

# Beaumont

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## Auto-Dilution Verification Abbott Architect

Document Type: Procedure

### I. PURPOSE AND OBJECTIVE:

To evaluate, at least annually, the accuracy of each instrument's auto-dilution function by comparing auto-diluted results to manually diluted results from each instrument. This document provides instructions for completing this procedure.

### II. PROCEDURE:

- A. Obtain a specimen that is near the maximum analytical measurement range (AMR) for a test that is auto-diluted on the analyzer for each sample probe.
- B. Run the sample 3 separate times using the on-board dilution.
- C. Manually dilute the sample using the same dilution factor as the on-board dilution.
- D. Run the manually diluted sample 3 separate times.
- E. Calculate the average value of the 3 replicates for the on-board dilutions and manual dilutions.
- F. Calculate the percent difference.  $(\text{Auto-Dilution} - \text{Manual Dilution}) / \text{Manual Dilution} \times 100$
- G. The percent difference must be with-in 10%.
- H. Results exceeding the acceptable criteria of 10% difference will be repeated. If repeat testing fails the acceptable criteria, the instrument will be serviced before continuing to test using the dilution function.

### III. REFERENCES:

A. CAP Standard COM. 30820

#### Approval Signatures

Step Description	Approver	Date
Medical Director	Ann Marie Blenc: System Med Dir, Hematopath	1/11/2023
Policy and Forms Steering Committee Approval (if needed)	Robin Carey-Ballough: Medical Technologist Lead	1/6/2023
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