



## Therapeutic Drugs

Name	Line No.	Specimen 1			Specimen 2			Specimen 3			Specimen 4			Specimen 5			No. of Labs
		Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	Range & Type	Mean	SD	
<b>Acetaminophen</b>																	
<b>Initial Grouping by Reagent and Instrument</b>																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	17 - 29	P 23.0	0.0	60 - 100	P 80.1	1.2	82 - 137	P 109.6	1.4	40 - 67	P 53.4	0.8	69 - 115	P 92.2	1.1	13
Siemens Dimension Flex & Siemens Dimension EXL	2	22 - 38	P 30.0	0.9	53 - 89	P 71.1	1.1	74 - 124	P 99.1	1.4	37 - 62	P 49.8	0.9	62 - 103	P 82.5	1.2	41
<b>Initial Grouping by Reagent</b>																	
Ortho Vitros	3	17 - 29	P 23.1	0.2	60 - 100	P 80.2	1.1	82 - 137	P 109.6	1.3	40 - 67	P 53.5	0.8	69 - 115	P 92.4	1.1	17
Siemens Dimension Flex	4	22 - 38	P 30.0	0.9	53 - 89	P 71.1	1.1	74 - 124	P 99.0	1.3	37 - 62	P 49.9	0.9	62 - 103	P 82.4	1.1	49
<b>Initial Grouping by Sensitivity or Principle</b>																	
Other spectrophotometric	5	17 - 28	P 22.0	1.9	59 - 98	P 78.0	4.3	81 - 135	P 108.3	2.9	39 - 64	P 51.5	3.7	68 - 113	P 90.5	3.5	22
Enzyme-multiplied IA/EMIT	6	22 - 37	P 29.3	2.7	53 - 88	P 70.8	2.1	74 - 123	P 98.5	3.9	37 - 62	P 49.3	2.1	61 - 102	P 81.8	3.0	53
<b>Total Population</b>																	
Whole Population	7	20 - 33	P 26.5	4.6	54 - 91	P 72.5	5.0	76 - 126	P 101.1	7.0	37 - 62	P 49.7	3.2	63 - 105	P 84.1	5.9	83
<b>Carbamazepine</b>																	
<b>Initial Grouping by Reagent and Instrument</b>																	
Siemens Dimension Flex & Siemens Dimension EXL	1	3.1 - 5.1	P 4.09	0.19	6.1 - 10.2	P 8.12	0.27	7.9 - 13.2	P 10.59	0.4	4.6 - 7.6	P 6.09	0.2	6.8 - 11.4	P 9.11	0.28	14
<b>Initial Grouping by Reagent</b>																	
Siemens Dimension Flex	2	3.1 - 5.2	P 4.14	0.2	6.1 - 10.2	P 8.15	0.27	8.0 - 13.3	P 10.63	0.39	4.6 - 7.6	P 6.11	0.19	6.8 - 11.4	P 9.1	0.25	19
<b>Initial Grouping by Sensitivity or Principle</b>																	
Enzyme-multiplied IA/EMIT	3	3.2 - 5.3	P 4.22	0.27	6.2 - 10.4	P 8.3	0.46	8.1 - 13.4	P 10.74	0.56	4.7 - 7.8	P 6.23	0.42	6.9 - 11.5	P 9.22	0.58	26
<b>Total Population</b>																	
Whole Population	4	3.0 - 5.0	P 3.98	0.48	5.8 - 9.7	P 7.77	1.05	7.6 - 12.6	P 10.1	1.33	4.4 - 7.3	P 5.86	0.8	6.5 - 10.9	P 8.71	1.09	57
<b>Digoxin</b>																	
<b>Initial Grouping by Reagent and Instrument</b>																	
Ortho Vitros & Ortho Vitros 3600, 5600	1	0.7 - 1.1	C 0.91	0.1	1.1 - 1.6	P 1.34	0.12	1.3 - 2.0	P 1.65	0.13	0.9 - 1.3	P 1.09	0.08	1.2 - 1.8	P 1.47	0.13	14
Siemens Dimension Flex & Siemens Dimension EXL	2	0.6 - 1.0	C 0.8	0.06	1.2 - 1.9	P 1.56	0.07	1.6 - 2.4	P 2.02	0.08	1.0 - 1.4	P 1.19	0.06	1.4 - 2.1	P 1.77	0.06	40
<b>Initial Grouping by Reagent</b>																	
Beckman Olympus	3	0.6 - 1.0	C 0.76	0.13	1.2 - 1.8	P 1.54	0.19	1.6 - 2.4	P 2.03	0.18	0.9 - 1.4	P 1.13	0.14	1.4 - 2.1	P 1.71	0.11	10
Ortho Vitros	4	0.7 - 1.1	C 0.9	0.11	1.0 - 1.6	P 1.31	0.13	1.3 - 1.9	P 1.62	0.15	0.9 - 1.3	P 1.07	0.09	1.2 - 1.7	P 1.44	0.14	16
Siemens Dimension Flex	5	0.6 - 1.0	C 0.79	0.06	1.2 - 1.9	P 1.56	0.07	1.6 - 2.4	P 2.02	0.09	1.0 - 1.4	P 1.19	0.06	1.4 - 2.1	P 1.76	0.07	52
<b>Initial Grouping by Sensitivity or Principle</b>																	
Other spectrophotometric	6	0.6 - 1.0	C 0.81	0.09	1.2 - 1.8	P 1.49	0.14	1.5 - 2.3	P 1.93	0.2	0.9 - 1.4	P 1.16	0.09	1.4 - 2.0	P 1.69	0.16	75
Luminometric/CLIA	7	0.7 - 1.1	C 0.91	0.08	1.4 - 2.1	P 1.71	0.11	1.8 - 2.6	P 2.2	0.19	1.0 - 1.6	P 1.3	0.09	1.5 - 2.3	P 1.9	0.14	15
Enzyme-multiplied IA/EMIT	8	0.6 - 1.0	C 0.76	0.12	1.2 - 1.8	P 1.51	0.21	1.6 - 2.4	P 1.99	0.22	0.9 - 1.3	P 1.12	0.14	1.3 - 2.0	P 1.68	0.14	11
Turbidimetric/PETINIA	9	0.6 - 1.0	C 0.8	0.1	1.2 - 1.7	P 1.44	0.16	1.5 - 2.2	P 1.84	0.13	0.9 - 1.3	P 1.1	0.1	1.3 - 1.9	P 1.61	0.12	13
<b>Total Population</b>																	
Whole Population	10	0.6 - 1.0	C 0.81	0.1	1.2 - 1.8	P 1.52	0.16	1.6 - 2.4	P 1.96	0.21	0.9 - 1.4	P 1.16	0.11	1.4 - 2.0	P 1.7	0.17	114
<b>Gentamicin</b>																	
<b>Initial Grouping by Reagent and Instrument</b>																	
Siemens Dimension Flex & Siemens Dimension EXL	1	1.5 - 2.6	P 2.04	0.09	4.3 - 7.1	P 5.67	0.16	6.0 - 9.9	P 7.96	0.2	2.9 - 4.9	P 3.93	0.12	5.0 - 8.4	P 6.69	0.14	14
<b>Initial Grouping by Reagent</b>																	
Siemens Dimension Flex	2	1.5 - 2.5	P 2.02	0.11	4.2 - 7.1	P 5.66	0.16	6.0 - 9.9	P 7.94	0.19	2.9 - 4.9	P 3.89	0.14	5.0 - 8.3	P 6.67	0.14	16
<b>Initial Grouping by Sensitivity or Principle</b>																	
Other spectrophotometric	3	1.6 - 2.7	P 2.19	0.17	4.7 - 7.8	P 6.22	0.56	6.6 - 11.0	P 8.78	0.88	3.2 - 5.3	P 4.22	0.34	5.5 - 9.2	P 7.34	0.71	13
Enzyme-multiplied IA/EMIT	4	1.5 - 2.5	P 2.03	0.11	4.3 - 7.1	P 5.71	0.22	6.0 - 10.0	P 8.02	0.3	3.0 - 4.9	P 3.94	0.18	5.0 - 8.4	P 6.73	0.27	19
<b>Total Population</b>																	
Whole Population	5	1.6 - 2.6	P 2.11	0.18	4.5 - 7.5	P 6.03	0.57	6.4 - 10.7	P 8.52	0.88	3.1 - 5.2	P 4.13	0.36	5.3 - 8.9	P 7.12	0.71	39

## Lithium

### Initial Grouping by Reagent

Siemens Dimension Flex	1	0.2 - 0.8	C 0.48	0.05	1.1 - 1.7	C 1.38	0.06	1.5 - 2.3	P 1.92	0.05	0.6 - 1.2	C 0.93	0.05	1.3 - 1.9	P 1.58	0.05	13
------------------------	---	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	----

### Initial Grouping by Sensitivity or Principle

Other, not flame equivalent	2	0.2 - 0.8	C 0.53	0.09	0.9 - 1.5	C 1.22	0.17	1.3 - 2.0	P 1.68	0.21	0.6 - 1.2	C 0.9	0.13	1.1 - 1.7	C 1.42	0.17	11
-----------------------------	---	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	-------	------	-----------	--------	------	----

Flame-equivalent methods	3	0.2 - 0.8	C 0.5	0.08	1.1 - 1.7	C 1.38	0.06	1.5 - 2.3	P 1.91	0.05	0.6 - 1.2	C 0.94	0.05	1.3 - 1.9	P 1.59	0.05	14
--------------------------	---	-----------	-------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	----

### Total Population

Whole Population	4	0.2 - 0.8	C 0.52	0.08	1.0 - 1.6	C 1.31	0.14	1.5 - 2.2	P 1.82	0.17	0.6 - 1.2	C 0.93	0.09	1.2 - 1.8	P 1.51	0.14	29
------------------	---	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	----

## Phenobarbital

### Initial Grouping by Reagent and Instrument

Siemens Dimension Flex & Siemens Dimension EXL	1	7 - 11	C 8.9	1.1	19 - 28	P 23.7	1.1	28 - 42	P 34.6	2.5	13 - 20	P 16.5	1.3	23 - 34	P 28.3	2.2	12
--	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Initial Grouping by Reagent

Siemens Dimension Flex	2	7 - 11	C 8.9	1.1	19 - 28	P 23.7	1.2	28 - 41	P 34.5	2.5	13 - 20	P 16.4	1.2	23 - 34	P 28.2	2.2	14
------------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Initial Grouping by Sensitivity or Principle

Enzyme-multiplied IA/EMIT	3	7 - 11	C 8.9	0.9	19 - 28	P 23.7	1.2	27 - 41	P 34.1	2.5	13 - 20	P 16.4	1.1	22 - 34	P 28.0	2.0	20
---------------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Total Population

Whole Population	4	7 - 11	C 8.9	0.8	19 - 29	P 23.8	1.4	27 - 40	P 33.6	2.5	13 - 20	P 16.3	1.0	22 - 33	P 27.8	2.1	36
------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

## Phenytoin

### Initial Grouping by Reagent and Instrument

Ortho Vitros & Ortho Vitros 3600, 5600	1	7 - 12	P 9.5	0.8	14 - 24	P 18.8	1.0	17 - 28	P 22.5	0.9	11 - 18	P 14.4	0.8	16 - 26	P 20.7	1.1	11
--	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

Siemens Dimension Flex & Siemens Dimension EXL	2	7 - 11	P 8.8	0.9	15 - 24	P 19.4	1.1	20 - 33	P 26.1	1.1	10 - 17	P 13.7	0.9	16 - 27	P 21.7	1.1	26
--	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Initial Grouping by Reagent

Beckman Olympus	3	7 - 11	P 8.7	1.1	13 - 22	P 17.8	2.3	17 - 28	P 22.6	3.4	10 - 16	P 12.7	1.1	14 - 24	P 19.0	1.3	10
-----------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

Ortho Vitros	4	7 - 12	P 9.7	1.0	14 - 24	P 19.1	1.3	17 - 29	P 22.9	1.5	11 - 18	P 14.6	1.0	16 - 26	P 21.1	1.6	12
--------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

Siemens Dimension Flex	5	7 - 11	P 8.8	0.8	14 - 24	P 19.3	1.1	20 - 33	P 26.1	1.1	10 - 17	P 13.7	0.8	16 - 27	P 21.6	1.0	33
------------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Initial Grouping by Sensitivity or Principle

Other spectrophotometric	6	7 - 12	P 9.3	1.0	14 - 23	P 18.2	1.4	17 - 29	P 22.9	1.4	10 - 17	P 13.9	1.2	15 - 25	P 20.3	1.5	29
--------------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

Enzyme-multiplied IA/EMIT	7	7 - 11	P 8.8	0.9	14 - 24	P 19.0	1.6	19 - 32	P 25.3	2.4	10 - 17	P 13.5	1.0	16 - 26	P 21.0	1.5	43
---------------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

Turbidimetric/PETINIA	8	7 - 11	P 9.0	0.7	14 - 23	P 18.7	1.7	19 - 31	P 24.9	2.0	10 - 17	P 13.9	1.0	16 - 27	P 21.4	1.5	15
-----------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Total Population

Whole Population	9	7 - 11	P 9.1	1.0	14 - 24	P 18.8	1.9	18 - 31	P 24.5	2.5	10 - 17	P 13.7	1.1	16 - 26	P 20.9	1.6	95
------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

## Salicylates - mg/dL

### Initial Grouping by Reagent and Instrument

Ortho Vitros & Ortho Vitros 3600, 5600	1	7.8 - 13.1	P 10.45	0.36	14.5 - 24.1	P 19.27	0.44	18.3 - 30.5	P 24.39	0.55	11.4 - 18.9	P 15.14	0.39	16.1 - 26.9	P 21.48	0.45	11
--	---	------------	---------	------	-------------	---------	------	-------------	---------	------	-------------	---------	------	-------------	---------	------	----

Siemens Dimension Flex & Siemens Dimension EXL	2	6.3 - 10.6	P 8.45	0.33	12.9 - 21.5	P 17.2	0.46	17.2 - 28.7	P 22.99	0.5	9.6 - 16.0	P 12.82	0.34	14.7 - 24.4	P 19.55	0.49	34
--	---	------------	--------	------	-------------	--------	------	-------------	---------	-----	------------	---------	------	-------------	---------	------	----

### Initial Grouping by Reagent

Ortho Vitros	3	7.8 - 13.1	P 10.45	0.37	14.5 - 24.1	P 19.3	0.44	18.3 - 30.6	P 24.45	0.55	11.3 - 18.9	P 15.13	0.35	16.1 - 26.8	P 21.46	0.45	14
--------------	---	------------	---------	------	-------------	--------	------	-------------	---------	------	-------------	---------	------	-------------	---------	------	----

Siemens Dimension Flex	4	6.3 - 10.5	P 8.44	0.33	12.9 - 21.6	P 17.25	0.48	17.3 - 28.8	P 23.01	0.51	9.6 - 16.0	P 12.82	0.33	14.7 - 24.5	P 19.59	0.5	38
------------------------	---	------------	--------	------	-------------	---------	------	-------------	---------	------	------------	---------	------	-------------	---------	-----	----

### Initial Grouping by Sensitivity or Principle

Other spectrophotometric	5	6.6 - 11.0	P 8.78	1.0	13.3 - 22.2	P 17.79	1.03	17.7 - 29.5	P 23.57	1.07	10.0 - 16.6	P 13.3	1.05	15.1 - 25.2	P 20.17	1.01	64
--------------------------	---	------------	--------	-----	-------------	---------	------	-------------	---------	------	-------------	--------	------	-------------	---------	------	----

### Total Population

Whole Population	6	6.5 - 10.9	P 8.73	1.04	13.3 - 22.3	P 17.8	1.07	17.8 - 29.6	P 23.71	1.31	10.0 - 16.6	P 13.29	1.16	15.2 - 25.3	P 20.22	1.1	73
------------------	---	------------	--------	------	-------------	--------	------	-------------	---------	------	-------------	---------	------	-------------	---------	-----	----

## Theophylline

### Initial Grouping by Reagent

Siemens Dimension Flex	1	10 - 16	P 12.9	0.7	18 - 30	P 24.2	1.2	23 - 39	P 31.2	1.7	14 - 23	P 18.3	0.6	20 - 33	P 26.2	1.3	13
------------------------	---	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Initial Grouping by Sensitivity or Principle

Enzyme-multiplied IA/EMIT	2	10 - 16	P 12.8	0.8	18 - 30	P 24.1	1.7	23 - 39	P 30.9	2.4	14 - 23	P 18.0	1.0	20 - 33	P 26.1	1.5	16
---------------------------	---	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

### Total Population

Whole Population	3	10 - 16	P 12.8	2.2	19 - 31	P 24.7	4.0	23 - 39	P 31.3	3.7	14 - 23	P 18.4	2.6	20 - 34	P 27.0	3.5	33
------------------	---	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----

## Tobramycin

### Total Population

Whole Population	1	1.4 - 2.3	P 1.84	0.22	4.1 - 6.8	P 5.44	0.48	5.8 - 9.7	P 7.74	0.55	2.7 - 4.6	P 3.64	0.27	4.9 - 8.1	P 6.48	0.46	5
------------------	---	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	-----------	--------	------	---

## Valproic Acid

### Initial Grouping by Reagent and Instrument

Ortho Vitros & Ortho Vitros 3600, 5600	1	27 - 45	P 35.8	4.5	49 - 82	P 65.6	2.8	66 - 111	P 88.4	5.8	38 - 63	P 50.5	1.8	57 - 95	P 75.6	3.2	12
Siemens Dimension Flex & Siemens Dimension EXL	2	28 - 47	P 37.8	2.1	51 - 85	P 68.2	2.4	64 - 107	P 85.9	3.0	40 - 66	P 52.9	2.0	56 - 93	P 74.6	2.7	18

### Initial Grouping by Reagent

Ortho Vitros	3	27 - 45	P 35.8	4.5	49 - 82	P 65.6	2.8	66 - 111	P 88.4	5.8	38 - 63	P 50.5	1.8	57 - 95	P 75.6	3.2	12
Siemens Dimension Flex	4	29 - 47	P 38.0	2.0	51 - 85	P 68.3	2.2	65 - 108	P 86.4	2.9	40 - 66	P 53.1	1.9	56 - 94	P 74.8	2.6	22

### Initial Grouping by Sensitivity or Principle

Other spectrophotometric	5	29 - 48	P 38.6	4.6	52 - 87	P 69.5	5.3	68 - 113	P 90.4	5.9	41 - 68	P 54.0	4.3	59 - 99	P 78.8	4.7	27
Enzyme-multiplied IA/EMIT	6	29 - 48	P 38.3	2.7	52 - 86	P 68.8	2.5	66 - 110	P 87.9	4.0	40 - 67	P 53.4	3.2	57 - 95	P 75.7	3.2	30
Turbidimetric/PETINIA	7	29 - 49	P 38.9	3.1	52 - 87	P 69.9	5.0	67 - 112	P 89.4	5.2	41 - 69	P 55.1	4.1	58 - 97	P 77.6	4.5	10

### Total Population

Whole Population	8	29 - 48	P 38.6	3.6	52 - 87	P 69.4	4.1	67 - 112	P 89.2	5.0	41 - 67	P 54.0	3.8	58 - 97	P 77.3	4.2	74
------------------	---	---------	--------	-----	---------	--------	-----	----------	--------	-----	---------	--------	-----	---------	--------	-----	----

## Vancomycin

### Initial Grouping by Reagent and Instrument

Ortho Vitros & Ortho Vitros 3600, 5600	1	6 - 10	P 7.7	0.6	19 - 32	P 25.9	1.0	28 - 47	P 37.8	1.7	13 - 21	P 16.8	0.7	23 - 39	P 30.8	1.1	12
Siemens Dimension Flex & Siemens Dimension EXL	2	6 - 10	P 7.9	0.4	21 - 34	P 27.6	1.2	29 - 49	P 39.3	2.1	14 - 23	P 18.5	0.9	24 - 40	P 32.4	1.7	37

### Initial Grouping by Reagent

Ortho Vitros	3	6 - 10	P 7.6	0.6	19 - 32	P 25.7	1.0	28 - 47	P 37.4	2.1	12 - 21	P 16.6	0.7	23 - 38	P 30.5	1.3	14
Siemens Dimension Flex	4	6 - 10	P 7.9	0.4	21 - 34	P 27.5	1.2	29 - 49	P 39.3	2.0	14 - 23	P 18.5	0.9	24 - 40	P 32.3	1.7	43

### Initial Grouping by Sensitivity or Principle

Other spectrophotometric	5	6 - 10	P 8.1	0.9	21 - 35	P 28.2	3.3	31 - 51	P 40.9	5.0	14 - 23	P 18.2	2.1	25 - 42	P 33.4	3.9	29
Enzyme-multiplied IA/EMIT	6	6 - 10	P 7.8	0.5	20 - 34	P 27.0	1.8	29 - 48	P 38.5	2.9	14 - 23	P 18.1	1.4	24 - 40	P 31.8	2.1	50
Turbidimetric/PETINIA	7	6 - 10	P 7.8	0.5	21 - 35	P 28.3	1.9	30 - 50	P 40.0	2.6	14 - 23	P 18.4	0.9	25 - 42	P 33.8	2.5	13

### Total Population

Whole Population	8	6 - 10	P 7.9	0.7	21 - 34	P 27.5	2.6	30 - 49	P 39.4	4.0	14 - 23	P 18.1	1.7	24 - 41	P 32.6	3.1	95
------------------	---	--------	-------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	---------	--------	-----	----