

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394333

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/10/2025 11:26 AM

This order was split into 9 orders: 394317 (Lipid Panel,Hemoglobin A1c,DHEA Sulfate, Immunoassay,Anti-Mullerian Hormone,Testosterone, Total with Free Androgen Index,Vitamin D 25-OH Total Level,Prolactin,HIV 1/2 Antibody/Antigen, Fourth Generation,Comprehensive Metabolic Panel,Complete Blood Count (with Reflex to Manual Differential),Anti-thyroid Antibodies Panel,Free T3,Free T4,Thyroid Stimulating Hormone (TSH)), 394331 (Antibody Screen, RBC with Reflex to Identification, Titer, a,Homocysteine,Immunoglobulin Panel,Partial Thromboplastin Time, Activated), 394332 (Protein S Activity,Protein C Activity,Plasminogen Activator Inhibitor-1), 394333 (Glucose-6-Phosphate Dehydrogenase, Quantitative,Ovarian Antibody Screen withReflex to Titer IFA), 394334 (MTHFR (A1298C) Gene Polymorphism,PAI-1 4G/5G Gene Polymorphism,MTHFR (C677T) Gene Polymorphism,HPA-1a Gene Polymorphism,Factor XIII V34L Gene Polymorphism,beta-Fibrinogen 455G/A Gene Polymorphism), 394335 (TH1/TH2 Intracellular Cytokine Ratios,NK Assay Full Panel), 394336 (Anti-DNA, Histones, Scl-70 Panel,Anti-phospholipid Antibody Panel,ANA w/Reflex if Positive), 394337 (Insulin, Free (Bioactive)), 394338 (DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS)

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Glucose-6-Phosphate Dehydrogenase, Quantitative

GLUCOSE-6-PHOSPHATE DEHYDROGENASE	16.5	U/g Hgb	7.0-20.5
--------------------------------------	------	---------	----------

Quest Accession #: WX689237J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004800

Quest Reported Date/Time: 20251010132011

**Clinical Immunology Lab**

(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394331

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 10:06 AM

This order was split into 9 orders: 394317 (Lipid Panel,Hemoglobin A1c,DHEA Sulfate, Immunoassay,Anti-Mullerian Hormone,Testosterone, Total with Free Androgen Index,Vitamin D 25-OH Total Level,Prolactin,HIV 1/2 Antibody/Antigen, Fourth Generation,Comprehensive Metabolic Panel,Complete Blood Count (with Reflex to Manual Differential),Anti-thyroid Antibodies Panel,Free T3,Free T4,Thyroid Stimulating Hormone (TSH)), 394331 (Antibody Screen, RBC with Reflex to Identification, Titer, a,Homocysteine,Immunoglobulin Panel,Partial Thromboplastin Time, Activated), 394332 (Protein S Activity,Protein C Activity,Plasminogen Activator Inhibitor-1), 394333 (Glucose-6-Phosphate Dehydrogenase, Quantitative,Ovarian Antibody Screen withReflex to Titer IFA), 394334 (MTHFR (A1298C) Gene Polymorphism,PAI-1 4G/5G Gene Polymorphism,MTHFR (C677T) Gene Polymorphism,HPA-1a Gene Polymorphism,Factor XIII V34L Gene Polymorphism,beta-Fibrinogen 455G/A Gene Polymorphism), 394335 (TH1/TH2 Intracellular Cytokine Ratios,NK Assay Full Panel), 394336 (Anti-DNA, Histones, Scl-70 Panel,Anti-phospholipid Antibody Panel,ANA w/Reflex if Positive), 394337 (Insulin, Free (Bioactive)), 394338 (DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS)

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Antibody Screen, RBC with Reflex to Identification, Titer, a

ANTIBODY SCREEN, RBC W/ REFL ID, TITER AND AG	NO ANTIBODIES DETECTED
Reference range No antibodies detected	

This assay is a screening test for the detection of red blood cell antibodies. The test is not to be used for pretransfusion screening or for the medical management of an alloimmunized pregnancy.

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010090508

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010093640

Homocysteine

HOMOCYSTEINE	3.2	umol/L	< or = 11.0
--------------	-----	--------	-------------



DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394331

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 10:06 AM

TEST NAME**IN RANGE****RESULT****OUT OF RANGE****UNITS****REFERENCE****RANGE****Homocysteine (cont'd)**

Homocysteine is increased by functional deficiency of folate or vitamin B12. Testing for methylmalonic acid differentiates between these deficiencies. Other causes of increased homocysteine include renal failure, folate antagonists such as methotrexate and phenytoin, and exposure to nitrous oxide.

Selhub J, et al., Ann Intern Med. 1999;131(5):331-9.

Quest Accession #: WX689013J

Quest Collection Date/Time: 20251009111500

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010201225

Partial Thromboplastin Time, Activated

PARTIAL THROMBOPLASTIN
TIME, ACTIVATED

28

sec

23-32

This test has not been validated for monitoring unfractionated heparin therapy. For testing that is validated for this type of therapy, please refer to the Heparin Anti-Xa assay (test code 30292).

For additional information, please refer to <http://education.QuestDiagnostics.com/faq/FAQ159>
(This link is being provided for informational/educational purposes only.)

Quest Accession #: WX689013J

Quest Collection Date/Time: 20251009111500

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010093640

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATEName/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394331

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 10:06 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Immunoglobulin Panel

IMMUNOGLOBULIN A	200		mg/dL	47-310
IMMUNOGLOBULIN G	1333		mg/dL	600-1640
IMMUNOGLOBULIN M	84		mg/dL	50-300

Quest Accession #: WX689013J

Quest Collection Date/Time: 20251009111500

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010170845

Quest Accession #: WX689013J

Testing performed at: CB, Quest Diagnostics-Wood Dale, 1355 Mittel Blvd, Wood Dale, IL, 60191-1024,

Laboratory Director: Anthony V Thomas

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004300

Quest Reported Date/Time: 20251010201225



DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394332

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 10:06 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Protein S Activity

PROTEIN S, ACTIVITY	91		% normal	60-140
---------------------	----	--	----------	--------

Decreased levels of Protein S activity may be found in patients with hereditary deficiency, warfarin therapy, vitamin k deficiency, liver disease, DIC, or recent thrombosis as well as after surgery. In addition, it may be physiologic in pregnancy. An elevated Protein S activity is not clinically significant. Only deficiencies are associated with an increased thrombotic risk.

Quest Accession #: WX688465J

Quest Collection Date/Time: 20251009111500

Quest Accession #: WX688465J

Testing performed at: EZ, Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA, 92675-2042, Laboratory Director: Irina Maramica MD,PhD,MBA

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010003200

Quest Reported Date/Time: 20251014001335

Protein C Activity

PROTEIN C, ACTIVITY	126		% normal	70-180
---------------------	-----	--	----------	--------

Decreased levels of protein C activity may be found in hereditary deficiency, treatment with oral anticoagulants, liver disease, D.I.C. and post surgery. An elevated protein C activity is not clinically significant. Only deficiencies are associated with an increased thrombotic risk. However, anti-thrombin or oral anti-Xa medications may cause false elevations.

Quest Accession #: WX688465J

Testing performed at: EZ, Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA, 92675-2042, Laboratory Director: Irina Maramica MD,PhD,MBA

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010003200

Quest Reported Date/Time: 20251013145835

Quest Accession #: WX688465J

Testing performed at: EZ, Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA, 92675-2042, Laboratory Director: Irina Maramica MD,PhD,MBA

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATEName/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394332

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 10:06 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Protein C Activity (cont'd)

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010003200

Quest Reported Date/Time: 20251014001335

**Clinical Immunology Lab**

(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394335

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 12:56 PM

This order was split into 9 orders: 394317 (Lipid Panel,Hemoglobin A1c,DHEA Sulfate, Immunoassay,Anti-Mullerian Hormone,Testosterone, Total with Free Androgen Index,Vitamin D 25-OH Total Level,Prolactin,HIV 1/2 Antibody/Antigen, Fourth Generation,Comprehensive Metabolic Panel,Complete Blood Count (with Reflex to Manual Differential),Anti-thyroid Antibodies Panel,Free T3,Free T4,Thyroid Stimulating Hormone (TSH)), 394331 (Antibody Screen, RBC with Reflex to Identification, Titer, a,Homocysteine,Immunoglobulin Panel,Partial Thromboplastin Time, Activated), 394332 (Protein S Activity,Protein C Activity,Plasminogen Activator Inhibitor-1), 394333 (Glucose-6-Phosphate Dehydrogenase, Quantitative,Ovarian Antibody Screen withReflex to Titer IFA), 394334 (MTHFR (A1298C) Gene Polymorphism,PAI-1 4G/5G Gene Polymorphism,MTHFR (C677T) Gene Polymorphism,HPA-1a Gene Polymorphism,Factor XIII V34L Gene Polymorphism,beta-Fibrinogen 455G/A Gene Polymorphism), 394335 (TH1/TH2 Intracellular Cytokine Ratios,NK Assay Full Panel), 394336 (Anti-DNA, Histones, Scl-70 Panel,Anti-phospholipid Antibody Panel,ANA w/Reflex if Positive), 394337 (Insulin, Free (Bioactive)), 394338 (DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS)

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

NK Assay Full Panel

50:1	31.9		%	10.0-40.0
25:1	20.1		%	5.0-30.0
12.5:1	13.0		%	3.0-20.0
IVIG 12.5 mg/ml, 50:1	20.6		%	
IVIG 12.5 mg/ml, 25:1	14.2		%	
IVIG 6.25 mg/ml, 50:1	20.1		%	
IVIG 6.25 mg/ml, 25:1	19.1		%	
%CD3	73.3		%	60.0-85.0
%CD19		12.3 (H)	%	2.0-12.0
%CD56		14.5 (H)	%	2.0-12.0
%CD19+cells,CD5+		15.5 (H)	%	5.0-10.0

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

*Result is either less than or greater than the 95% confidence range for this patient sample at this time. This may or may not be indicative of pathology. This test result should be interpreted in the context of the patient's clinical presentation and other immune parameters.

This report continues... (Final)

Page: 1

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394335

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/14/2025 12:56 PM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

TH1/TH2 Intracellular Cytokine Ratios

TNF-a:IL-10 (CD3+CD4+)		35.9 (H)	ratio	13.2-30.6
IFN-g:IL-10 (CD3+CD4+)	9.1		ratio	5.8-20.5

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

*Result is either less than or greater than the 95% confidence range for this patient sample at this time. This may or may not be indicative of pathology. This test result should be interpreted in the context of the patient's clinical presentation and other immune parameters.

END OF REPORT (Final)**Page: 2**

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394337

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/15/2025 2:20 PM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Insulin, Free (Bioactive)

INSULIN, FREE (BIOACTIVE)	3.4		uIU/mL	1.5-14.9
---------------------------	-----	--	--------	----------

Insulin levels vary widely in specimens taken from non-fasting individuals.

Insulin analogues may demonstrate non-linear cross-reactivity in this assay. Interpret results accordingly.

Quest Accession #: WX689108J

Testing performed at: EZ, Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA, 92675-2042, Laboratory Director: Irina Maramica MD,PhD,MBA

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010004500

Quest Reported Date/Time: 20251015142507

**Clinical Immunology Lab**

(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394334

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/17/2025 9:02 AM

This order was split into 9 orders: 394317 (Lipid Panel,Hemoglobin A1c,DHEA Sulfate, Immunoassay,Anti-Mullerian Hormone,Testosterone, Total with Free Androgen Index,Vitamin D 25-OH Total Level,Prolactin,HIV 1/2 Antibody/Antigen, Fourth Generation,Comprehensive Metabolic Panel,Complete Blood Count (with Reflex to Manual Differential),Anti-thyroid Antibodies Panel,Free T3,Free T4,Thyroid Stimulating Hormone (TSH)), 394331 (Antibody Screen, RBC with Reflex to Identification, Titer, a,Homocysteine,Immunoglobulin Panel,Partial Thromboplastin Time, Activated), 394332 (Protein S Activity,Protein C Activity,Plasminogen Activator Inhibitor-1), 394333 (Glucose-6-Phosphate Dehydrogenase, Quantitative,Ovarian Antibody Screen withReflex to Titer IFA), 394334 (MTHFR (A1298C) Gene Polymorphism,PAI-1 4G/5G Gene Polymorphism,MTHFR (C677T) Gene Polymorphism,HPA-1a Gene Polymorphism,Factor XIII V34L Gene Polymorphism,beta-Fibrinogen 455G/A Gene Polymorphism), 394335 (TH1/TH2 Intracellular Cytokine Ratios,NK Assay Full Panel), 394336 (Anti-DNA, Histones, Scl-70 Panel,Anti-phospholipid Antibody Panel,ANA w/Reflex if Positive), 394337 (Insulin, Free (Bioactive)), 394338 (DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS)

TEST NAME**IN RANGE****RESULT****OUT OF RANGE****UNITS****REFERENCE
RANGE****Factor XIII V34L Gene Polymorphism**

Factor XIII V34L Mutation

NORMAL

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

beta-Fibrinogen 455G/A Gene Polymorphism

b-Fibrinogen 455G/A mutation

HETEROZYGOUS
MUTATED

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

PAI-1 4G/5G Gene Polymorphism

PAI-1 4G/5G Polymorphism

HETEROZYGOUS
MUTATED (4G/5G
GENOTYPE)

Note: Plasminogen activator inhibitor-1 (PAI-1) is an essential regulatory component of fibrinolytic pathway. A



DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394334

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/17/2025 9:02 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

PAI-1 4G/5G Gene Polymorphism (cont'd)

common guanosine (G) insertion/deletion gene polymorphism at 675 bp is related to levels of PAI-1 protein. Homozygosity for the deletion genotype (4G/4G) is associated with higher levels of PAI-1 protein and increased risk for thrombosis.

PAI-1 NORMAL represents a 5G/5G genotype.

PAI-1 HETEROZYGOUS MUTATED represents a 4G/5G genotype. This genotype has shown association with an increased risk of venous thromboembolism (VTE) or myocardial infarction (MI)

PAI-1 HOMOZYGOUS MUTATED represents 4G/4G genotype. This genotype has shown association with an increased risk of venous thromboembolism (VTE) or myocardial infarction (MI)

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

HPA-1a Gene Polymorphism

HPA-1a detection POSITIVE
(NORMAL)

Notes: HPA-1a allele is a common allele, while rare allele is designated as HPA-1b. POSITIVE (NORMAL) represents a/a genotype; HETEROZYGOUS is a/b genotype; NEGATIVE (HOMOZYGOUS) is b/b genotype.

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

MTHFR (C677T) Gene Polymorphism

MTHFR C677T Mutation Detection HOMOZYGOUS
MUTATED

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATEName/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394334

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/17/2025 9:02 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

MTHFR (A1298C) Gene Polymorphism

MTHFR A1298C Gene Mutation NORMAL

Notes: This test was developed by the Clinical Immunology Laboratory at RFUMS/The Chicago Medical School. The performance characteristics of this test were determined and are monitored by the Clinical Immunology Laboratory. The use of this test has not been cleared or approved by the U.S. FDA for diagnostic testing.

**Clinical Immunology Lab**

(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

This order was split into 9 orders: 394317 (Lipid Panel,Hemoglobin A1c,DHEA Sulfate, Immunoassay,Anti-Mullerian Hormone,Testosterone, Total with Free Androgen Index,Vitamin D 25-OH Total Level,Prolactin,HIV 1/2 Antibody/Antigen, Fourth Generation,Comprehensive Metabolic Panel,Complete Blood Count (with Reflex to Manual Differential),Anti-thyroid Antibodies Panel,Free T3,Free T4,Thyroid Stimulating Hormone (TSH)), 394331 (Antibody Screen, RBC with Reflex to Identification, Titer, a,Homocysteine,Immunoglobulin Panel,Partial Thromboplastin Time, Activated), 394332 (Protein S Activity,Protein C Activity,Plasminogen Activator Inhibitor-1), 394333 (Glucose-6-Phosphate Dehydrogenase, Quantitative,Ovarian Antibody Screen withReflex to Titer IFA), 394334 (MTHFR (A1298C) Gene Polymorphism,PAI-1 4G/5G Gene Polymorphism,MTHFR (C677T) Gene Polymorphism,HPA-1a Gene Polymorphism,Factor XIII V34L Gene Polymorphism,beta-Fibrinogen 455G/A Gene Polymorphism), 394335 (TH1/TH2 Intracellular Cytokine Ratios,NK Assay Full Panel), 394336 (Anti-DNA, Histones, Scl-70 Panel,Anti-phospholipid Antibody Panel,ANA w/Reflex if Positive), 394337 (Insulin, Free (Bioactive)), 394338 (DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS)

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Anti-thyroid Antibodies Panel

Anti-Thyroglobulin Antibody	<1	IU/mL	<4
-----------------------------	----	-------	----

Note: This test may exhibit interference when the sample is collected from patients who are supplementing with high amounts of Biotin (also termed B7, B8, Vitamin H, or Coenzyme-R). It is recommended to inquire from all patients who are indicated for this test on Biotin supplementation status. Patients should be cautioned to stop all forms of Biotin supplementation at least 72 hours prior to collection of serum samples.

Anti-Thyroid Peroxidase Antibody	<1	IU/mL	<9
----------------------------------	----	-------	----

Notes: Effective as of 10/23/2017, Anti-TPO & Anti-TG values will be reported quantitatively via immunoassay chemiluminescence, replacing our previous qualitative ELISA Assays. For more questions regarding these methods, please contact the laboratory directly.



DUPLICATE

Name/DOB: SONG, JULEE (5/18/1982)

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Complete Blood Count (with Reflex to Manual Differential)

WBC	3.4		10 ³ /uL	3.1-10.5
RBC	4.05		10 ⁶ /uL	4.01-5.85
Hemoglobin	13.2		g/dL	11.8-17.5
Hematocrit	39.7		%	36.2-52.3
MCV		98 (H)	fL	83-96
MCH	32.6		pg	26.7-32.8
MCHC	33.2		g/dL	31.9-34.4
RDW	12.2		%	7.8-16.2
Platelet Count	321		10 ³ /uL	151-402
MPV	10.8		fL	7.5-12.5
Neutrophils%	51.7		%	43.2-77.0
Lymphocytes%	37.7		%	19.9-46.3
Monocytes%	8.5		%	1.7-9.3
Eosinophils%	0.9		%	0.0-2.9
Basophils%		1.2 (H)	%	0.0-1.0

Hemoglobin A1c

HEMOGLOBIN A1c 5.1 % of total Hgb <5.7

The HbA1c assay provides a metric for blood sugar levels over the past 3 months from date of blood draw. HbA1c is detected utilizing ion-exchange chromatography. This technology provides both a numerical result and a visual picture of the separated hemoglobins, distinguishing hemoglobin fractions based on charge differences.

For the purpose of screening for the presence of diabetes:

- <5.7% Consistent with the absence of diabetes
- 5.7-6.4% Consistent with increased risk for diabetes (prediabetes)
- > or =6.5% Consistent with diabetes

According to the American Diabetes Association (ADA), the goal for most adults with diabetes is an A1c that is less than 7%. With regard to children, the ADA 2020 Standards of Care recommends a hemoglobin A1c of <7% for many children with type 1 diabetes (T1D), with an emphasis on target personalization.

References

- 1.Ding et al. Hemoglobin A1c and diagnosis of diabetes. J Diabetes. May 2018.
- 2.<https://www.cdc.gov/diabetes/diabetes-testing/prediabetes-a1c-test.html>



DUPLICATE

Name/DOB: SONG, JULEE (5/18/1982)

Patient ID: 177757

Reference #: 177757

Sex: F

Age: 43

Provider: Thanh Luu, DO

Order Location: Reproductive Immunology

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Reported Date: 10/20/2025 12:58 PM

Collection Date: 10/9/2025 11:15 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Lipid Panel

Triglycerides	49		mg/dL	35-200
Cholesterol, Total	189		mg/dL	50-230
HDL Cholesterol	84		mg/dL	40-110
CHOL/HDLC	2.00		mg/dL	0.10-4.98
LDL	96		mg/dL	2-130
VLDL	10		mg/dL	5-40

Comprehensive Metabolic Panel

Glucose	85		mg/dL	75-110
Total Protein	7.7		g/dL	5.8-8.1
Albumin	4.70		g/dL	3.20-5.00
Globulin	3.0		g/dL	2.2-4.2
A/G Ratio	1.6			0.8-2.0
Total Bilirubin	0.50		mg/dL	0.10-1.30
ALT (SGPT)	15		U/L	<50
AST (SGOT)	23		U/L	17-59
ALK Phosphatase	44		U/L	20-125
Calcium	9.4		mg/dL	8.5-10.3
BUN	10		mg/dL	9-20
Creatinine		0.50 (L)	mg/dL	0.55-1.25
eGFR	119.0		ml/min/1.73 m2	>60.0
BUN/Creatinine	21.2			6.0-25.0
Sodium	136		mmol/L	135-146
Potassium	4.0		mmol/L	3.5-5.3
Chloride	102		mmol/L	95-108
Bicarbonate	25.0		mmol/L	22.0-30.0

Anti-Mullerian Hormone

AMH, serum 0.69 ng/mL

Please Note: The limit of detection for the AMH immunoassay is 0.08 ng/mL compared to the previously reported limit (0.11 ng/mL) effective as of 05/20/19. Therefore, any specimen containing AMH less than 0.08 ng/mL will be reported as (<0.08 ng/mL).

Reference Range for Adult Females:

18-25 years 1.02 -14.63 ng/mL

26-30 years 0.69-13.39 ng/mL



DUPLICATE

Name/DOB: SONG, JULEE (5/18/1982)

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

TEST NAME	RESULT	UNITS	REFERENCE RANGE
	IN RANGE OUT OF RANGE		

Anti-Mullerian Hormone (cont'd)

31-35 years	0.36-10.07 ng/mL
36-40 years	0.18-5.68 ng/mL
41-45 years	0.01-2.99 ng/mL

Vitamin D 25-OH Total Level

Vitamin D 25-OH Total Level	50.9	ng/mL	30.0-100.0
-----------------------------	------	-------	------------

Notes: The Vitamin D,25-OH Total Level test is a competitive immunoassay measuring total Vitamin D,25-OH

(the sum of Vitamin D3,25-OH and Vitamin D2,25-OH). Based on the Endocrine Society Clinical Practice guidelines [1] for Vitamin D status, a deficiency is a serum level of Vitamin D,25-OH less than 20 ng/mL, and an insufficiency is a level between 20 and 30 ng/mL.

[1] Holick MF et al, Evaluation, treatment, and prevention of Vitamin D deficiency: an Endocrine Society Clinical Practice guideline. J.Clin.Endocrin.Metab. 2001, 96(7).

Thyroid Stimulating Hormone (TSH)

Thyroid Stimulating Hormone	1.38	uIU/mL	0.34-5.60
-----------------------------	------	--------	-----------

Free T3

T3, Free	2.8	pg/mL	2.5-3.9
----------	-----	-------	---------

Note: This test may exhibit interference when the sample is collected from patients who are supplementing with high amounts of Biotin (also termed B7, B8, Vitamin H, or Coenzyme-R). It is recommended to inquire from all patients who are indicated for this test on Biotin supplementation status. Patients should be cautioned to stop all forms of Biotin supplementation at least 72 hours prior to collection of serum samples.

Free T4

T4, Free	0.8	ng/dL	0.6-1.1
----------	-----	-------	---------

Note: This test may exhibit interference when the sample is collected from patients who are supplementing with high amounts of Biotin (also termed B7, B8, Vitamin H, or Coenzyme-R). It is recommended to inquire from all patients who are indicated for this test on Biotin supplementation status. Patients should be cautioned to stop all forms of Biotin supplementation at least 72 hours prior to collection of serum samples.



DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

Testosterone, Total with Free Androgen Index

Testosterone, Total 0.1 ng/mL

Normal Males (age 18 - 66): 1.75 - 7.81 ng/mL

Normal Females (age 21-73): <0.1 - 0.75 ng/mL

Sex Hormone Binding Globulin 51.8 nmol/L

Normal Males (age 20 - 50): 13.3 - 89.5 nmol/L

Normal Females (age 20 - 46): 18.2 - 135.5 nmol/L

Post-menopausal Females (age 47-91): 16.8 - 125.2 nmol/L

Free Androgen Index (Free Testosterone) 0.94 % nmol/L

Normal Males (age 20 - 50): 24.3 - 110.2 % nmol/L

Normal Females (age 20 - 46): 0.65 - 10.93 % nmol/L

Post-menopausal Females (age 47-91): 0.23 - 6.80 % nmol/L

Free Androgen Index (FAI) is an indirect method used to determine androgen status. FAI is used to assess circulating physiologically active testosterone which includes "unbound free testosterone" and albumin-bound "bioavailable" testosterone. Testosterone that is bound to Sex Hormone Binding Globulin (SHBG), >50% of circulating testosterone, is not bio-active due to the high binding affinity of SHBG. Therefore, higher amounts of circulating SHBG reduce the levels of bio-active testosterone. The calculation for FAI utilizes the ratio between levels of total-testosterone and Sex Hormone Binding Globulin (SHBG). FAI may correlate better with clinical symptoms in comparison to total-testosterone alone.

References:

1. Himoto et al. Clinical efficacy of free androgen index, a surrogate hallmark of circulating free testosterone level, in male patients with HCV-related chronic liver disease. J Clin Biochem Nutr. 2018 Nov;63(3):238-245.
2. Wilke et al. Total testosterone, free-androgen index, calculated free testosterone, and free testosterone by analog RIA compared in hirsute women and in otherwise-normal women with altered binding of sex-hormone-binding globulin. Clin Chem. 1987 Aug;33(8):1372-5.
3. Miller et al. Measurement of Free Testosterone in Normal Women and Women with Androgen Deficiency: Comparison of Methods. J Clin Endocrinol Metab. 2004 Feb;89(2):525-33.

Prolactin

Prolactin 15.0 ng/mL

Normal Range:

Female Premenopausal (<50 years of age): 3.34-26.72 ng/ml



DUPLICATE

Name/DOB: SONG, JULEE (5/18/1982)

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

TEST NAME

RESULT

UNITS

REFERENCE

IN RANGE

OUT OF RANGE

RANGE

Prolactin (cont'd)

Female Postmenopausal (=>50 years of age): 2.74-19.64 ng/ml

Male: 2.64-13.13 ng/ml

DHEA Sulfate, Immunoassay

DHEA Sulfate

144.90

mcg/dL

19.00-231.00

Normal Range:

Age:	Male (mcg/dL)	Female (mcg/dL)
<1 Month ≤316		15-261
1-6 Months	≤58	≤74
7-11 Months	≤26	≤26
1-3 Years ≤15		≤22
4-6 Years ≤27		≤34
7-9 Years ≤91		≤92
10-13 Years	≤138	≤148
14-17 Years	38-340	37-307
18-21 Years	24-537	51-321
22-30 Years	85-690	18-391
31-40 Years	106-464	23-266
41-50 Years	70-495	19-231
51-60 Years	38-313	8-188
61-70 Years	24-244	12-133
≥71 Years 5-253		7-177

HIV 1/2 Antibody/Antigen, Fourth Generation

HIV-1/2 Antibody+Antigen Fourth Gen NON-REACTIVE

NON-REACTIVE

The HIV1/2 antibody/antigen assay is a qualitative test that detects the presence of antibodies to HIV Type 1 (HIV-1 groups M and O), HIV Type 2 (HIV-2) and the p24 HIV antigen in human serum. This test is intended as an aid in the diagnosis of HIV-1 and/or HIV-2 infection, including acute or primary HIV-1 infection. Results from this test cannot be used to distinguish between the presence of HIV-1 p24 antigen, HIV-1 antibody, or HIV-2 antibody.

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATEName/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394317

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 12:58 PM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

HIV 1/2 Antibody/Antigen, Fourth Generation (cont'd)

All(REACTIVE) results will be confirmed by repeat testing. Since this is a screening test, (REACTIVE) samples should be followed up with confirmatory testing that determines the nature of reactivity (HIV1 antibody, HIV2 antibody, and/or p24 antigen).

**Clinical Immunology Lab**(847) 578-3444 E-mail: clinlab@rosalindfranklin.edu

3333 Green Bay Road

NORTH CHICAGO, IL 60064-3039

CLIA ID# 14D0646416

S. Dambaeva, Ph.D.D(ABMLI)

DUPLICATE

Name/DOB: **SONG, JULEE (5/18/1982)**

Provider: Thanh Luu, DO

Patient ID: 177757

Sex: F

Order Location: Reproductive Immunology

Reference #: 177757

Age: 43

Sample ID: 394338

Received Date: 10/9/2025 3:16 PM

Collection Date: 10/9/2025 11:15 AM

Reported Date: 10/20/2025 9:22 AM

TEST NAME	RESULT		UNITS	REFERENCE RANGE
	IN RANGE	OUT OF RANGE		

DHEA (Dehydroepiandrosterone), Unconjugated, LC/MS/MS

DHEA, UNCONJUGATED	528		ng/dL
--------------------	-----	--	-------

Adult Female Reference Ranges

Pre-Menopausal

Mid Follicular: 385-1143 ng/dL

Surge: 345-2030 ng/dL

Mid Luteal: 414-1295 ng/dL

Post-Menopausal 77-851 ng/dL

This test was developed and its analytical performance characteristics have been determined by Quest Diagnostics. It has not been cleared or approved by the FDA. This assay has been validated pursuant to the CLIA regulations and is used for clinical purposes.

Quest Accession #: WX688438J

Testing performed at: EZ, Quest Diagnostics/Nichols SJC-San Juan Capistrano,, 33608 Ortega Hwy, San Juan Capistrano, CA, 92675-2042, Laboratory Director: Irina Maramica MD,PhD,MBA

Quest Collection Date/Time: 20251009111500

Quest Results Received Date/Time: 20251010003100

Quest Reported Date/Time: 20251018092343