البحث السادس				
عنوان البحث	**Novel spectrofluorimetric assessment of ondansetron hydrochloride based on excited state quenching of pararosaniline fluorophore**			
المؤلفون	**شارك في البحث باحثين أثنين.** Amr A. Essawy , H.M. Ali			
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Abstract:

In this work, pararosaniline hydrochloride (PA) was developed as the first fluorescent probe used for the spectrofluorimetric determination of ondansetron (OND). The analytical method is simple, rapid, sensitive and validated for studying the excited state interactions and measuring the quenching effect of OND on the fluorescence intensity of PA in dioxane. Under the optimized conditions, fluorescence quenching value ($\Delta F=F_{PA}-F_{PA\text{-}OND}$) showed a linear relation with OND concentration in the two ranges of 2.0 $x10^{-7}$ to 1.0 $x10^{-6}$ mol L^{-1} and 4.0 x 10^{-6} to 1.0 $x10^{-5}$mol L^{-1}. The detection limit (DL) in the lower range is 2.0 $x10^{-8}$ mol L^{-1} and quantification limit (QL) is 6.05$x10^{-8}$ mol L^{-1}. The % recovery for intra-day and inter-day assay ranged from 96.66 – 102.1 with percent relative standard deviation (%RSD) ranged from 0.0272 to 1.474 %, thus the developed method is accurate and precise in determining OND. Moreover, the developed method was successfully applied for determining OND in human urine samples and in pharmaceutical formulation with % recovery and %RSD values of 99.74 and 1.401 %, respectively.