

DATE:	2022 May 2
TO:	All Lethbridge and Area Physicians and Healthcare Providers
FROM:	Clinical Biochemistry, South Sector, Alberta Precision Laboratories (APL)
RE:	Pleural Fluid for pH Collection

PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE

Key Message

- A previous bulletin was issued on September 8, 2020 focusing on pH Fluid collections.
- Pleural fluid samples for pH must be collected anaerobically into a balanced heparinized blood gas syringe (*safePICO*® syringe). See reverse side for *safePICO*® Quick Start Instructions.
- Samples must not be exposed to air.
- Ensures that all bubbles are expelled from syringe.
- Labelled *safePICO*® syringe must be sent to the laboratory immediately.
- Samples collected in alternate containers will not be accepted.

Why this is Important

- Exposure of the sample to air leads to a clinically significant increase in pH, resulting in misleading results which can negatively impact patient care.

Action Required

- *safePICO*® blood gas syringes are orderable through the Stores warehouse, item # 0009283.
- Test Directory and Body Fluid Handling instructions for Lethbridge and Area have been previously updated to reflect this.

Effective

- Immediately

Inquiries and feedback may be directed to

- Dennis Orton, Clinical Biochemist, APL Calgary, 403-770-3219 | Dennis.Orton@aplabs.ca

This bulletin has been reviewed and approved by

- Dr. Krishna Narra, Regional Laboratory Medicine Site Chief, Chinook Regional Hospital
- Dr. Hossein Sadrzadeh, Section Chief, Clinical Biochemistry, South Sector
- Dr. Paul Klonowski, Associate Medical Director, South Sector



safePICO QUICK START Instructions

– for product evaluation



Sampling

- ▶ Twist the syringe wings 90 degrees for better access to the safety device and confirm a tight fit between the syringe and the safety device.
- ▶ Preset the syringe to a minimum of 1mL. When using FLEXQ a minimum of 0.6mL is needed with the tip cap purged of air. If this is not done by the operator may see an insufficient sample error. Remember short samples can be run manually.
- ▶ Expose the needle shaft by holding onto the barrel with one hand and pulling the needle sheath straight off without twisting with the other hand.
- ▶ SafePICO uses a short bevel needle so you will need to use a 45-degree angle as opposed to a 30-degree angle used with a long bevel needle when performing a puncture. A short bevel needle is preferred for blood gas sampling as it can be positioned better in the lumen of the artery.
- ▶ The safePICO needle is very sharp and may not require the same pressure to pierce the tissue compared to your current needle. You may need to use less pressure or you may end up going deeper than you have in the past.
- ▶ It will be easier to see the blood flash during the puncture if you adjust your line of site to be able to look over the needle hub.
- ▶ Draw the sample.



Operation of needle shield device

- ▶ Still holding the sampler in one hand, place your thumb on the thumb plate. Without pressing the plate down, gently slide the protective shield over the exposed needle until a **click is heard**. The click signifies that the protective shield is safely locked.
- ▶ Remove the needle and needle shield device by holding onto the syringe-barrel finger grips while twisting the needle shield device with the other hand.
- ▶ Discard the needle shield device and needle in a sharps container.



Sample mixing and removal of air bubbles

- ▶ Holding onto the syringe barrel, firmly place and twist the safeTIPCAP on the syringe luer tip.
- ▶ Press the plunger to expel air through the vented tip cap.
- ▶ Mix the sample by inverting the sampler several times.