# Customizing Your Closed System Device Hybrid System ChemoClave ChemoLock



# Hybrid Systems Customized for You & Your Practice

PractiVet's Closed System Transfer Device systems offer multiple cost-saving strategies that are unique to our system and may not be achievable with other system

In some situations, a facility may implement both the ChemoLock system and Spiros closed male luer. Many clinics prefer the click-to-lock design of the ChemoLock system, but oncology techs prefer the intuitive, luer-based design of the Spiros for administration to patients. In order to accomodate both preferred CSTD technologies, PractiVet developed a variety of "hybrid" administration sets that combine ChemoLock's proprietary locking technology with the Spiros luer-based components.

PractiVet's ChemoClave and ChemoLock systems offer the most comprehensive and cost effective CSTD solutions for facilities of all sizes.



# Creating a Hybrid CSTD System: Things to Consider

- Administration protocol
- Budget
- Preference
- Residual volume in components



## ChemoClave

- Single membrane luer system
- ChemoClave CSTDs generate less biohazard waste than other CSTD's
- Lowest cost to implement
- Keeps practices in compliance with NIOSH
   USP 800 guidelines





## ChemoLock

- Double membrane locking system
- An audible 'click' lets you know you've made a secure connection
- Keeps practices in compliance with NIOSH
   USP 800 guidelines
- The first needle free CSTD to receive FDA 510(K) clearance for both pharmacy compounding (ONB) and patient administration (FDA) application





## Key Differences

### ChemoClave®

- Single membrane luer system
- Male adapter (syringe adapter) residual volume: 0.1 mL
- Female adapter residual volume:0.06 mL
- Flush with a standard syringe into female adapters
- Average cost to administerVincristine: ~\$11

## ChemoLock™

- Double membrane locking system
- Male adapter (syringe adapter) residual volume: 0.35 mL
- Female adapter residual volume:0.104 mL
- All flush syringes must have ChemoLock male adapter
- Average cost to administer Vincristine: ~\$19



## Budget

#### **Standard Vincristine Administration**

|                                | ChemoClave ChemoLock |       |    |       |
|--------------------------------|----------------------|-------|----|-------|
| Vial Adapter                   | \$                   | 3.29  | \$ | 5.95  |
| Male Adapter (Syringe Adapter) | \$                   | 3.75  | \$ | 5.45  |
| Female Adapter                 | \$                   | 1.75  | \$ | 2.40  |
| Flush Syringe                  |                      |       | \$ | 5.45  |
| Bag Adapter (To Draw Flush)    | \$                   | 2.04  | \$ | 3.95  |
|                                | \$                   | 10.83 | \$ | 23.20 |

#### Standard Doxorubicin Administration

|                                 | Che | moClave | Che | emoLock |
|---------------------------------|-----|---------|-----|---------|
| Vial Adapter                    | \$  | 3.06    | \$  | 5.85    |
| Male Adapter (Syringe Adapter)  | \$  | 3.75    | \$  | 5.45    |
| T Port                          | \$  | 2.15    | \$  | 4.50    |
| Admin Set w Infusion Port       | \$  | 4.68    | \$  | 8.45    |
| Male Adapter (End of Admin Set) | \$  | 3.75    | \$  | 5.45    |
| Flush Syringe                   |     |         | \$  | 5.45    |
| Bag Adapter (To Draw Flush)     | \$  | 2.04    | \$  | 3.65    |
|                                 | \$  | 19.43   | \$  | 38.80   |

## Smaller Dosed Drugs

| 1 mL           |  |  | 1 mL            |
|----------------|--|--|-----------------|
| -0.06          | 0.06 mL lost in vial adapter             | 0.104 mL lost in vial adapter            | -0.104          |
| -0.1           | 0.10 mL lost in syringe adapter (Dose 1) | 0.35 mL lost in syringe adapter (Dose 1) | -0.35           |
| <u>0.84 mL</u> |  |  | <u>0.546 mL</u> |
| 0.1 mL         | 0.10 mL lost in syringe adapter (Dose 2) | 0.35 mL lost in syringe adapter (Dose 2) | -0.35           |
| <u>0.74 mL</u> |  | (DO3C 2)                                 | <u>0.196 mL</u> |





## Drawing Up & Administering Flush

Both systems have bag adapters to easily draw up flush

The ChemoClave system utilized the MicroClave - the MicroClave can be accessed with a standard syringe

The ChemoLock system utilized a double membrane system - you will need to use a ChemoLock male adapter on all syringes that will access the patient, including flush syringes





## Vial Adapters

13mm vail tops

20mm+ vail tops
Vial equalized pressure with
filtered air

Vials that must be reconstituted



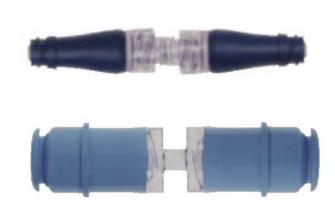


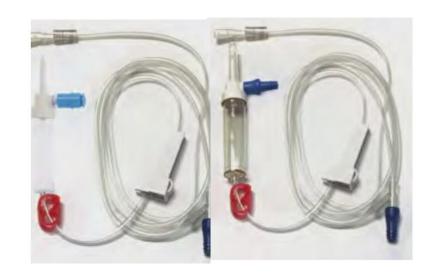
## Administration Set Up

Syringe Transfer Devices
Dilute drugs via via syringe
Note\* always push diluant
through the transfer device
NOT drug

Administration Set w
Infusion Port
Infuse your bag with drug
using the infusion port
above the drip chamber

Pushing Drug at Y-Site
If pushing drug that was
drawn up with Spiros, you
can push at the MicroClave
Y-Site, if administering with
a ChemoLock Male adapter,
luer the ChemoLock female
adapter onto MicroClave YSite to adapt the set to
administer with the
ChemoLock male adapter



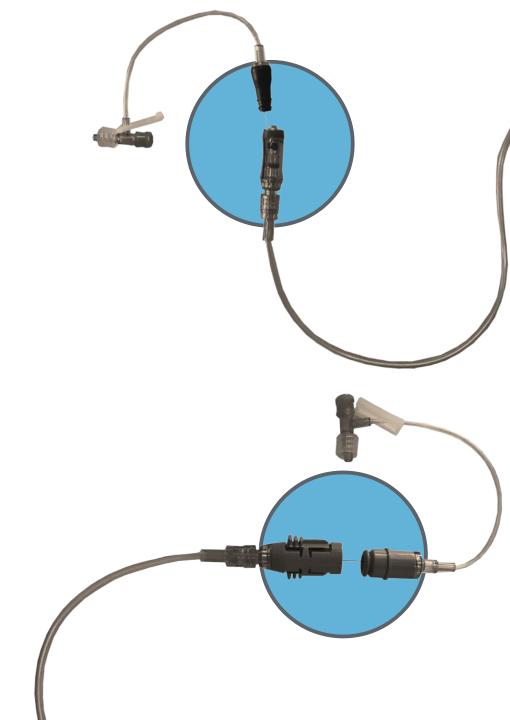




### Patient End

You can use either ChemoClave or ChemoLock system on the patient end regardless of what system you decide to use to draw up your drug and administer

If you are using ChemoLock to administer your drug into your admin set, you can use a Spiros on the end of the admin set if you wish to use a MicroClave T-Port



## Patient Port Options

