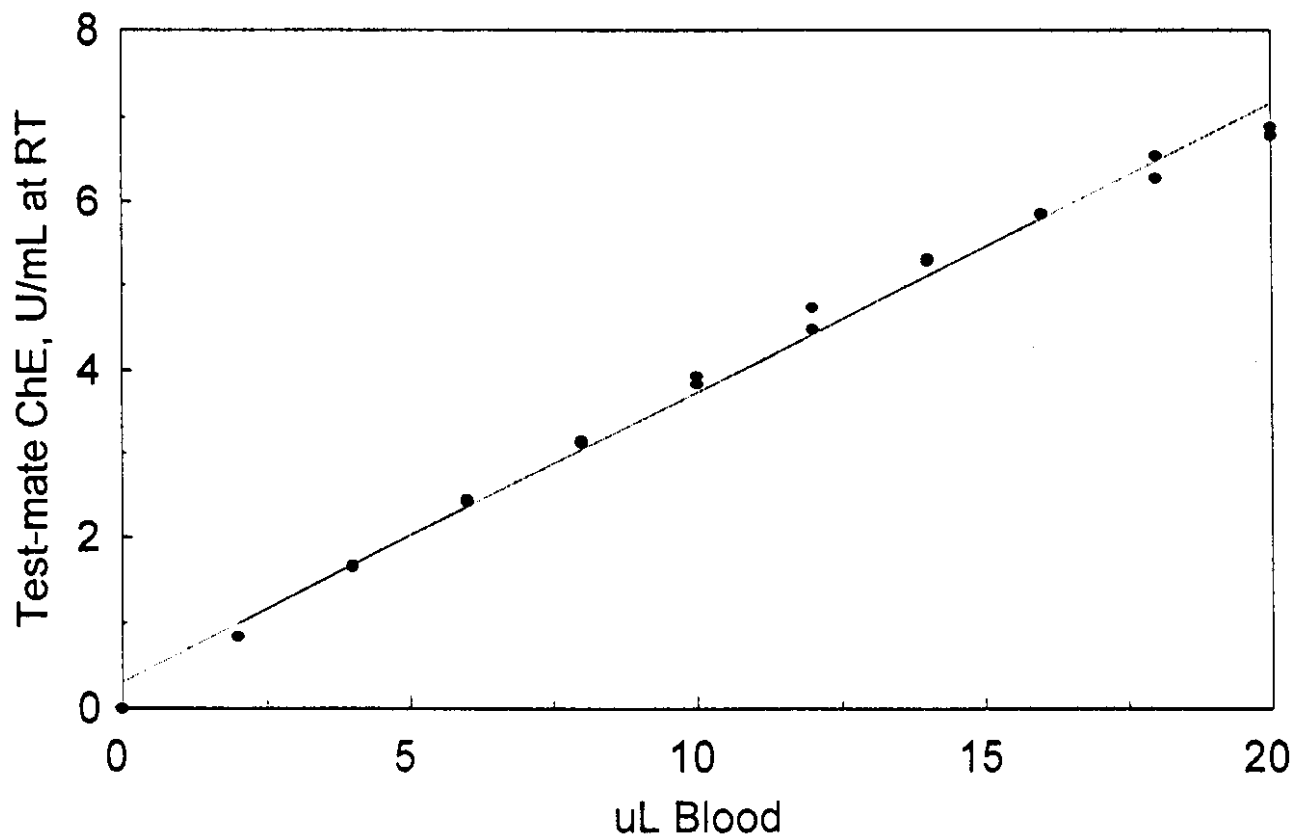


Clinical Linearity Study Methods and Test Data

This clinical study was performed on January 11, 1996 using normal human donor blood anticoagulated with EDTA (purple-top tube) obtained from Hoxworth Blood Center in Cincinnati, Ohio. Temperature varied between 23°C and 24°C. To eliminate sample viscosity effects on precision, blood was diluted five-fold in reagent buffer prior to sampling with a 100µL precision Hamilton syringe. Samples between 10µL and 100µL of diluted blood were added to each assay performed in duplicate, corresponding with 2µL and 20µL of added whole blood (20% to 200% dynamic range). These samples cover the range of values that would be encountered when using the Test-mate ChE Cholinesterase Test System. To correct for background activity, the linearity study was repeated using blood diluted five-fold in reagent buffer containing 7.3µM paraoxon (an inhibitor to both PChE and AChE), sufficient to completely abolish all cholinesterase activity. Activity was calculated by subtracting blank activity from gross activity. This study confirmed the estimate in the Test-mate ChE software system of approximately 15% for both PChE and AChE blank activity, and that this blank activity is proportional and solely due to the amount of blood added to the assay.

The test data from this study was analyzed using Quattro Pro 6.0 to produce plotted graphs and provide statistical parameters [see fig. 16-A, fig. 16-B and fig. 16-C].

AChE: Linearity Analysis

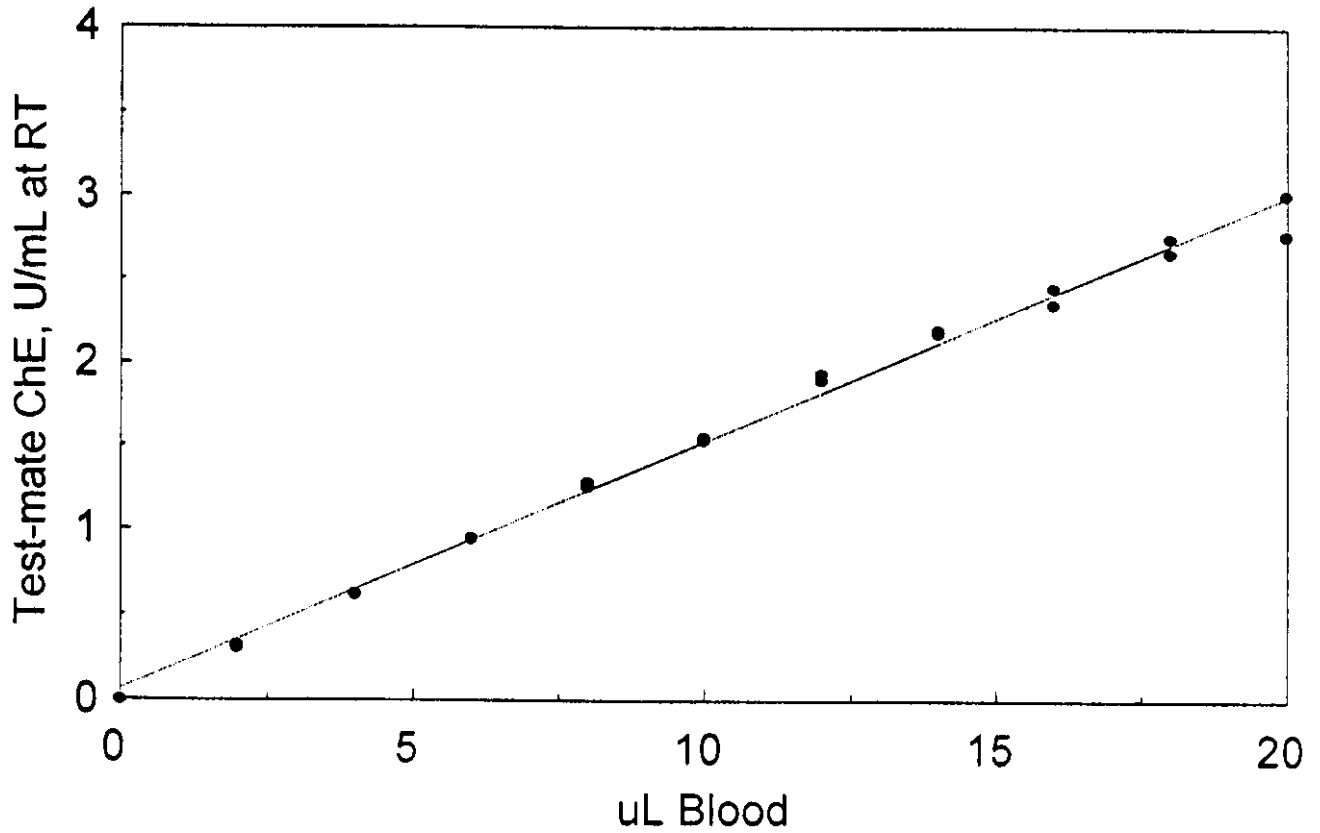


Regression Output:
Constant 0.309189
Std Err of Y Est 0.186149
R Squared 0.992833
No. of Observations 21
Degrees of Freedom 19
X Coefficient 0.342986
Std Err of Coef. 0.006686

Correlation Coef. 0.996410

Fig. 16-A

PChE: Linearity Analysis

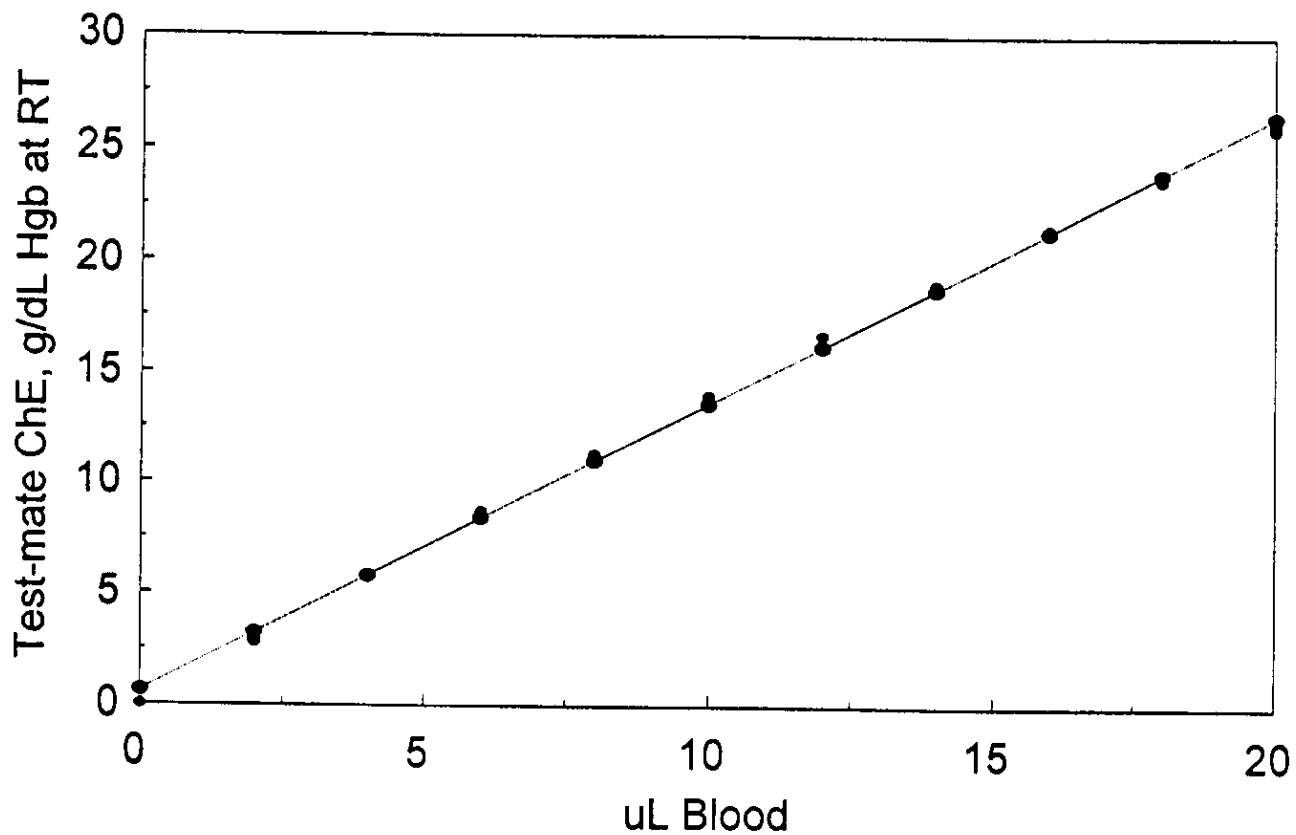


Regression Output:

Constant	0.066486
Std Err of Y Est	0.073976
R Squared	0.993803
No. of Observations	21
Degrees of Freedom	19
X Coefficient	0.146654
Std Err of Coef.	0.002657
Correlation Coef.	0.996897

Fig. 16-B

Hgb: Linearity Analysis



Regression Output:

Constant	0.640541
Std Err of Y Est	0.330899
R Squared	0.998403
No. of Observations	21
Degrees of Freedom	19
X Coefficient	1.295221
Std Err of Coef.	0.011884
Correlation Coef.	0.999201

Fig. 16-C