Therapeutic Drugs

Name	Line No.	Specimen 1 Range & Type	Specimen 1 Mean	Specimen 1 SD	Specimen 2 Range & Type	Specimen 2 Mean	Specimen 2 SD	Specimen 3 Range & Type	Specimen 3 Mean	Specimen 3 SD	Specimen 4 Range & Type	Specimen 4 Mean	Specimen 4 SD	Specimen 5 Range & Type	Specimen 5 Mean	Specimen 5 SD	No. of Labs
Acetaminophen																	
Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	8 - 13	P 10.0	0.0	8 - 13	P 10.0	0.0	104 - 174	P 139.2	2.5	52 - 87	P 69.6	1.0	72 - 120	P 95.7	1.3	12
Siemens Dimension Flex & Siemens Dimension EXL	2	0 - 3	C 0.6	0.9	14 - 24	P 19.1	1.4	105 - 176	P 140.6	2.4	49 - 82	P 65.6	1.7	68 - 113	P 90.1	1.6	42
Initial Grouping by Reagent																	
Ortho Vitros	3	7 - 12	C 9.3	1.8	7 - 12	C 9.5	1.3	104 - 174	P 139.1	2.5	52 - 87	P 69.7	1.1	72 - 120	P 95.6	1.4	16
Siemens Dimension Flex	4	0 - 3	C 0.6	0.9	14 - 24	P 19.2	1.4	106 - 176	P 140.9	2.3	49 - 82	P 65.7	1.6	68 - 113	P 90.2	1.6	50
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	5	5 - 10	C 7.8	3.1	6 - 11	C 8.3	2.5	105 - 174	P 139.5	3.1	50 - 84	P 67.0	4.9	70 - 116	P 93.2	4.7	21
Enzyme-multiplied IA/EMIT	6	0 - 4	C 1.1	2.0	13 - 23	P 18.0	4.1	104 - 174	P 139.1	6.3	49 - 81	P 64.8	3.3	67 - 111	P 88.9	4.5	55
Total Population																	
Whole Population	7	1 - 6	C 3.7	4.4	11 - 18	P 14.7	5.9	105 - 175	P 139.9	8.6	49 - 81	P 65.1	4.5	67 - 112	P 89.9	6.0	85
Carbamazepine																	
Initial Grouping by Reagent and Instrument																	
Siemens Dimension Flex & Siemens Dimension EXL	1	1.3 - 2.2	P 1.78	0.12	2.3 - 3.8	P 3.04	0.13	10.3 - 17.1	P 13.68	0.38	5.5 - 9.1	P 7.28	0.2	7.2 - 11.9	P 9.54	0.32	16
Initial Grouping by Reagent																	
Siemens Dimension Flex	2	1.3 - 2.2	P 1.76	0.12	2.3 - 3.8	P 3.03	0.13	10.3 - 17.2	P 13.73	0.42	5.5 - 9.1	P 7.29	0.23	7.1 - 11.9	P 9.52	0.36	20
Initial Grouping by Sensitivity or Principle																	
Enzyme-multiplied IA/EMIT	3	1.4 - 2.3	P 1.81	0.15	2.3 - 3.9	P 3.11	0.19	10.4 - 17.3	P 13.84	0.94	5.6 - 9.3	P 7.42	0.36	7.2 - 12.0	P 9.59	0.55	27
Turbidimetric/PETINIA	4	1.4 - 2.3	P 1.88	0.37	2.1 - 3.4	P 2.74	0.28	10.0 - 16.7	P 13.39	0.63	5.3 - 8.9	P 7.12	0.43	6.9 - 11.6	P 9.24	0.5	10
Total Population																	
Whole Population	5	1.5 - 2.5	P 1.97	0.45	2.3 - 3.8	P 3.04	0.3	9.9 - 16.5	P 13.21	1.16	5.3 - 8.8	P 7.05	0.74	6.8 - 11.4	P 9.12	0.87	61
Digoxin																	
Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	0.2 - 0.6	C 0.42	0.04	0.6 - 1.1	C 0.85	0.09	1.9 - 2.9	P 2.43	0.1	1.2 - 1.8	P 1.47	0.11	1.4 - 2.1	P 1.78	0.11	13
Siemens Dimension Flex & Siemens Dimension EXL	2	0.3 - 0.7	C 0.47	0.07	0.5 - 0.9	C 0.74	0.09	2.3 - 3.4	P 2.84	0.09	1.3 - 1.9	P 1.6	0.07	1.6 - 2.4	P 2.03	0.08	40
Initial Grouping by Reagent																	
Beckman Olympus	3	0.3 - 0.7	C 0.48	0.07	0.5 - 0.9	C 0.69	0.12	2.2 - 3.4	P 2.81	0.1	1.2 - 1.8	P 1.46	0.14	1.5 - 2.3	P 1.92	0.18	11
Ortho Vitros	4	0.2 - 0.6	C 0.41	0.04	0.6 - 1.1	C 0.85	0.09	1.9 - 2.9	P 2.43	0.09	1.2 - 1.7	P 1.44	0.11	1.4 - 2.1	P 1.76	0.13	16
Siemens Dimension Flex	5	0.3 - 0.7	C 0.46	0.07	0.5 - 0.9	C 0.73	0.08	2.3 - 3.4	P 2.86	0.11	1.3 - 1.9	P 1.6	0.07	1.6 - 2.4	P 2.04	0.08	51
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	6	0.2 - 0.6	C 0.44	0.08	0.5 - 0.9	C 0.74	0.1	2.2 - 3.3	P 2.78	0.21	1.2 - 1.9	P 1.55	0.11	1.6 - 2.4	P 1.97	0.15	74
Luminometric/CLIA	7	0.4 - 0.8	C 0.56	0.07	0.6 - 1.0	C 0.83	0.09	2.3 - 3.5	P 2.9	0.2	1.4 - 2.1	P 1.74	0.16	1.7 - 2.6	P 2.18	0.17	16
Enzyme-multiplied IA/EMIT	8	0.3 - 0.7	C 0.46	0.1	0.5 - 0.9	C 0.67	0.14	2.2 - 3.3	P 2.75	0.2	1.2 - 1.8	P 1.46	0.14	1.5 - 2.3	P 1.88	0.21	12
Turbidimetric/PETINIA	9	0.4 - 0.8	C 0.56	0.1	0.6 - 1.0	C 0.75	0.12	2.1 - 3.2	P 2.64	0.17	1.2 - 1.8	P 1.51	0.1	1.5 - 2.3	P 1.88	0.15	15
Total Population																	
Whole Population	10	0.3 - 0.7	C 0.47	0.1	0.6 - 1.0	C 0.75	0.12	2.2 - 3.3	P 2.77	0.22	1.3 - 1.9	P 1.57	0.14	1.6 - 2.4	P 1.98	0.18	117
Gentamicin																	
Initial Grouping by Reagent and Instrument																	
Siemens Dimension Flex & Siemens Dimension EXL	1	0.6 - 1.0	P 0.79	0.18	0.6 - 1.0	P 0.77	0.27	7.5 - 12.5	P 10.0	0.31	3.4 - 5.7	P 4.57	0.18	4.8 - 8.0	P 6.38	0.14	15
Initial Grouping by Reagent																	
Siemens Dimension Flex	2	0.6 - 1.0	P 0.79	0.17	0.5 - 0.9	P 0.73	0.29	7.5 - 12.5	P 10.01	0.3	3.4 - 5.7	P 4.56	0.2	4.8 - 8.0	P 6.37	0.16	17
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	3	0.7 - 1.1	P 0.92	0.12	0.7 - 1.1	P 0.89	0.15	8.2 - 13.6	P 10.9	1.07	3.8 - 6.3	P 5.03	0.35	5.3 - 8.8	P 7.03	0.55	12
Enzyme-multiplied IA/EMIT	4	0.6 - 1.0	P 0.81	0.17	0.6 - 0.9	P 0.74	0.27	7.5 - 12.6	P 10.05	0.37	3.5 - 5.8	P 4.61	0.25	4.8 - 7.9	P 6.35	0.47	20
Total Population																	

Whole Population	5	0.6 - 1.0	P 0.83	0.16	0.6 - 1.0	P 0.79	0.22	7.9 - 13.2	P 10.58	0.99	3.7 - 6.1	P 4.92	0.46	5.1 - 8.5	P 6.83	0.74	40

Lithium

Initial Grouping by Reagent																	
Siemens Dimension Flex	1	0 - 0.5	C 0.17	0.05	0 - 0.5	C 0.18	0.06	1.9 - 2.8	P 2.34	0.09	0.7 - 1.3	C 1.0	0.06	1.2 - 1.8	C 1.46	0.06	13
Initial Grouping by Sensitivity or Principle																	
Other, not flame equivalent	2	0 - 0.5	C 0.16	0.05	0 - 0.5	C 0.2	0.0	1.4 - 2.1	P 1.74	0.39	0.5 - 1.1	C 0.84	0.17	0.9 - 1.5	C 1.16	0.22	11
Flame-equivalent methods	3	0 - 0.5	C 0.16	0.05	0 - 0.5	C 0.18	0.06	1.9 - 2.8	P 2.32	0.11	0.7 - 1.3	C 0.99	0.06	1.2 - 1.8	C 1.45	0.07	14
Total Population																	
Whole Population	4	0 - 0.5	C 0.15	0.05	0 - 0.5	C 0.19	0.04	1.7 - 2.5	P 2.08	0.37	0.6 - 1.2	C 0.94	0.14	1.0 - 1.6	C 1.33	0.2	29

Phenobarbital

Initial Grouping by Reagent and Instrument																	
Siemens Dimension Flex & Siemens Dimension EXL	1	15 - 23	P 19.0	1.2	5 - 9	C 7.1	0.7	43 - 65	P 54.2	2.8	20 - 31	P 25.5	0.9	28 - 41	P 34.5	1.8	13
Initial Grouping by Reagent																	
Siemens Dimension Flex	2	15 - 23	P 18.9	1.2	5 - 9	C 7.1	0.7	43 - 65	P 53.8	2.9	20 - 31	P 25.5	0.9	27 - 41	P 34.3	1.7	15
Initial Grouping by Sensitivity or Principle																	
Enzyme-multiplied IA/EMIT	3	15 - 22	P 18.7	1.1	5 - 9	C 7.0	0.6	42 - 64	P 53.1	3.5	20 - 30	P 25.3	1.0	27 - 41	P 34.2	1.8	21
Total Population																	
Whole Population	4	14 - 22	P 18.1	1.3	5 - 9	C 7.0	0.7	41 - 62	P 51.4	3.7	20 - 30	P 24.8	1.3	27 - 40	P 33.4	2.0	39

Phenytoin

Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	6 - 9	P 7.4	0.7	5 - 9	P 6.9	0.6	23 - 38	P 30.7	2.6	12 - 21	P 16.6	1.0	16 - 26	P 21.0	1.3	10
Siemens Dimension Flex & Siemens Dimension EXL	2	6 - 10	P 8.2	0.7	5 - 8	P 6.7	0.8	25 - 42	P 33.5	1.6	13 - 21	P 16.9	1.0	17 - 28	P 22.0	1.1	28
Initial Grouping by Reagent																	
Beckman Olympus	3	5 - 9	P 6.9	0.5	5 - 9	P 7.0	0.4	23 - 39	P 31.3	2.7	12 - 21	P 16.5	1.2	17 - 28	P 22.0	1.7	11
Ortho Vitros	4	6 - 9	P 7.5	0.7	5 - 9	P 7.0	0.6	23 - 39	P 31.0	2.7	13 - 21	P 16.8	1.2	16 - 27	P 21.3	1.5	11
Roche Cobas	5	5 - 9	P 7.1	0.7	5 - 8	P 6.5	0.8	21 - 35	P 27.8	1.8	12 - 19	P 15.5	0.9	15 - 25	P 20.0	1.5	10
Siemens Dimension Flex	6	6 - 10	P 8.2	0.7	5 - 8	P 6.7	0.8	25 - 42	P 33.3	1.6	13 - 21	P 16.8	1.0	17 - 27	P 22.0	1.1	33
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	7	5 - 9	P 7.3	0.6	5 - 9	P 6.8	0.7	22 - 37	P 29.3	2.5	12 - 20	P 16.3	1.2	16 - 26	P 20.7	1.6	28
Enzyme-multiplied IA/EMIT	8	6 - 10	P 7.9	0.9	5 - 8	P 6.8	0.7	25 - 41	P 32.9	2.1	13 - 21	P 16.7	1.1	17 - 27	P 22.0	1.3	44
Turbidimetric/PETINIA	9	5 - 9	P 7.3	0.6	5 - 8	P 6.4	0.5	23 - 38	P 30.7	2.5	12 - 20	P 15.8	0.7	16 - 26	P 20.7	1.1	13
Total Population																	
Whole Population	10	6 - 9	P 7.6	0.8	5 - 9	P 6.8	0.7	24 - 39	P 31.5	2.9	12 - 21	P 16.5	1.2	16 - 27	P 21.4	1.6	93

Salicylates - mg/dL

Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	5.5 - 9.1	P 7.29	0.19	5.8 - 9.6	P 7.68	0.23	25.3 - 42.1	P 33.7	1.84	13.9 - 23.1	P 18.5	0.61	17.5 - 29.1	P 23.29	0.83	10
Siemens Dimension Flex & Siemens Dimension EXL	2	6.3 - 10.6	P 8.45	0.27	4.3 - 7.2	P 5.73	0.23	23.6 - 39.3	P 31.42	0.61	12.0 - 19.9	P 15.96	0.33	15.8 - 26.3	P 21.05	0.38	34
Initial Grouping by Reagent																	
Ortho Vitros	3	5.5 - 9.1	P 7.32	0.27	5.8 - 9.7	P 7.72	0.23	25.3 - 42.2	P 33.74	1.73	13.9 - 23.2	P 18.53	0.57	17.5 - 29.2	P 23.33	0.79	13
Siemens Dimension Flex	4	6.3 - 10.6	P 8.45	0.26	4.3 - 7.2	P 5.73	0.23	23.6 - 39.4	P 31.5	0.66	12.0 - 20.0	P 15.99	0.33	15.8 - 26.4	P 21.08	0.38	39
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	5	5.9 - 9.8	P 7.86	1.15	4.6 - 7.6	P 6.07	0.91	24.2 - 40.3	P 32.27	1.62	12.4 - 20.7	P 16.55	1.09	16.3 - 27.1	P 21.7	1.09	63
Total Population																	
Whole Population	6	5.7 - 9.5	P 7.62	1.26	4.5 - 7.5	P 6.03	0.88	24.6 - 41.0	P 32.77	2.31	12.5 - 20.9	P 16.69	1.2	16.5 - 27.5	P 21.97	1.36	73

Theophyline

Initial Grouping by Reagent and Instrument																	
Siemens Dimension Flex & Siemens Dimension EXL	1	8 - 13	P 10.3	0.5	7 - 12	P 9.5	0.5	28 - 47	P 37.7	1.5	15 - 26	P 20.5	0.8	20 - 33	P 26.4	1.0	10
Initial Grouping by Reagent																	
Siemens Dimension Flex	2	8 - 13	P 10.4	0.5	7 - 12	P 9.5	0.5	28 - 47	P 37.7	1.5	15 - 26	P 20.6	0.8	20 - 33	P 26.2	1.0	14
Initial Grouping by Sensitivity or Principle																	
Enzyme-multiplied IA/EMIT	3	8 - 13	P 10.3	0.5	7 - 12	P 9.6	0.5	28 - 47	P 37.8	1.7	16 - 26	P 20.7	0.9	20 - 33	P 26.3	1.0	17
Total Population																	
Whole Population	4	8 - 13	P 10.8	2.0	8 - 13	P 10.3	2.6	29 - 49	P 39.1	5.3	17 - 28	P 22.1	4.4	20 - 34	P 27.0	3.3	36

Tobramycin

Total Population																	
Whole Population	1	0.3 - 0.5	P 0.43	0.05	0.5 - 0.8	P 0.6	0.22	8.4 - 14.0	P 11.16	1.18	3.8 - 6.4	P 5.12	0.96	5.6 - 9.4	P 7.5	1.16	5

Valproic Acid

Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	24 - 40	P 32.4	2.6	23 - 39	P 30.9	2.9	84 - 140	P 112.3	6.9	48 - 79	P 63.5	4.3	60 - 100	P 79.6	5.5	11
Siemens Dimension Flex & Siemens Dimension EXL	2	27 - 45	P 36.4	2.1	24 - 39	P 31.5	2.2	78 - 130	P 104.4	3.2	46 - 77	P 61.4	2.1	57 - 94	P 75.5	2.0	19
Initial Grouping by Reagent																	
Ortho Vitros	3	24 - 40	P 32.4	2.6	23 - 39	P 30.9	2.9	84 - 140	P 112.3	6.9	48 - 79	P 63.5	4.3	60 - 100	P 79.6	5.5	11
Siemens Dimension Flex	4	27 - 45	P 36.3	2.0	24 - 39	P 31.4	2.1	78 - 131	P 104.5	3.2	46 - 77	P 61.4	2.0	57 - 94	P 75.6	2.0	22
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	5	24 - 41	P 32.4	2.5	24 - 39	P 31.4	2.8	83 - 139	P 111.3	8.1	48 - 80	P 64.0	4.9	60 - 100	P 80.4	5.1	26
Enzyme-multiplied IA/EMIT	6	27 - 46	P 36.6	2.2	24 - 41	P 32.5	2.5	81 - 134	P 107.6	7.8	47 - 79	P 63.1	3.2	58 - 97	P 77.8	4.6	32
Turbidimetric/PETINIA	7	25 - 42	P 33.7	2.8	24 - 39	P 31.5	3.1	81 - 136	P 108.6	7.1	47 - 79	P 63.1	3.4	59 - 98	P 78.2	3.2	10
Total Population																	
Whole Population	8	26 - 43	P 34.5	3.0	24 - 40	P 32.1	2.8	82 - 137	P 109.3	8.0	48 - 79	P 63.5	4.0	59 - 99	P 78.9	4.8	75

Vancomycin

Initial Grouping by Reagent and Instrument																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	4 - 7	C 5.0	0.0	4 - 7	C 5.0	0.0	40 - 66	P 53.0	3.4	17 - 29	P 23.1	1.3	25 - 42	P 33.3	1.8	11
Siemens Dimension Flex & Siemens Dimension EXL	2	0 - 3	C 1.5	0.5	1 - 4	C 2.9	0.4	41 - 68	P 54.4	3.7	18 - 31	P 24.6	1.0	26 - 44	P 35.1	1.7	38
Initial Grouping by Reagent																	
Ortho Vitros	3	4 - 7	C 5.0	0.0	4 - 7	C 5.0	0.0	40 - 66	P 52.8	3.6	17 - 29	P 23.2	1.3	25 - 41	P 33.2	1.7	13
Siemens Dimension Flex	4	0 - 3	C 1.5	0.5	1 - 4	C 2.9	0.4	41 - 68	P 54.7	3.8	18 - 31	P 24.6	1.0	26 - 44	P 35.1	1.6	43
Initial Grouping by Sensitivity or Principle																	
Other spectrophotometric	5	2 - 5	C 3.4	1.8	3 - 6	C 4.2	0.9	41 - 69	P 55.3	6.2	19 - 31	P 25.0	2.6	27 - 44	P 35.5	3.5	26
Enzyme-multiplied IA/EMIT	6	0 - 3	C 1.6	0.6	2 - 5	C 3.0	0.4	41 - 68	P 54.2	4.5	18 - 30	P 24.2	1.5	26 - 43	P 34.6	2.3	52
Turbidimetric/PETINIA	7	1 - 4	C 2.3	1.2	2 - 5	C 3.5	0.7	44 - 73	P 58.8	7.7	20 - 33	P 26.5	1.9	28 - 47	P 37.8	2.2	13
Total Population																	
Whole Population	8	1 - 4	C 2.2	1.4	2 - 5	C 3.4	0.9	41 - 69	P 55.2	6.1	19 - 31	P 24.8	2.2	26 - 44	P 35.2	3.2	94