KAISER PERMANENTE®
COLORADO LABORATORY

CENTRIFUGING PROTOCOL

PRINCIPLE

This protocol outlines the requirements for those specimens that require centrifuging prior to testing or transport. Centrifuging specimens is an important factor in maintaining specimen integrity.

SCOPE

All laboratory staff who prepare specimens for transport and testing.

PROTOCOL

Preparing Specimens for Centrifugation

Specimens that are collected and inverted per the manufacturer's recommendations will require little preparation for centrifugation. Allow specimens being processed for serum, to clot thoroughly. Red top specimens will require 15-20 minutes to clot.

Rimming specimens prior to centrifugation is not recommended by CLSI (Clinical Laboratory Standards Institute). Rimmed specimens may result in post collection hemolysis and will contribute to laboratory errors.

Fibrin strands, a possible interferent, are the result of improper specimen handling during or after specimen collection. Fibrin strands can be eliminated by following recommendations for inverting tubes after collection.

Centrifugation

Specimens must be centrifuged with caps and centrifuge lids are required to be in place during the centrifugation process.

Except as noted below, Kaiser Permanente laboratories have established an RPM (rotations per minute) of 3500 and a time of 10 minutes for centrifuging specimens. Centrifuges will be preset with time and RPM. These settings will ensure complete centrifugation of the specimens and will contribute to the accuracy and quality of results.

Centrifugation of Coagulation Specimens

Centrifuges used to spin coagulation specimens will be spun at a minimum of 3500 RPM for 10 minutes. Use the settings (RPM and time) established at your location based on the Platelet Poor Plasma protocol.

Centrifugation of Urine Specimens

Centrifuges used to spin urine tubes for microscopic will be set at 2000 RPM and specimens will be spun for 5 minutes.

Post Centrifugation

Unless otherwise indicated, serum/plasma will be removed immediately after centrifugation. Analytes can be affected by additional time sitting on red cells and cellular exchange can affect results.

PROTOCOL NOTES

Temperatures lower than 15°C can falsely elevate potassium results after 2 hours.

Re-centrifugation of specimens is not recommended. If a specimen needs to be re-spun, remove the serum or plasma to an aliquot tube and centrifuge the aliquot tube to remove the remaining red cells.

Harvesting additional serum/plasma from tubes is not recommended. Once the serum or plasma has been removed the subsequent centrifugation alters the plasma/red cell ratio and can cause leakage/exchange accentuated by clot retraction. Serum retrieved from a previously spun specimen will have concentrated levels of numerous analytes and this will cause erroneous results.

REFERENCES

CLSI H18-A4 Procedures for the Handling and Processing of Blood Specimens for Common Laboratory Tests; Volume 30 No. 10

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COLORADO REGION PROCEDURE REVIEW

TITLE: CENTRIFUGE PROTOCOL	
LABORATORY SITE: **All Locations**	DEPARTMENT: **LABORATORY**
WRITTEN BY: E. Gibson	WRITTEN DATE: 5/12
REVISED BY:	REVISED DATE:

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