Clave™
Market-leading needlefree IV connector technology proven to minimize bacterial transfer and colonization
Powerful medications used in cancer treatments are critical to patient care, but they also pose a safety risk to patients and healthcare workers. At ICU Medical, our focus is on delivering safe, efficient and cost-effective oncology systems that fit seamlessly into your workflows, and help you keep pharmacists, clinicians, and patients safe from hazardous drug exposure.

See how our focus can help you:

- Enhance Patient Safety
- Improve Clinical Efficiency
- Maximize Profitability

Help Reduce Infection Risks
Standardize Clinical Protocols
Optimize Supply of IV Consumables

When you choose ICU Medical needlefree IV sets and connectors with patented Clave technology, you get an effective barrier against bacterial transfer and colonization designed to help reduce the risk of bloodstream infections.

And since the same clinical protocol is used with all patient populations, you can standardize on a single connector technology wherever care is given, letting you minimize clinical training and in-servicing and provide enhanced patient safety throughout your facilities while optimizing your supply chain.

Help enhance the safety and efficiency of infusion therapy by choosing Industry-Leading Infection Control Technology.
Use the needlefree IV connector technology chosen by more clinicians than any other brand\(^1\)

When you choose any one of ICU Medical’s needlefree IV connectors featuring Clave technology, you’re in good company. Clinicians around the world choose Clave technology more than any other brand because they know they can trust Clave to help keep their patients safe.

Minimize bacterial transfer and colonization with proven Clave needlefree connector technology\(^2,3,4,5\)

Intravenous therapy is essential to patient care, but accessing your patient’s bloodstream may increase the risk of infection. Proven Clave needlefree IV connector technology can be an important element in your efforts to help minimize the risk of bloodstream infections.

Standardize on a single connector technology wherever care is given

Clave technology can be used on all central venous catheters and all patient populations for blood draws or administration of IV medications, letting you minimize clinical training while enhancing patient safety by using a single, clinically-preferred connector technology throughout the hospital.

Help reduce the risk of CRBSIs by standardizing on connector technology that’s proven to minimize bacterial contamination

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1. 2016 GHX market data on single-sterile sales of standalone needleless connectors and single-sterile sales of extension sets with needleless connection. February 1, 2016.
Enhance patient safety with one innovative technology in the DNA of every connector

Designed to enhance patient safety, each of ICU Medical’s needlefree connectors utilizes the same Clave infection control technology. Clave’s straight fluid path and minimal residual volume help maximize the effectiveness of every flush.

**MicroClave™ Clear**
- Clear housing to visualize connector flushing
- Use on all vascular catheters

**MicroClave™**
- Also available with blue tint for enhanced line identification
- Use on all vascular catheters

**Clave™ Neutron**
- Helps reduce multiple causes of catheter reflux
- Helps reduce catheter occlusions by as much as 50%6

**NanoClave™**
- Minimize flush volumes
- Multiple applications, including multiport manifolds and stopcocks

**Silicone Seal and Internal Cannula**
Minimizes Point of Entry for Bacteria
Specifically designed to minimize contact between the connector’s external surface and the internal fluid path upon luer activation, Clave needlefree IV connectors minimize entry points for bacteria. Several studies have attributed this feature to a reduction in bacterial contaminants passed through the connector.2,3,4,5

**Split Septum**
Clave’s normally closed swabbable split septum design is a preferred feature for needlefree connectors.7

**Straight Fluid Path**
Clave’s straight fluid path allows for efficient clearing of medications, blood, and blood residual with low flush volumes.6,8

**Minimal Residual Volume**
Clave’s minimal residual volume allows for lower flush volumes.

**Clear Housing**
A clear housing lets you see whether you have completely flushed the connector after blood draws or administration.

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Clave helps minimize entry points for bacteria and maximize the effectiveness of each flush.

In a comprehensive study comparing 20 different needlefree IV connectors researchers reported ICU Medical’s connectors featuring Clave technology were “shown to have a significantly lower bacterial transfer rate than any of the other connectors tested.”

Clave technology has the Lowest Bacterial Transfer Rate of all connectors tested.

Efficiently clear the connector with low flush volumes

- ICU Medical’s Clave technology outperforms the BD MaxPlus™, and Baxter Clearlink™ connectors as determined by the total flush volume needed to clear the connectors of residual blood elements.
Clave technology helps enhance patient and clinician safety by using a single, clinically-preferred connector technology throughout the hospital so you can minimize clinical training and in-servicing while optimizing your supply chain.

Use a single connector technology to standardize IV therapy wherever care is given

General Infusions

› Connectors and extension sets chosen by clinicians more often than any other
› Primary gravity and secondary sets featuring Clave technology

NICU & PICU

› Closed medication sets for syringe pump delivery
› Stopcocks and manifolds with low residual volumes

Anesthesia

› Multiport manifolds and stopcocks for simultaneous fluid delivery
› Custom administration, extension, and blood sets for adult and pediatric patients

Oncology

› Connector technology that helps minimize catheter reflux in immunocompromised patients

MicroClave: the clear choice to visualize flushing and help reduce bloodstream infection risk

MicroClave combines proven Clave technology with a clear housing to help you visualize connector flushing after blood draws or administration while providing an effective microbial barrier against bacteria transfer and contamination. Ideal for a wide range of clinical applications and patient populations, MicroClave is the optimal facility-wide needlefree IV connector.

**Help Reduce Risk of CRBSIs**
A mechanically and microbiologically closed system provides a safe and effective microbial barrier to help minimize infection risks.

**Visualize Connector Flushing**
The clear housing of the MicroClave allows for visualization of the internal fluid path upon flushing the connector.

**Use on all Catheters**
MicroClave can be used on all peripheral, arterial, and central venous catheters for blood draws or administration of IV medications.

**No Change in Technique**
By allowing a single protocol to be used with all patient populations, MicroClave minimizes clinical training and in-servicing, while enhancing patient safety.

MicroClave is available with blue-tinted housing for enhanced line identification

> Blue-tinted clear housing lets you easily spot the MicroClave connectors on even your most complex IV sets.
Clave Neutron: unique technology that helps reduce reflux to maintain catheter patency

Maintaining catheter patency and minimizing occlusions can be important steps in your efforts to enhance patient safety and reduce costs. Clave Neutron combines proven Clave infection control technologies with a patented bi-directional silicone valve and bellows feature to help reduce reflux. Clave Neutron helps maintain catheter patency during times when traditional connectors have been shown to occlude most often.

Valve during aspiration
Valve during infusion
Valve with no fluid flow
Valve during reflux challenge

Unlike other anti-reflux valves, Neutron’s patented technology provides the unique ability to absorb and physically compensate for pressure variations that typically result in blood reflux into a catheter.

Clave Neutron may help you reduce catheter occlusions by 50%.

NanoClave Manifolds and Stopcocks: optimize fluid delivery while helping protect against CRBSIs

Help reduce the risk of bloodstream infections and visualize connector flushing with NanoClave featuring a mechanically and microbiologically closed system that provides a safe and effective microbial barrier, and a clear housing that lets you visualize the internal fluid path upon flushing.

Maximize Patient Comfort
The small size and weight of the NanoClave make it the perfect solution for your NICU and PICU patients.

Minimize Flush Volumes
Minimal residual volume of only 0.02 mL allows for lower flush volumes which may help your efforts to maintain appropriate patient fluid balance.

Incorporating proven Clave technology at every connection point
Stopcock and manifold ports integrate Clave infection control technology to maintain a closed system and enhance patient safety.

Optimize the supply of your essential IV consumables

Standardizing on ICU Medical IV consumables gives you best-in-class Clave technology and access to our full portfolio of components to optimize your supply chain across dedicated and non-dedicated sets and the broadest offering of off-the-shelf IV sets tailored to a range of clinical needs.

Reduce SKUs by customizing sets to meet your specific clinical needs

Choose from a wide range of components to create procedure-ready sets tailored to meet your specific clinical needs. Design patient-ready sets with a wide selection of components so you can avoid ordering multiple components, maximize shelf space, and reduce packaging waste.

Custom Tubing

Choose from multiple colors, large and small bore, and specified set lengths for distinct clinical applications.

Custom Configurations

In addition to Clave connectors, choose rotating, fixed, or slip luer connections, clamp type and placement, drip chambers, 0.2 and 1.2 micron integrated filters and more.

Color-coded Components

When line differentiation matters, choose our color-coded components from connector rings, IV tubing, and clamps designed to enhance patient safety and make your job easier.

To learn more about ICU Medical’s full line of Clave needlefree IV sets and components, please call 866.488.6088 or visit www.icumed.com

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