

CDC Hormone Standardization Program (CDC HoSt)

Certified Total Testosterone Assays

From 2019 Q4 and forward

(UPDATED 04/2026)

CDC HoSt started quarterly certification from November 2019 shipment.

See <https://www.cdc.gov/clinical-standardization-programs/media/pdfs/2024/04/CDC-Certified-Testosterone-Procedures-508.pdf> for previous list of certified assays.

- The following assays have successfully met the performance criterion of $\pm 6.4\%$ mean bias when compared to the CDC reference measurement procedure for total testosterone.
- It is not the intent of the CDC HoSt Program to certify each lot of reagents. Participants are awarded certificates for successfully meeting bias criterion using specific methods that consist of different reagent lots and calibrator lots.
- Analytical performance in CDC HoSt Program is assessed using human serum. The measurement procedures may have different accuracy and precision with other specimen types, such as plasma.
- Certification is valid for one quarter from the certification date. It is the responsibility of the participant to ensure that the results of the assay remain consistent, between lots, and over the measurement range reported.
- The analytical performance evaluation used in certification is for testing performed in patient care. Therefore, this certification does not imply suitability of a participant as a calibration laboratory or the procedure as a metrological reference measurement procedure.

Each table includes information about certified assays, including participant name, measurement principle, assay identifier, assay measurement range, certification measurement range, certification date, individual samples pass rate, and contact information.

“Assay identifier” is an internal code used by the participant to represent the assay used for certification.

“Assay Measurement range” is the assays’ reported analytical measurement range (AMR) and is not the certification range.

“Certification Measurement Range” is the concentration range the of the samples used for HoSt certification.

“Certification date” includes historical certification information and gaps between years do not always indicate the assay’s failure to meet certification criteria.

“Individual samples pass rate” is the percentage of individual samples out of the 40 provided that met the certification criteria of $\pm 6.4\%$ bias. This information was provided starting in February 2017.

Note: The $\pm 6.4\%$ mean bias used for certification can be considered the allowable calibration bias. Certification indicates that the assay is calibrated to meet those limits. Due to differences in test selectivity, measurements on individual samples can exceed the calibration bias. Therefore, the individual sample pass rate provides some information about the selectivity of a test that meets the calibration criteria.

CDC CSP suggests manufacturers and developers to participate in HoSt for certifications. The end-users or secondary location of an LDT may participate in Accuracy-based Monitoring Programs (CDC AMP) to verify performance. This document also indicates secondary LDT locations that are participating in AMP (Table 2).

Table 1: Currently Certified Assays including their certification history

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
ARUP Laboratories Salt Lake City, UT	LC/MS/MS ⁺	Total Testosterone in Serum	1.00 - 2,000	7.71 - 769	Q4 2025	88	Kayla West Kayla.west@aruplab.com 801-583-2787 x2893
				7.71 - 769	Q3 2025	82	
				7.71 - 769	Q2 2025	75	
				7.71 - 736	Q1 2025	68	
				8.53 - 840	Q4 2024	70	
				8.77 - 840	Q3 2024	68	
				8.77 - 840	Q2 2024	72	
				8.77 - 840	Q1 2024	88	
				9.51 - 840	Q4 2023	62	
				9.51 - 840	Q3 2023	57	
				7.71 - 840	Q2 2023	62	
				7.71 - 840	Q1 2023	45	
				7.71 - 753	Q4 2022	68	
				7.71 - 753	Q3 2022	60	
				10.1 - 753	Q2 2022	42	
				10.1 - 736	Q1 2022	50	
				10.1 - 736	Q4 2021	38	
				8.53 - 680	Q3 2021	55	
				7.71 - 680	Q2 2021	75	
				7.71 - 680	Q1 2021	85	
				7.71 - 941	Q4 2020	90	
				7.71 - 941	Q3 2020	92	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date <i>(active for 1 quarter)</i>	Individual Samples Pass Rate (%)	Participant's Contact Information
				8.77 - 941 9.63 - 941 5.70 - 840	Q2 2020 Q1 2020 Q4 2019	72 70 52	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
BioReference Laboratories, an OPKO Health Company Elmwood Park, NJ	LC/MS/MS ⁺	Total Testosterone	1 - 4,000	7.71 - 821	Q3 2020	62	Hashim Othman, Ph.D. hothman@bioreference.com
				8.49 - 915	Q2 2020	72	
				8.49 - 915	Q1 2020	68	
				8.49 - 915	Q4 2019	75	
Brigham Research Assay Core (BRAC) Laboratory at Harvard Medical School Boston, MA	LC/MS/MS ⁺	Serum Total Testosterone	1.00 - 2,000 (>2,000 with dilution)	9.04 - 656	Q4 2025	57	Dr. Shalender Bhasin sbhasin@bwh.harvard.edu (617) 525-9040 Liming Peng lpeng2@bwh.harvard.edu (617) 525-9048
				8.53 - 661	Q3 2025	60	
				8.53 - 941	Q2 2025	65	
				8.53 - 941	Q1 2025	60	
				8.53 - 941	Q4 2024	75	
				8.53 - 941	Q3 2024	78	
				8.53 - 821	Q2 2024	78	
				8.53 - 821	Q1 2024	85	
				8.53 - 753	Q4 2023	85	
				9.51 - 680	Q3 2023	80	
				9.51 - 840	Q2 2023	70	
				9.51 - 840	Q1 2023	65	
				10.9 - 840	Q4 2022	70	
				8.53 - 840	Q3 2022	78	
				7.71 - 753	Q2 2022	90	
				7.71 - 941	Q1 2022	92	
				7.71 - 941	Q4 2021	82	
				7.71 - 941	Q3 2021	72	
				8.77 - 941	Q2 2021	72	
				8.77 - 680	Q1 2021	68	

				8.77 - 941	Q4 2020	68	
				8.77 - 941	Q3 2020	57	
				8.77 - 941	Q2 2020	50	
				7.71 - 941	Q1 2020	55	
				5.70 - 915	Q4 2019	57	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Clinical Chemistry Branch CDC Atlanta, GA	LC/MS/MS ⁺	Total Testosterone in Serum (1036)	0.57 - 12,800	7.71 - 666	Q4 2025	80	Lumi Duke, MS LDuke@cdc.gov (770) 488-4126
				7.71 - 680	Q1 2023	90	
				7.71 - 680	Q4 2022	90	
				7.71 - 629	Q3 2022	92	
				7.71 - 651	Q2 2022	88	
				8.53 - 651	Q1 2022	90	
				8.53 - 680	Q4 2021	90	
				8.53 - 840	Q3 2021	90	
				11.0 - 840	Q2 2021	90	
				8.77 - 840	Q1 2021	92	
				8.77 - 941	Q4 2020	95	
				8.49 - 941	Q3 2020	92	
				8.49 - 941	Q2 2020	98	
				8.49 - 941	Q1 2020	98	
				8.49 - 915	Q4 2019	98	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Covance Central Laboratories Services, Inc. Indianapolis, IN	LC/MS/MS ⁺	Serum Total Testosterone	2.00 - 8,000	8.84 - 753	Q4 2025	88	Cristina Hedin, MS 8211 Scicor Drive Indianapolis, IN 46214 cristina.hedin@covance.com (317) 273-7842
				8.84 - 753	Q3 2025	90	
				8.84 - 753	Q2 2025	88	
				8.77 - 753	Q1 2025	90	
				8.77 - 840	Q4 2024	95	
				8.53 - 840	Q3 2024	98	
				8.53 - 840	Q2 2024	98	
				8.53 - 941	Q1 2024	85	
				7.71 - 941	Q4 2023	85	
				7.71 - 941	Q3 2023	80	
				9.51 - 941	Q2 2023	80	
				9.51 - 941	Q1 2023	90	
				9.51 - 941	Q4 2022	87	
				9.51 - 941	Q3 2022	79	
				8.77 - 941	Q2 2022	82	
				8.77 - 769	Q1 2022	82	
				7.71 - 840	Q4 2021	78	
				7.71 - 840	Q3 2021	88	
				7.71 - 840	Q2 2021	78	
				7.71 - 840	Q1 2021	78	
				8.77 - 941	Q4 2020	82	
				8.77 - 941	Q3 2020	78	
				8.77 - 941	Q2 2020	85	
				7.71 - 941	Q1 2020	85	
				7.71 - 753	Q4 2019	80	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Covance Central Laboratories Services, Inc. Geneva, Switzerland	LC/MS/MS ⁺	Total Testosterone	2.00 - 8,000	7.71 - 840	Q4 2025	98	Gaelle Gilbert gaelle.gilbert@covance.com 0041 (0) 58 822 7656
				7.71 - 840	Q3 2025	92	
				7.71 - 661	Q2 2025	95	
				7.71 - 769	Q1 2025	98	
				8.53 - 840	Q4 2024	98	
				10.9 - 840	Q3 2024	98	
				12.0 - 840	Q2 2024	98	
				12.0 - 840	Q1 2024	95	
				12.0 - 821	Q4 2023	90	
				12.0 - 821	Q3 2023	88	
				13.4 - 821	Q2 2023	85	
				12.0 - 821	Q1 2023	88	
				12.0 - 629	Q4 2022	88	
				12.0 - 941	Q3 2022	95	
				12.0 - 941	Q2 2022	98	
				12.2 - 941	Q1 2022	90	
				12.2 - 941	Q4 2021	95	
				12.2 - 769	Q3 2021	75	
				12.2 - 769	Q2 2021	70	
				8.77 - 821	Q1 2021	75	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Diagnostic Laboratory for Endocrinology, Erasmus University Medical Center Rotterdam, The Netherlands	LC/MS/MS†	Serum Testosterone	2 - 1,729	7.71 - 840	Q4 2025	90	S.A.A. van den Berg s.a.a.vandenberg@erasmusmc.nl S.S. Panchoe - Ramcharan s.panchoe@erasmusmc.nl
				7.71 - 840	Q3 2025	90	
				7.71 - 680	Q2 2025	90	
				7.71 - 769	Q1 2025	90	
				8.53 - 769	Q4 2024	95	
				10.9 - 769	Q3 2024	92	
				8.77 - 769	Q2 2024	92	
				8.77 - 769	Q1 2024	95	
				8.77 - 769	Q4 2023	87	
				8.77 - 769	Q3 2023	87	
				9.51 - 769	Q2 2023	85	
				7.71 - 821	Q1 2023	85	
				7.71 - 821	Q4 2022	90	
				7.71 - 941	Q3 2022	88	
				7.71 - 941	Q2 2022	90	
				8.77 - 941	Q1 2022	92	
				7.71 - 941	Q4 2021	80	
				7.71 - 769	Q3 2021	85	
				7.71 - 769	Q2 2021	70	
				7.71 - 736	Q1 2021	68	
				8.77 - 753	Q4 2020	78	
				8.49 - 821	Q3 2020	78	
				8.49 - 821	Q2 2020	92	
				8.49 - 840	Q1 2020	92	
				8.49 - 840	Q4 2019	95	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Endocrine and Metabolic Research Laboratory at Los Angeles Biomedical Research Institute Torrance, CA	LC/MS/MS ⁺	TDHT	2.0 - 1800	7.71 - 769	Q4 2025	62	Dr. Christina Wang wang@lundquist.org (310) 222-2503
				7.71 - 769	Q3 2025	65	
				7.71 - 769	Q2 2025	70	
				7.71 - 753	Q1 2025	65	
				8.53 - 736	Q4 2024	62	
				8.53 - 656	Q3 2024	62	
				8.53 - 769	Q2 2024	60	
				8.53 - 769	Q1 2024	60	
				8.77 - 769	Q4 2023	57	
				8.77 - 941	Q3 2023	50	
				9.51 - 941	Q2 2023	55	
				7.71 - 941	A1 2023	50	
				7.71 - 941	Q4 2022	50	
				11.0 - 769	Q1 2022	50	
				8.53 - 753	Q4 2021	52	
				8.53 - 753	Q3 2021	65	
				8.53 - 736	Q2 2021	68	
				8.53 - 736	Q1 2021	50	
				8.77 - 941	Q4 2020	52	
				8.77 - 941	Q2 2020	48	
				3.66 - 941	Q1 2020	70	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
GC Labs Yongin-si, Gyeonggi-do, Republic of Korea	LC/MS/MS ⁺	Total Testosterone	0.8 – 5059.2	7.71 - 840	Q4 2025	98	Sung-Eun Cho, M.D., Ph.D secho1206!!@gclabs.co.kr Jung-Sun Han jshan@gclabs.co.kr
				7.71 - 840	Q3 2025	100	
				7.71 - 840	Q2 2025	100	
				7.71 - 840	Q1 2025	100	
				8.53 - 840	Q4 2024	100	
				8.53 - 840	Q3 2024	100	
				8.53 - 680	Q2 2024	100	
				8.53 - 753	Q1 2024	100	
				8.77 - 941	Q4 2023	98	
				8.77 - 941	Q3 2023	92	
				8.53 - 941	Q2 2023	92	
				8.53 - 941	Q1 2023	92	
				8.53 - 821	Q4 2022	92	
				8.77 - 941	Q3 2022	95	
				8.53 - 736	Q2 2022	88	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
LabCorp Calabasas Hills, CA	LC/MS/MS†	#070001 Testosterone, Total, Women, Children, and Hypogonadal Males, LC MS/MS	2.50 - 5,000 (250,000 with validated dilution)	7.71 - 941	Q4 2025	88	 Majid Moridani moridam@labcorp.com 336-436-3102 Dr. Andre Valcour ValcouA@labcorp.com (336) 436-3854 Dr. Brett Holmquist holmqub@labcorp.com (818) 867-1362
				7.71 - 941	Q3 2025	88	
				7.71 - 753	Q2 2025	88	
				7.71 - 753	Q1 2025	90	
				8.77 - 840	Q4 2024	95	
				8.77 - 840	Q3 2024	92	
				8.53 - 840	Q2 2024	92	
				8.53 - 840	Q1 2024	90	
				7.71 - 736	Q4 2023	85	
				7.71 - 840	Q3 2023	88	
				7.71 - 840	Q2 2023	85	
				7.71 - 840	Q1 2023	80	
				8.77 - 840	Q4 2022	72	
				10.9 - 753	Q3 2022	72	
				8.77 - 753	Q2 2022	72	
				8.77 - 941	Q1 2022	80	
				8.77 - 941	Q4 2021	95	
				8.77 - 941	Q3 2021	90	
				9.51 - 941	Q2 2021	88	
				8.77 - 941	Q4 2020	78	
				8.77 - 941	Q3 2020	82	
				8.77 - 941	Q2 2020	82	
				13.1 - 941	Q1 2020	88	
				9.63 - 840	Q4 2019	90	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
LabCorp Burlington, NC	LC/MS/MS+	#070001 Testosterone, Total, Women, Children, and Hypogonadal Males, LC MS/MS	2.50 - 5,000 (250,000 with validated dilution)	7.71 - 808	Q3 2025	77	Majid Moridani moridam@labcorp.com 336-436-3102
				7.71 - 808	Q2 2025	90	
				8.53 - 941	Q2 2021	90	
				8.77 - 941	Q1 2021	95	
				8.77 - 941	Q4 2020	95	
				8.77 - 941	Q3 2020	92	
				8.77 - 941	Q2 2020	95	
				8.49 - 941	Q1 2020	98	
				8.49 - 840	Q4 2019	98	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
LabCorp Spokane, WA	LC/MS/MS ⁺	Total Testosterone	2.5 – 1,000 (250,000 with validated dilution)	7.71 - 753	Q4 2025	65	Carissa Schmitz MLS(ASCP)CM Schmic4@LabCorp.com (509) 755-8358
				7.71 - 753	Q3 2025	60	
				7.71 - 753	Q2 2025	55	
				7.71 - 769	Q1 2025	55	
				8.53 - 769	Q4 2024	57	
				8.77 - 769	Q3 2024	50	
				8.77 - 769	Q2 2024	55	
				8.77 - 769	Q1 2024	78	
				8.77 - 941	Q4 2023	72	
				9.51 - 941	Q3 2023	82	
				9.51 - 941	Q2 2023	82	
				9.51 - 941	Q1 2023	68	
				10.1 - 840	Q4 2022	68	
				7.71 - 840	Q3 2022	52	
				7.71 - 840	Q2 2022	48	
				7.71 - 736	Q1 2022	55	
				7.71 - 753	Q4 2021	57	
				8.77 - 753	Q3 2021	65	
				9.51 - 753	Q2 2021	62	
				8.77 - 821	Q1 2021	62	
				8.77 - 941	Q4 2020	70	
				8.49 - 941	Q3 2020	72	
				8.49 - 941	Q2 2020	80	
				7.71 - 941	Q1 2020	88	
				7.71 - 915	Q4 2019	88	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Mayo Clinic Rochester, MN	LC/MS/MS ⁺	Total Testosterone	7 – 2,000	8.77 - 753	Q4 2025	77	Sue Reicks reicks.sue@mayo.edu
				8.53 - 753	Q3 2025	92	
				8.53 - 753	Q2 2025	90	
				8.53 - 753	Q1 2025	95	
				8.53 - 659	Q4 2-24	80	
				8.77 - 821	Q3 2023	60	
				8.53 - 821	Q2 2023	75	
				8.53 - 821	Q1 2023	65	
				8.53 - 821	Q4 2022	65	
				8.53 - 840	Q3 2022	62	
				9.51 - 840	Q2 2022	55	
				9.51 - 941	Q1 2022	70	
				10.1 - 941	Q4 2021	60	
				10.1 - 941	Q3 2021	62	
				10.1 - 941	Q2 2021	62	
				8.77 - 651	Q1 2021	55	
				8.77 - 941	Q4 2020	57	
				8.77 - 941	Q3 2020	60	
				8.77 - 941	Q2 2020	72	
				10.6 - 941	Q1 2020	70	
				9.63 - 915	Q4 2019	72	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Quest Diagnostics Nichols Institute of Valencia, Inc. Valencia, CA See Table 2 for AMP status	LC/MS/MS ⁺	Serum Total Testosterone	2 - 2,000 (10,000 with dilution)	8.53 - 680 7.71 - 680 7.71 - 680 7.71 - 680 7.71 - 680 8.77 - 680 8.77 - 769 8.77 - 821 11.0 - 941 8.77 - 941 8.77 - 941 8.49 - 941 8.49 - 821 8.49 - 821 8.49 - 941	Q2 2023 Q1 2023 Q4 2022 Q3 2022 Q2 2022 Q1 2022 Q4 2021 Q3 2021 Q2 2021 Q1 2021 Q4 2020 Q3 2020 Q2 2020 Q1 2020 Q4 2019	90 88 85 80 80 78 72 75 65 62 65 65 72 70 70	Amit Ghoshal PhD Amit.K.Ghoshal@QuestDiagnostics.com (661) 799-6204
Quest Diagnostics San Juan Capistrano, CA	LC/MS/MS ⁺	Serum Total Testosterone	1 - 10000	7.71 - 769 7.71 - 769 7.71 - 769 7.71 - 753 8.53 - 719	Q4 2025 Q3 2025 Q2 2025 Q1 2025 Q4 2024	62 68 60 60 52	Allan Fraser dgxsjcqacls@questdiagnostics.com

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Roche Diagnostics GmbH Penzberg, Germany	LC/MS/MS ⁺	Total Testosterone in Serum	0.8 – 1,800	8.77 - 840	Q4 2024	85	Judith Taibon judith.taibon@roche.com 0049 8856 60 12941
				8.77 - 840	Q3 2024	80	
				8.77 - 840	Q2 2024	78	
				8.53 - 840	Q1 2024	78	
				8.53 - 753	Q4 2023	85	
				8.53 - 769	Q3 2023	78	
				8.53 - 840	Q2 2022	80	
				8.53 - 821	Q1 2022	68	
				8.53 - 821	Q4 2021	75	
				9.51 - 769	Q3 2021	65	
				10.1 - 769	Q2 2021	70	
				8.77 - 941	Q1 2021	70	
				8.77 - 941	Q4 2020	70	
Roche Diagnostics GmbH Munich, Germany	LC/MS/MS ⁺	Total Testosterone in Serum	1 – 1500	7.71 - 769	Q4 2025	50	Dr. Stefanie Grimm Stefanie.grimm.sg2@roche.com Svenja Treu muc.testsidestudy@roche.com
				7.71 - 769	Q3 2025	48	
				8.53 - 821	Q1 2024	70	
				8.53 - 753	Q4 2023	85	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Siemens Healthcare Diagnostics Newark, DE	Chemiluminescence Immunoassay	Serum Total Testosterone	8 - 1,000	9.51 - 753	Q4 2025	31	Dr. Craig Hixson craig.hixson@siemens.com (302) 631-7540
				9.51 - 753	Q3 2025	33	
				9.51 - 753	Q2 2025	38	
				10.9 - 769	Q1 2025	35	
				9.51 - 840	Q3 2024	22	
				9.51 - 840	Q2 2024	28	
				9.51 - 840	Q1 2024	22	
				9.51 - 656	Q4 2023	28	
				11.0 - 941	Q4 2022	28	
				11.0 - 941	Q3 2022	33	
				11.0 - 736	Q2 2022	31	
				10.9 - 680	Q1 2022	35	
				10.9 - 680	Q4 2021	31	
				9.51 - 680	Q3 2021	21	
				8.77 - 941	Q4 2020	24	
				8.49 - 941	Q3 2020	30	
				8.49 - 941	Q2 2020	24	
				8.49 - 941	Q1 2020	26	
				8.49 - 915	Q4 2019	32	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Siemens Healthcare Diagnostics Tarrytown, NY	Chemiluminescence Immunoassay	ADVIA Centaur CP	7.0 – 1,500	8.84 - 736	Q4 2025	36	Neil Parker neil.np.parker@siemens-healthineers.com
				8.53 - 666	Q3 2025	41	
				8.53 - 666	Q2 2025	36	
				8.53 - 666	Q1 2025	35	
				8.53 - 840	Q4 2024	38	
				8.77 - 840	Q3 2024	35	
				8.53 - 840	Q2 2024	31	
				8.53 - 769	Q3 2023	23	
				9.51 - 840	Q2 2023	25	
				10.1 - 840	Q1 2023	20	
				10.1 - 840	Q4 2022	25	
				10.1 - 840	Q3 2022	30	
				10.1 - 769	Q2 2022	31	
				9.51 - 769	Q1 2022	33	
				9.51 - 736	Q4 2021	28	
				10.1 - 840	Q3 2021	35	
				8.53 - 840	Q2 2021	38	
				8.53 - 840	Q1 2021	28	
				8.53 - 941	Q4 2020	35	
				8.49 - 941	Q3 2020	32	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Siemens Healthcare Diagnostics Tarrytown, NY	Chemiluminescence Immunoassay	ADVIA Centaur® Testosterone II Assay	7.0 – 1,500	8.77 - 840	Q4 2025	18	Neil Parker neil.np.parker@siemens-healthineers.com
				8.53 - 840	Q3 2025	18	
				8.53 - 719	Q2 2025	26	
				8.53 - 769	Q1 2025	30	
				8.53 - 821	Q4 2024	38	
				8.77 - 821	Q3 2024	45	
				8.53 - 821	Q2 2024	40	
				8.53 - 821	Q1 2024	38	
				8.53 - 736	Q4 2023	32	
				8.53 - 769	Q3 2023	25	
				10.9 - 941	Q2 2023	25	
				10.9 - 941	Q1 2023	25	
				10.9 - 941	Q4 2022	20	
				10.9 - 941	Q3 2022	22	
				10.1 - 769	Q2 2022	22	
				10.1 - 840	Q1 2022	22	
				10.1 - 840	Q4 2021	32	
				8.53 - 840	Q3 2021	28	
				10.9 - 840	Q2 2021	35	
				8.77 - 821	Q1 2021	35	
				8.77 - 941	Q4 2020	38	
				8.77 - 941	Q3 2020	38	
				8.77 - 941	Q2 2020	38	
				7.71 - 941	Q1 2020	35	
				7.71 - 840	Q4 2019	32	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
Siemens Healthcare Diagnostics Tarrytown, NY	Chemiluminescence Immunoassay	Atellica® Testosterone	7.0 – 1,500	8.77 - 840	Q4 2025	36	Neil Parker neil.np.parker@siemens-healthineers.com
				8.77 - 840	Q3 2025	38	
				8.77 - 769	Q2 2025	31	
				10.9 - 680	Q1 2025	20	
				10.9 - 753	Q4 2024	25	
				8.77 - 769	Q3 2024	30	
				8.53 - 821	Q2 2024	32	
				8.53 - 821	Q1 2024	38	
				8.53 - 821	Q4 2023	35	
				8.53 - 821	Q3 2023	30	
				8.53 - 769	Q2 2023	30	
				8.53 - 769	Q1 2023	28	
				8.53 - 769	Q4 2022	25	
				8.53 - 840	Q3 2022	22	
				8.53 - 941	Q2 2022	28	
				8.53 - 941	Q1 2022	26	
				8.53 - 941	Q4 2021	26	
				8.53 - 941	Q3 2021	31	
				10.1 - 736	Q2 2021	21	
				8.77 - 659	Q1 2021	18	
				8.77 - 821	Q4 2020	18	
				8.49 - 821	Q3 2020	15	
				8.49 - 821	Q2 2020	20	
				8.49 - 821	Q1 2020	28	
				8.49 - 941	Q4 2019	32	

Participant	Measurement Principle	Assay Identifier	Assay Measurement Range (ng/dL)	Certification Measurement Range (ng/dL)	Certification Date (active for 1 quarter)	Individual Samples Pass Rate (%)	Participant's Contact Information
University of Minnesota (MEBRL) Minneapolis, MN	LC/MS/MS†	Total Testosterone in Serum	2 – 2,000	8.53 - 753	Q4 2021	80	Revati Koratkar kora0033@umn.edu 612-624-2959
				7.71 - 753	Q3 2021	70	
				7.71 - 753	Q2 2021	60	
				7.71 - 659	Q1 2021	57	
				8.49 - 941	Q2 2020	75	
Waters Technologies IDA Business Park, Wexford, Ireland	LC/MS/MS†	Serum Total Testosterone	1– 1930	7.71 - 840	Q4 2025	69	Danielle Kehoe danielle_kehoe@waters.com
				7.71 - 840	Q3 2025	82	
				7.71- 661	Q2 2025	90	
				7.71 - 769	Q1 2025	92	
				8.53 - 821	Q4 2024	92	

† LC/MS/MS – Liquid Chromatography Tandem Mass Spectrometry

‡ GC/MS/MS – Gas Chromatography Tandem Mass Spectrometry

Table 2: Accuracy-Based Monitoring Programs (AMP) status of secondary location

Participant	Measurement Principle	Assay Identifier	AMP Active Date <i>(active for 1 quarter)</i>	Participant's Contact Information
Quest Diagnostics Chantilly, VA	LC/MS/MS†	Serum Total Testosterone	Q2 2023 Q1 2023 Q4 2022 Q3 2022 Q2 2022 Q1 2022 Q4 2021 Q3 2021 Q2 2021 Q1 2021 Q4 2020 Q3 2020 Q2 2020 Q1 2020 Q4 2019	William Wu PhD William.W.Wu@QuestDiagnostics.com (703) 802-7210