

Date: May 1, 2015

## **Laboratory Update:**

Thrombophilia Risk Panel

## HIGHLIGHTS

Thrombophilia Risk
 Panel provides a
 complete picture of
 inherited risk and aids in
 individualized treatment
 decision-making.



Lenco Laboratory is pleased to announce we now offer Thrombophilia Risk Panel. Utilizing innovative PCR technology for determination of genotyping, as well as providing a complete picture of inherited risk and aiding in individualized treatment decision-making.

## **BACKGROUND**

Inherited thrombosis is associated with congenital predisposing risk factors such as Factor II (Prothrombin, FII)<sup>1</sup> and Factor V (FV)<sup>2</sup> Leiden proteins involved in the blood coagulation enzyme activity cascade and the methylenetetrahydrofolate reductase (MTHFR) that converts homocysteine to methionine as part of the pathway that converts 5,10-methylenetetrahydrofolate to 5-methyltetrahydrofolate.<sup>3</sup>

## **USING THROMBOPHILIA RISK PANEL IN YOUR CLINICAL PRACTICE**

In 2001, the American college of Medical Genetics (ACMG) recommended that FV DNA testing should be performed in patients with any type of venous thrombosis (hepatic, mesenteric, cerebra and recurrent) with a strong family history of thrombotic disease, pregnant women with venous thrombosis, women with history of pregnancy difficulties such as miscarriages, placental abruption, intrauterine fetal

Thrombophilia Risk Panel	
Factor V Leiden (Factor V)	The protein made by F5 called factor V plays a critical role in the formation of blood clots in response to injury. Factor V Leiden is the most common inherited form of thrombophilia.
Prothrombin (Factor II)	Protein produced from the F2 gene is the precursor to a protein called thrombin that initiates a series of chemical reactions in order to form a blood clot.
Methylenetetrahydrofolate Reductase (MTHFR)	MTHFR enzyme is critical for metabolizing one form of vitamin folate (Vitamin B9) into another and converting homocysteine into methionine (building block for proteins). This test detects two most common mutations (C677T, A1298C).





grow retardation or still birth, or women taking oral contraceptive and female smokers (under age 50) with myocardial infarction.

We would like to thank you, our clients, for allowing us to be your preferred laboratory. We are continuously working to provide you and your staff the excellent service and support that clinical services demand. If you have any questions, please call your Lenco Sales/Service Representative or our Client Services Department at 718-232-1515, ext 9.

Best Regards,

Dr. Elena Agranovsky Medical Director

**TEST NAME:** Thrombophilia Risk Panel

TEST NUMBER: 6371

COLLECTION: 3 mL whole blood; **DEDICATED 1 LAVENDER** 

**EDTA TUBE IS REQUIRED.** 

CONTAINER: Lavender (EDTA)

**TRANSPORT/STABILITY:** Refrigerated 30 days

**REJECTION:** Clotted specimen, insufficient volume

DAYS SET UP: Tuesday
EXPECTED TAT: 7 days
METHOD: PCR

**CPT CODE(S):** 81240, 81241, 81291x2