

<b>DATE:</b>	2021 December 29
<b>TO:</b>	All Healthcare Providers
<b>FROM:</b>	Clinical Biochemistry and Pre-analytics Discipline Councils, Alberta Precision Laboratories (APL)
<b>RE:</b>	<b>Standardization of Tourniquet use for Collection of Ionized Calcium and Lactate</b>

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### Key Messages

- Tourniquet application must be no more than 1 minute for blood collection of ionized calcium and lactate. This is the recommended blood collection practice as other blood tests.

### Why this is important

- There are variable practices across the province regarding the allowed use of and time of application of tourniquets during blood collection of ionized calcium and lactate.
- Review of literature and laboratory guidelines recommended that tourniquet application must not exceed 1 minute. This recommendation is endorsed by APL Biochemistry and Pre-analytic Discipline Councils.
- Prolonged application of tourniquet for more than 1 minute may falsely increase ionized calcium and lactate.

### Action Required

- Be aware of appropriate tourniquet applications.
- Refer to APL Test Directory for further specimen collection and handling requirements.

### Inquiries and feedback may be directed to

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- Dr. Albert Tsui, Clinical Biochemist, APL, 587-782-2674 or [albert.tsui@aplabs.ca](mailto:albert.tsui@aplabs.ca)

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