	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 all lab:						
mean	22.7	53.2	44.2	31.4	38.4	
SD	4.2	5.4	5.6	5.7	5.6	
%CV	18.4%	10.2%	12.7%	18.0%	14.6%	
N	119	107	112	119	114	
mean+3SD	35.3	69.5	61.0	48.4	55.3	
mean-3SD	10.2	36.9	27.3	14.4	21.6	
mean/all kit median	1.06	0.99	1.01	1.03	1.03	1.02

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Siemens Immulite 1000 (DPB/DP5):						
mean	22.4	56.4	44.9	30.8	40.2	
SD	0.4	1.7	0.5	1.1	0.9	
%CV	1.8%	3.0%	1.1%	3.6%	2.3%	
N	4	4	4	4	4	
mean+3SD	23.7	61.5	46.3	34.2	42.9	
mean-3SD	21.2	51.3	43.4	27.5	37.4	
kit median	22.5	55.9	44.8	30.4	40.4	
mean/all kit median	1.05	1.05	1.03	1.01	1.08	1.04

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 TOSOH AIA/ST-A1A (TOM/TO1)						
mean	33.1	85.0	67.8	47.3	60.1	
SD	1.8	6.5	4.5	2.0	3.2	
%CV	5.3%	7.7%	6.6%	4.2%	5.4%	
N	6	6	6	6	6	
mean+3SD	38.3	104.5	81.2	53.2	69.9	
mean-3SD	27.8	65.4	54.3	41.4	50.4	
kit median	32.7	83.2	65.9	46.8	59.1	
mean/all kit median	1.55	1.57	1.55	1.55	1.62	1.57

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Ortho Clinical Vitros Eci (JJC/JJ1):						
mean	21.4	54.0	43.8	30.5	37.2	
SD	0.9	2.5	3.1	1.4	2.2	
%CV	4.1%	4.6%	7.1%	4.7%	6.0%	
N	6	6	6	6	6	
mean+3SD	24.0	61.3	53.1	34.8	44.0	
mean-3SD	18.7	46.6	34.4	26.2	30.5	
kit median	21.3	54.9	44.5	30.8	37.8	
mean/all kit median	1.00	1.00	1.00	1.00	1.00	1.00

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Abbott AxSym & Architect (ABB & ABH/AB1)						
mean	29.1	66.4	54.5	39.0	47.5	
SD	4.0	6.9	5.4	4.9	5.7	
%CV	13.6%	10.4%	9.9%	12.5%	11.9%	
N	15	15	15	15	15	
mean+3SD	40.9	87.1	70.7	53.6	64.5	
mean-3SD	17.2	45.7	38.3	24.4	30.5	
kit median	30.3	66.6	56.1	40.3	48.3	
mean/all kit median	1.36	1.23	1.24	1.28	1.28	1.28

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Siemens Immulite 2000 (DPD/DP5):						
mean	20.3	50.8	42.5	28.3	36.5	
SD	1.1	2.8	2.1	1.1	1.8	
%CV	5.6%	5.4%	5.0%	4.0%	4.8%	
N	23	23	23	23	23	
mean+3SD	23.6	59.1	48.8	31.7	41.8	
mean-3SD	16.9	42.6	36.1	24.9	31.2	
kit median	20.0	51.0	41.8	28.4	36.0	
mean/all kit median	0.95	0.94	0.97	0.93	0.98	0.95

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Siemens ADVIA-Centaur (COB/BA1):						
mean	23.3	55.5	45.7	32.5	40.1	
SD	1.3	3.3	2.7	1.9	2.2	
%CV	5.4%	6.0%	5.9%	5.9%	5.5%	
N	32	32	32	32	32	
mean+3SD	27.1	65.5	53.8	38.2	46.7	
mean-3SD	19.5	45.5	37.6	26.7	33.4	
kit median	23.5	56.3	46.1	32.7	39.8	
mean/all kit median	1.09	1.03	1.04	1.06	1.08	1.06

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Beckman Unicel & Access (BCU & BCX/BC1):						
mean	20.1	50.5	41.1	27.9	35.7	
SD	1.4	1.9	2.2	1.5	2.1	
%CV	6.9%	3.8%	5.3%	5.4%	6.0%	
N	11	11	11	11	11	
mean+3SD	24.3	56.3	47.5	32.4	42.1	
mean-3SD	16.0	44.8	34.6	23.4	29.3	
kit median	20.5	49.6	41.0	28.0	36.1	
mean/all kit median	0.94	0.94	0.94	0.91	0.96	0.94

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Roche Elecsys/Cobas e411 & E170/Cobas e601(BME & BMR/BM1):						
mean	20.4	47.2	38.8	27.5	33.8	
SD	2.2	4.1	3.7	2.6	2.9	
%CV	10.8%	8.6%	9.6%	9.6%	8.7%	
N	16	16	16	16	16	
mean+3SD	27.1	59.4	50.0	35.4	42.7	
mean-3SD	13.8	35.0	27.6	19.5	25.0	
kit median	20.5	47.8	39.1	27.8	34.1	
mean/all kit median	0.96	0.88	0.89	0.90	0.91	0.91

	TM191	TM192	TM193	TM194	TM195	Average bias
CA125 Siemens Immulite 2500 (DPF/DP5):						
mean	18.6	49.1	38.6	26.7	33.0	
SD	1.6	3.5	3.0	1.5	2.3	
%CV	8.5%	7.0%	7.7%	5.8%	6.8%	
N	4	4	4	4	4	
mean+3SD	23.3	59.4	47.5	31.3	39.7	
mean-3SD	13.9	38.7	29.6	22.1	26.2	
kit median	19.1	49.6	38.7	27.2	34.0	
mean/all kit median	0.87	0.91	0.88	0.87	0.89	0.88

	TM191	TM192	TM193	TM194	TM195	
CA125 Fujirebio/Centocor (GAA/CE1):						
mean	13.2	31.5	27.2	17.4	22.1	
N	2	2	2	2	2	
mean/all kit median	0.62	0.58	0.62	0.57	0.59	0.60

	TM191	TM192	TM193	TM194	TM195
***CA125 kit average:**					
mean*	23.2	57.2	46.4	32.3	40.5
SD*	4.8	11.8	9.3	6.8	8.6
all kit median*	21.4	54.0	43.8	30.5	37.2

*excluded Fujirebio/Centocor for insufficient data

	TM191	TM192	TM193	TM194	TM195	
CA27.29 all lab:						
mean	54.4	22.6	40.0	35.8	32.2	
SD	4.1	4.0	4.7	4.7	3.7	
%CV	7.5%	17.6%	11.6%	13.1%	11.6%	
mean+3SD	66.6	34.6	54.0	49.9	43.4	
mean-3SD	42.2	10.6	26.1	21.7	21.0	
N	48	49	49	49	49	
mean/all kit median	0.96	0.89	0.93	0.93	0.98	0.94

	TM191	TM192	TM193	TM194	TM195	
CA27.29 Siemens ADVIA-Centaur & ACS-180 (COB & COS/BA1)						
mean	53.5	21.5	38.8	34.8	31.9	
SD	3.5	3.0	3.7	4.2	4.0	
%CV	6.6%	14.1%	9.6%	12.0%	12.4%	
mean+3SD	64.0	30.6	50.0	47.3	43.8	
mean-3SD	42.9	12.4	27.6	22.2	20.1	
N	41	42	42	42	42	
kit median	53.2	21.4	38.6	34.6	31.8	
mean/all kit median	0.94	0.85	0.90	0.91	0.97	0.91

	TM191	TM192	TM193	TM194	TM195	
CA27.29 TOSOH A1A/ST-AIA (TOM/TO1)						
mean	59.7	29.3	47.4	41.9	33.9	
SD	2.6	1.8	2.1	2.5	0.7	
%CV	4.4%	6.2%	4.5%	5.9%	2.1%	
mean+3SD	67.6	34.8	53.8	49.3	36.0	
mean-3SD	51.9	23.9	41.0	34.4	31.8	
N	7	7	7	7	7	
kit median	59.7	30.3	47.2	41.6	33.7	
mean/all kit median	1.06	1.15	1.10	1.09	1.03	1.09

	TM191	TM192	TM193	TM194	TM195
CA27.29 kit average:					
mean	56.6	25.4	43.1	38.3	32.9
SD	4.4	5.5	6.0	5.0	1.4
all kit median	56.6	25.4	43.1	38.3	32.9

CA15-3 all lab:	TM191	TM192	TM193	TM194	TM195	Average bias
mean	55.1	27.4	43.3	39.1	39.5	
SD	20.5	9.7	15.9	14.2	8.6	
%CV	37.2%	35.5%	36.6%	36.2%	21.9%	
mean+3SD	116.5	56.6	90.9	81.6	65.5	
mean-3SD	-6.3	-1.8	-4.3	-3.4	13.6	
N	56	56	56	56	56	
nean/all kit median w/o	1.24	1.23	1.18	1.21	1.13	1.20

CA15-3 Ortho Clinical Vitros Eci (JJC/JJ1):	TM191	TM192	TM193	TM194	TM195	Average bias
mean	44.5	22.2	34.2	31.2	35.0	
SD	1.4	1.3	1.4	1.1	1.3	
%CV	3.2%	5.7%	4.2%	3.6%	3.6%	
mean+3SD	48.8	26.0	38.5	34.6	38.8	
mean-3SD	40.2	18.4	29.8	27.7	31.2	
N	4	4	4	4	4	
kit median	44.0	22.5	34.0	31.5	35.0	
mean/all kit median	1.00	1.00	0.93	0.97	1.00	0.98

CA15-3 Siemens Immulite 1000/2000/2500 (DPB, DPD & DPF/DP5):						
mean	95.0	46.4	73.9	66.7	46.9	
SD	9.3	3.1	6.8	5.2	2.7	
%CV	9.8%	6.7%	9.2%	7.9%	5.7%	
mean+3SD	122.8	55.7	94.3	82.5	54.9	
mean-3SD	67.1	37.0	53.6	51.0	38.9	
N	10	10	10	10	10	
kit median	93.6	46.2	70.9	66.9	47.0	
mean/all kit median	2.13	2.09	2.01	2.07	1.34	1.93

CA15-3 Beckman Unicel & Access (BCU & BCX/BC1):						
mean	44.1	22.0	36.7	32.2	25.0	
SD	3.6	2.0	2.8	1.0	1.1	
%CV	8.1%	8.9%	7.6%	3.2%	4.6%	
mean+3SD	54.8	27.8	45.1	35.3	28.4	
mean-3SD	33.4	16.1	28.3	29.1	21.5	
N	6	6	6	6	6	
kit median	44.8	22.1	36.5	32.3	24.8	
mean/all kit median	0.99	0.99	1.00	1.00	0.71	0.94

CA15-3 Siemens ADVIA-Centaur (COB/BA1):						
mean	52.2	26.0	41.9	37.2	45.8	
SD	5.9	2.5	4.1	4.5	5.7	
%CV	11.4%	9.6%	9.8%	12.1%	12.4%	
mean+3SD	70.0	33.5	54.2	50.7	62.9	
mean-3SD	34.4	18.5	29.5	23.7	28.8	
N	18	18	18	18	18	
kit median	52.5	26.2	42.7	37.3	45.5	
mean/all kit median	1.17	1.17	1.14	1.16	1.31	1.19

CA15-3 Roche Elecsys/Cobas e411 & E170/Cobas e601(BME & BMR/BM1):						
mean	35.7	18.0	27.5	25.4	32.6	
SD	2.8	1.5	2.5	2.0	2.9	
%CV	7.9%	8.1%	9.2%	8.1%	8.8%	
mean+3SD	44.1	22.4	35.0	31.5	41.3	
mean-3SD	27.2	13.6	19.9	19.2	24.0	
N	10	10	10	10	10	
kit median	35.3	18.0	27.3	25.3	33.3	
mean/all kit median	0.80	0.81	0.75	0.79	0.93	0.82

CA15-3 Abbott Asxym & Architect (ABB & ABH/AB1)						
mean	51.3	26.8	39.8	36.5	39.7	
SD	5.0	1.6	3.1	2.4	4.5	
%CV	9.8%	5.8%	7.7%	6.7%	11.3%	
mean+3SD	66.4	31.5	49.1	43.8	53.2	
mean-3SD	36.3	22.1	30.6	29.2	26.3	
N	7	7	7	7	7	
kit median	48.6	26.5	39.3	35.8	38.5	
mean/all kit median	1.15	1.21	1.09	1.13	1.14	1.14

CA 15-3 kit average: *see note below					
mean	45.6	23.0	36.0	32.5	35.6
SD	6.7	3.5	5.6	4.8	7.8
all kit median	44.5	22.2	36.7	32.2	35.0

* **Note**: The Siemens Immulite results were not included in the calculation of the all kit means and medians because the results from those methods were very different from the results of all the others.

	TM191	TM192	TM193	TM194	TM195	Average bias
CA19-9 all lab (COB included):						
mean	71.5	38.1	56.4	50.4	39.6	
SD	22.5	12.9	18.0	16.4	15.2	
%CV	31.5%	33.8%	31.9%	32.6%	38.4%	
mean+3SD	139.1	76.7	110.4	99.6	85.1	
mean-3SD	3.9	-0.5	2.4	1.1	-6.0	
N	60	60	60	60	60	
mean/all kit median	1.38	1.45	1.39	1.41	1.46	1.42

	TM191	TM192	TM193	TM194	TM195	Average bias
CA19-9 Roche Elecsys/Cobas e411 & E170/Cobas e601(BME & BMR/BM1):						
mean	50.3	26.0	39.6	34.9	25.7	
SD	2.1	1.5	2.5	2.4	1.8	
%CV	4.2%	5.9%	6.2%	6.9%	7.0%	
mean+3SD	56.6	30.6	47.0	42.1	31.0	
mean-3SD	43.9	21.4	32.3	27.7	20.3	
N	7	7	7	7	7	
kit median	50.7	25.6	40.3	35.3	25.2	
mean/all kit median	0.97	0.98	0.98	0.97	0.95	0.97

CA19-9 all lab (COB excluded):						
mean	50.0	25.7	39.3	35.2	25.3	
SD	6.4	3.2	4.9	4.3	6.0	
%CV	12.8%	12.6%	12.6%	12.2%	23.5%	
mean+3SD	69.2	35.5	54.1	48.1	43.1	
mean-3SD	30.8	16.0	24.4	22.3	7.4	
N	30	30	30	30	30	
mean/all kit median	0.94	0.96	0.95	0.97	0.89	0.94

CA19-9 TOSOH A1A/ST-AIA (TOM/TO1)						
mean	40.8	21.6	32.3	30.1	15.9	
SD	2.2	1.0	1.3	2.7	1.0	
%CV	5.3%	4.5%	4.0%	8.9%	6.3%	
mean+3SD	47.3	24.5	36.1	38.2	18.9	
mean-3SD	34.3	18.7	28.5	22.0	12.9	
N	7	7	7	7	7	
kit median	40.7	21.8	32.1	29.8	16.2	
mean/all kit median	0.79	0.82	0.80	0.84	0.58	0.77

CA19-9 Siemens ADVIA-Centaur (COB/BA1):						
mean	93.0	50.5	73.6	65.5	53.9	
SD	6.0	3.2	4.9	7.4	3.4	
%CV	6.4%	6.4%	6.7%	11.2%	6.3%	
mean+3SD	110.9	60.2	88.3	87.7	64.0	
mean-3SD	75.1	40.8	58.9	43.4	43.8	
N	30	30	30	30	30	
kit median	93.6	50.8	74.3	66.5	54.0	
mean/all kit median	1.80	1.91	1.81	1.83	1.99	1.87

CA 19-9 kit average: * see note					
mean	48.1	24.8	37.8	33.9	23.4
SD	23.1	13.1	18.3	16.1	16.2
all kit median	51.7	26.4	40.6	35.8	27.1

* **Note**: The COB means were not included in the calculation of the all kit means because the results from this method were very different from the results of all the others. However, this method was included in the all kit median calculation.

CA19-9 Beckman Unicel & Access (BCU & BCX/BC1):					
mean	53.2	26.8	41.5	36.8	28.6
SD	3.7	2.2	2.7	3.0	2.4
%CV	7.0%	8.3%	6.5%	8.1%	8.4%
mean+3SD	64.3	33.5	49.5	45.7	35.8
mean-3SD	42.1	20.1	33.5	27.9	21.4
N	13	13	13	13	13
kit median	53.3	26.9	41.0	36.4	29.0
mean/all kit median	1.03	1.02	1.02	1.03	1.05	1.03

	TM191	TM192	TM193	TM194	TM195	Average bias
CEA all lab:						
mean	15.7	5.3	10.3	8.4	14.6	
SD	2.5	1.1	1.7	1.5	2.3	
%CV	16.1%	21.1%	16.7%	17.7%	15.5%	
mean+3SD	23.2	8.7	15.4	12.8	21.4	
mean-3SD	8.1	2.0	5.1	3.9	7.8	
N	176	176	176	176	176	
mean/all kit median	0.97	1.02	0.98	0.98	1.01	0.99

	TM191	TM192	TM193	TM194	TM195	Average bias
CEA Siemens Immulite 1000/2000/2500 (DPB, D & F/DP5):						
mean	17.3	5.3	10.8	8.8	15.8	
SD	1.0	0.3	0.6	0.4	1.0	
%CV	5.7%	6.2%	5.8%	4.5%	6.1%	
mean+3SD	20.3	6.2	12.7	10.0	18.7	
mean-3SD	14.3	4.3	8.9	7.6	12.9	
N	21	21	21	21	21	
kit median	17.2	5.2	10.7	8.8	16.1	
mean/all kit median	1.07	1.00	1.04	1.03	1.09	1.04

CEA TOSOH AIA/ST-A1A (TOM/TO1)						
mean	21.5	7.3	13.9	11.5	19.6	
SD	1.3	0.3	0.6	0.5	1.1	
%CV	5.9%	4.1%	4.5%	4.0%	5.4%	
mean+3SD	25.3	8.2	15.8	12.8	22.8	
mean-3SD	17.7	6.4	12.0	10.1	16.4	
N	8	8	8	8	8	
kit median	21.2	7.2	13.7	11.3	19.6	
mean/all kit median	1.32	1.38	1.34	1.34	1.35	1.35

CEA Siemens ADVIA-Centaur new antibody (COB/BA3)						
mean	16.6	5.4	10.6	8.6	15.3	
SD	0.8	0.3	0.6	0.6	0.7	
%CV	4.6%	5.8%	5.8%	6.4%	4.5%	
mean+3SD	18.8	6.3	12.5	10.3	17.4	
mean-3SD	14.3	4.4	8.8	7.0	13.3	
N	39	39	39	39	39	
kit median	16.5	5.4	10.6	8.6	15.2	
mean/all kit median	1.02	1.02	1.02	1.01	1.06	1.02

CEA Ortho Clinical Vitros Eci (JJC/JJ1):						
mean	18.7	8.7	13.6	11.8	17.6	
SD	1.0	0.8	0.9	0.9	1.0	
%CV	5.3%	9.3%	6.4%	7.7%	5.8%	
mean+3SD	21.7	11.2	16.2	14.6	20.6	
mean-3SD	15.7	6.3	11.0	9.1	14.5	
N	10	10	10	10	10	
kit median	18.9	8.7	13.4	11.7	17.4	
mean/all kit median	1.15	1.66	1.31	1.38	1.21	1.34

CEA Abbott Architect (ABH/AB1)						
mean	16.3	5.5	10.4	8.6	14.5	
SD	0.3	0.3	0.3	0.2	0.3	
%CV	1.8%	4.9%	2.5%	2.4%	2.0%	
mean+3SD	17.1	6.2	11.2	9.2	15.3	
mean-3SD	15.4	4.7	9.6	7.9	13.7	
N	4	4	4	4	4	
kit median	16.3	5.5	10.4	8.6	14.4	
mean/all kit median	1.00	1.04	1.00	1.00	1.00	1.01

CEA Siemens ADVIA-Centaur original antibody (COB/BA2)						
mean	16.7	5.7	11.0	9.0	15.7	
SD	1.3	0.5	0.8	0.6	1.1	
%CV	7.7%	9.4%	7.6%	6.9%	7.2%	
mean+3SD	20.5	7.3	13.5	10.8	19.1	
mean-3SD	12.8	4.1	8.5	7.1	12.3	
N	21	21	21	21	21	
kit median	16.7	5.6	10.7	8.9	15.7	
mean/all kit median	1.03	1.08	1.06	1.05	1.08	1.06

	TM191	TM192	TM193	TM194	TM195	Average bias
CEA Beckman Access (CEA & enhanced CEA2, BCX/BC4 & 5):						
mean	15.0	5.0	9.8	7.8	13.8	
SD	0.8	0.3	0.6	0.5	0.9	
%CV	5.4%	5.3%	5.8%	6.5%	6.7%	
mean+3SD	17.4	5.8	11.6	9.4	16.6	
mean-3SD	12.6	4.2	8.1	6.3	11.1	
N	11	11	11	11	11	
kit median	14.9	5.0	10.0	7.9	13.7	
mean/all kit median	0.92	0.96	0.94	0.92	0.95	0.94

	TM191	TM192	TM193	TM194	TM195	Average bias
CEA Roche E170/Cobas e601 (BMR/BM1):						
mean	12.0	4.3	7.9	6.5	11.2	
SD	0.5	0.2	0.2	0.2	0.4	
%CV	3.9%	3.9%	2.8%	2.8%	3.3%	
mean+3SD	13.4	4.8	8.6	7.0	12.3	
mean-3SD	10.6	3.7	7.2	5.9	10.1	
N	16	16	16	16	16	
kit median	12.0	4.3	7.9	6.5	11.2	
mean/all kit median	0.74	0.81	0.76	0.76	0.77	0.77

CEA Abbott Asxym (ABB/AB1)						
mean	14.2	4.8	9.4	7.7	13.4	
SD	1.2	0.4	0.7	0.4	0.9	
%CV	8.7%	7.7%	7.6%	5.7%	6.7%	
mean+3SD	18.0	5.9	11.5	9.0	16.1	
mean-3SD	10.5	3.7	7.3	6.4	10.7	
N	17	17	17	16	17	
kit median	14.3	4.8	9.4	7.7	13.4	
mean/all kit median	0.88	0.92	0.90	0.90	0.92	0.90

CEA Roche Elecsys/Cobas e411 (BME/BM1):						
mean	11.7	4.1	7.7	6.4	10.9	
SD	0.7	0.3	0.5	0.4	0.7	
%CV	6.0%	8.0%	6.8%	6.3%	6.2%	
mean+3SD	13.8	5.1	9.3	7.7	13.0	
mean-3SD	9.6	3.1	6.1	5.2	8.9	
N	11	11	11	11	11	
kit median	11.8	4.1	7.8	6.6	11.1	
mean/all kit median	0.72	0.78	0.74	0.75	0.75	0.75

CEA Beckman Unicel (CEA & enhanced CEA2, BCU/BC4 & 5):						
mean	13.7	4.6	8.9	7.5	13.3	
SD	1.1	0.4	0.7	0.5	1.2	
%CV	7.8%	7.8%	8.1%	6.5%	9.0%	
mean+3SD	16.9	5.7	11.1	8.9	16.8	
mean-3SD	10.5	3.5	6.8	6.0	9.7	
N	16	16	16	16	16	
kit median	13.5	4.6	8.9	7.4	13.2	
mean/all kit median	0.84	0.88	0.86	0.87	0.91	0.87

CEA kit average:					
mean	15.8	5.5	10.4	8.6	14.6
SD	2.9	1.4	2.0	1.7	2.6
all kit median	16.3	5.3	10.4	8.6	14.5

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP all lab:						
mean	7.5	11.0	17.9	13.6	22.8	
SD	0.8	1.1	1.6	1.3	2.1	
%CV	10.1%	9.6%	8.9%	9.5%	9.1%	
mean+3SD	9.8	14.2	22.7	17.5	29.0	
mean-3SD	5.2	7.8	13.2	9.8	16.5	
N	103	104	105	104	105	
mean/target	1.10	1.10	1.05	1.07	1.06	1.08

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Abbott Asxym (ABB/AB1)						
mean	7.5	10.6	16.9	13.5	22.0	
SD	0.6	0.9	1.7	2.1	1.5	
%CV	7.8%	8.3%	9.8%	15.8%	6.8%	
mean+3SD	9.2	13.3	21.9	19.9	26.5	
mean-3SD	5.7	8.0	12.0	7.1	17.5	
N	11	11	11	11	11	
kit median	7.4	10.6	17.1	12.8	21.9	
mean/target	1.10	1.06	0.99	1.07	1.03	1.05

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Siemens ADVIA-Centaur (COB/BA1):						
mean	8.4	12.0	19.0	14.6	24.1	
SD	0.7	0.8	1.1	1.1	1.8	
%CV	8.8%	6.8%	5.5%	7.3%	7.3%	
mean+3SD	10.6	14.4	22.2	17.8	29.4	
mean-3SD	6.2	9.5	15.9	11.4	18.8	
N	26	25	26	26	26	
kit median	8.2	12.0	19.0	14.6	24.0	
mean/target	1.24	1.20	1.11	1.15	1.13	1.16

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Siemens Immulite 1000/2000/2500 (DPB, DPD & DPF/DP5):						
mean	6.9	10.3	17.1	12.8	21.6	
SD	0.6	1.0	1.4	1.0	2.0	
%CV	8.7%	9.5%	8.2%	7.9%	9.2%	
mean+3SD	8.7	13.3	21.3	15.8	27.5	
mean-3SD	5.1	7.4	12.9	9.7	15.6	
N	27	27	27	27	27	
kit median	6.9	10.4	17.3	13.1	21.8	
mean/target	1.01	1.03	1.00	1.01	1.01	1.01

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Beckman Unicel & Access (BCU & BCX/BC1):						
mean	7.8	11.3	18.8	14.4	23.8	
SD	0.4	0.6	0.7	0.7	1.0	
%CV	5.4%	5.3%	3.6%	4.8%	4.4%	
mean+3SD	9.0	13.1	20.8	16.5	26.9	
mean-3SD	6.5	9.5	16.8	12.3	20.6	
N	17	17	17	17	17	
kit median	7.7	11.3	18.8	14.2	23.5	
mean/target	1.14	1.13	1.10	1.13	1.11	1.12

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Ortho Clinical Vitros Eci (JJC/JJ1):						
mean	6.5	9.4	15.0	11.4	19.2	
SD	0.2	0.3	0.4	0.2	0.5	
%CV	3.7%	3.1%	2.5%	2.1%	2.5%	
mean+3SD	7.2	10.2	16.1	12.1	20.6	
mean-3SD	5.7	8.5	13.9	10.6	17.8	
N	4	4	4	4	4	
kit median	6.5	9.5	15.1	11.5	19.4	
mean/target	0.95	0.94	0.88	0.89	0.90	0.91

	TM191	TM192	TM193	TM194	TM195	Average bias
AFP Roche Elecsys/Cobas e411 & E170/Cobas e601 (BME & BMR/BM1):						
mean	7.5	11.0	18.2	13.7	23.1	
SD	0.6	0.8	1.5	1.1	1.9	
%CV	8.0%	7.1%	8.2%	8.1%	8.4%	
mean+3SD	9.3	13.3	22.6	17.0	28.9	
mean-3SD	5.7	8.6	13.7	10.4	17.3	
N	15	15	15	15	15	
kit median	7.6	11.0	18.4	13.8	23.2	
mean/target	1.10	1.10	1.06	1.08	1.08	1.08

	TM191	TM192	TM193	TM194	TM195
AFP kit average:					
mean	7.4	10.8	17.6	13.4	22.3
SD	0.6	0.8	1.4	1.1	1.7
all kit median	7.5	11.0	17.9	13.6	22.4

	TM191	TM192	TM193	TM194	TM195
AFP TOSOH A1A/ST-A1A (TOM/TO1)					
mean	7.5	11.0	17.9	13.6	22.4
SD	0.5	0.9	1.4	1.0	1.3
%CV	6.4%	7.9%	7.8%	7.1%	5.7%
mean+3SD	8.9	13.6	22.1	16.5	26.2
mean-3SD	6.1	8.4	13.7	10.7	18.6
N	5	5	5	5	5
kit median	7.6	11.1	18.1	13.8	23.1
mean/target	1.10	1.10	1.05	1.07	1.04	1.07

AFP	**TM191**	**TM192**	**TM193**	**TM194**	**TM195**
***IS target**	**6.8**	**10.0**	**17.1**	**12.7**	**21.4**
SD (+/-)	0.2	0.4	1.0	0.6	1.2
% CV	2.5%	4.0%	6.0%	5.1%	5.6%
high (30%)	8.8	13.0	22.2	16.5	27.8
low (30%)	4.8	7.0	12.0	8.9	15.0

* target value from a traceable AFP standard

	TM191	TM192	TM193	TM194	TM195	Average bias
PSA all lab:						
mean	10.4	8.5	4.1	4.3	1.0	
SD	1.1	0.8	0.4	0.4	0.1	
%CV	10.2%	9.7%	9.1%	8.9%	9.9%	
mean+3SD	13.6	10.9	5.3	5.5	1.4	
mean-3SD	7.2	6.0	3.0	3.2	0.7	
N	261	261	262	262	261	
mean/target	1.13	1.10	1.12	1.11	1.16	1.13

	TM191	TM192	TM193	TM194	TM195	Average bias
PSA Abbott Architect (ABH/AB1)						
mean	11.2	8.7	4.4	4.4	1.0	
SD	0.3	0.3	0.1	0.2	0.1	
%CV	3.0%	3.0%	2.4%	3.9%	5.0%	
mean+3SD	12.2	9.5	4.7	4.9	1.2	
mean-3SD	10.2	7.9	4.0	3.9	0.9	
N	6	6	6	6	6	
kit median	11.2	8.7	4.4	4.4	1.0	
mean/target	1.22	1.13	1.18	1.12	1.15	1.16

PSA Siemens Dimension (DUD/DA1):						
mean	12.3	9.7	4.7	4.8	1.2	
SD	0.8	0.6	0.3	0.3	0.1	
%CV	6.2%	6.4%	6.8%	6.4%	10.2%	
mean+3SD	14.6	11.6	5.7	5.8	1.5	
mean-3SD	10.0	7.9	3.7	3.9	0.8	
N	28	28	28	27	28	
kit median	12.1	9.6	4.7	4.8	1.1	
mean/target	1.33	1.26	1.27	1.24	1.31	1.28

PSA Siemens Immulite 1000/2000/2500 (DPB, D &F/DP5):						
mean	10.8	8.8	4.3	4.5	1.1	
SD	0.8	0.6	0.3	0.3	0.1	
%CV	7.4%	7.3%	8.1%	6.6%	7.6%	
mean+3SD	13.2	10.8	5.3	5.4	1.3	
mean-3SD	8.4	6.9	3.2	3.6	0.8	
N	28	28	28	28	28	
kit median	10.7	8.9	4.2	4.5	1.0	
mean/target	1.17	1.15	1.16	1.16	1.17	1.16

PSA Beckman Access (BCX/BC2):						
mean	11.5	9.2	4.5	4.7	1.1	
SD	0.6	0.6	0.3	0.3	0.1	
%CV	5.2%	6.0%	7.3%	5.6%	7.1%	
mean+3SD	13.3	10.9	5.5	5.5	1.4	
mean-3SD	9.7	7.6	3.5	3.9	0.9	
N	30	31	31	31	31	
kit median	11.6	9.2	4.5	4.8	1.1	
mean/target	1.25	1.20	1.21	1.21	1.24	1.22

PSA Ortho Clinical Vitros Eci (JJC/JJ1):						
mean	10.1	8.0	4.1	4.2	1.1	
SD	0.4	0.3	0.2	0.2	0.1	
%CV	4.3%	3.9%	4.5%	5.0%	5.4%	
mean+3SD	11.3	8.9	4.7	4.8	1.3	
mean-3SD	8.8	7.1	3.6	3.6	1.0	
N	17	17	17	17	17	
kit median	10.1	7.9	4.1	4.2	1.1	
mean/target	1.09	1.04	1.12	1.08	1.27	1.12

PSA Beckman Unicel (BCU/BC2):						
mean	11.0	9.0	4.3	4.5	1.1	
SD	0.4	0.5	0.2	0.2	0.1	
%CV	3.9%	5.3%	4.9%	5.2%	7.5%	
mean+3SD	12.3	10.5	5.0	5.3	1.3	
mean-3SD	9.7	7.6	3.7	3.8	0.8	
N	23	23	23	23	23	
kit median	11.1	8.9	4.4	4.5	1.1	
mean/target	1.20	1.17	1.17	1.16	1.19	1.18

PSA Siemens Immulite1000/2000/2500 3G (DPB, D & F/DP6):						
mean	10.4	8.5	4.0	4.3	1.0	
SD	1.2	1.2	0.4	0.4	0.1	
%CV	12.0%	13.8%	9.9%	10.1%	14.1%	
mean+3SD	14.1	12.0	5.2	5.6	1.4	
mean-3SD	6.6	5.0	2.8	3.0	0.6	
N	6	6	6	6	6	
kit median	10.2	8.2	4.1	4.4	1.0	
mean/target	1.13	1.10	1.08	1.11	1.07	1.10

	TM191	TM192	TM193	TM194	TM195	Average bias
PSA Siemens ADVIA-Centaur (COB/BA1):						
mean	9.9	8.1	4.0	4.1	1.0	
SD	0.6	0.4	0.2	0.2	0.1	
%CV	5.8%	5.5%	5.0%	5.5%	6.1%	
mean+3SD	11.6	9.5	4.6	4.8	1.2	
mean-3SD	8.1	6.8	3.4	3.5	0.8	
N	58	58	58	58	58	
kit median	9.9	8.1	4.0	4.1	1.0	
mean/target	1.07	1.05	1.08	1.06	1.15	1.08

	TM191	TM192	TM193	TM194	TM195	Average bias
PSA Roche Elecsys/Cobas e411 (BME/BM1):						
mean	9.3	7.7	3.8	4.0	1.0	
SD	0.5	0.5	0.2	0.3	0.1	
%CV	5.6%	6.2%	5.8%	6.5%	6.3%	
mean+3SD	10.9	9.2	4.4	4.7	1.1	
mean-3SD	7.7	6.3	3.1	3.2	0.8	
N	18	18	18	18	18	
kit median	9.4	7.8	3.8	3.9	1.0	
mean/target	1.01	1.00	1.02	1.01	1.07	1.02

	TM191	TM192	TM193	TM194	TM195	
PSA TOSOH AIA/ST-A1A (TOM/TO1)						
mean	9.9	8.0	3.9	4.1	1.0	
SD	0.7	0.6	0.3	0.2	0.1	
%CV	6.8%	7.9%	6.8%	5.9%	8.7%	
mean+3SD	11.9	9.8	4.7	4.8	1.3	
mean-3SD	7.9	6.1	3.1	3.3	0.7	
N	13	13	13	13	13	
kit median	10.0	8.1	4.0	4.1	1.0	
mean/target	1.08	1.03	1.06	1.04	1.10	1.06

PSA kit average:					
mean	10.5	8.5	4.1	4.3	1.0
SD	0.9	0.6	0.3	0.3	0.1
all kit median	10.2	8.3	4.1	4.3	1.0

	TM191	TM192	TM193	TM194	TM195	
PSA Abbott Asxym & Imx (ABB & ABM/AB1)						
mean	9.9	7.8	3.9	4.1	1.0	
SD	0.6	0.4	0.2	0.2	0.1	
%CV	6.1%	5.1%	4.4%	3.9%	7.1%	
mean+3SD	11.7	9.0	4.4	4.5	1.2	
mean-3SD	8.1	6.6	3.4	3.6	0.7	
N	22	22	22	22	22	
kit median	10.0	7.9	3.9	4.1	1.0	
mean/target	1.07	1.02	1.05	1.04	1.06	1.05

PSA	**TM191**	**TM192**	**TM193**	**TM194**	**TM195**
*** IS target**	**9.2**	**7.7**	**3.7**	**3.9**	**0.9**
SD (+/-)	**0.5**	**0.4**	**0.2**	**0.2**	**0.05**
% CV	**5.6%**	**5.1%**	**4.4%**	**5.5%**	**5.5%**
high (25%)	11.5	9.6			
low (25%)	6.9	5.8			
high (30%)			4.8	5.1	1.2
low (30%)			2.6	2.7	0.6

* target value from a traceable PSA standard

	TM191	TM192	TM193	TM194	TM195	
PSA Roche E170/Cobas e601 (BMR/BM1):						
mean	9.5	7.9	3.8	4.0	1.0	
SD	0.5	0.3	0.1	0.2	0.0	
%CV	5.7%	3.2%	3.2%	5.9%	4.8%	
mean+3SD	11.1	8.7	4.2	4.7	1.1	
mean-3SD	7.8	7.1	3.5	3.3	0.8	
N	18	17	17	18	17	
kit median	9.6	7.9	3.9	4.1	1.0	
mean/target	1.03	1.03	1.04	1.03	1.08	1.04

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	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA all lab:						
mean	1.10	1.94	0.45	0.99	0.12	
SD	0.23	0.41	0.10	0.22	0.03	
%CV	20.6%	21.1%	22.6%	22.3%	24.2%	
mean+3SD	1.78	3.16	0.76	1.65	0.20	
mean-3SD	0.42	0.71	0.15	0.33	0.03	
N	78	82	76	81	70	
mean/target	1.28	1.28	1.30	1.26	1.47	1.32

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Roche E170/Cobas e601 (BMR/BM1):						
mean	0.93	1.63	0.40	0.84	0.11	
SD	0.05	0.10	0.03	0.05	0.01	
%CV	5.3%	6.1%	7.3%	5.9%	9.4%	
mean+3SD	1.08	1.93	0.49	0.99	0.14	
mean-3SD	0.78	1.33	0.31	0.69	0.08	
N	13	13	11	12	11	
kit median	0.93	1.62	0.40	0.84	0.10	
mean/target	1.08	1.07	1.14	1.07	1.34	1.14

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Beckman Unicel (BCU/BC2):						
mean	1.38	2.46	0.57	1.27	0.14	
SD	0.05	0.10	0.03	0.04	0.03	
%CV	3.3%	4.0%	5.8%	3.5%	22.1%	
mean+3SD	1.51	2.75	0.67	1.40	0.23	
mean-3SD	1.24	2.17	0.47	1.13	0.05	
N	16	16	16	16	16	
kit median	1.40	2.46	0.59	1.28	0.14	
mean/target	1.60	1.62	1.63	1.60	1.74	1.64

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Abbott Asxym, Architect & Imx (ABB, ABH & ABM/AB1)						
mean	0.92	1.66	0.36	0.83	0.10	
SD	0.06	0.09	0.03	0.04	0.01	
%CV	6.7%	5.7%	7.9%	5.4%	6.0%	
mean+3SD	1.11	1.94	0.45	0.97	0.11	
mean-3SD	0.74	1.37	0.28	0.70	0.08	
N	6	6	4	5	3	
kit median	0.93	1.66	0.36	0.85	0.10	
mean/target	1.07	1.09	1.04	1.05	1.21	1.09

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Beckman Access (BCX/BC2):						
mean	1.35	2.37	0.56	1.22	0.13	
SD	0.06	0.12	0.04	0.05	0.02	
%CV	4.1%	5.1%	6.6%	4.0%	15.9%	
mean+3SD	1.51	2.74	0.67	1.37	0.20	
mean-3SD	1.18	2.01	0.45	1.08	0.07	
N	15	16	16	16	13	
kit median	1.35	2.39	0.55	1.21	0.14	
mean/target	1.56	1.56	1.59	1.55	1.68	1.59

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Siemens Immulite 2000 (DPD/DP5):						
mean	0.85	1.49	0.33	0.76	0.09	
SD	0.06	0.07	0.03	0.04	0.01	
%CV	6.8%	5.0%	10.2%	5.5%	10.3%	
mean+3SD	1.02	1.71	0.43	0.89	0.12	
mean-3SD	0.67	1.26	0.23	0.64	0.06	
N	14	15	15	15	14	
kit median	0.84	1.49	0.32	0.77	0.09	
mean/target	0.99	0.98	0.93	0.97	1.12	1.00

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Siemens Dimension (DUD/DA1):						
mean	1.08	1.84	0.43	0.93	0.13	
SD	0.06	0.11	0.04	0.05	0.04	
%CV	6.0%	6.1%	8.2%	5.9%	28.3%	
mean+3SD	1.27	2.18	0.54	1.10	0.23	
mean-3SD	0.89	1.51	0.33	0.77	0.02	
N	6	8	8	8	7	
kit median	1.09	1.82	0.43	0.90	0.11	
mean/target	1.26	1.21	1.23	1.18	1.57	1.29

	TM191	TM192	TM193	TM194	TM195
free PSA kit average:					
mean	1.07	1.88	0.43	0.96	0.11
SD	0.21	0.39	0.09	0.20	0.02
all kit median	0.95	1.68	0.40	0.86	0.11

	TM191	TM192	TM193	TM194	TM195	Average bias
free PSA Roche Elecsys/Cobas e411 (BME/BM1):						
mean	0.95	1.68	0.39	0.86	0.11	
SD	0.04	0.06	0.01	0.03	0.01	
%CV	4.0%	3.4%	3.8%	3.8%	4.8%	
mean+3SD	1.07	1.85	0.44	0.96	0.12	
mean-3SD	0.84	1.51	0.35	0.76	0.09	
N	8	8	6	8	6	
kit median	0.96	1.69	0.40	0.87	0.11	
mean/target	1.11	1.10	1.12	1.09	1.33	1.15

free PSA	**TM191**	**TM192**	**TM193**	**TM194**	**TM195**
*** IS target**	**0.86**	**1.52**	**0.35**	**0.79**	**0.08**
SD (+/-)	0.01	0.01	0.01	0.01	0.01
% CV	1.6%	0.9%	2.0%	0.9%	9.4%
high (30%)	1.12	1.98	0.46	1.03	0.10
low (30%)	0.60	1.06	0.25	0.55	0.06

* target value from a traceable free PSA standard.

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Summary of Results

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA all lab:						
mean	10.2	22.7	10.9	22.9	11.2	
SD	1.6	3.7	2.1	4.0	2.1	
%CV	15.5%	16.4%	19.1%	17.3%	18.8%	
mean+3SD	14.9	33.8	17.1	34.7	17.6	
mean-3SD	5.5	11.5	4.6	11.0	4.9	
N	53	70	63	68	45	
mean/target	1.09	1.14	1.18	1.13	1.39	1.19

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA DUD/DA1:						
mean	9.1	19.6	9.4	19.9	11.2	
SD	0.8	1.1	0.4	1.4	1.2	
%CV	8.3%	5.4%	4.5%	7.2%	11.1%	
mean+3SD	11.3	22.7	10.7	24.2	15.0	
mean-3SD	6.8	16.4	8.2	15.6	7.5	
N	6	7	7	7	6	
kit median	9.0	19.6	9.5	19.5	11.0	
mean/target	0.97	0.99	1.03	0.98	1.38	1.07

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA BCU & BCX/BC2:						
mean	12.2	26.5	12.7	26.8	12.7	
SD	0.7	1.6	1.0	1.8	3.4	
%CV	5.7%	6.1%	7.8%	6.6%	26.4%	
mean+3SD	14.2	31.4	15.7	32.2	22.8	
mean-3SD	10.1	21.7	9.8	21.5	2.6	
N	13	27	27	27	15	
kit median	12.1	26.0	13.0	26.1	13.1	
mean/target	1.31	1.34	1.39	1.32	1.57	1.38

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA DPD/DP5:						
mean	8.3	17.4	7.9	17.5	8.7	
SD	0.7	1.3	1.3	0.9	1.2	
%CV	7.9%	7.3%	16.9%	4.9%	13.6%	
mean+3SD	10.3	21.2	11.8	20.0	12.3	
mean-3SD	6.3	13.6	3.9	14.9	5.2	
N	8	9	9	9	7	
kit median	8.3	17.2	8.0	18.0	8.7	
mean/target	0.89	0.88	0.85	0.86	1.08	0.91

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA BME & BMR/BM1:						
mean	10.0	21.3	10.5	21.4	11.3	
SD	0.7	1.2	0.7	1.3	0.9	
%CV	6.7%	5.8%	7.1%	6.0%	7.9%	
mean+3SD	12.0	25.0	12.7	25.3	14.0	
mean-3SD	8.0	17.6	8.2	17.5	8.6	
N	19	19	14	18	14	
kit median	10.0	21.0	10.3	21.5	11.1	
mean/target	1.08	1.08	1.14	1.05	1.39	1.15

	TM191	TM192	TM193	TM194	TM195
% free PSA kit average:					
mean	9.8	21.1	9.9	21.2	11.2
SD	1.5	3.4	1.8	3.5	1.5
all kit median	9.5	20.9	9.4	20.2	11.3

	TM191	TM192	TM193	TM194	TM195	Average bias
% free PSA ABB, ABH & ABM/AB1						
mean	9.5	20.9	9.0	20.2	12.3	
SD	1.0	0.8	0.2	1.4	1.1	
%CV	10.2%	3.6%	2.7%	6.8%	8.7%	
mean+3SD	12.4	23.1	9.7	24.3	15.4	
mean-3SD	6.6	18.6	8.3	16.1	9.1	
N	5	6	4	5	2	
kit median	9.0	21.0	9.0	20.0	12.3	
mean/target	1.02	1.05	0.98	0.99	1.51	1.11

% free PSA IS target	TM191	TM192	TM193	TM194	TM195
	9.3%	**19.8%**	**9.2%**	**20.3%**	**8.1%**

	TM191	TM192	TM193	TM194	TM195
complexed PSA all lab:					
mean	8.8	6.2	3.6	3.2	0.9
SD	0.6	0.3	0.2	0.1	0.0
%CV	6.4%	4.7%	5.0%	4.4%	5.2%
mean+3SD	10.5	7.1	4.1	3.6	1.0
mean-3SD	7.1	5.4	3.0	2.8	0.7
N	12	12	12	12	12
all median	8.7	6.3	3.5	3.2	0.9

	TM191	TM192	TM193	TM194	TM195
% complexed PSA all lab:					
mean	87.2%	75.9%	88.6%	77.4%	86.0%
SD	7.7%	4.0%	5.8%	4.7%	6.0%
%CV	8.9%	5.3%	6.6%	6.1%	7.0%
mean+3SD	110.5%	88.0%	106.0%	91.6%	104.0%
mean-3SD	64.0%	63.7%	71.1%	63.2%	68.1%
N	11	11	11	11	11
all median	87.6%	75.6%	88.1%	78.6%	90.0%