

Letter to the Editor

Correlation between Standard Clinical Chemistry and Point of Care Testing Analyzers on Hemoglobin A1C Determination

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Dear Editor in Chief

Hemoglobin A1C (HbA1C) testing is an important laboratory investigation for diabetes care (1). HbA1C value is useful for diagnosis and following up of the diabetic patients (1). This test is widely used at present. Several clinical chemistry analyzers are launched to serve the demand on HbA1C determination. Some new analyzers are based on the principle of point of care testing (POCT). Based on concept of POCT, it can help fasten laboratory analysis and let the physician in charge to use the result for modification of clinical management for their diabetic patients. However, a basic question to be answer for the testing is the agreement or correlation between classical

clinical chemistry analyzer and POCT analyzer for determination of HbA1C (2 – 3). It is suggested to prove any new POCT analyzer for correlation to classical standard testing (2–3). Here, the author set a preliminary evaluation to check such correlation between a clinical chemistry analyzer, Cobas 600 and POCT analyzer, DCA Vantage for determination of HbA1C. The setting is a reference tertiary in Bangkok that get certification by ISO15189 standard. The author performed correlation study on 30 paired testing on hemoglobin A1C by both analyzers. The derived correlation coefficient (r) is equal to 0.98 ($P = 0.05$). It can be seen that there is a good correlation between both analyzers (Fig. 1). It might assume that there is a good correlation between this pair of analyzers for HbA1C testing.

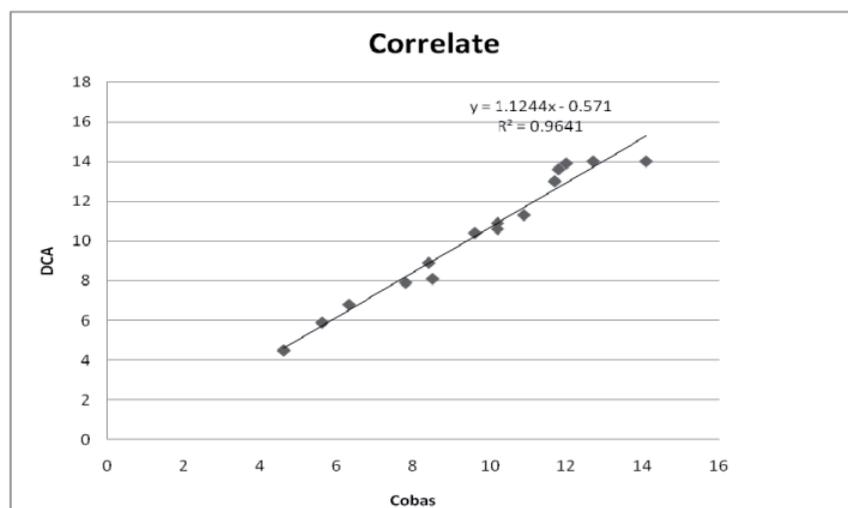


Fig.1: Correlation between HbA1C derived from two analyzers

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Conflict of interest

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