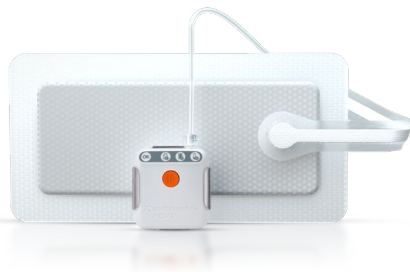


+ Control your risks, control your outcomes

PICO[◇] sNPWT has been shown to help reduce the incidence of **surgical site complications**¹, **length of stay**¹, and overall **cost** of care³ following primary total joint arthroplasty (TJA)*



Smith+Nephew

PICO[◇] 7

Single Use Negative Pressure
Wound Therapy System

Helping you get **CLOSER TO ZERO[◇]**
surgical site complications¹⁶

*compared with standard care

PICO[◇] INCISIONAL ORTHOPAEDIC SURGERY



The real-world impact of oedema?

Physiologically, oedema compromises the diffusion of waste and nutrients between the capillaries and the cells, which puts the patient at risk of **delayed healing, infection, skin breakdown and cell damage**⁴⁶



Oedema

Haematoma

Seroma

Prolonged drainage

FOLLOWING TJA PROLONGED DRAINAGE CAN LEAD TO:



29%⁵

reduction in knee extension strength

29-42%⁴

increase risk of surgical site infection (SSI)

Surgical site complications (SSC)

Average length of stay (LoS) increases following an SSI

Total hip arthroplasty (THA)
= 13.4 days⁸

Total knee arthroplasty (TKA)
= 9.7 days⁸

An SSC following primary TJA can have significant real-world impact

Reattendance

Up to 6.1%⁶

Readmission

Up to 23.2%^{6,7}

Reoperation

Up to 40%⁶

Is your patient high risk?

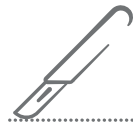
Multi-morbid patients with common risk factors are more susceptible to developing SSCs⁸, which can have significant real-world impacts^{6,7}

With the growing number of obesity rates across Australia, this will result in an additional **24,707 Total knee revisions (TKRs)**, totalling **\$251 million AUD** increasing the potential length of stay in this cohort of patients.*



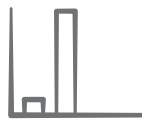
BMI ≥ 40

Significantly more likely to suffer **prolonged drainage** following THA**⁴



BMI ≥ 35

4.5x times more likely to suffer an **SSC** following TKA or THA surgery^{†3}



ASA ≥ 3

8x times more likely to suffer an **SSC** following TKA or THA surgery^{‡3}



Operative time

SSI risk increases by **11%** every 15 minutes during TKA^{\$9}



Revision

Deep or organ space can nearly **quadruple** with revision hip arthroplasty compared with primary procedures¹⁰



Emergency

Up to **16%** SSI rate following peri-prosthetic hip fracture^{11, 12}

*<https://bmcmusculoskeletdisord.biomedcentral.com/articles/10.1186/s12891-019-2411-9> **Compared with normal weight; p = 0.001. †Compared with BMI < 35. ‡Compared with patients with ASA < 3. \$Where operative times had a significant independent effect on SSI rates (adjusted OR 1.007, 95% CI 1.004-1.011, P < .001;) which corresponded to an 11% (95% CI 6-17) increase in SSI risk with every 15-minute increase in operative time.



Is your patient high risk?



The risk of developing a post-operative SSC depends on the type of surgery and patient risk factors^{14,15}

The presence of just **1 major risk factor** or **2** or more moderate risk factors, places patients at high risk of an SSC and means you should consider **PICO® sNPWT¹⁴**



Category

Patient-related risk factor

Procedural-related risk factor



Major risk factor
presence of 1 = high risk of surgical site complication

! BMI $\geq 40\text{kg/m}^2$ or $\leq 18\text{kg/m}^2$

! Extended surgery*

! Uncontrolled insulin dependent diabetes mellitus

! Emergency surgery

! Renal dialysis

! Hypothermia



Moderate risk factor
presence of 2 \geq high risk of surgical site complication

! ASA physical status $>II$

! Anaemia / blood transfusion

! Age < 1 year or > 75 years

! High wound tension after closure

! BMI $30-39.9\text{kg/m}^2$

! Dual antiplatelet treatment

! Immunosuppression

! Suboptimal timing or omission of prophylactic antibiotics

! Smoking (current)

! Tissue trauma / large area of dissection / large area of undermining

Table adapted from World Union of Wound Healing societies Consensus, 2016. The risk factors represented in this table are examples only and not an exhaustive list¹⁴

Defined as $>T$ (hours) which is dependent on the type of surgical procedure, and is the 75th centile of duration of surgery for a particular procedure, e.g. coronary artery bypass graft has a T of 5 hours and caesarean section has a T of 1 hour



REFERENCES

CONTROL YOUR RISKS, CONTROL YOUR OUTCOMES | 4

Control your risks, control your outcomes

PICO® sNPWT has shown to help reduce the incidence of **SSCs**¹, **LoS**¹ and overall **cost** of care³ following primary TJA*



*compared with standard care

Control your risks, control your outcomes

In an RCT of **209 patients** undergoing primary THA and TKA:

4-FOLD REDUCTION IN SSCs


76% relative reduction
PICO[®] sNPWT reduced the incidence of SSCs by 76%*¹

CHANGE YOUR PRACTICE, NOT DRESSINGS

PICO[®] sNPWT significantly reduced both wound exudate*^{†1} and the number of dressing changes by 40%*^{‡1}

*compared with standard care; n = 107 (std care) v 102 (PICO system)

†Grade 4 exudate: 4 vs 16%; p = 0.007 ‡2.5 vs 4.2; p = 0.002

Ask for 
Evidence in
Focus publication
summary

Control your risks, control your outcomes

In a prospective study of **296 patients**
undergoing primary TKA:

The prophylactic use of **PICO[®] sNPWT**
significantly reduced the incidence of **SSCs** by

37%^{*45} ↓

THIS INCLUDES

**Hyperaemia,[†] skin necrosis[‡]
and wound dehiscence^{*§}**

which resulted in a significant
reduction in the incidence of
re-operation by 76%^{||}



Ask for Evidence in
Focus publication
summary



All compared with standard care; *28.5% v 45.7%, p = 0.001; †14.7% v 40.2%, p = 0.01; ‡2.1% v 8.5%, p = 0.04; §3.1% v 10.1%, p = 0.03 and || 8.5%, p = 0.001.

High risk, low LoS

In an RCT of **209 patients** undergoing primary THA and TKA:

REDUCED LoS

PICO[®] sNPWT reduced mean LoS by an average of **0.9 days^{*1}**



Extremes of LoS were also reduced significantly with patients who received **PICO sNPWT^{†1}**

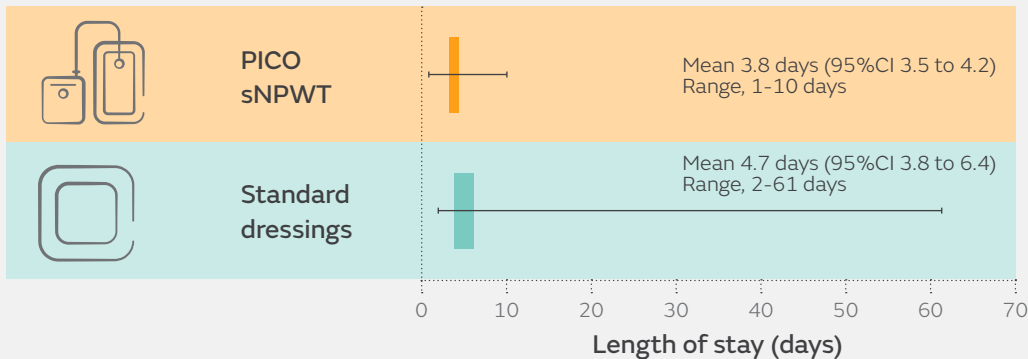


Figure. Mean LoS (and range) with PICO sNPWT and standard dressings

^{*}compared with standard care; n = 107 (std care) v 102 (PICO system) [†]p = 0.003



Prolonged operative time can increase the risk of SSI¹⁴



Revision hip arthroplasty can take, on average, **78 mins longer** compared with primary procedures⁵¹

X2

SSI risk can **double** with revision hip arthroplasties compared with primary procedures¹⁰



The prophylactic use of incisional NPWT **significantly reduced LoS** by an average of **1.87 days*** following **revision hip and knee arthroplasties²**

*Compared with standard care; 6.71 days v 8.58 days; p = 0.019



Seize the cost opportunity

Reductions in dressing changes, SSCs and LoS with **PICO** sNPWT demonstrated an estimated **£1,049 (\$1870.48 AUD) per patient** cost savings following primary TJA^{*3}

Ask for



Evidence in Focus
publication summary

Figure 1. Estimated total mean costs per patient associated with PICO sNPWT and standard dressings

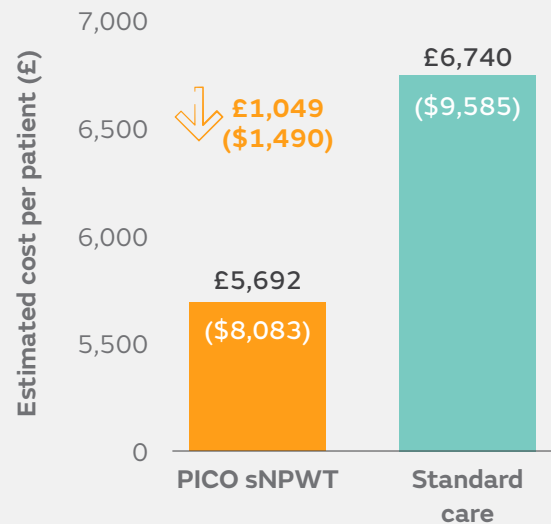
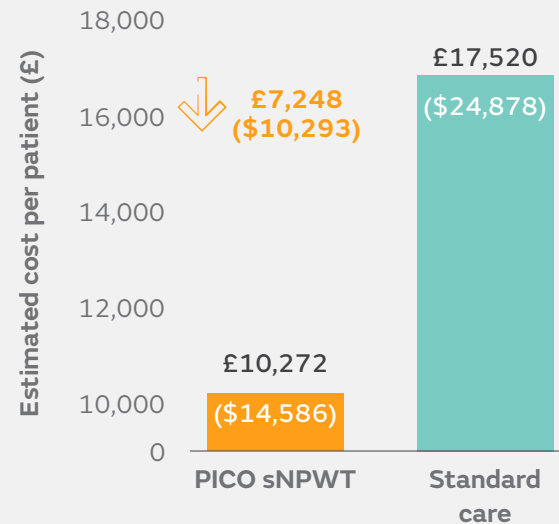
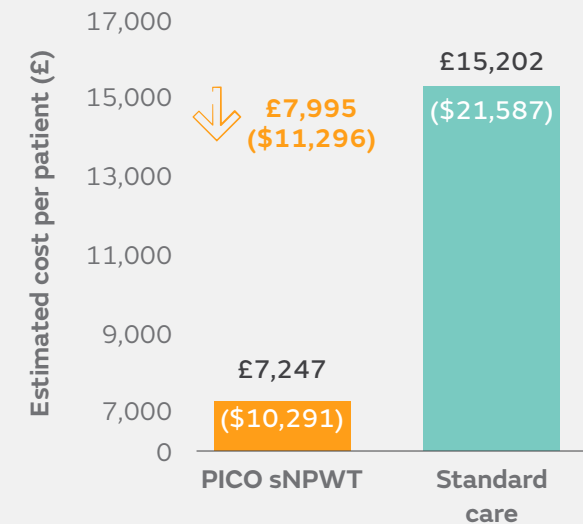


Figure 2. Sub-group analysis ASA ≥ 3 and BMI ≥ 35 , deterministic results, sNPWT compared with standard care, mean costs, outcomes



Sub-group analysis ASA ≥ 3



Sub-group analysis BMI ≥ 35

Abbreviations: sNPWT, single use negative pressure wound therapy; BMI, body mass index; ASA, American Society of Anesthesiologists.

*compared with standard care

High quality evidence for high risk patients



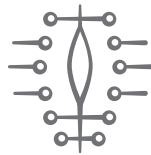
In a meta-analysis¹⁶ of **29 studies** in a variety of surgical indications; including **11 randomised controlled trials** (RCTs) with a total of **5,614 patients**, PICO's NPWT was found to:

63%↓



In SSI risk with **PICO** sNPWT compared with standard care¹⁶

30%↓



In dehiscence risk with **PICO** sNPWT compared with standard care¹⁶

77%↓



In seroma risk with **PICO** sNPWT compared with standard care¹⁶

1.75 DAYS↓



In length of hospital stay seen with **PICO** sNPWT compared with conventional dressings¹⁶



NICE guidance demonstrates that PICO sNPWT provides better outcomes than standard care for preventing surgical site complications in high-risk patients with closed surgical incisions¹⁷

Incremental acquisition costs of PICO sNPWT is more than offset by savings in the treatment of SSIs¹⁷



Is your patient high risk?

Certain patient factors correlate with SSI development following primary and revision arthroplasty¹³. Pre-operative identification can determine the probability of an SSI developing post-operatively¹³.

| Procedure | | | | |
|---------------|-------------|--------------|--------------|---------------|
| TJA procedure | Primary hip | Primary knee | Revision hip | Revision knee |
| Score | 0 | 1 | 3 | 3 |

| Chronic obstructive pulmonary disease | | |
|---------------------------------------|-----|----|
| Presence | Yes | No |
| Score | 1 | 0 |

| Diabetes | | |
|----------|-----|----|
| Presence | Yes | No |
| Score | 1 | 0 |

| Long term insulin use | | |
|-----------------------|-----|----|
| Presence | Yes | No |
| Score | 1.5 | 0 |

| Rheumatoid arthritis or inflammatory arthropathy | | |
|--|-----|----|
| Presence | Yes | No |
| Score | 1.5 | 0 |

| Tobacco use | | |
|-------------|-----|----|
| Presence | Yes | No |
| Score | 1.5 | 0 |

| Lower-extremity osteomyelitis or pyogenic arthritis | | |
|---|-----|----|
| Presence | Yes | No |
| Score | 2 | 0 |

| Pelvis, thigh, leg traumatic fracture | | |
|---------------------------------------|-----|----|
| Presence | Yes | No |
| Score | 2 | 0 |

| Lower-extremity pathologic fracture | | |
|-------------------------------------|-----|----|
| Presence | Yes | No |
| Score | 2.5 | 0 |

| Morbid obesity (BMI ≥ 40) | | |
|---------------------------|-----|----|
| Presence | Yes | No |
| Score | 2.5 | 0 |

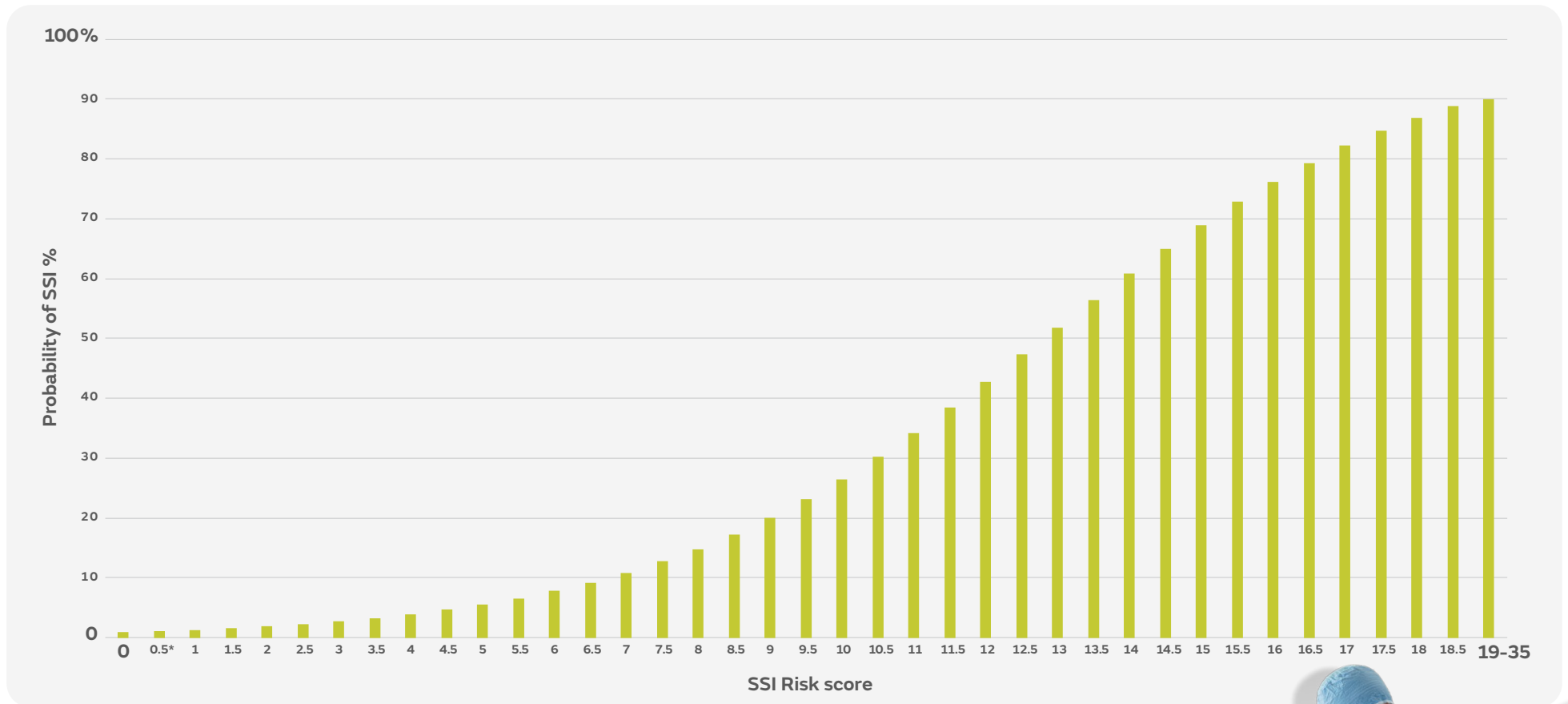
| Primary bone cancer | | |
|---------------------|-----|----|
| Presence | Yes | No |
| Score | 4 | 0 |

| Reaction to prosthesis or implant within 3 years | | |
|--|-----|----|
| Presence | Yes | No |
| Score | 4 | 0 |

| Staphylococcal septicemia | | |
|---------------------------|-----|----|
| Presence | Yes | No |
| Score | 4.5 | 0 |

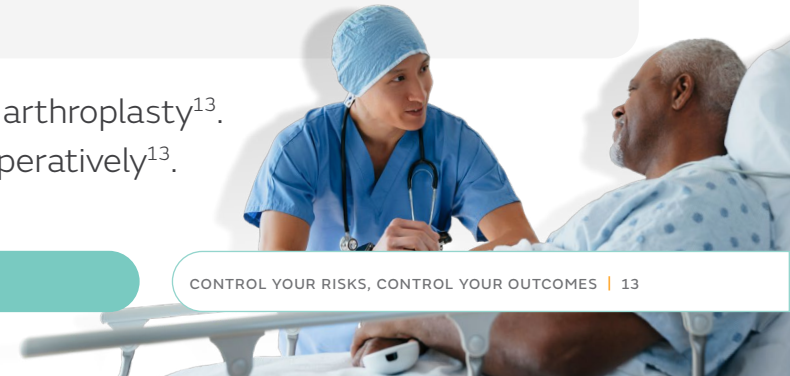
TOTAL PATIENT SCORE:

SSI risk score and corresponding probability of SSI



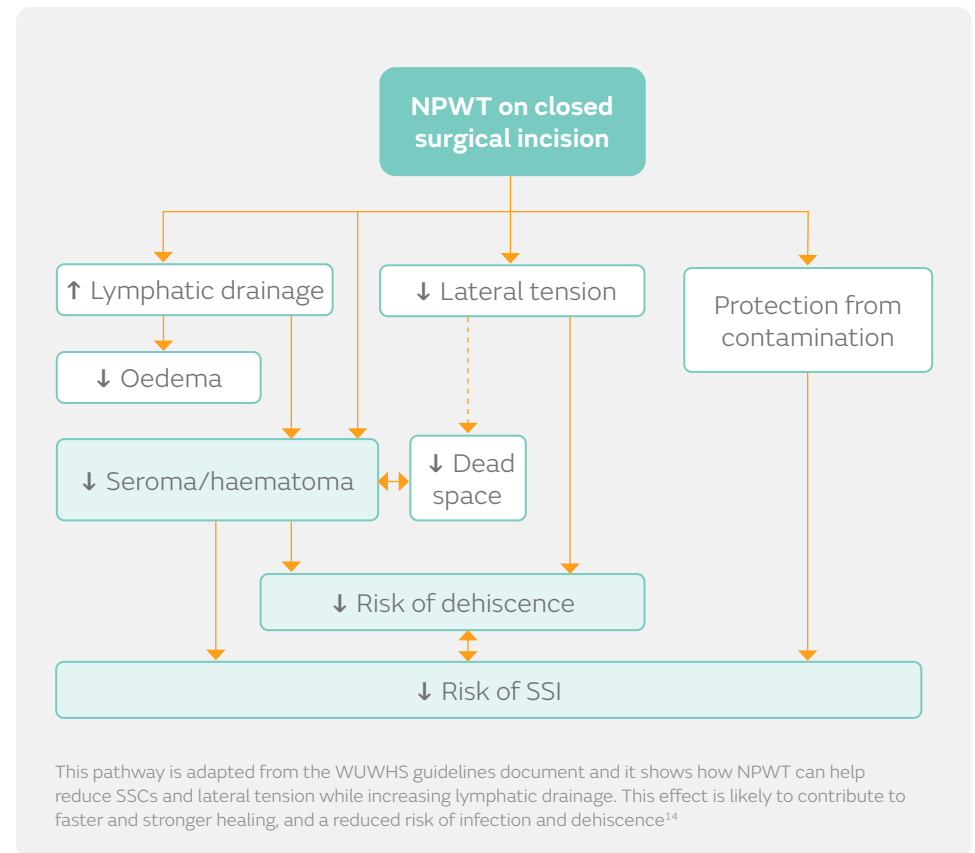
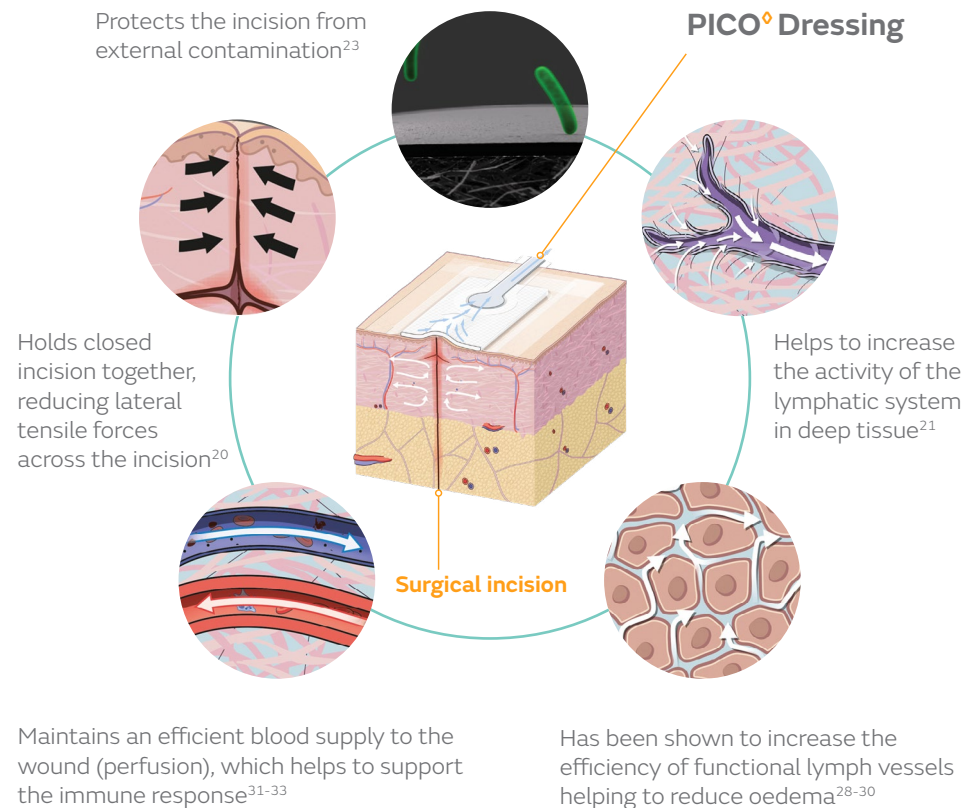
Certain patient factors correlate with SSI development following primary and revision arthroplasty¹³. Pre-operative identification can determine the probability of an SSI developing post-operatively¹³.

*Interpolated value. A score of 0.5 is not a possible result of any combination of positive risk factors



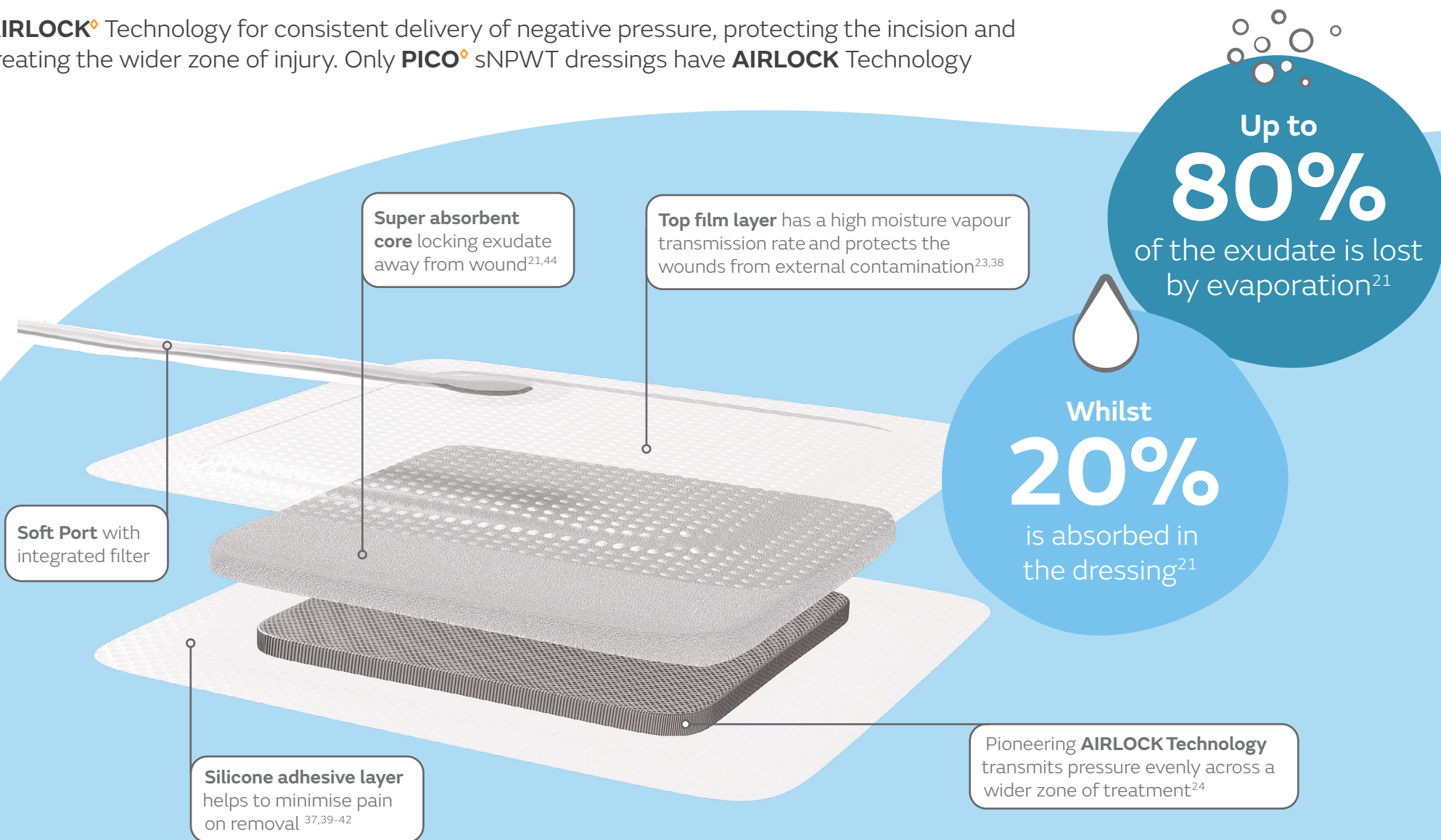
Negative pressure wound therapy (NPWT):

NPWT has multiple mechanisms of action that can help improve the speed, strength and quality of incisional wound healing which can minimise surgical site complications¹⁸⁻²³



One unique differentiator

AIRLOCK Technology for consistent delivery of negative pressure, protecting the incision and treating the wider zone of injury. Only **PICO** sNPWT dressings have **AIRLOCK** Technology



PICO[◇] 7 System

Completely portable and clinically effective in the treatment of surgical, chronic and acute wounds

PICO[◇] 7

Single Use Negative Pressure Wound Therapy System



Features:

Improved device performance*

- Enhanced management of air leaks helping to support healthcare professionals in delivering negative pressure and could potentially be used in problematic 'hard to seal' awkward areas²⁵

Improved ease-of-use

- New user interface with a 'dressing full' indicator, optimising dressing changes⁴¹
- Area to write start date of therapy, helping with healthcare protocols

Designed to improve patient quality of life

- Now even quieter pump than before²⁶
- New transparent belt clip for greater portability²⁷





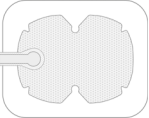
Increased flexibility


- New multipacks of five dressings now available, allowing therapy to be tailored to patients' clinical needs

*compared with standard care

Product ordering codes

The **PICO** sNPWT portfolio is compatible with **ACTICOAT FLEX** Antimicrobial Barrier Dressing, our silver-coated antimicrobial wound contact layer. ACTICOAT FLEX Dressing can be used for up to 3 days on closed surgical incisions at high risk of infection and open wounds with signs and symptoms of infection.⁴⁷⁻⁵⁰

| | | PICO 7 system | | PICO 14 system | Multipack with | PICO 7Y device |
|---|--------------------------------|---------------|---------------|----------------|----------------|----------------|
| | | + 1 dressing | + 2 dressings | + 2 dressings | 5 dressings | + 2 dressings |
| Dressing sizes | | Code | Code | Code | Code | Code |
|  | 10cm x 20cm | 66802012 | 66802002 | 66802042 | 66802022 | – |
| | 10cm x 30cm | 66802013 | 66802003 | 66802043 | 66802023 | – |
| | 10cm x 40cm | 66802014 | 66802004 | 66802044 | 66802024 | – |
|  | 15cm x 15cm | – | 66802005 | 66802045 | 66802025 | – |
|  | 15cm x 20cm | – | 66802006 | 66802046 | 66802026 | – |
| | 15cm x 30cm | – | 66802007 | 66802047 | 66802027 | – |
|  | 20cm x 20cm | – | 66802008 | 66802048 | 66802028 | – |
| | 25cm x 25cm | – | 66802009 | 66802049 | 66802029 | – |
|  | Multisite small 15cm x 20cm | – | 66802000 | 66802040 | 66802020 | – |
| | Multisite large 20cm x 25cm | – | 66802001 | 66802041 | 66802021 | 66802031 |

| Consumables | | Code |
|---|---|------------------------|
|  | Foam dressing filler | 10cm x 12.5cm 66801021 |
|  | 5 Antimicrobial Gauze Rolls + 1 SECURA [®] NSBF Wipe | 11.4cm x 3.7m 66802127 |

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.

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