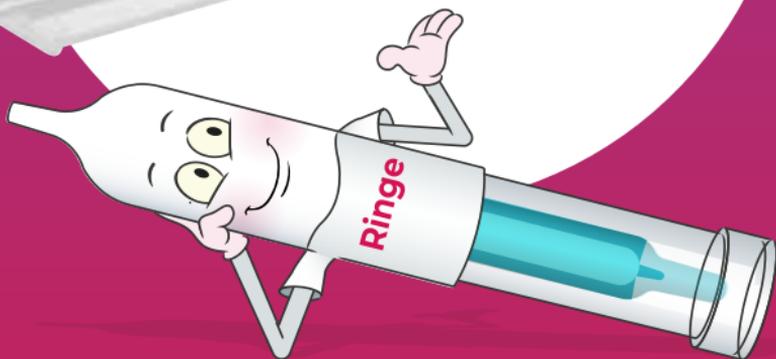


# CueSee

Spotlight



Eurotrol

**Inside The CueSee Ringe**  
Design, Function & Why it Matters

[eurotrol.com](http://eurotrol.com)



Understanding the CueSee® Ringe  
(CSR) for a Safe and Easy Approach to  
Blood Gas CueSee.



For decades, conventional glass ampoules have been used for blood-gas CueSee, offering several clear benefits.

Glass is chemically inert and fully gas-tight, enabling long shelf-life when ampoules remain sealed.

In addition, the transparency of glass allows a clear visual inspection of the contents.

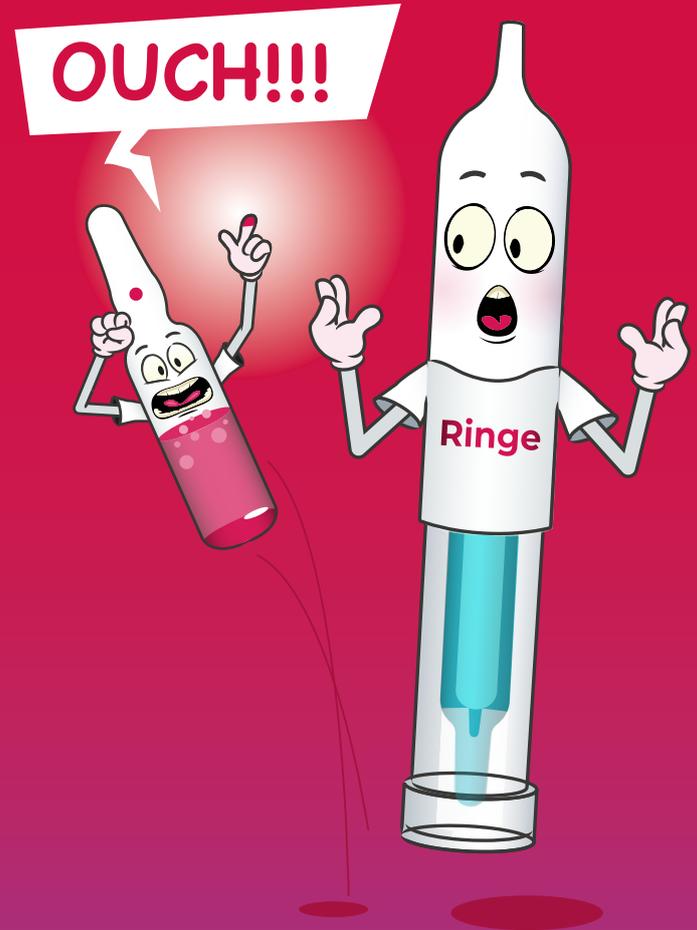




However, glass ampoules also present notable disadvantages, particularly with respect to handling safety. They can be difficult to open and pose a risk of injury, including:

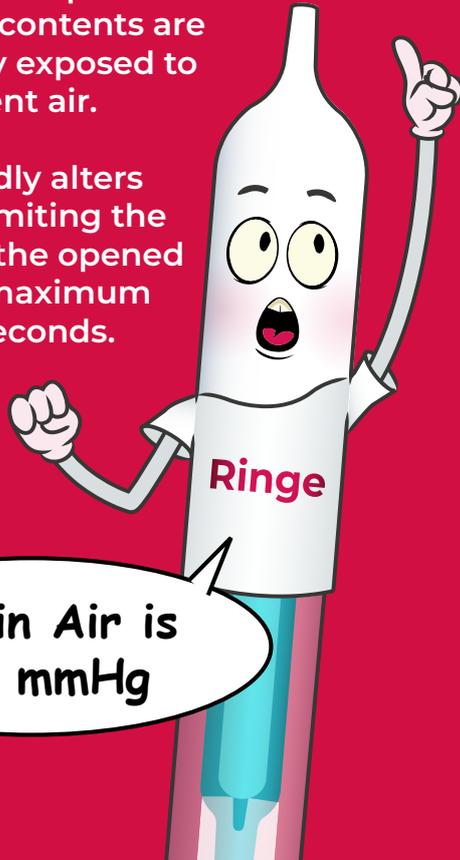
- Lacerations from sharp glass fragments
- Scattering of glass particles

In addition, glass ampoules are fragile and may break during transport and storage.

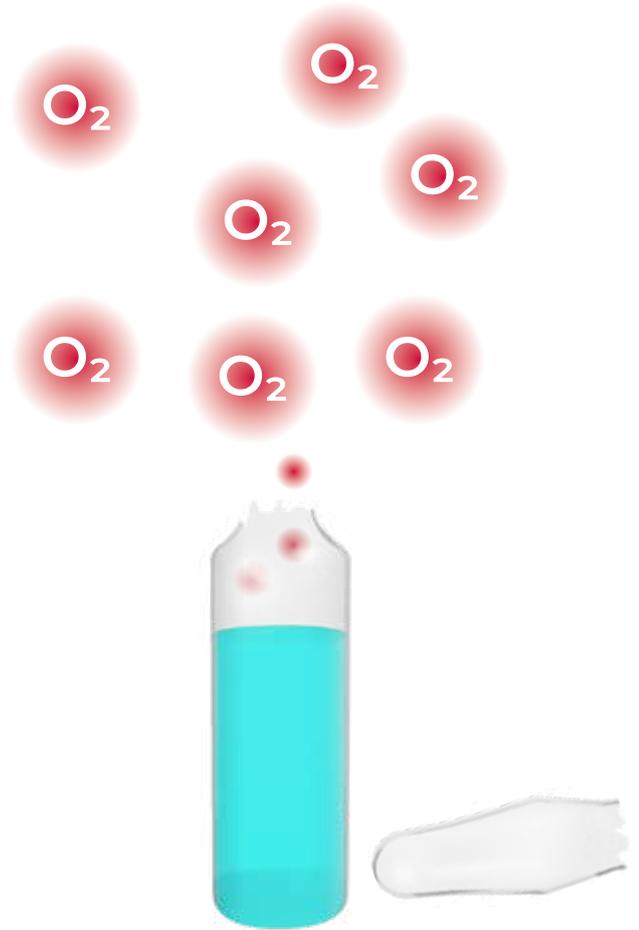


A key practical disadvantage is that once a glass ampoule is opened, the contents are immediately exposed to ambient air.

This rapidly alters the  $pO_2$ , limiting the stability of the opened vial to a maximum of 30 seconds.

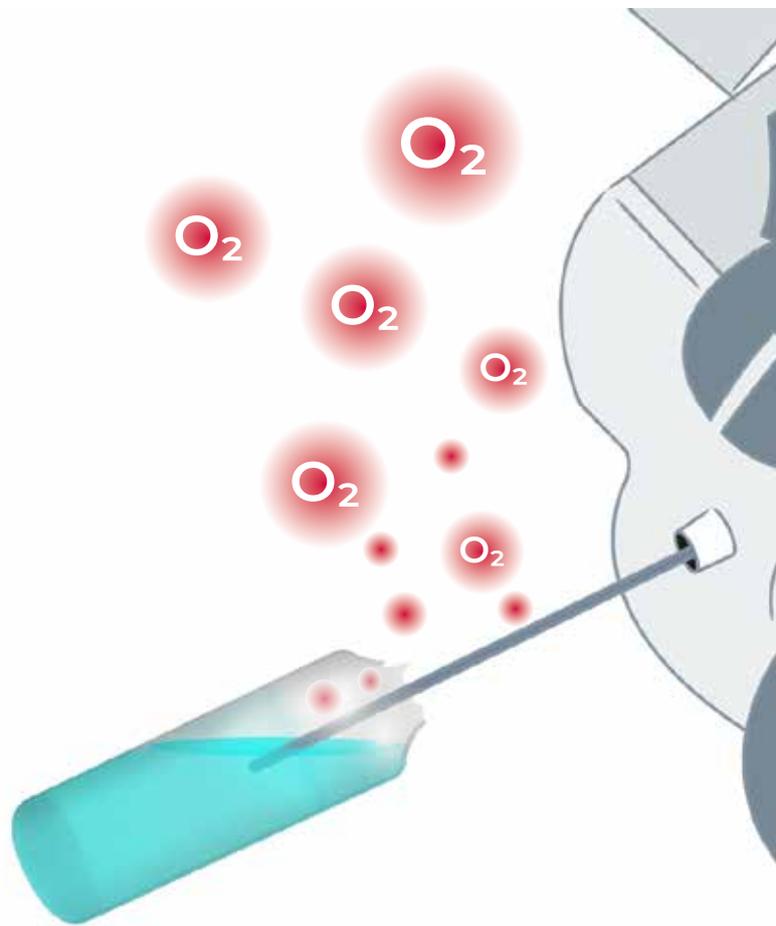


$pO_2$  in Air is  
160 mmHg



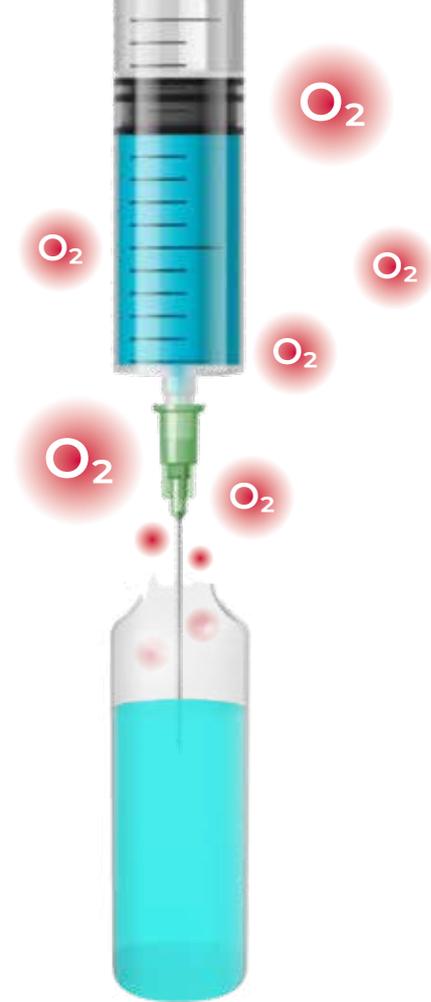
When aspiration mode is used, the analyzer needle aspirates the sample directly from an open ampoule.

During this process, the contents are fully exposed to ambient air, creating a risk of air contamination and subsequent  $pO_2$  alteration.

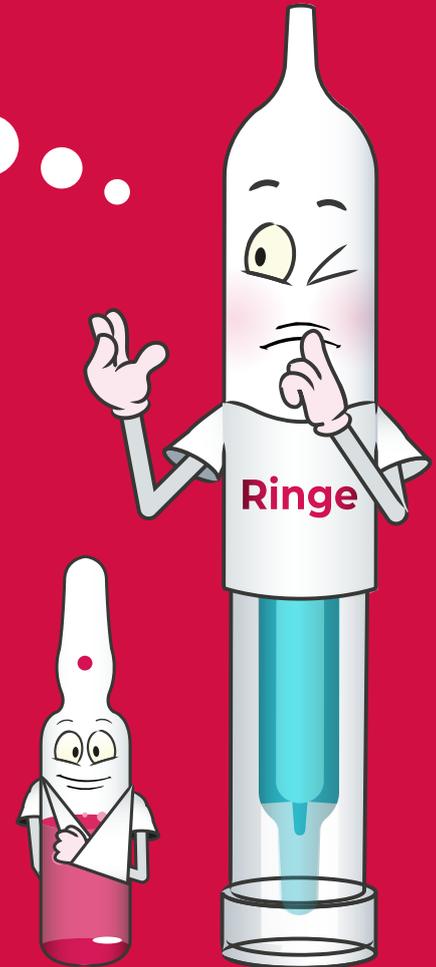


When injection mode is used, you need a separate device to collect the sample from the ampoule.

This is unpractical and again a big source of air contamination influencing the pO<sub>2</sub>.



How to  
resolve these  
issues?





# CueSee<sup>®</sup> Ringe



The ultimate solution for a safe and easy way to sample for blood gas CueSee with none of the drawbacks of conventional ampoules.

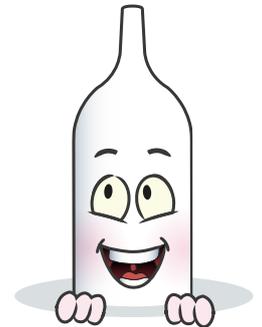
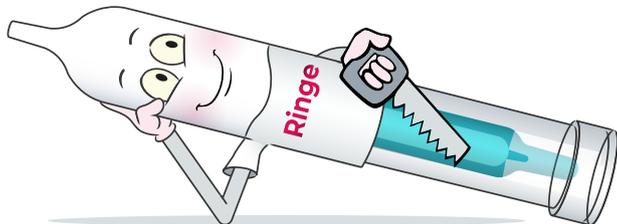
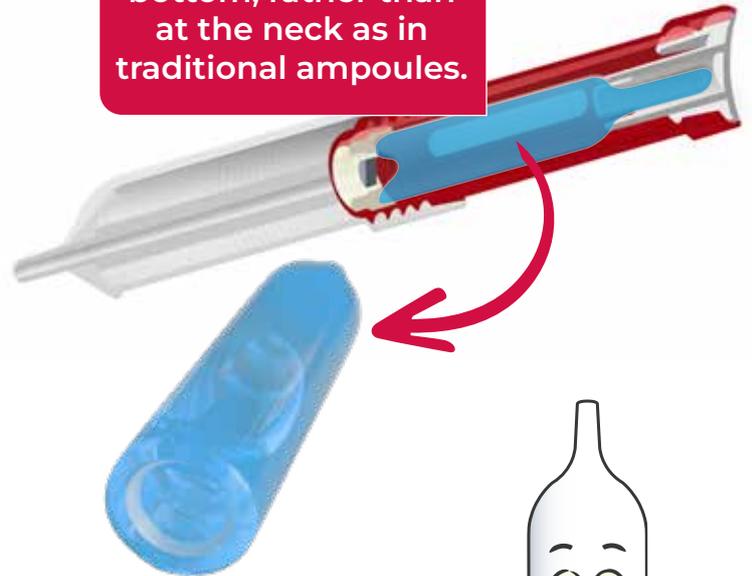
To understand how the CueSee® Ringe works, we will first look more closely at its design.



Seal

Inside the device, a special glass ampoule is positioned against an airtight seal.

This special glass ampoule features a break ring positioned at the bottom, rather than at the neck as in traditional ampoules.



The plunger (green component) incorporates a sample channel with glass walls.

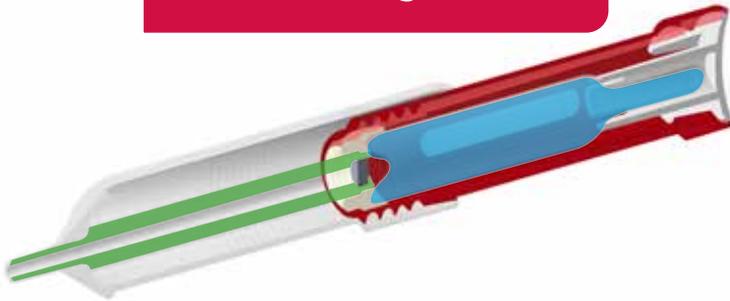
The plunger is positioned opposite the bottom of the ampoule and is seated against the seal to form an airtight closure.

When the syringe is held stationary and the holder (red component) is rotated, the threaded mechanism advances the plunger toward the bottom of the ampoule, breaking it and thereby opening the ampoule.

Syringe

As the plunger advances, direct contact with the liquid pushes it forward, ensuring air-independent flow into the sampling channel.

The bottom of the plunger incorporates an integrated filter that prevents glass particles from entering the sampling channel.



Once the threaded mechanism has reached its end position and the ampoule is opened, the device enters dosing mode.

**Button**



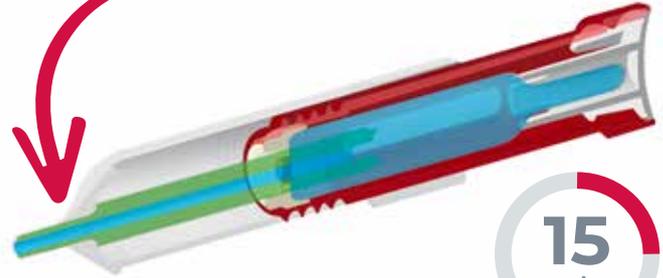
**Luer-slip**



The syringe can then be operated like a conventional syringe by pressing the holder button to dispense fluid through the sampling channel.

Dosing is performed without an additional sampling device, as the package incorporates an integrated syringe with a standard Luer-slip connection.

Only the very small opening of the sampling channel at the Luer-slip is exposed to ambient air. As a result, oxygen contamination is minimized, providing an open-vial stability of at least 15 minutes.



**15**  
min

This extended stability allows multiple samplings to be performed from a single ampoule while maintaining consistent quality.

Before using the CueSee® Ringe, users should carefully read the “How to Get Started” instructions.

The following section highlights several general but important tips for using the CueSee® Ringe with blood-gas analyzers, both in aspiration and injection mode.

## CueSee VeriSTAT® CSR

### To Get Started

Sign up for [cuseecompare.com](http://cuseecompare.com)  
supportus@eurotrol.com  
502-501-1100 Ext. 1

Obtain your barcode sheet for all lots from CueSee® Compare

Prepare your samples as explained below

Enter your results in CueSee® Compare

Obtain reports with Target Values and many more from CueSee® Compare

## Sample Preparation

### Method A - Recommended

**A1** Bring device from refrigerator to room temperature for a minimum of 2 days.



**A2** Before activation the device is stable for 30 days at room temperature.

No shaking required!



### Method B - Alternative (for urgent needs)

**B1** Bring device from refrigerator to room temperature for a minimum of 1 hour.



**B2** Shake vigorously for 3 minutes.



Method A or B continue to 3

Use Abbott i-STAT® according to the user's instructions.

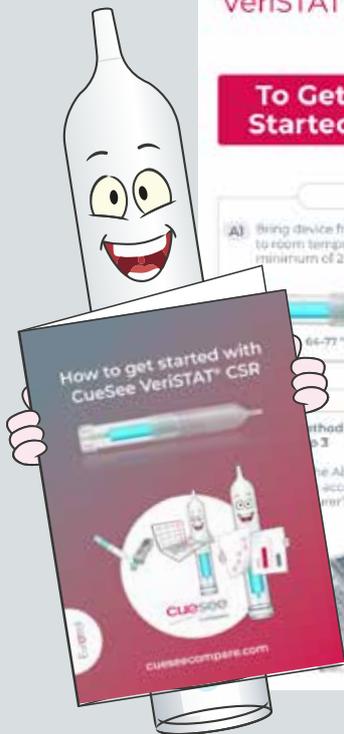


5 Device is now used as a regular syringe.

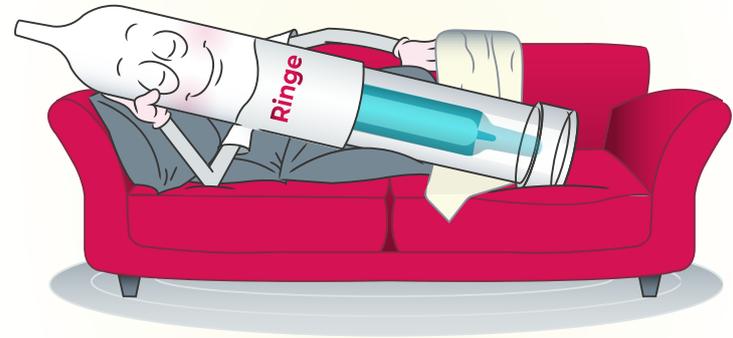
Discard a drop before each test.

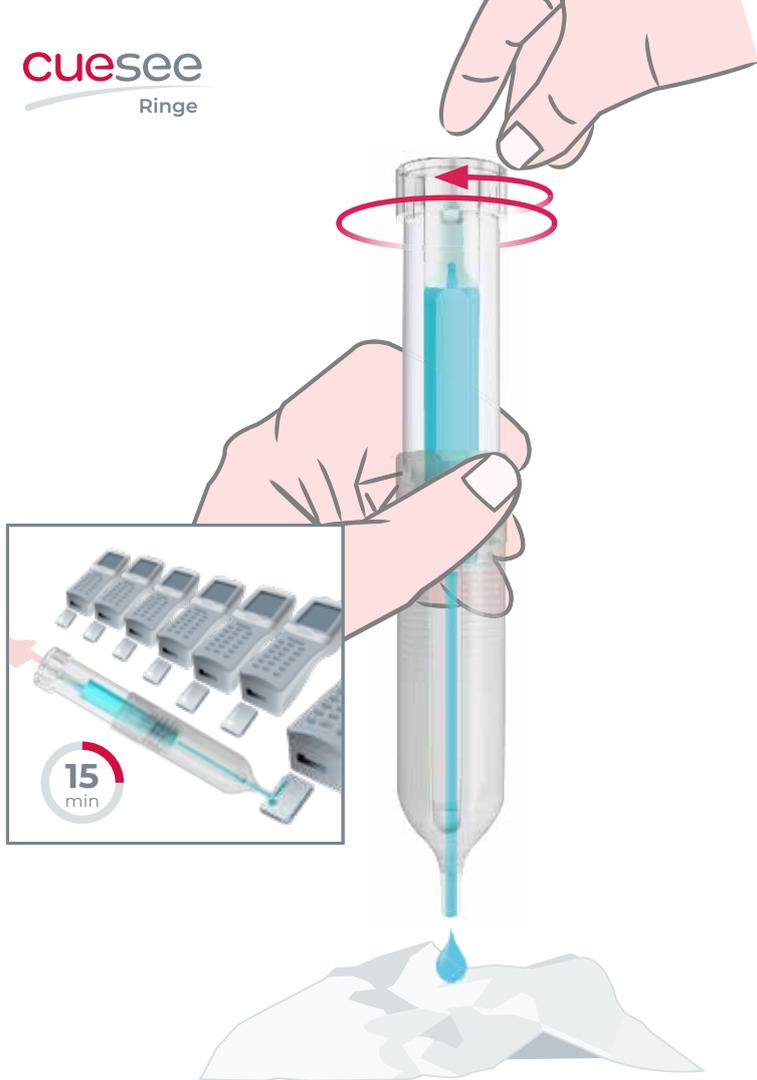


6 After activation device is stable for 15 minutes.



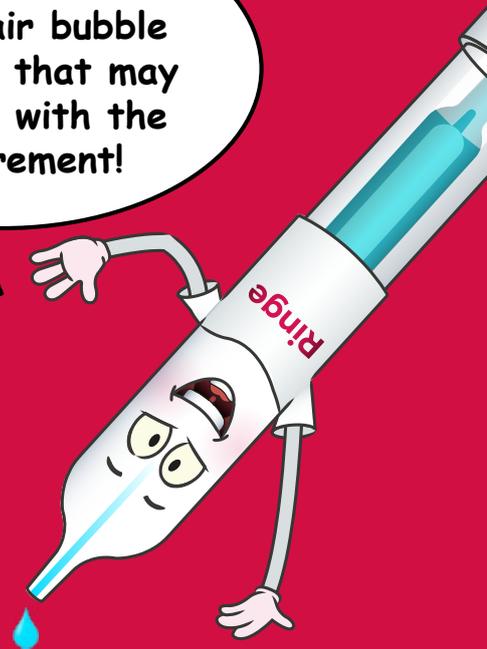
After equilibrating the CueSee® Ringe at room temperature for 48 hours, the gases inside the ampoule reach equilibrium. No vigorous shaking is required; the device is ready for immediate use!

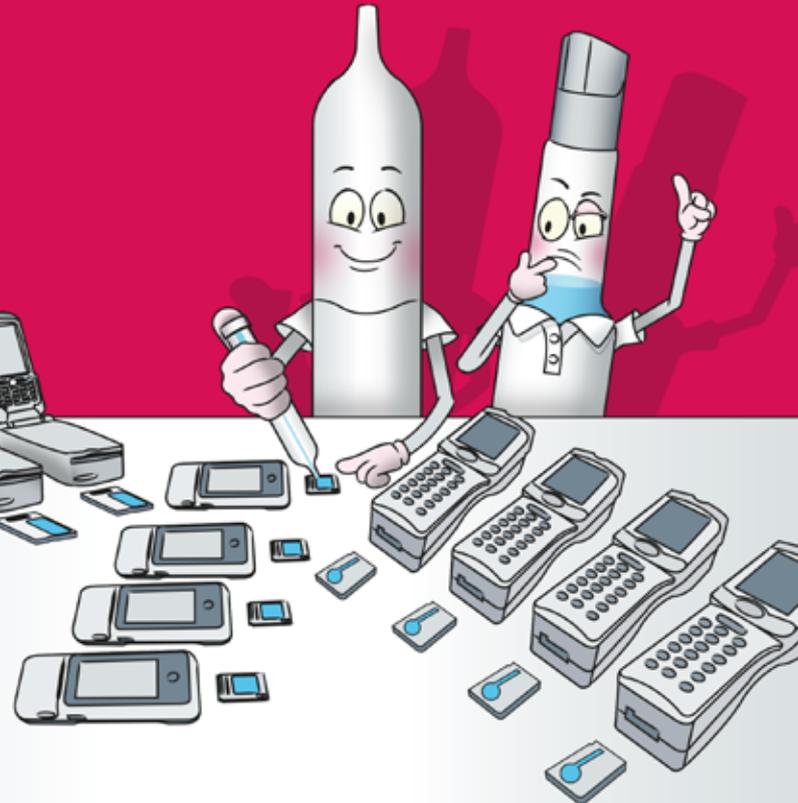




When using the CueSee® Ringe in injection mode, the device should be held with the Luer-slip connection pointing downward during activation and sampling.

This is to prevent air bubble movement that may interfere with the measurement!

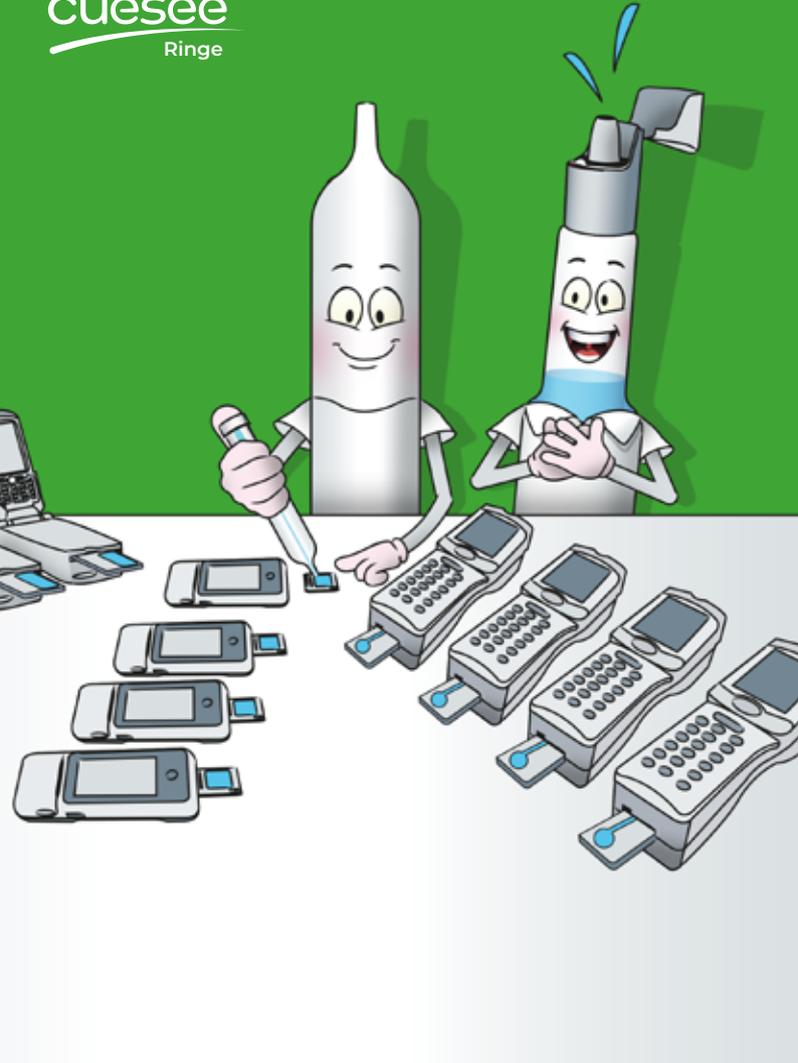




## Incorrect Use

Preloading a cartridge with sample and allowing it to remain on the bench prior to analysis is not acceptable.

Exposure to ambient air while in the cartridge allows oxygen diffusion into the sample, which leads to deviating pO<sub>2</sub> results.

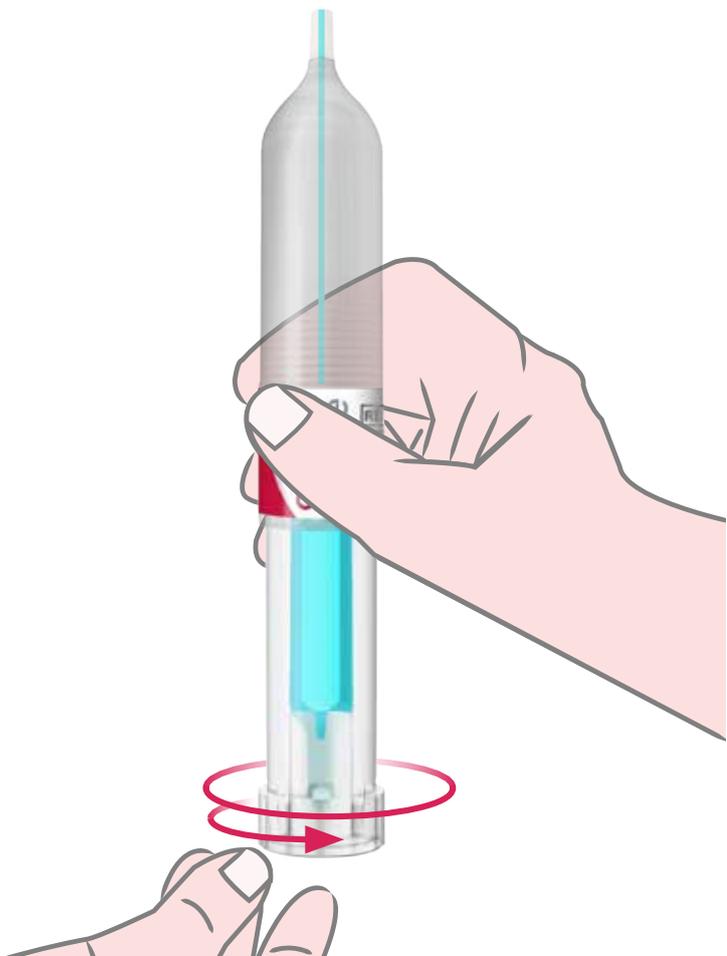


## Correct Use

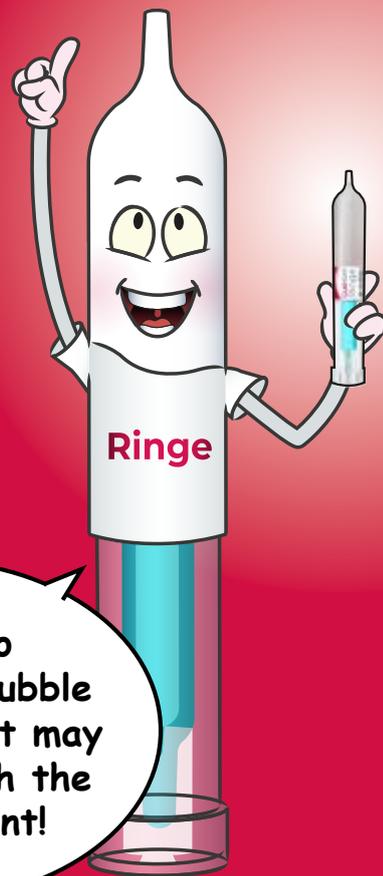
For reliable measurements, fill the cartridge and start the test immediately.

Follow the same procedure for each subsequent device.

Compared with conventional glass ampoules, this workflow improves precision by eliminating exposure to ambient air.



When using the CueSee® Ringe in aspiration mode, the device should be held with the Luer-slip connection pointing upward during activation and sampling.



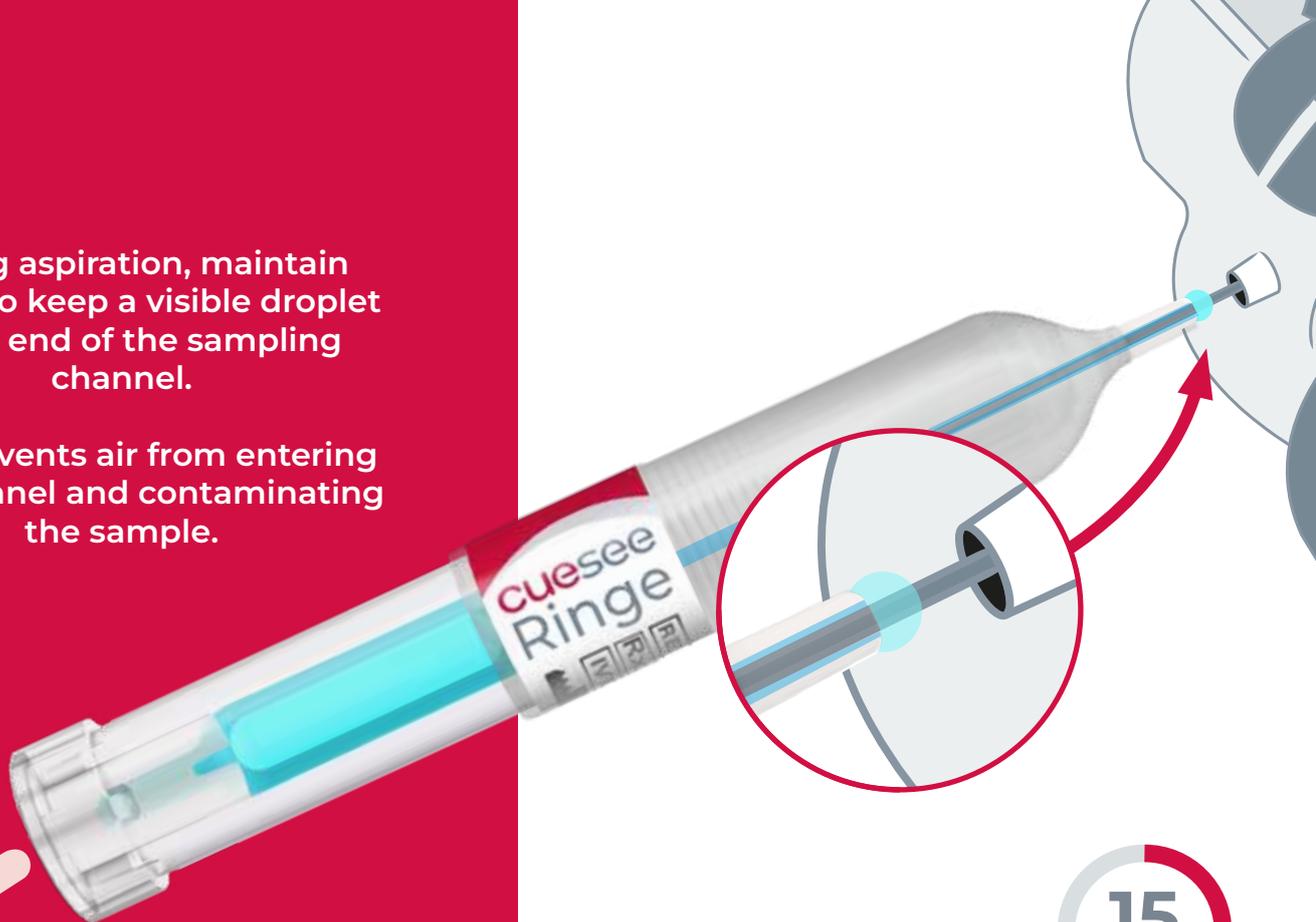
This is to prevent air bubble movement that may interfere with the measurement!

Once the needle is ready for sampling, immediately insert the needle fully into the sampling channel of the CueSee® Ringe to prevent air exposure; liquid spilling due to positive displacement is expected.



During aspiration, maintain dosing to keep a visible droplet at the end of the sampling channel.

This prevents air from entering the channel and contaminating the sample.



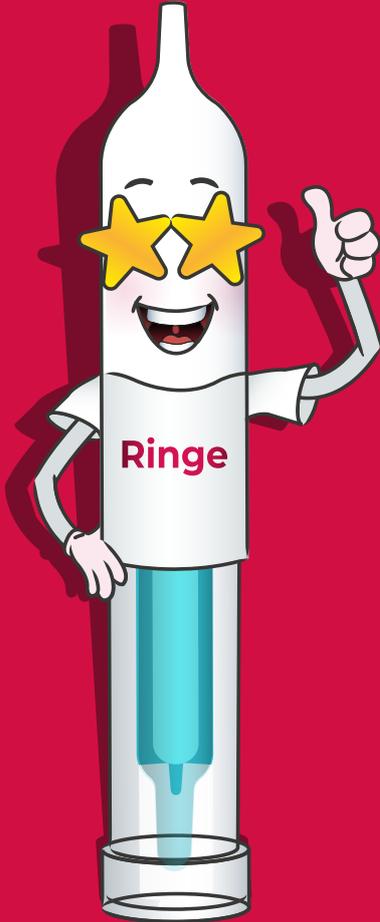


# IMPORTANT NOTE

At the end of dosing, about 50% of the liquid remains in the ampoule by design.

This excess volume supports positive displacement sampling, ensuring that any potential oxygen exposure has minimal impact on sample quality.

Importantly, the CueSee® Ringe still provides approximately 2 mL of usable liquid, equal to the full volume of a conventional ampoule.



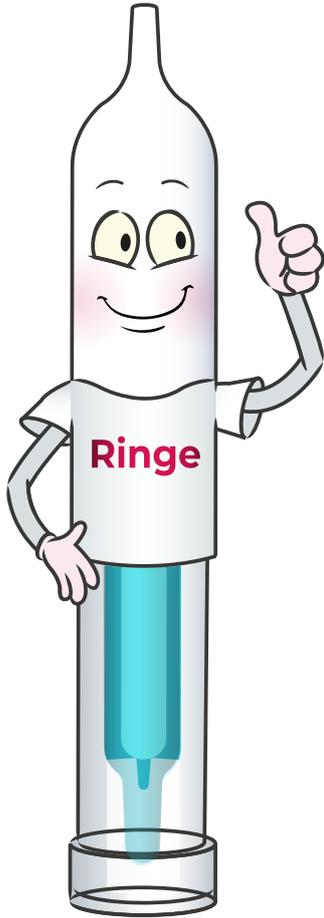
A market evaluation for CueSee® Ringe confirmed excellent performance, achieving an outstanding overall score!

Question	Score (1-5)
Overall Rating of CSR	4.6
User-Friendliness	4.8
Room Temperature Stability for 30 days	4.9
Activation of the CSR	4.8
Sampling into the iSTAT cartridges	4.9
In-Use stability of 15 minutes	5.0
<b>Overall Score</b>	<b>4.8</b>



**Feedback from clinical users  
has been very positive:**

“ I really did like it so much better than the traditional vials of LVM. You didn't feel so rushed to get the cartridges loaded and worried about the pO<sub>2</sub> because of the 15 minutes stability of the product.



# Summary of Key Benefits

- ✓ Safe and easy sampling
- ✓ No shaking required before use
- ✓ The best precision for gases
- ✓ **Open vial stability of 15 minutes!**
- ✓ Multiple tests with just ONE CueSee® Ringe
- ✓ Multiple tests mean lower costs per test

# CueSee

Hyperbaric CSR

Precision under  
Pressure



New experience with CueSee for extreme high pO<sub>2</sub>.

## Benefits

- Safe and easy sampling with the CueSee® Ringe (CSR)
- The best precision for gases
- Red dye to aid dosing
- Multiple tests with just ONE CueSee® Ringe
- Open vial stability of 15 minutes
- Extend your lab's reportable range
- Satisfy federal and accrediting agency AMR requirements

Ideal for reportable range validation and linearity studies in combination with **FREE** access to CueSee® Compare.



Glass ampoule inside the device for safe and easy use.

Activate the device by twisting until it stops. Then it can be used as a regular syringe.



Injection



*Fill the cartridge  
and start the test  
immediately!*

Aspiration



New experience with CueSee for BGEM on the Abbott i-STAT®.

## Benefits

- Safe and easy sampling
- No shaking required before use
- Long shelf-life of 4 years at 2-8 °C
- 30 days storage at room temperature before use
- All analytes in one vial including Hematocrit (Hct)
- **Blue dye** to enhance sample visibility
- Products are offered as a QC and LV bundle
- The best precision for gases
- **Open vial stability of 15 minutes!**
- Multiple tests with just ONE CueSee® Ringe

Products are offered as a QC bundle (Level 1,2,3) and LV Bundle (Level 1,2,3,4,5).

Ideal for routine CueSee®, method comparisons, reportable range validation, linearity studies and competency testing in combination with **FREE** access to CueSee Compare.



The original all-in-one Quality Controls  
for Abbott i-STAT® analyzers.



CueSee VeriSTAT® CSR



CueSee VeriSTAT® CSR LV

# cuesee

BGEM CSR

The only CueSee  
that plays well with  
everyone



A universal blood-gas formulation engineered for reliable performance across blood-gas, electrolyte, and metabolite measurements on all major analyzers.

## Benefits

- Safe and easy sampling with the CueSee® Ringe (CSR)
- The best precision for gases
- Red dye to aid dosing
- Multiple tests with just ONE CueSee® Ringe
- Open vial stability of 15 minutes

Products are offered as a QC bundle (Level 1,2,3) and LV Bundle (Level 1,2,3,4,5). Ideal for routine CueSee, method comparisons, reportable range validation, linearity studies and competency in combination with **FREE** access to CueSee® Compare.



Glass ampoule inside the device for safe and easy use.



Activate the device by twisting until it stops. Then it can be used as a regular syringe.

Injection



*Fill the cartridge  
and start the test  
immediately!*

Aspiration



The only CueSee® for CO-oximeters covering the whole reportable range with real hemoglobin derivatives like patient samples. Packaged in the ACU-Drop II, a two chambered device, which separates the FO<sub>2</sub>Hb and FCOHb from FMetHb during storage, provides a stable formulation.

This separation of fractions also means multiple concentrations of all analytes including FMetHb are available. Once ready to use, simply push a button to mix the fractions and use the built-in dropper bottle or attach a syringe to test.

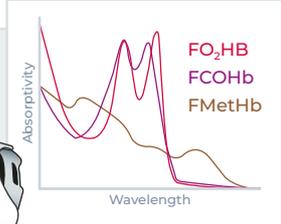
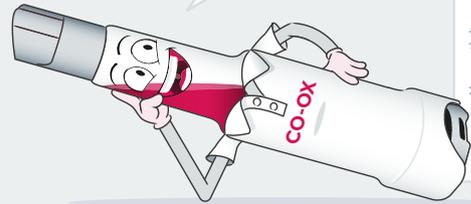
### Benefits

- Containing measurable ranges for tHb, FO<sub>2</sub>Hb, FCOHb and **FMetHb (Methemoglobin)**
- Safe and easy sampling
- Open vial stability of 15 minutes
- Proven superior performance on CO-oximeters
- Products are offered as QC and VM bundle
- Rated no. 1 by Proficiency Testing (PT) organizations

Ideal for routine CueSee, method comparisons, reportable range validation, linearity studies and competency testing in combination with **FREE** access to CueSee Compare.



The only product offering FMetHb concentrations covering a wide reportable range with the lowest spread possible.





Eurotrol has revolutionized CueSee® for coagulation by developing a unique plasma with red blood cells for reporting PT, INR, ACT and aPTT. Packaged in the innovative CueSee® Mix, a dual-chambered device, that keeps the lyophilized plasma with red blood cells separated from the reconstitution solution until activation. When ready to test a simple twisting motion allows the two components to mix. After mixing, the CueSee® material is easy and safe to test by use of the integrated dropper or by attaching a syringe.

### Benefits

- Safe and easy sampling
- Covering the clinical relevant ranges for PT, INR, ACT and aPTT in **ONE** vial
- Plasma with red blood cells that mimic patient samples
- Products are offered as a QC and VM bundle
- Compatible with all common POCT devices

Ideal for routine CueSee®, method comparisons, reportable range validation, linearity studies and competency testing in combination with **FREE** access to CueSee® Compare.



Cheers to the POC team at Huntsville Hospital! They were the first to experience testing with our new CueSee® Coag controls which became available in May 2025.



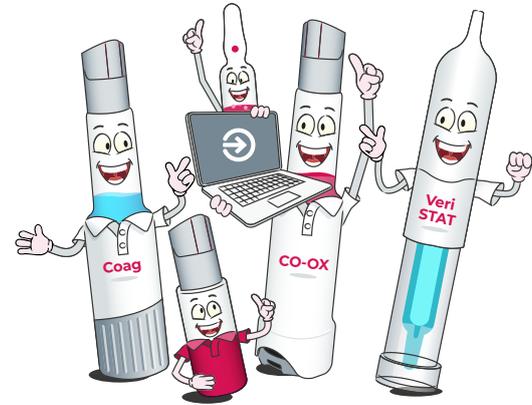
*“It was nice and easy to use, especially compared to having to mix up custom heparin dilutions.” “Were able to go across all 21 of our analyzers ... I would project that we could go across 24 or 25 analyzers with one vial.” “It can be difficult to see if you’ve loaded the cartridge properly, so it was nice to have a color of the sample similar to blood.”*





Your Companion  
to Validate  
CueSee Results

There is no more reliable reference for the expected results of CueSee than peer data comparison. Eurotrol offers a comprehensive and user-friendly solution to assist you with this reference for all your CueSee testing needs. There are endless possibilities for statistical and graphical presentations based on your own acceptance criteria. You will soon discover that it is the perfect companion for your CueSee.



Sign up for CueSee® Compare NOW!

[cuseecompare.com](http://cuseecompare.com)

For any assistance contact our team  
[supportus@eurotrol.com](mailto:supportus@eurotrol.com) | 502-501-1180 Ext. 1



## Benefits

- Easy access to target values
- Comparison of your results with peers
- Simple result entry manually or import
- Multiple reports with **your acceptance criteria**
- Real-time access to all reports
- Customizable to your testing program
- Satisfy regulatory requirements
- Continuous training and support
- **FREE** with all Eurotrol products



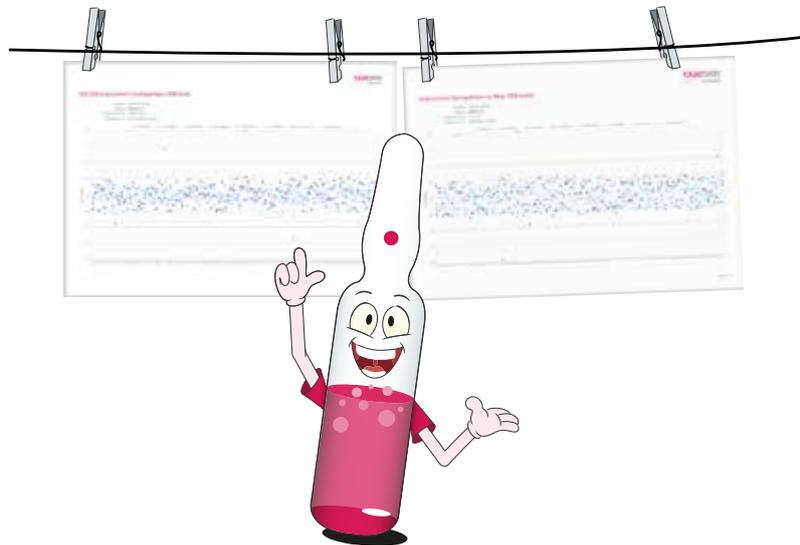
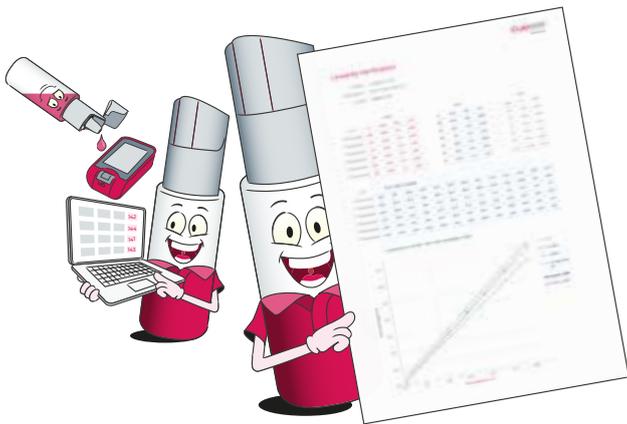


Unlock the true performance of your analyzers with CueSee Compare. The smart, modern way to visualize accuracy, detect trends, and elevate confidence in your results.

## Linearity Reports

A customizable linearity report tells you if your system behaves the way it should across the measuring range.

- Instantly visualize proportionality across levels
- Spot subtle deviations before they become problems
- Transform raw data into powerful insights for decision-making
- Shows if bias, recoveries and deviation from the expected relationship are within acceptable limits



## Instrument Comparison Reports

Whether you're standardizing systems across a hospital network, validating new instruments, or simply ensuring day-to-day accuracy CueSee Compare gives you the tools to instantly compare:

- Multiple analyzers
- Multiple reagent lots
- Multiple locations or networks
- Multiple QC levels and analytes

***It's the comparison tool every lab wishes they had — now they do.***



Meet us

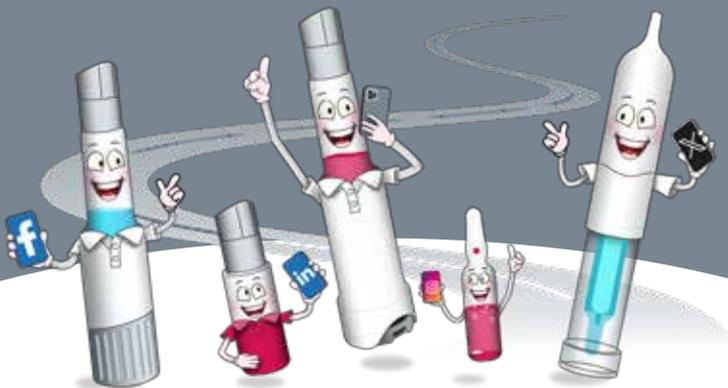


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# Follow us



in



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x

**cue**see

# Find us

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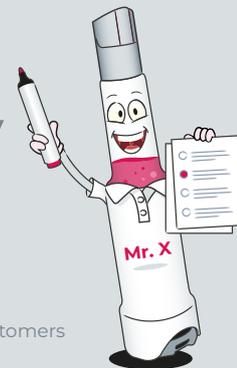


[eurotrol.com](http://eurotrol.com)

# Online Survey



[cuesee.eurotrol.com/en/surveys/customers](http://cuesee.eurotrol.com/en/surveys/customers)



**cuesee**

# Quality Controls for In Vitro Diagnostics

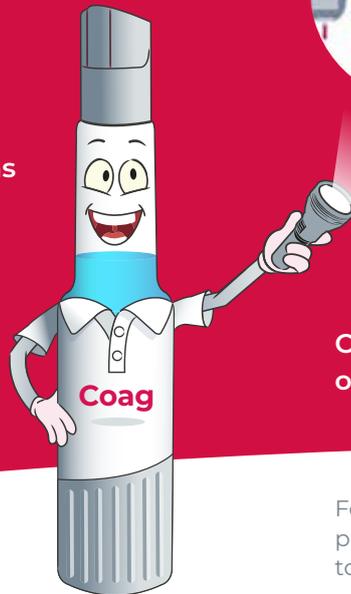
For 30+ years Eurotrol has been entrusted by customers worldwide to develop, manufacture and distribute CueSee® solutions for In Vitro Diagnostics (IVD).

Typical customers are

- Hospital laboratories
- Point-of-care sites
- Proficiency testing organizations
- Standardization bodies
- Diagnostic companies

Products have been registered in more than 100 countries.

We do offer CueSee® customized to meet your specific needs.



Blood Gases



Cardiac Markers



Diabetes Care



Hemoglobin



Coagulation

On the following pages you will find spotlights of some latest developments in CueSee®.

**Euro**trol

For a more detailed overview of our products and developments, please refer to: [eurotrol.com/products](http://eurotrol.com/products)



