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APCR w /FV+A2APla+Fibrin+Fll...

	Test	Current Result and Flag	Previous Result and Date	Units	ReferenceInterval
A	**Lipoprotein (a)**[01]	**70** **High** Verified by repeat analysis. The mean and median Lp(a) concentration of the African-American population is approximately twice that of the Caucasian population, although studies have shown that elevated Lp(a) concentration is not an independent risk factor for developing atherosclerotic disease in the African-American population. Reference Range: <31		mg/dL	
	Homocysteine[01]	9.2 Homocysteine levels in patients >60 years increase 1-2 umol/L. Reference Range: 5.0 - 15.0		umol/L	
	Fibrinogen Activity[01]	349 Reference Range: 160 - 420		mg/dl	
	Alpha-2AntiplasminAssay[01]	117 Reference Range: 80 - 150		%	
	PAl-1Activity[01]	<4.4 Reference Range: <31.1		IU/ml	
	ProteinS Activity(clottable)[01]	77 Protein S activity may be falsely increased (masking an abnormal, low result) in patients receiving direct Xa inhibitor (e.g., rivaroxaban, apixaban, edoxaban) or a direct thrombin inhibitor (e.g., dabigatran) anticoagulant treatment due to assay interference by these drugs. Reference Range: 7 months and older: 63 - 140 This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.		%	
	Act.PrtC Resist w/FVDefic.[01]	2.5 The APCR result may be falsely increased (masking an abnormal, low APCR result) in patients on direct Xa inhibitor (e.g., rivaroxaban, apixaban, edoxaban) or a direct thrombin inhibitor (e.g., dabigatran) anticoagulant therapy due to assay interference by these drugs. Reference Range: 2.2 - 3.5		ratio	
	Thrombin Antithrombin				

Complex[01]	4.1		ng/mL

APCR w/FV+A2APla+Fibrin+FII... (Cont.)

Pre-analytical conditions such as a difficult draw may spuriously increase test results.
Reference Range:
<4.3

Factor II Gene Mutation Result[01]

G-G (Normal-Normal)
No prothrombin G20210A mutation present.

Interpretation:[01]

While the patient does not possess this risk factor, other thrombotic risk factors may be detected through systematic clinical laboratory analysis.

Methodology:[01]

Patient DNA was evaluated for the factor II gene mutation at nucleotide 20210 using PCR amplification followed by restriction analysis and gel electrophoresis.

Comments:[01]

Simultaneous Risks: If a patient possesses two or more congenital or acquired thrombophilic risk factors, the risk of thrombosis may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the prothrombin G20210A mutation and the factor V Leiden mutation may confer an increase in thrombotic risk in the range of 20-30 fold.

Recommendations for Genetic Counseling: The prothrombin gene mutation is an inherited characteristic. If the mutation is present, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk.

Testing Characteristics: Genetic testing provides exceptionally high sensitivity and specificity. Inaccurate results are limited to rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay detects only the prothrombin G20210A mutation and does not detect other genetic abnormalities.

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

References: Brown K, et al. Br J of Haem. 1997;98:907.
CuTI111ing **AM**, et al. Br J of Haem. 1997;98:353. Del Rio-LaFreniere and McGlennen Mol.Diagn. 2001;6(3):201.
Emmerich J, et al. Thromb Haemost. 2001;86:809-16.
Margaglione **M**, et al. Thromb Haemost. 1999;82:1583.

Prothrombin Fragment 1+2

.a.	**MoAb**[01]	**524**	**High**	pmol/L

Pre-analytical conditions such as a difficult draw may spuriously increase test results.
Reference Range:
<326

PAI-1 Gene Polymorphism

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
PAl-1Locus 4G/5G Polymorphism[01]				
	Patient DNA was evaluated for the PAI-1 4G/5G promoter polymorphism, which is a single base pair guanine (4G/5G) deletion/insertion polymorphism, using polymerase chain reaction (PCR) technology and restriction fragment length polymorphism (RFLP).			
Results[01]	5G/5G			
	Homozygous for the 5G insertion allele.			
Interpretation[1]				
	This individual has two copies of the 5G allele, also known as the 5G/5G genotype of the plasminogen activator inhibitor type 1 (PAI-1) gene. The 5G/5G genotype is associated with the lowest PAI-1 activity and antigen levels compared to those individuals that have either the 4G/4G or 4G/5G genotype. Elevated PAI-1 levels are associated with an increased risk of coronary artery disease, venous thromboembolic disease and possibly complications of pregnancy such as recurrent abortion.			
Comments[01]				
	Simultaneous Risks: If a patient possesses two or more congenital or acquired risk factors, the risk of disease may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the 4G/4G genotype and the insulin resistance syndrome may confer an increase in cardiovascular disease risk over that conferred by the presence of an isolated PAI-1 4G/4G polymorphism. Recommendations for Genetic Counseling: The PAI-1 4G allele is an inherited characteristic.If the polymorphism is present in a heterozygous or homozygous fashion, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk. Testing Characteristics: Genetic testing by PCR provides exceptionally high sensitivity and specificity. Incorrect genotyping results can be caused by rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay analyzes only the PAI 4G/5G locus and does not measure genetic abnormalities elsewhere in the genome. This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration. References: Barcellona D. Thromb Haemost. 2003;90:1061.; Dossenbach-Glaninger. Clin Chem. 2003;49:1081.; Kohler et al. NEJM. 2000;342:1792.; Margaglione Met al. Arterioscl Thromb and Vase Bio. 1998;18:152.			

Ordered Items: **APCR w/FV+A2APla+Fibrin+Fll... ; Drawing Fee**

DateCollected: **11/21/2024**

APCR w/FV+A2APla+Fibrin+Fll...

Test	Current Result and Flag	Previous Resultand Date	Units	Reference Interval
Lipoprotein (a)[01]	9 The mean and median Lp(a) concentration of the African-American population is approximately twice that of the Caucasian population, although studies have shown that elevated Lp(a) concentration is not an independent risk factor for developing atherosclerotic disease in the African-American population. Reference Range: <31		mg/dl	
Homocysteineo[1]	7.6 Homocysteine levels in patients >60 years increase 1-2 umol/L. Reference Range: 5.0 - 15.0		umol/L	
Fibrinogen Activity[01]	311 Reference Range: 160 - 420		mg/dl	
Alpha-2 Antiplasmin Assay[01]	120 Reference Range: 80 - 150		%	
PAl-1Activity[01]	5.3 Reference Range: <31 .1		IU/ml	
Protein SActivity (clottable)[01]	**55** **Low** A deficiency of proteins (PS), either congenital or acquired, increases the risk of thromboembolism. PS activity levels may be falsely low in individuals with APCR-Factor V Leiden. Consider performing free protein S antigen in those with APCR-Factor V Leiden before making a diagnosis of protein S deficiency. Acquired PS deficiency is more common than congenital deficiency. PS values decrease with normal pregnancy, and are also dependent on age, sex and hormone status. PS values tend to be lower in a younger age group and lower in women than in men. Levels may be decreased in pre-menopausal women on oral contraceptive agents. Acquired deficiency can occur as a result of vitamin K deficiency or antagonism, severe hepatic disorders (hepatitis, cirrhosis, etc.), nephrotic syndrome, inflammatory bowel **disease**, certain chemotherapeutic agents, L-asparaginase therapy, sepsis, disseminated intravascular coagulation (DIC) and acute thrombosis. Levels may be decreased in patients with polycythemia vera, sickle cell disease and essential thrombocythemia. Repeat evaluation on a new plasma sample to confirm or refute this result should be considered, after ruling out acquired causes, depending on the clinical scenario.		%	

APCR w/FV+A2APla+Fibrin+Fll... (Cont.)

	Reference Range: 7 months and older: 63 - 140 This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.	
Act. Prt CResistw/FVOefic.[01]	2.4 The APCR result may be falsely increased (masking an abnormal, low APCR result) in patients on direct Xa inhibitor (e.g., rivaroxaban, **apixaban**, edoxaban) or a direct thrombin inhibitor (e.g., dabigatran) anticoagulant therapy due to assay interference by these drugs. Reference Range: 2.2 - 3.5	ratio
Thrombin Antithrombin Complex[01]	2.1 Pre-analytical conditions such as a difficult draw may spuriously increase test results. Reference Range: <4.3	ng/ml
FactorII Gene Mutation Resutt•[1]	G-G (Normal-Normal) No prothrombin G20210A mutation present.	
Interpretation:[01]	While the patient does not possess this risk factor, other thrombotic risk factors may be detected through systematic clinical laboratory analysis.	
Methodology:[01]	Patient DNA was evaluated for the factor II gene mutation at nucleotide 20210 using PCR amplification followed by restriction analysis and gel electrophoresis.	
Cornments:[01]	Simultaneous Risks: If a patient possesses two or more congenital or acquired thrombophilic risk factors. the risk of thrombosis may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the prothrombin G20210A mutation and the factor V Leiden mutation may confer an increase in thrombotic risk in the range of 20-30 **fold.** Recommendations for Genetic Counseling: The prothrombin gene mutation is an inherited characteristic. If the mutation is present, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk. Testing Characteristics: Genetic testing provides exceptionally high sensitivity and specificity. Inaccurate results are limited to rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay detects only the prothrombin G20210A mutation and does not detect other genetic abnormalities.	

APCR w/FV+A2APIa+Fibrin+FII... (Cont.)

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

References: Brown K, et al. Br J of Haem. 1997;98:907.
Cumming AH, et al. Br J of Haem. 1997;98:353. Del Rio-Lafreniere and McGlennen Mol.Diagn.2001;6{3):201.
Envnerich J, et al. Thromb Haemost.2001;86:809-16.
Margaglione M, et al. Thromb Haemost. 1999;82:1583.

Prothrombin Fragment 1+2 MoAb[01]	L 119 .	pmol/L

Pre-analytical conditions such as a difficult draw may spuriously increase test results.

Reference Range:
<326

DateCollected: **04/10/2024**

APCR w /FV+A2APIa+Fibrin+FII...

	Test	Current Resultand Flag	Previous Resultand Date	Units	ReferenceInterval
	Lipoprotein(a)A.01	9 The mean and median Lp(a) concentration of the African-American population is approximately twice that of the Caucasian population, although studies have shown that elevated Lp(a) concentration is not an independent risk factor for developing atherosclerotic disease in the African-American population. Reference Range: <31		mg/dL	
	HomocysteineA,oi	8.1 Homocysteine levels in patients >60 years increase 1-2 umol/L. Reference Range: 5.0 - 15.0	6.8 09/06/2023	umol/L	
	Fibrinogen ActivityA.oi	344 Reference Range: 160 - 420		mg/dl	
A	**Alpha-2 Antiplasmin AssayA.01**	**154 High** Reference Range: 80 - 150		%	
	PAl-1ActivityA,o,	<4.4 Reference Range: <31.1		IU/ml	
	ProteinS Activity(clottable)A.01	69 Protein S activity may be falsely increased (masking an abnormal, low result) in patients receiving direct Xa inhibitor (e.g., rivaroxaban, apixaban, edoxaban) or a direct thrombin inhibitor (e.g., dabigatran) anticoagulant treatment due to assay interference by these drugs. Reference Range: 7 months and older: 63 - 140 This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.		%	
	Act.PrtC Resist w/FV Defic.A.01	2.8 The APCR result may be falsely increased (masking an abnormal, low APCR result) in patients on direct Xa inhibitor (e.g., rivaroxaban, apixaban, edoxaban) or a direct thrombin inhibitor (e.g., dabigatran) anticoagulant therapy due to assay interference by these drugs. Reference Range: 2.2 - 3.5		ratio	
	Thrombin Antithrombin ComplexA•01	2.8 Pre-analytical conditions such as a difficult draw may		ng/ml	

APCR w/FV+A2APla+Fibrin+FII... (Cont.)

spuriously increase test results.
Reference Range:
<4.3

Factor II Gene Mutation Result
A.01

G-G (Normal-Normal)
No prothrombin G20210A mutation present.

lnterpretation:A,o,

While the patient does not possess this risk factor, other thrombotic risk factors may be detected through systematic clinical laboratory analysis.

Methodology:A,oi

Patient DNA was evaluated for the factor II gene mutation at nucleotide 20210 using PCR amplification followed by restriction analysis and gel electrophoresis.

Comments:A,o,

Simultaneous Risks: If a patient possesses two or more congenital or acquired thrombophilic risk factors, the risk of thrombosis may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the prothrombin G20210A mutation and the factor V Leiden mutation may confer an increase in thrombotic risk in the range of 20-30 fold.

Recommendations for Genetic Counseling: The prothrombin gene mutation is an inherited characteristic. If the mutation is present, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk.

Testing Characteristics: Genetic testing provides exceptionally high sensitivity and specificity. Inaccurate results are limited to rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay detects only the prothrombin G20210A mutation and does not detect other genetic abnormalities.

This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration.

References: Brown K, et al. Br J of Haem. 1997;98:907.
Cumming **AM**, et al. Br J of Haem. 1997;98:353. Del Rio-LaFreniere and McGlennen Mol.Diagn. 2001;6(3):201.
Emmerich J, et al. Thromb Haemost. 2001;86:809-16.
Margaglione **M**, et al. Thromb Haemost. 1999;82:1583.

Prothrombin Fragment 1+2
MoAb"-01

286 pmol/L

Pre-analytical conditions such as a difficult draw may spuriously increase test results.
Reference Range:
<326

PAI-1 Gene Polymorphism

Test	Current Result and Flag	Previous Result and Date	Units	Reference Interval
PAl-1 Locus 4G/5G PolymorphismA,o,	Patient DNA was evaluated for the PAI-1 4G/5G promoter polymorphism, which is a single base pair guanine (4G/5G) deletion/insertion polymorphism, using polymerase chain reaction (PCR) technology and restriction fragment length polymorphism (RFLP).			
ResultsA,oi	4G/5G Heterozygous for the 4G/5G deletion-insertion allele.			
InterpretationA.[01]	This individual has one copy of the 4G allele and one copy of the 5G allele, also known as the 4G/5G genotype of the plasminogen activator inhibitor type 1 (PAI-1) gene. The 4G/5G genotype is associated **with** the intermediate PAI-1 activity and antigen levels compared to those individuals that have either the 4G/4G genotype with the highest PAI levels or 5G/5G genotype with the lowest PAI levels. Elevated PAI-1 levels are associated with an increased risk of coronary artery disease, venous thromboembolic disease and possibly complications of pregnancy such as recurrent abortion.			
CommentsA.[01]	Simultaneous Risks: If a patient possesses two or more congenital or acquired risk factors, the risk of disease may rise to more than the sum of the risk ratios for the individual risk factors. For instance, a combination of the 4G/4G genotype and the insulin resistance syndrome may confer an increase in cardiovascular disease risk over that conferred by the presence of an isolated PAI-1 4G/4G polymorphism. Recommendations for Genetic Counseling: The PAI-1 4G allele is an inherited characteristic.If the polymorphism is present in a heterozygous or homozygous fashion, we recommend that the patient and their family consider genetic counseling to obtain additional information on inheritance and to identify other family members at risk. Testing Characteristics: Genetic testing by PCR provides exceptionally high sensitivity and specificity. Incorrect genotyping results can be caused by rare polymorphisms in primer binding sites and to misidentification of specimens by collectors or laboratory personnel. This assay analyzes only the PAI 4G/5G locus and does not measure genetic abnormalities elsewhere in the genome. This test was developed and its performance characteristics determined by LabCorp. It has not been cleared or approved by the Food and Drug Administration. References: Barcellona D. Thromb Haemost. 2003;90:1061.; Dossenbach-Glaninger. Clin Chem. 2003;49:1081.; Kohler et			