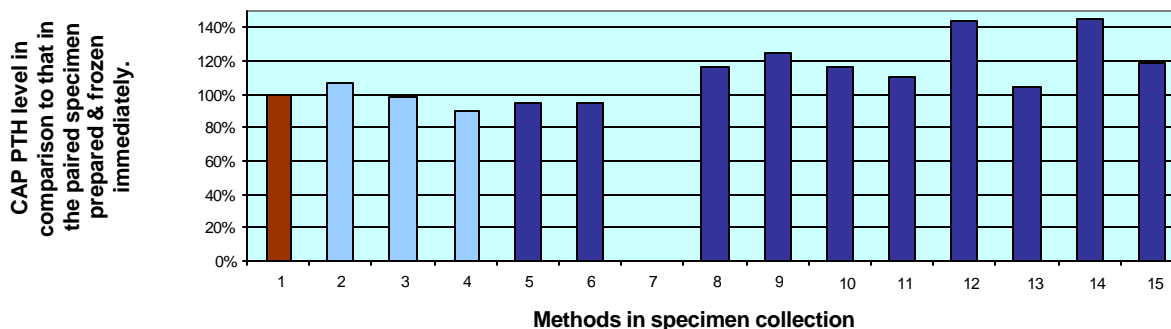


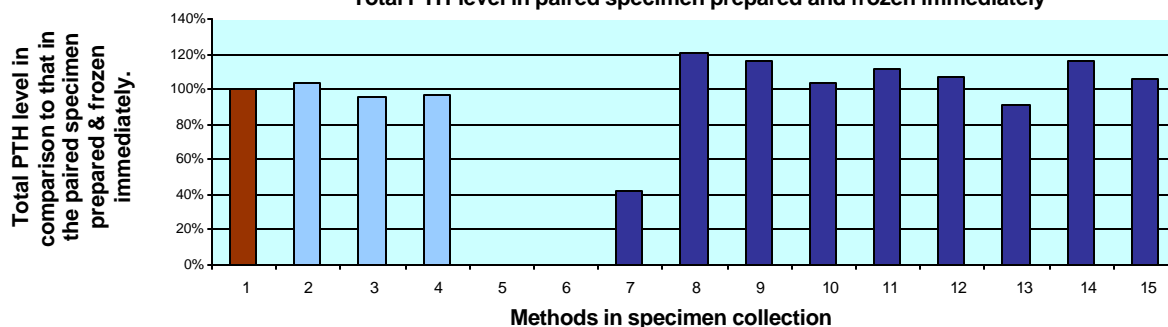
Effect of Specimen Collection Variables on PTH Values

SCL's mission is to provide accurate diagnostic services that help patients benefit from better-guided and appropriate treatments. A large body of evidence indicates that Total PTH and CAP PTH values are stable in frozen EDTA plasma. Over the past several years, our scientists have been studying different methods of specimen collection and their impact on PTH values, in order to better understand factors that affect PTH lability. Earlier, we reported the risk of PTH instability if blood cells were frozen prior to their separation from plasma. Our investigation then shifted to the stability of PTH if the temperature was controlled such that the blood cells did not freeze. After extensive study, the data generated from refrigerated (not frozen) whole blood storage has demonstrated that PTH is stable compared to paired frozen plasma. Please see the comparison of method tables below. Therefore, SCL is able to accept temperature monitored, refrigerated whole blood for PTH analysis.

Evaluation of specimen collection and CAP PTH determination in comparison to the CAP PTH level in paired specimen prepared and frozen immediately



Evaluation of specimen collection and Total PTH determination in comparison to the Total PTH level in paired specimen prepared and frozen immediately



Columns	Years	Specimen collection and handling	N	CAP	tPTH
1	Varied	Control EDTA plasma, frozen immediately	13	100%	100%
2	2005	EDTA WB, 24 hrs at 2-8°C	126	107%	104%
3	2005	EDTA WB, 48 hrs at 2-8°C	47	98%	96%
4	2005	EDTA WB, 72 hrs at 2-8°C	30	90%	97%
5	2001	EDTA plasma, 24 hrs at 2-8°C	13	95%	QNS
6	2001	Heparin plasma, 24 hrs at 2-8°C	13	95%	QNS
7	2003	WB, frozen before plasma preparation	22	QNS	42%
8	2003	EDTA plasma, frozen in gel tubes	47	117%	121%
9	2004	ETDA plasma in gel tubes, 24 hrs at 2-8°C	78	125%	116%
10	2004	ETDA plasma in gel tubes, 48 hrs at 2-8°C	14	117%	104%
11	2004	ETDA plasma in gel tubes, 96 hrs at 2-8°C	14	110%	112%
12	2004	Heparin plasma in gel tubes, 24 hrs at 2-8°C	30	144%	107%
13	2004	Heparin plasma in gel tubes, 48 hrs at 2-8°C	30	105%	91%
14	2005	EDTA plasma in pol. gel tubes, 24 hrs at 2-8°C	36	145%	116%
15	2005	EDTA plasma in pol. gel tubes, 48 hrs at 2-8°C	36	119%	106%

Years: The year when the study was conducted. **WB:** Whole Blood. **N:** The number of specimens applied in the study.