

Introduction

Ristocetin cofactor assay has become one of the key elements in the diagnosis of von Willebrand disease (vWD), the most common hereditary hemostasis disorder. Its measurement is associated with that of vWf (von Willebrand factor) antigen for the diagnosis of type II vWD, in the measurement of the "vWf RCO / vWf-Ag" ratio.

Aim

Evaluation of the new STAGO "STA-vWf RCO" kit for ristocetin cofactor assay, and comparison with two kits for vWf assay in the diagnosis of von Willebrand disease.

Materials and Methods

Two ristocetin cofactor assays : STA-VWF: RCO (Diagnostica Stago) on STA-R® MAX2 ; BC VWF Reagent (Siemens Healthcare Diagnostics) and a VWF:GP1BM assay: Innovance AC (Siemens Healthcare Diagnostics) on BCS-XP®. All tests were performed following manufacturer's instructions.

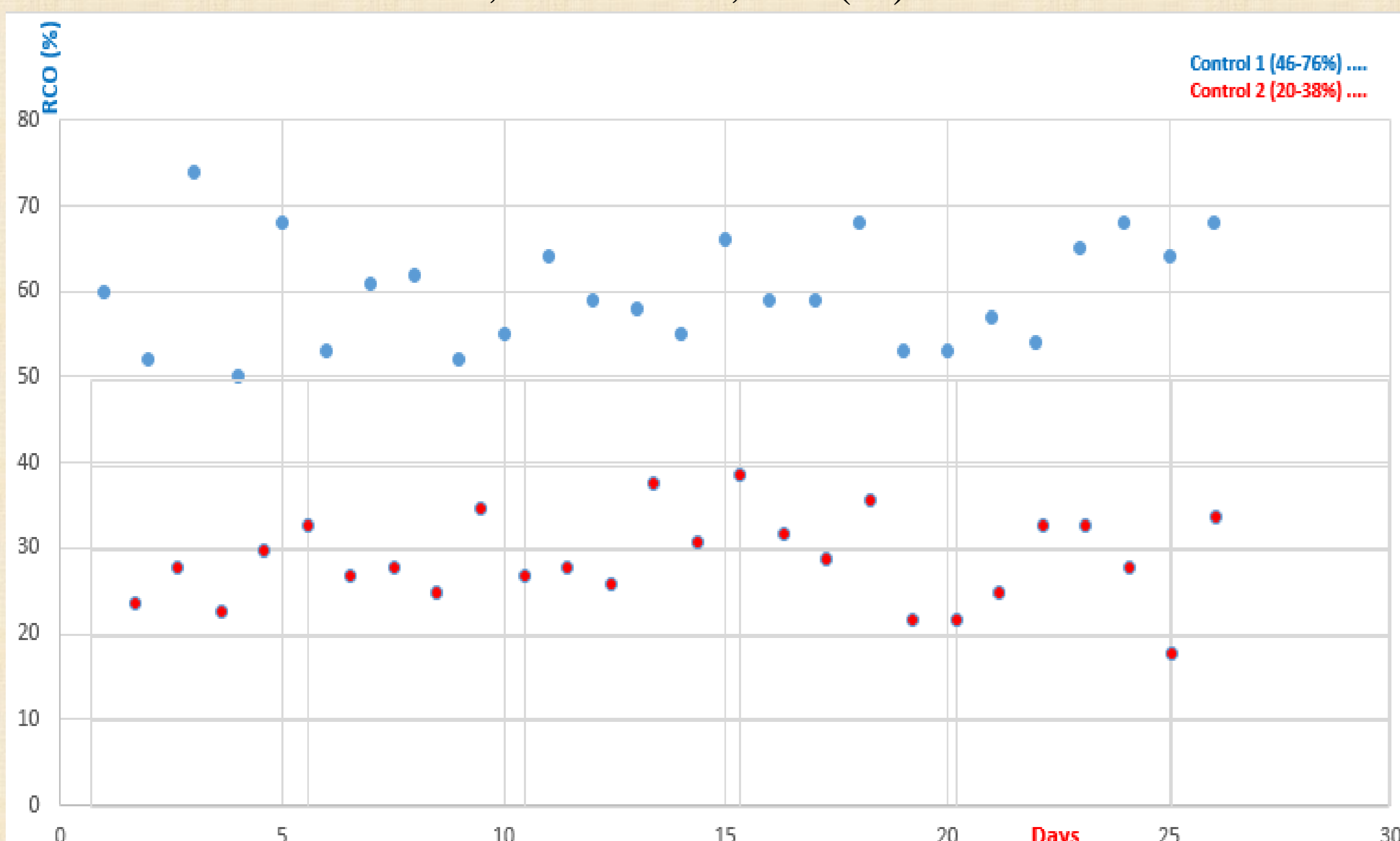
Patients : n = 81 ; Type I = 8 ; Type II = 11 ; AVWS = 3 ; Normal = 59

Results

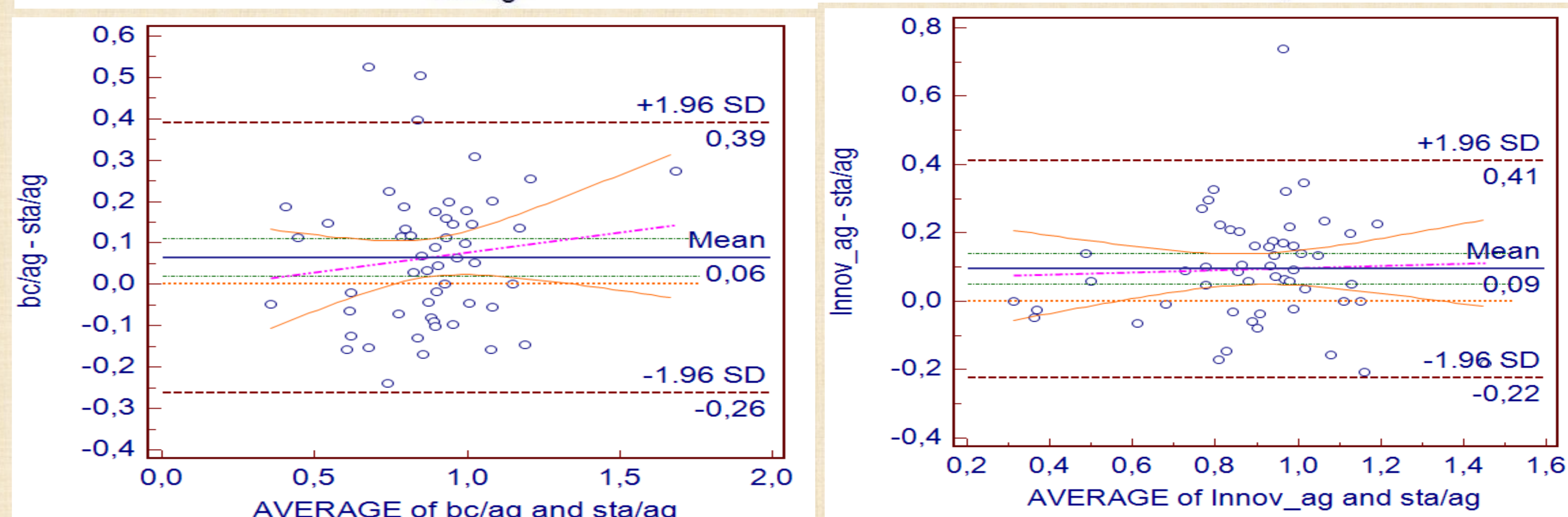
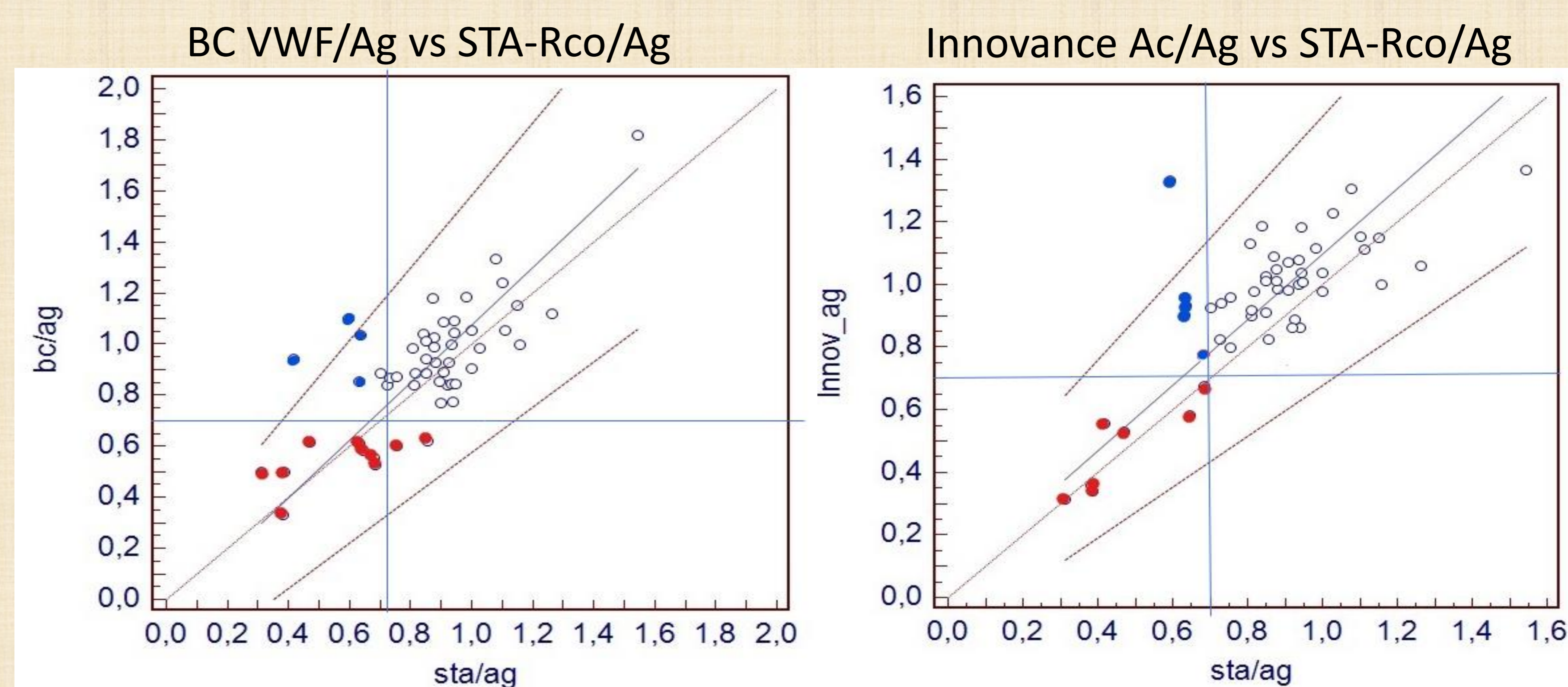
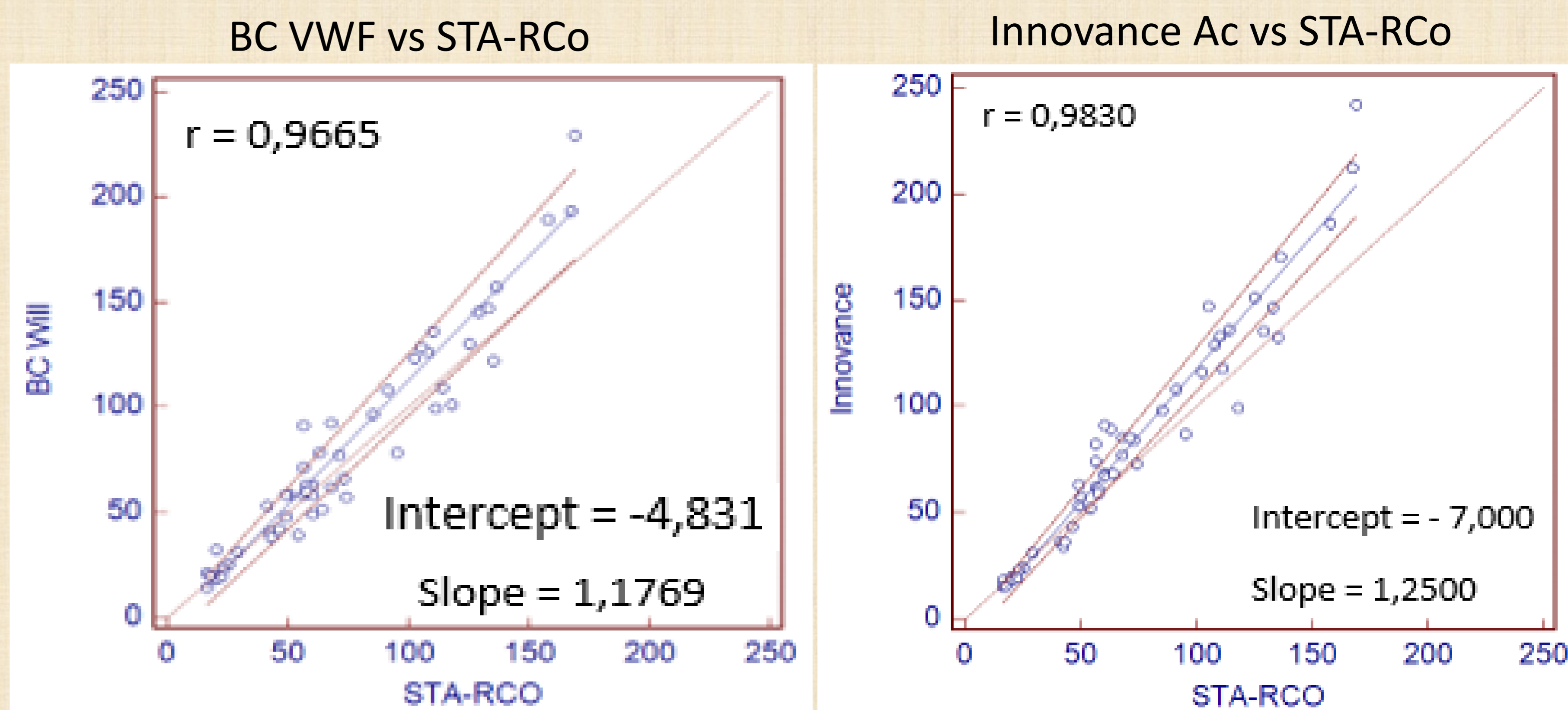
N	Levels	Mean	Repeatability	
			CV (%)	SD
26	Low	21	9.24	1.94
31	Normal	59	8.85	5.22
24	High	108.83	7.9	8.6

Control 1 : Mean = 59.88 ; SD = 6.28 ; CV (%) = 10.49

Control 2 : Mean = 29 ; SD = 5.13 ; CV (%) = 17.7



BCW/Ag Vs STA	Slope	1.1281	0.8875 to 1.4212
	Intercept	-0.05527	-0.3129 to 0.1608
	r	0.7511	0.6033 to 0.8490
Innov/Ag Vs STA	Slope	1.0477	0.8132 to 1.2953
	Intercept	0.04822	-0.1363 to 0.2392
	r	0.7479	0.5986 to 0.8470



Conclusion

This new STA-VWF: RCO kit shows satisfactory results with a repeatability of less than 10% and a reproducibility of less than 17%. We suggest the use of the kit for medium-sized series or as a second-line test in reference laboratories.