Anesthesia
IV Consumables

Infusion technology to help provide safe and efficient delivery of anesthetic medications
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

When it comes to anesthesia delivery, every detail matters. That's why we've designed specialty products to help reduce the risk of anesthesiology-related infections while helping address inefficiencies in intraoperative environments.

From the infection control properties of our market-leading Clave™ needlefree connectors, to custom IV sets that let you streamline the delivery of care, we’ve got everything you need to help safely and efficiently deliver anesthesia medications to your patients.

Helping to enhance the Safety and Efficiency of IV anesthetic administration
High levels of contamination in the anesthesia work environment point to the need for enhanced infection control technology

The administration of intravenous (IV) fluids is essential in anesthesia, but your typical OR can be crowded and cluttered with equipment that may not be sterile.

Due to the necessity of frequent contact with sources of bacterial transfer, there’s a high probability of patient contamination during anesthesia administration.

Contamination of the anesthesia work area can occur in as little as 4 minutes

- The horizontal transmission of bacterial organisms continues to maintain a high nosocomial infection rate in acute care settings, impacting 10% of patients admitted.

Anesthesia hand hygiene compliance failure rates are as high as 82%.

- Inconsistent cleaning of IV medication ports, as well as manipulation of ports with contaminated gloves, represents significant transmission risk.
- Studies have shown that poor hand hygiene is commonly associated in intraoperative contamination of peripheral intravascular devices.

32% of open IV stopcock sets become contaminated in the OR.

25% of patients with contaminated stopcocks develop infections.

Four of the most contaminated surfaces in the OR are the anesthesia keyboard and mouse, the drawers to the anesthesia card, and the OR bed.
Closed catheter access systems are associated with fewer CRBSIs than open systems and should be used preferentially.\(^5\) The Centers for Disease Control and Prevention (CDC), Guidelines for the Prevention of Intravascular Catheter-Related Infections.\(^5\)  

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Clave technology has been proven to minimize bacterial transfer and colonization\(^5,6,7,8\). 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.”

Minimize infection risks by incorporating closed, self-sealing components featuring Clave IV connector technology

While IV therapy is essential to patient care, accessing your patient’s bloodstream may increase the risk of infection. As a result, the design of needlefree stopcocks and manifolds can be an important part of your efforts to minimize contamination and the risk of bloodstream infection.

ICU Medical’s full line of needlefree stopcocks and manifolds feature proven Clave infection control technology, designed to minimize the risk of contamination by maintaining a closed system. These access ports are ideal for anesthesiology where simultaneous fluid delivery is critical.

- **NanoClave™ Manifolds**
  - Optimize fluid delivery and eliminate integrated fluid flow with gravity-activated back check valve security

- **NanoClave™ Stopcocks**
  - Maintain a needlefree, closed system with automatically self-sealing connector technology

Clave technology has the Lowest Bacterial Transfer Rate of all connectors tested.
Choose from a broad portfolio of anesthesia IV sets with integrated Clave technology

Access a wide selection of off-the-shelf sets with the adaptability to be customized to your unique facility protocols and procedures.

Silicone Seal and Internal Cannula
Minimize 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 significant reduction in bacterial contamination passed through the connector.1,4,7,8

Split Septum
Clave’s normally closed, swabbable split-septum design is a preferred feature for needlefree connectors.10

Straight Fluid Path
Clave’s straight fluid path allows for efficient cleaning of medications, blood, and blood residual with low flush volumes.11,12

Minimal Residual Volume
Clave’s minimal dead space (also referred to as 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.

Extension Sets
Optimize fluid delivery with custom and stock extension sets featuring a range of needlefree connector and component options.

Administration Sets
Help enhance safety and efficiency with IV sets tailored to your protocols, including needlefree connector stopcocks, manifolds, and pre-attached and breakaway extension sets.

Blood Sets
Maintain a closed system throughout the administration of blood products with sets that include hand pumps and add-on extension sets for blood warming.
Get IV anesthesia sets configured just the way you want them

Assembling multiple IV sets and components for anesthesia delivery is not only complex, it requires extra manipulation, wastes time, and may lead to delays in care or an increased risk of contamination. ICU Medical’s custom IV sets for anesthesia are designed to let you standardize processes and minimize setup time.

- Studies have shown anesthesiologists spend 22-29% of their time manipulating IV components.  
- Traditional anesthesia delivery methods require the assembly of multiple IV sets and components, which may increase packaging waste and clutter.

Improve quality of care by addressing inefficiencies in intraoperative IV fluid and drug administration

Anesthesia workspaces were observed to become cluttered with unwanted sterile packaging, occasionally obscuring a clear view of more critical items like drug syringes or airway supplies.”

- Fraind et al.  

Choose from a wide range of best-in-class components to create procedure-ready sets tailored to meet your specific clinical needs.

Get IV anesthesia sets configured just the way you want them

Our custom IV set program helps to improve the efficiency of your anesthesia IV drug delivery practices by allowing you to design patient-ready sets, avoiding the burdensome assembly of multiple components at the bedside. When you consolidate inventory of different set SKUs, you free up shelf space, save valuable time spent searching for the set you need, and reduce packaging waste and clutter.
Standardize on a single supplier for your infusion consumables

With ICU Medical, there's no need to settle for second best when it comes to IV consumables. We give you access to our full portfolio of components and broadest offering of off-the-shelf IV sets tailored to a range of clinical needs. And as a full-line IV therapy provider, we help further optimize your supply chain by standardizing on a single supplier across your dedicated and nondedicated IV sets.

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.