

TEST CHANGE

Virilization Panel 2 2002281, VIRIL PAN2

Specimen Requirements:

Patient Preparation: Collect between 6-10 a.m.

Collect: Serum separator tube or green (sodium or lithium heparin).

Also acceptable: Pink (K2EDTA).

Specimen Preparation: Separate serum or plasma from cells ASAP or within 2 hours of

collection. Transfer 1.2 mL serum or plasma to an ARUP

Effective Date: February 20, 2024

Standard Transport Tube. (Min: 0.7 mL)

Transport Temperature: Refrigerated.

Unacceptable Conditions:

Remarks:

Stability: Ambient: 24 hours; Refrigerated: 1 week; Frozen: 6 months

Methodology: Quantitative High Performance Liquid Chromatography-

Tandem Mass Spectrometry

Performed: Sun-Sat

Reported: 1-<u>5</u>4 days

Note:

CPT Codes: 82157; 83498; 84403; 82626

New York DOH Approval Status: This test is New York DOH approved.

Interpretive Data:

Free or bioavailable testosterone measurements may provide supportive information.

This test was developed and its performance characteristics determined by ARUP Laboratories. It has not been cleared or approved by the US Food and Drug Administration. This test was performed in a CLIA certified laboratory and is intended for clinical purposes.

Reference Interval:



Test Number	Components	Reference Interval		
	Testosterone by Mass Spec			
		Age	Male (ng/dL)	Female (ng/dL)
		Premature (26-28 weeks)	59-125	5-16
		Premature (31-35 weeks)	37-198	5-22
		Newborn	75-400	20-64
		1-5 months	14-363	Less than 20
		6-24 months	Less than 37	Less than 9
		2-3 years	Less than 15	Less than 20
		4-5 years	Less than 19	Less than 30
		6-7 years	Less than 13	Less than 7
		8-9 years	2-8	1-11
		10-11 years	2-165	3-32
		12-13 years	3-619	6-50
		14-15 years	31-733	6-52
		16-17 years	158-826	9-58
		18-39 years	300-1080	9-55
		40-59 years	300-890	9-55
		60 years and older	300-720	5-32
		Premenopausal (18 years and older)	Not Applicable	9-55
		Postmenopausal	Not Applicable	5-32
		Tanner Stage I	2-15	2-17
		Tanner Stage II	3-303	5-40
		Tanner Stage III	10-851	10-63
		Tanner Stage IV-V	162-847	11-62



	Age	Male (ng/dL)	Female (ng/dL)
	Premature (26-28 weeks)	124-841	124-841
	Premature (29-35 weeks)	26-568	26-568
	Full term Day 3	7-77	7-77
	4 days-30 days	Less than 200	7-106
	1 month-2 months	Less than 200	13-106
	3 months-5 months	3-90	13-106
	6 months-1 year	Less than or equal to 148	Less than or equal to 148
	2-3 years	Less than or equal to 228	Less than or equal to 256
	4-6 years	Less than or equal to 208	Less than or equal to 299
	7-9 years	Less than or equal to 63	Less than or equal to 71
	10-12 years	Less than or equal to 79	Less than or equal to 129
	13-15 years	9-140	9-208
	16-17 years	24-192	Less than or equal to 178
	18 years and older	Less than 139	Less than 207
	Follicular	Not Applicable	15-70
	Luteal	Not Applicable	35-290
	Tanner Stage I	Less than or equal to 62	Less than or equal to 74
	Tanner Stage II	Less than or equal to 104	Less than or equal to 164
	Tanner Stage III	Less than or equal to 151	13-209
	Tanner Stage IV-V	20-173	7-170
y TMS			

Premature Infants (26-28 weeks Day 4) Premature Infants (31-35 weeks Day 4) Full Term Infants (1-7 days) 8-30 days 1-5 months 0.02-0.290 0.20-2.90 0.18-0.80 0.18-0.80 0.18-0.80 0.18-0.80 0.18-0.80 0.18-0.80 0.06-0.68 0.06-0.68 0.06-0.68 0.06-0.68 0.03-0.15 0.03-0.15 0.03-0.15 0.02-0.21 0.02-0.21 0.02-0.21 0.02-0.21 0.02-0.21 0.02-0.21 0.02-0.28 0.03-0.30 0.04-0.42 0.01-0.29 0.02-0.28 0.09-1.23 0.01-0.29 0.09-1.23 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Postmenopausal Tanner Stage I 0.08-0.48 0.15-1.37 Tanner Stage III Tanner Stage III 0.14-0.87 0.37-2.24 Tanner Stage III 0.14-0.87 0.37-2.24	Age	Male (ng/mL)	Female (ng/mL)
Infants (31-35 weeks Day 4) Full Term Infants (1-7 days) 8-30 days	Infants (26-28	0.92-2.82	0.92-2.82
(1-7 days) 8-30 days 0.18-0.80 0.18-0.80 1-5 months 0.06-0.68 0.06-0.68 6-24 months 0.03-0.15 Less than 0.15 2-3 years Less than 0.11 Less than 0.16 4-5 years 0.02-0.17 0.02-0.21 6-7 years 0.01-0.29 0.02-0.28 8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.26-2.14 Postmenopausal Tanner Stage II 0.04-0.32 0.05-0.51 Tanner Stage III 0.14-0.87 0.37-2.24	Infants (31-35	0.80-4.46	0.80-4.46
1-5 months 6-24 months 0.03-0.15 Less than 0.15 2-3 years Less than 0.11 Less than 0.16 4-5 years 0.02-0.17 0.02-0.21 6-7 years 0.01-0.29 0.02-0.28 8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.02-0.21		0.20-2.90	0.20-2.90
6-24 months 2-3 years Less than 0.11 Less than 0.16 4-5 years 0.02-0.17 0.02-0.21 6-7 years 0.01-0.29 0.02-0.28 8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.02-0.21	8-30 days	0.18-0.80	0.18-0.80
2-3 years Less than 0.11 Less than 0.16 4-5 years 0.02-0.17 0.02-0.21 6-7 years 0.01-0.29 0.02-0.28 8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.13-0.82 older Premenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage III 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	1-5 months	0.06-0.68	0.06-0.68
4-5 years	6-24 months	0.03-0.15	Less than 0.15
6-7 years 0.01-0.29 0.02-0.28 8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage III 0.14-0.87 0.37-2.24	2-3 years	Less than 0.11	Less than 0.16
8-9 years 0.03-0.30 0.04-0.42 10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	4-5 years	0.02-0.17	0.02-0.21
10-11 years 0.07-0.39 0.09-1.23 12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older 0.23-0.89 0.13-0.82 Premenopausal Premenopausal Premenopausal Not Applicable 0.26-2.14 Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage III 0.08-0.48 0.15-1.37 Tanner Stage IIII 0.14-0.87 0.37-2.24	6-7 years	0.01-0.29	0.02-0.28
12-13 years 0.10-0.64 0.24-1.73 14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older 0.23-0.89 0.13-0.82 Premenopausal Premenopausal Premenopausal Premenopausal Not Applicable 0.26-2.14 Postmenopausal Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	8-9 years	0.03-0.30	0.04-0.42
14-15 years 0.18-0.94 0.39-2.00 16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	10-11 years	0.07-0.39	0.09-1.23
16-17 years 0.30-1.13 0.35-2.12 18-39 years 0.33-1.34 0.26-2.14 40 years and older 0.23-0.89 0.13-0.82 Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	12-13 years	0.10-0.64	0.24-1.73
18-39 years 0.33-1.34 0.26-2.14 40 years and older 0.23-0.89 0.13-0.82 Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	14-15 years	0.18-0.94	0.39-2.00
40 years and older 0.23-0.89 0.13-0.82 Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	16-17 years	0.30-1.13	0.35-2.12
older Premenopausal Not Applicable 0.26-2.14 Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	18-39 years	0.33-1.34	0.26-2.14
Postmenopausal Not Applicable 0.13-0.82 Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24		0.23-0.89	0.13-0.82
Tanner Stage I 0.04-0.32 0.05-0.51 Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	Premenopausal	Not Applicable	0.26-2.14
Tanner Stage II 0.08-0.48 0.15-1.37 Tanner Stage III 0.14-0.87 0.37-2.24	Postmenopausal	Not Applicable	0.13-0.82
Tanner Stage III 0.14-0.87 0.37-2.24	Tanner Stage I	0.04-0.32	0.05-0.51
	Tanner Stage II	0.08-0.48	0.15-1.37
Tanner Stage IV-V 0.27-1.07 0.35-2.05	Tanner Stage III	0.14-0.87	0.37-2.24
	Tanner Stage IV-V	0.27-1.07	0.35-2.05

Age	e	Male (ng/mL)	Female (ng/ml
^o re	emature	Less than 40	Less than 40
	days	Less than 11	Less than 11
	days	Less than 8.7	Less than 8.7
da	lays-1 month	Less than 5.8	Less than 5.8
1-5	months	Less than 2.9	Less than 2.9
6-2	24 months	Less than 2.5	Less than 1.99
2-3	3 years	Less than 0.63	Less than 0.85
4-5	years	Less than 0.95	Less than 1.03
6-7	years	0.06-1.93	Less than 1.79
8-9	years	0.10-2.08	0.14-2.35
10-	-11 years	0.32-3.08	0.43-3.78
12-	-13 years	0.57-4.10	0.89-6.21
4-	-15 years	0.93-6.04	1.22-7.01
16-	-17 years	1.17-6.52	1.42-9.00
8-	-39 years	1.33-7.78	1.33-7.78
40 y	,	0.63-4.70	0.63-4.70
Pos	stmenopausal	Not Applicable	0.60-5.73
Tan	nner Stage I	0.11-2.37	0.14-2.76
Tan	nner Stage II	0.37-3.66	0.83-4.87
Tan	nner Stage III	0.75-5.24	1.08-7.56
Tan	nner Stage IV-V	1.22-6.73	1.24-7.88

