



# Evaluation of a new point-of-care immunoassay using surface plasmon enhanced fluorescence method for the measurement of feline total thyroxine

B. Rannou

Clinical pathology laboratory, VetAgro Sup, Campus Vétérinaire de Lyon, FRANCE

## INTRODUCTION

Hyperthyroidism is the most frequent endocrinopathy in cats and its routine screening is recommended for senior and geriatric cats. Immunoassays that are rapid, cheap and reliable are therefore needed.

## MATERIALS AND METHODS

- 46 feline samples included
- Tested Point-of-care : Fuji Dri-chem Immuno AU10V (Surface enhanced Fluorescence method (SPF) )
- Gold Standard Automat : Immulite 2000, Siemens (Chemiluminescence enzyme immunoassay)
- Statistical Analysis : Bland&Altman, Passing&Bablok (XLStat)

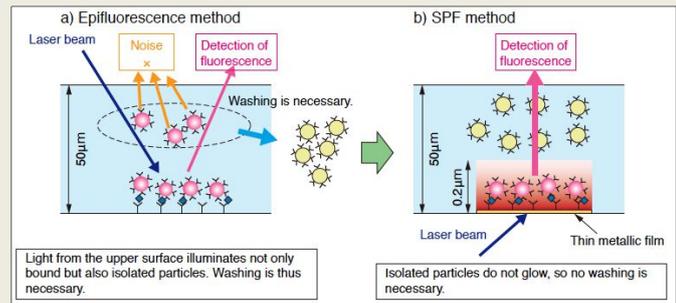


Figure 1 : Schematic drawings of a) epifluorescence method and b) SPF method

## RESULTS

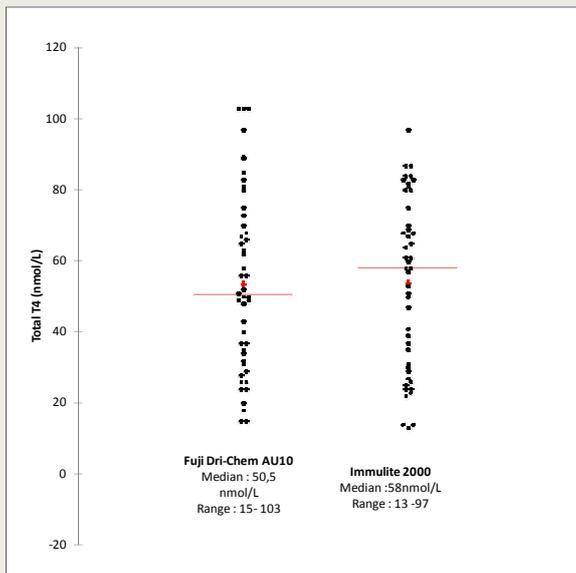


Figure 2 : Distribution of data

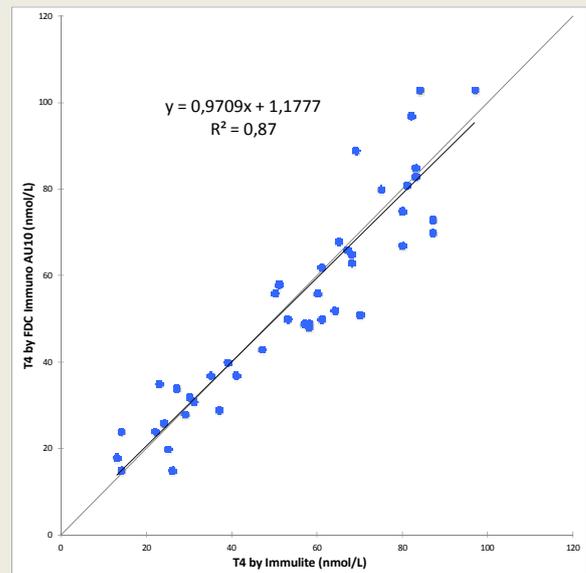


Figure 3 : Distribution of data

- Bland&Altman : Negative Bias (Mean = -0,4 nmol/L ; 95%CI : -3,1 to 2,3 nmol/L)
- Passing and Bablok analysis : Linear relationship (p=0,43) with intercept of 0,0 (95% CI : -5,5 to +7,0) and slope coefficient value of 1,0 (95% CI : -0,9 to +1,1)

## CONCLUSION

The new point-of-care immunoassay, FUJI DRI-CHEM IMMUNO AU10V, had an excellent correlation with the CLEIA for tT4 in feline samples