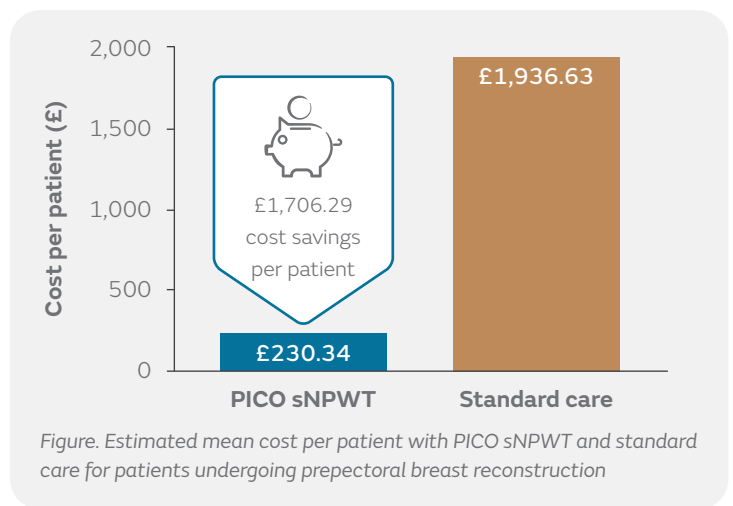
**Reduced reconstruction failure rate**  
with PICO sNPWT  
versus standard care (0 vs 8.3%)

## Overview

- An economic evaluation to determine the cost effectiveness of PICO sNPWT versus standard care for prevention of wound breakdown leading to reconstruction failure following prepectoral breast reconstruction in the UK
- Effectiveness was measured by the number of reconstruction failures avoided and gain in quality-adjusted life years (QALYs)
  - Time horizon was 48 months
- Baseline incidence of reconstruction failure resulting from wound breakdown was taken from a recently published study<sup>1</sup> and costs were estimated from patient resource data<sup>2</sup> with NHS 2018–19 reference costs applied<sup>3</sup>
  - Average undiscounted cost of reconstruction failure was estimated to be £23,628 per patient

## Results

- Compared to standard care, PICO sNPWT was the dominant treatment option (more effective and less costly)
- Estimated mean treatment costs per patient were lower with PICO sNPWT than with standard care (Figure), resulting in £1,706.29 estimated cost savings per patient
  - Following sensitivity analysis to confirm that the results were robust, PICO sNPWT remained cost effective
- Use of PICO sNPWT was estimated to reduce the reconstruction failure rate compared with standard care (0 vs 8.3%)
- An expected increase in QALYs of 0.0187 was observed with PICO sNPWT, as compared to standard care



## Conclusions

PICO sNPWT was estimated to be cost saving and helped to decrease reconstruction failures resulting from wound breakdown when compared with standard care in patients undergoing prepectoral breast reconstruction.

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.

**References.** **1.** Potter S, Conroy EJ, Cutress RI, et al. Short-term safety outcomes of mastectomy and immediate implant-based breast reconstruction with and without mesh (iBRA): a multicentre, prospective cohort study. *Lancet Oncol*. 2019;20(2):254–266. **2.** Irwin GW, Boundouki G, Fakim B, et al. Negative pressure wound therapy reduces wound breakdown and implant loss in prepectoral breast reconstruction. *Plast Reconstr Surg Glob Open*. 2020 Feb;8(2):e2667. **3.** NHS. 2018/19 National Cost Collection Data. Available at: <https://www.england.nhs.uk/national-cost-collection/#ncc1819>. Accessed July 27, 2021.