

# kurin<sup>®</sup>

**A SIMPLE & EFFECTIVE SOLUTION  
FOR DRASTICALLY REDUCING  
BLOOD CULTURE CONTAMINATION**

**ISKUSHEALTH**  
IMPROVING PATIENT OUTCOMES



## BLOOD CULTURE CONTAMINATION: THE CAUSE



- Blood culture is considered to be the “gold standard” method of investigation for the detection of microorganisms in the blood that leads to the diagnosis of serious infections.
- However, blood cultures continue to be a source of frustration to clinicians and microbiologists due to erroneous results caused by contamination of samples
- On average, positive blood culture results make up 10% of all blood culture tests done<sup>1</sup>
- The universally “acceptable” blood culture contamination (BCC) rate is currently set as 3% by the American Society for Microbiology<sup>2</sup>
- A 3% BCC rate indicates that approximately 1/3 of all positive blood cultures done in a hospital are false positive<sup>1</sup>
- Reports suggest UK & Irish hospitals contamination rates are on average at 5% or higher<sup>2</sup>
- Tests can become contaminated from several sources such as the patient’s skin, the equipment used to take the sample, the hands of the person taking the blood sample, or the environment<sup>3</sup>

## BLOOD CULTURE CONTAMINATION: THE EFFECT

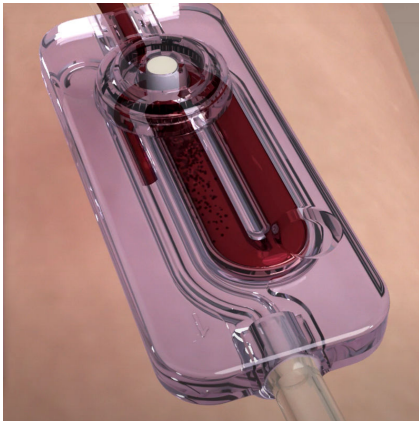


- Contaminated samples produce incorrect results and compromise the integrity of blood cultures as a diagnostic tool
- They place patients at risk of misinformed prognoses and incorrect targeted therapies<sup>2</sup>
- Unnecessary antibiotics are prescribed in 40-50% of cases of BCC, this can contribute to antimicrobial resistance<sup>3</sup>
- Studies confirm an association between contaminated blood culture samples and increased length of hospital stay (LOS) for patients<sup>2</sup>
- An unnecessary increase in hospitalisation can lead to hospital-acquired infections (HAIs), including C. Diff, Pneumonia and MRSA<sup>2</sup>
- Blood culture contamination has a large financial impact on hospitals and organisations
- Increased costs are due to prolonged LOS, greater antibiotic use, increased diagnostic testing and subsequent laboratory time<sup>2</sup>

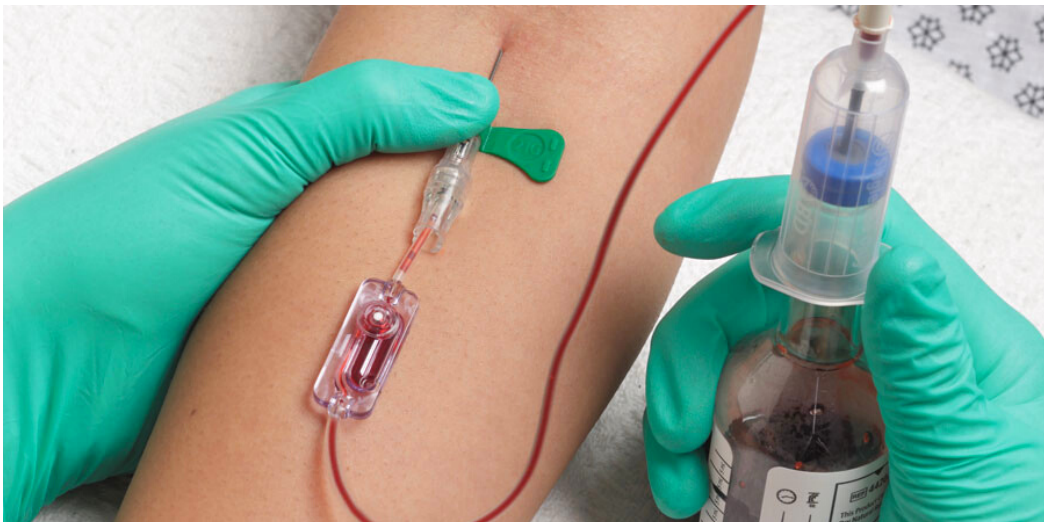
## THE SOLUTION: KURIN® THE NEW STANDARD FOR BLOOD CULTURE



- The integrated Kurin Lock® sidelines the initial flash of 0.15 ml of blood into a side-channel
- This is a passive process and requires no additional intervention
- Any bacterial contaminants are now likely to have been sidelined in the initial 0.15ml flash of blood
- When a vacuum is applied, the blood will continue through the device filling the blood culture bottle with an adequate amount of uncontaminated blood for blood culture testing



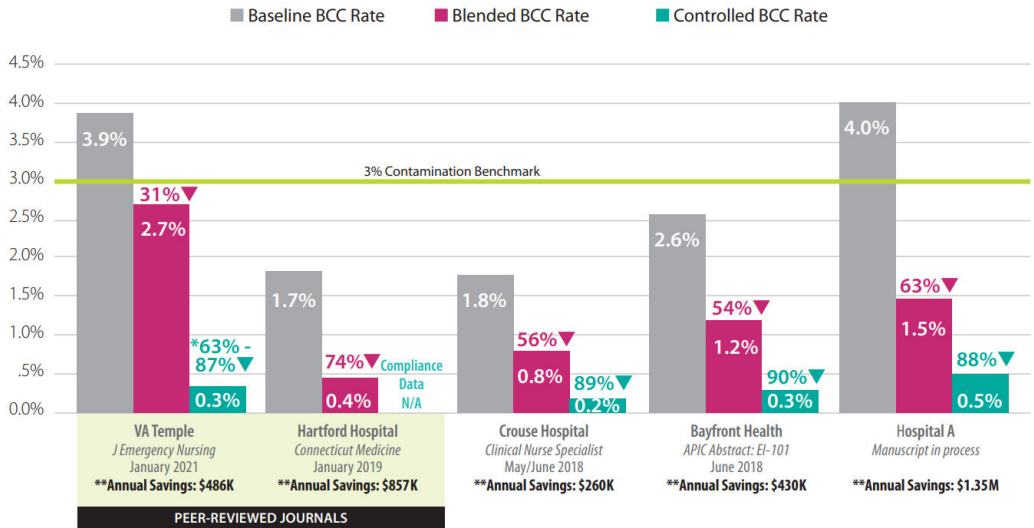
- The Kurin Lock® sidelines skin microbes without slowing down busy clinicians and requires no active intervention
- The Kurin Lock® is sensitive to blood wastage and can be used with pediatric patients
- Studies show that best practice compliance, combined with Flash Technology to sideline the initial flash of blood, can reduce contaminated cultures by up to 80%\*<sup>1</sup>
- This will improve the clinical value of blood culture testing for patients and reduce costs for organisations<sup>1</sup>



## BLOOD CULTURE CONTAMINATION : THE SOLUTION

- Kurin® peripheral stab collection set features industry-leading butterfly safety needles in 21G & 23G
- Kurin can be used from a freshly inserted cannula to prevent multiple blood taking/cannula insertion sites for patients
- Kurin® can be connected to a low volume syringe for pediatric use
- Kurin® requires no change in practitioners blood taking practice
- Compatible with BD or BioMérieux blood culture bottles

## Kurin Clinical Efficacy: Blended vs. Controlled Contamination Rate Reduction



Fluctuations in caregiver compliance are reflected in the blended rates, while Kurin rates reflect the efficacy of Kurin when it was used.

\*Authors state that the mean rate of contamination with Kurin was 63% to 87% lower than that for the control; 1,312 samples were collected using Kurin, of which four (0.3%) were contaminated.

\*\*Annual savings are based on a cost of \$4500/BCC.

Credit: [www.kurin.com/studies/](http://www.kurin.com/studies/)

### BLOOD CULTURE CONTAMINATION : THE RESULTS

- Kurin® was developed in 2017 in the US, where significant success in false-positive reduction is being achieved.
- Blended results refer to the hospital's use of Kurin® with other methods of blood culture collection. These results illustrate a minimum 50% reduction in false positives.
- This reduction greatly increases when hospitals completely convert to using Kurin® for all blood culture collection, with up to 90% reduction when using Kurin® alone<sup>1</sup>





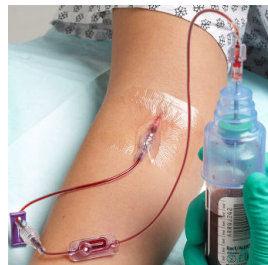
## KURIN® FOR VENIPUNCTURE

Product Code	Description	Gauge
D-11221	BD Saftey Slide	21G
D-11223	BD Saftey Slide	23G
M-11221	BioM Saftey Slide	21G
M-11223	BioM Saftey Slide	23G



## KURIN® FOR FRESH IV CANNULA

Product Code	Description
D-PIV12	BD Leur Connect 12"
D-PIV18	BD Leur Connect 12" set + 6" extension
M-PIV12	BioM Leur Connect 12" set
M-PIV18	BioM Leur Connect 12" set + 6" extension



## KURIN® FOR LOW VOLUME SYRINGE DRAW (PEDIATRICS)

Product Code	Description
S-PIV4	Leur Connect 4" set
S-PIV10	Leur Connect 4" set + 6" extension





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#### REFERENCES

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