# Measurement of BChE in anticholinesterase pesticide poisoning

**Method**: BChE was only measured with the ChE check and laboratory methods and done in fewer patients. Part of the blood samples collected at the time of admission was centrifuged to obtain plasma for plasma cholinesterase (PChE) testing. BChE was measured using the two methods: ChE check mobile and spectrophotometry. Reagent 1 was prepared using one volume of 3.6 mM DTNB and nine volumes of phosphate buffer. Then, 1275ul of Reagent 1 and 25 ul of a plasma sample were mixed in a cuvette and placed in the spectrophotometer. The reaction was started using 100 ul of 14 mM S-butyrylthiocholine iodide solution and mixed the cuvette contents by drawing up in to the pipette tip and dispensing three times. Absorbance of reaction solution was measured at wavelength of 436 nm using a SmartSpec™ 3000 Spectrophotometer (Bio Rad, USA).

**Results**: The 58 patient’s samples analysed for BChE also showed over-estimation by the ChE check mobile; Bias +528 (Limits of Agreement -1113 to + 2169) U/L (Figure A, correlation plot and B is Bland-Altman plot of ChE check mobile results vs spectrophotometer results).

