



InSight V-IA TSH Evaluation  
vs. Vcheck cTSH

The InSight V-IA is an easy to use Veterinary Immunoassay Analyser providing accurate and reliable results in 3-15 minutes. The InSight V-IA uses immunofluorescence technology for accurate results. A competitive binding assay is based upon the competition of labelled and unlabelled analytes for a limited number of antibody binding sites. Unbound antibodies and immunocomplexes migrate along the nitrocellulose membrane towards the test line. The unbound antibodies are then captured by antigens immobilised on the test line. The fluorescent signal intensity reflects the amount of analytes captured and is measured by the InSight V-IA.

### **TSH**

TSH is a glycoprotein secreted by the pituitary gland that promotes thyroid growth and stimulates the secretion of thyroxine (T4) by the thyroid gland. When T4 cannot be confirmed by monitoring, it can combine TSH to test. TSH is used in the diagnosis of hypothyroidism, treatment and monitoring of hypothyroidism.

### **Comparison Items**

#### **InSight V-IA:**

Test Item – TSH

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 30 Tests

#### **Vcheck:**

Test Item – cTSH

Sample Type – Fresh Canine Clinical Samples

Quantity of Samples – 30 Tests

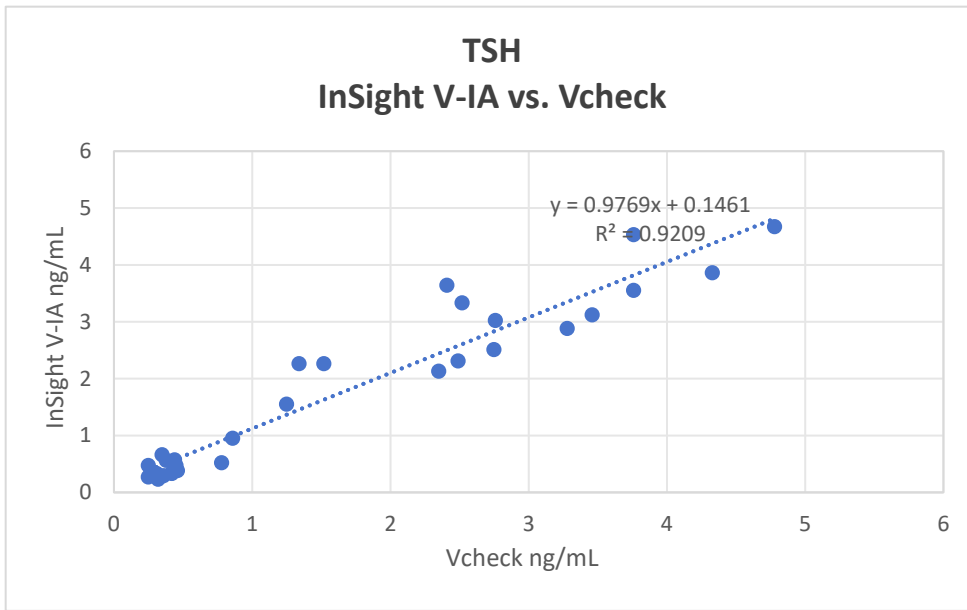
### **Results**

TSH		Vcheck		
		Positive	Negative	Total
InSight V-IA	Positive	16	1	17
	Negative	1	12	13
	Total	17	13	30

Positive Coincidence Rate	94.1%
Negative Coincidence Rate	92.3%
Total Coincidence Rate	93.3%

Sample	Vcheck (ng/mL)	InSight V-IA (ng/mL)
1	2.49	2.31
2	0.25	0.47
3	2.75	2.51
4	4.33	3.86
5	3.46	3.12
6	0.32	0.23
7	4.78	4.67
8	0.42	0.34
9	0.46	0.38

10	3.76	3.55
11	0.78	0.52
12	0.86	0.95
13	1.25	1.55
14	0.35	0.66
15	1.34	2.26
16	1.52	2.26
17	0.31	0.33
18	0.44	0.57
19	2.35	2.13
20	2.41	3.64
21	0.25	0.27
22	2.52	3.33
23	0.36	0.29
24	2.76	3.02
25	3.28	2.88
26	0.42	0.33
27	0.38	0.56
28	0.27	0.34
29	0.45	0.47
30	3.76	4.53



Sample Concentration	1	2	3	4	5	6	7	8	9	10	Mean Value	Bias%
0.3 ng/mL	0.33	0.33	0.31	0.32	0.35	0.35	0.29	0.32	0.25	0.29	0.31	4.67%
2.5 ng/mL	2.76	1.83	1.83	1.89	1.99	2.73	2.92	2.98	2.89	2.1	2.39	-4.32%
4.6 ng/mL	5.21	5.09	5.22	4.8	3.99	5.3	5.43	5.12	4.06	4.5	4.87	5.91%

**Conclusion**

Based on comparative analysis, the total coincidence rate of InSight V-IA TSH Rapid Quantitative Test Kit and Vcheck cTSH Rapid Quantitative Test is as high as 93%, indicating that the InSight V-IA reagent is comparable to the Vcheck quantitative reagent.