

vWF Activity CQAS Trials 2008-2010

Karen Morris UHBNHSFT

vWF Activity Trials 2008-10

- **4 trials per annum**
- **3 samples per trial**
- **Data form 12 trials 2008-10**
- **36 samples in total**
- **Average number of laboratory returns per trial = 18**

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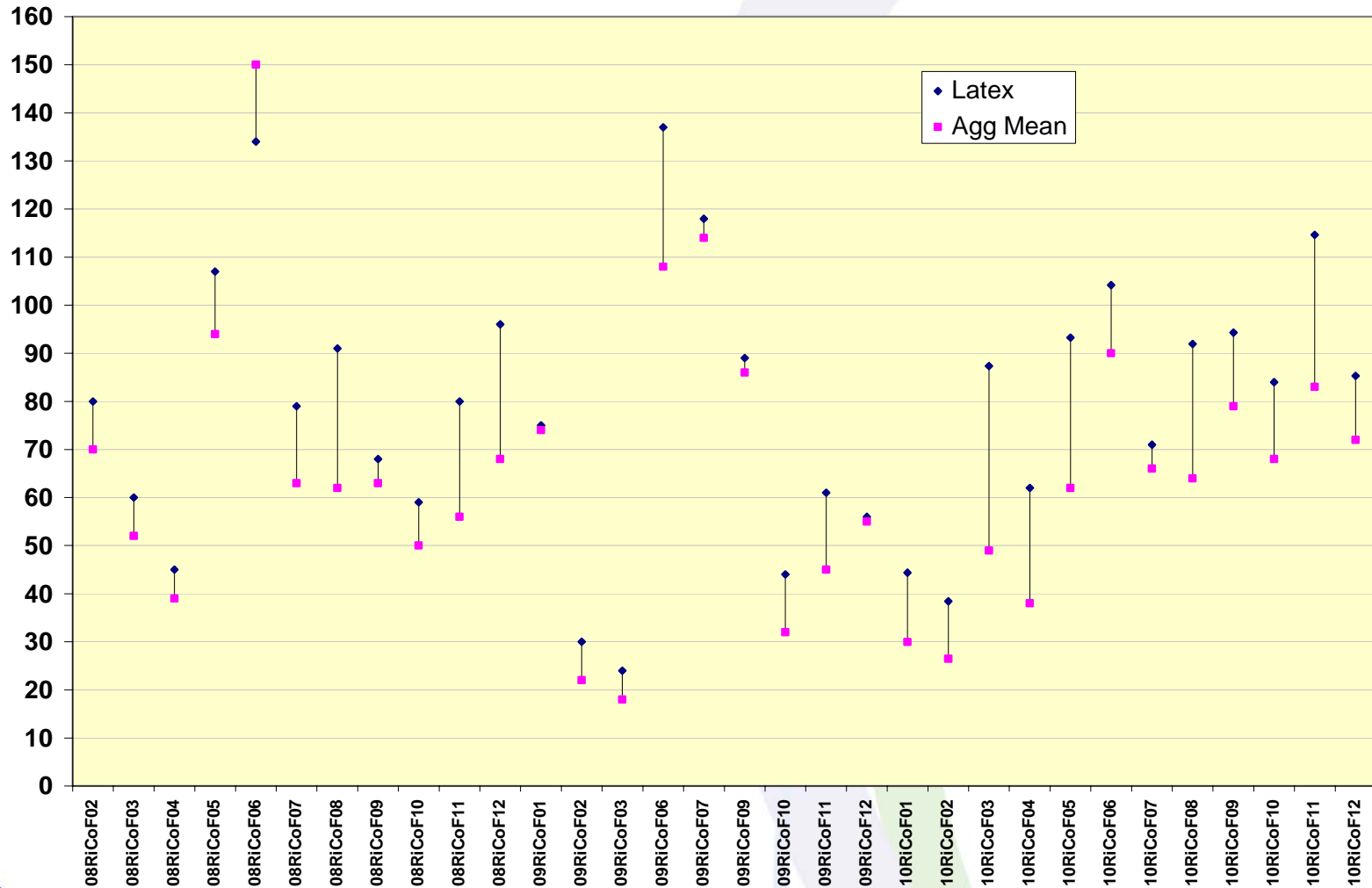
- **Four methods**
 - **Platelet Aggregation**
 - **Latex immunoturbidometric Automated Assay**
 - **ELISA**
 - **Slide Agglutination**

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- **Poor agreement across all methods**
- **Overall CVs range 13.92 – 39.21**
- **CV range of the two major groups**
 - **Platelet Aggregation 10.38 – 43.04**
 - **Latex immunoturbidometric Assay
2.01 -14.00**

Automated assay more precise but generally produces higher results

Latex v Aggregation



CQAS Trials 2008

Trial Number	All Methods			CV
	Mean	Lowest	Highest	
08RiCoF01	315	85	550	39.21
08RiCoF02	77	52	112	20.58
08RiCoF03	62	31	90	30.59
08RiCoF04	43	24	75	30.53
08RiCoF05	98	64	141	25.25
08RiCoF06	142	95	200	19.93
08RiCoF07	75	46	128	22.48
08RiCoF08	77	45	125	27.06
08RiCoF09	67	47	88	14.29
08RiCoF10	57	31	84	23.78
08RiCoF11	76	39	112	22.96
08RiCoF12	88	50	113	21.84

CQAS Trials 2009

Trial Number	All Methods			CV
	Mean	Lowest	Highest	
09RiCoF01	79	52	128	23.16
09RiCoF02	29	10	47	33.70
09RiCoF03	21	10	32	25.70
09RiCoF04	182	107	256	18.74
09RiCoF05	274	107	512	36.10
09RiCoF06	130	73	241	27.55
09RiCoF07	120	83	160	17.68
09RiCoF08	264	104	395	31.68
09RiCoF09	88	54	128	19.24
09RiCoF10	36	6	56	33.56
09RiCoF11	56	36	84	24.78
09RiCoF12	56	41	72	17.88

CQAS Trials 2010

Trial Number	All Methods			
	Mean	Lowest	Highest	CV
10RiCoF01	36	16	55	28.94
10RiCoF02	30	13	46	29.23
10RiCoF03	66	18	96	39.13
10RiCoF04	45	20	68	29.40
10RiCoF05	73	47	105	21.80
10RiCoF06	93	70	116	13.92
10RiCoF07	64	33	84	20.73
10RiCoF08	72	34	110	28.29
10RiCoF09	82	38	125	26.71
10RiCoF10	74	37	96	19.68
10RiCoF11	94	38	126	25.80
10RiCoF12	74	35	109	25.04

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- **Current Normal Ranges**

3 Centres

- **Blood group dependent ranges**

4 Centres

- **40iu/dl as low cut off**

1 Centre

- **45iu/dl as low cut off**

Remainder

- **50iu/dl as low cut off**

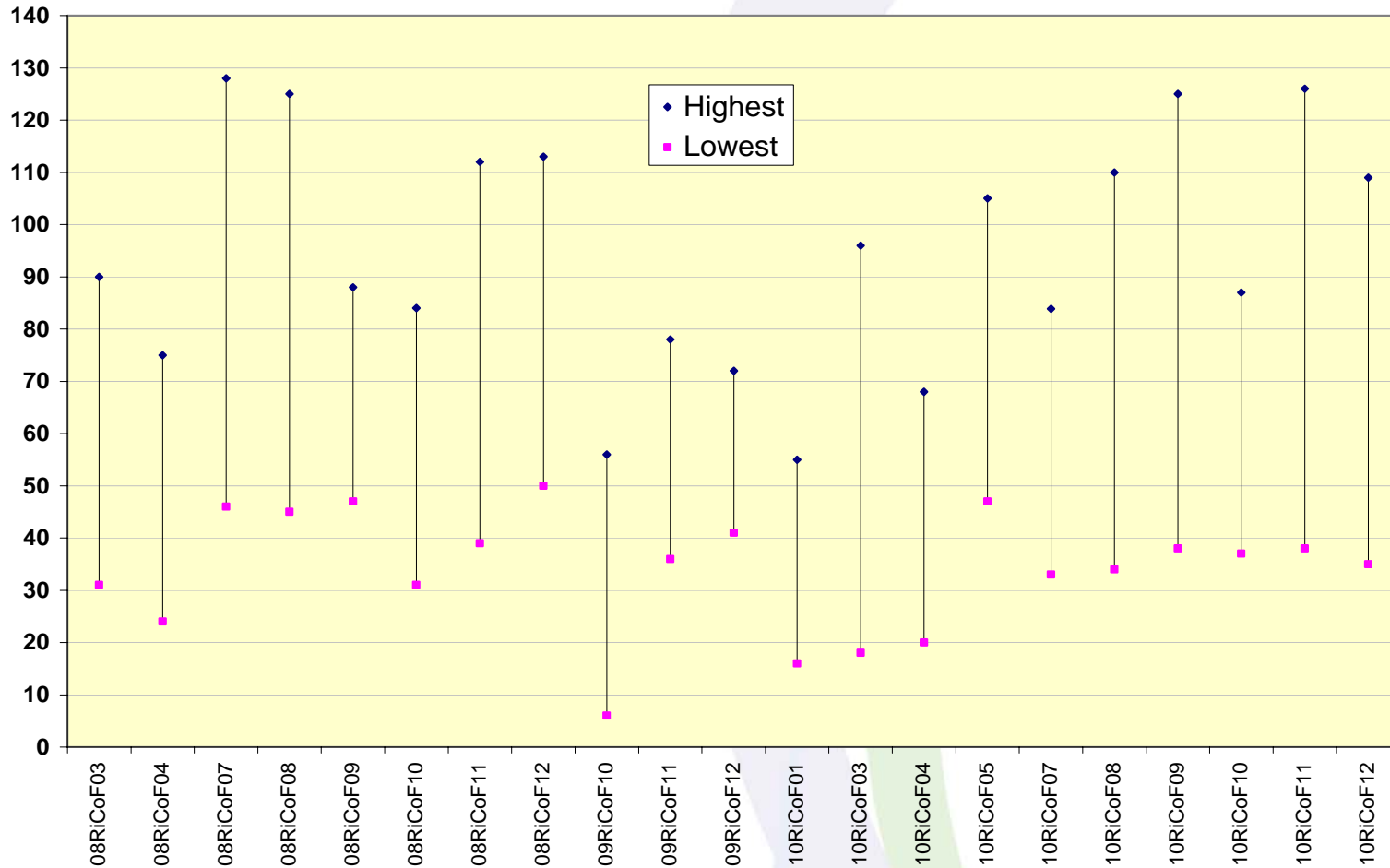
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- **36 Samples**
 - **13 ~ all 'normal values'**
 - **2 ~ all 'abnormal values'**
 - **4 ~ predominantly abnormal with between 2 and 7 centres producing normal values**
 - **17 ~ predominantly normal values with between 1 and 4 centres producing abnormal results**

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- **Lowest Values**
 - **Platelet Aggregation in all trials**
- **Highest Values**
 - **Platelet aggregation 25%**
 - **Latex Immunoturbidometric 22%**
 - **Platelet Agglutination 33%**
 - **ELISA 20%**

Results

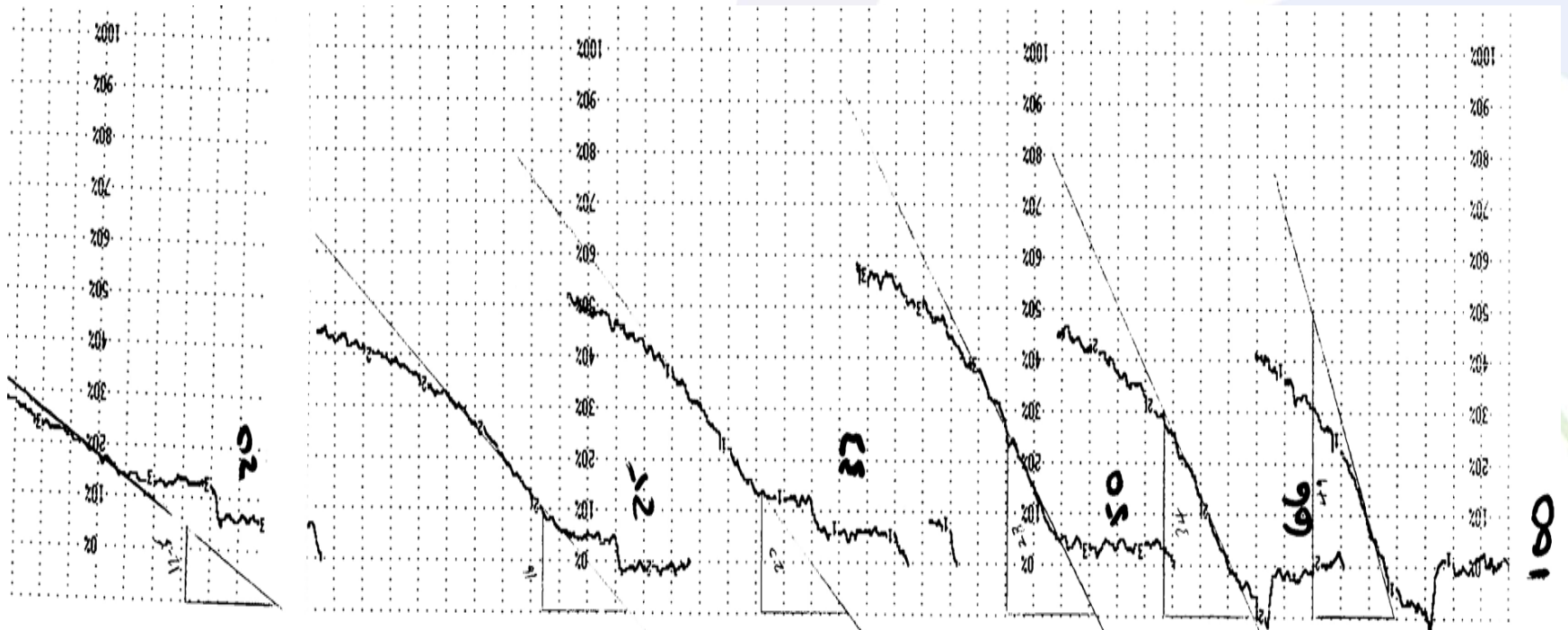


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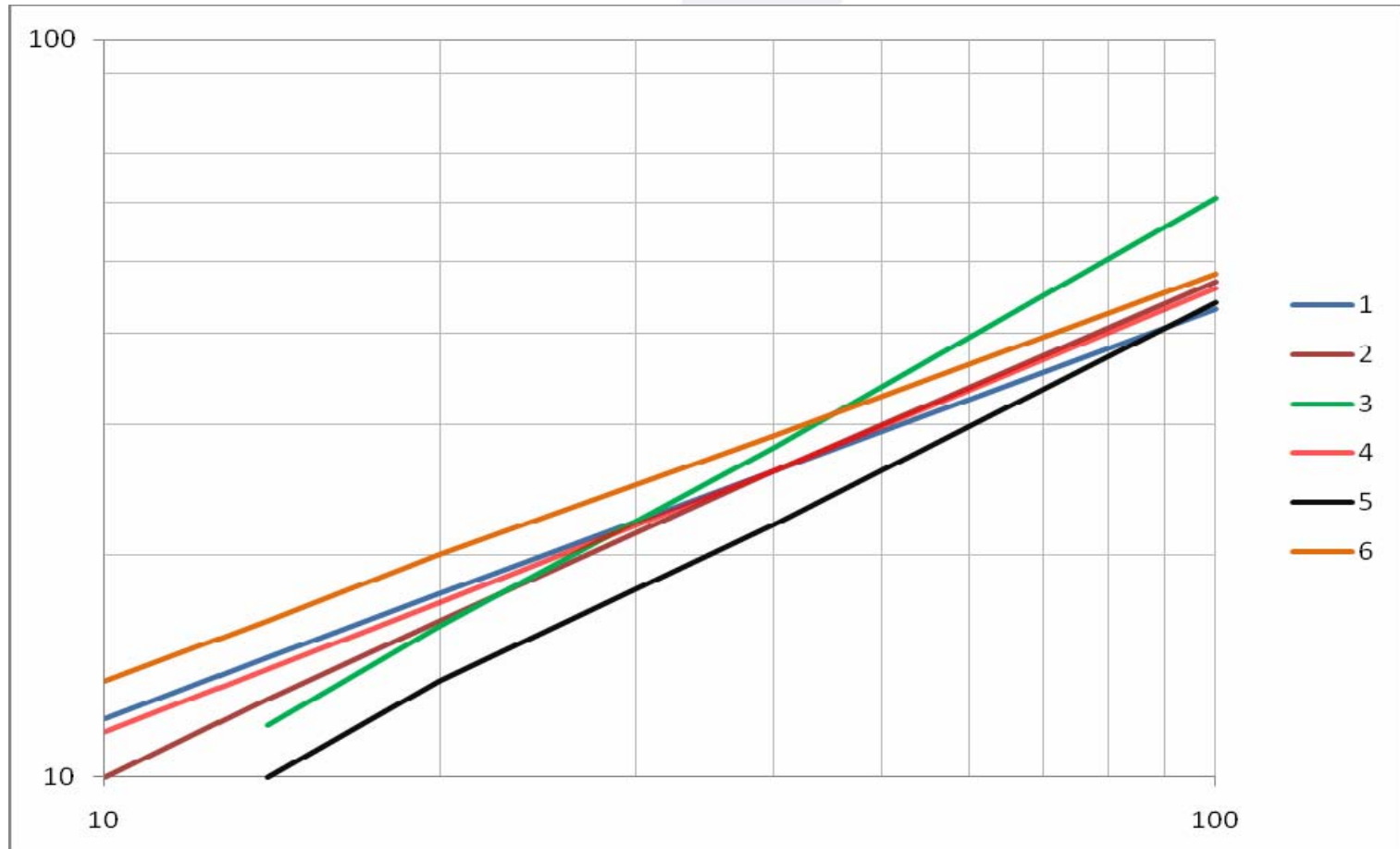
Platelet Aggregation

- **Still accepted as the ‘Gold Standard’**
- **If using a Manual technique ~ calculation of the results can be subjective**

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- **vWD is a complex disease with a high degree of variability in its clinical presentation and heterogeneity in its molecular structure making testing for and diagnosing extremely difficult**
- **Each method measures something different**
- **Data over time shows consistent findings with no improvement over time**

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CQAS 2011

Antigen & Activity

Give Blood Groups

Request Interpretation

vWF Activity CQAS Trials 2008-2010

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