

To: **Siva Hospital-Salem**  
448,449 T.V.K Road,Ammamet,  
Tamil Nadu  
Salem - 636003  
Contact:  
**Report Of: Mrs. ROGINI KATHIRVEL**  
Pt. Contact:



Sample ID 2300191762  
Patient ID 1102325130  
Received on 18/10/2023 17:36  
Registered on 19/10/2023 12:17  
Reported on -  
Referred by **DR.P.SUMATHI**  
Sonography by **DR.S.SIVARANJINIE**

**EVICOSCREEN - EVIDENCE BASED COMPREHENSIVE PRENATAL SCREENING REPORT**

**Patient Name: Mrs. ROGINI KATHIRVEL**

**Patient DOB: 19/02/2006**

EVICScreen™ is an evidence based prenatal screening program curated by Lilac Insights in accordance with the Fetal Medicine Foundation (UK) guidelines for First Trimester Screening to determine the probability of most common chromosomal aneuploidies in a pregnancy. It utilizes:

- Hormonal values from the pregnancy measured on Fetal Medicine foundation (UK) accredited analyzers and reagents
- Robust indigenous medians from over 7 lac+ pregnancies for different gestation ages
- Risk calculations from evidence based algorithms validated through large international studies

**UKNEQAS: United Kingdom National External Quality Assessment Service**

**RIQAS: Randox International Quality Assessment Scheme**



The Risk Assessment Performed Using  
CE-Marked Antenatal Risk Evaluation Software  
Certified by the British Standards Institute  
(BSI)- ISO 13485:2016

**RISK ASSESSMENT**

Condition	Ratio	Risk Level	Visual Scale
T21 (Down syndrome)	1: 674	Intermediate Risk	LOW   INTERMEDIATE   HIGH
T18 (Edwards' syndrome)	1: 32750	Low Risk	LOW   HIGH
T13 (Patau syndrome)	1: 13284	Low Risk	LOW   HIGH

**MULTIPLE OF MEDIAN (MoM)**

Free β-hCG	0.57	
PAPP-A	1.86	

**INTERPRETATION**

The First Trimester Screening for the given sample is found **Intermediate Risk for Down Syndrome**.

**SUGGESTIONS AND OTHER FINDINGS**

- In view of intermediate risk (Risk between 1:251 to 1:1000), further counselling is recommended.
  - Latest guidelines suggest further evaluation of intermediate risk patients by the following options as indicated:
    - Integrated screening with detailed Genetic Sonogram (Detection rate: 92-95%), ref: Kypros Nicolaides et al, Fetal Diagn Ther 2014;35:174-184.
    - Non- Invasive Prenatal Testing/ Screening (NIPT) (Detection rate: ;99%), ref: ISPD guidelines 2015.
    - Definitive testing through Fetal Karyotyping.
- In view of the increased NT, detailed cardiac and structural evaluation between 18-20 weeks is suggested.



Patient name : Mrs. ROGINI KATHIRVEL

Sample ID : 2300191762

Sample Type: Serum

Risk assessment: Algorithm validated by SURUSS 2003, N.J Wald

Method: Electrochemiluminescence

**PREGNANCY DETAILS**

No. of fetuses : 1      EDD : 17/04/2024      Age at Term : 18.2 Years  
 GA is Based on : CRL 78.1mm at 16/10/2023      LMP Date : 14/07/2023      LMP Certainty : Regular  
 Smoking : None      Parity :      Height : 150.0 cm      Weight : 43.50 Kg  
 Ethnicity: Asian      FHR :

**Previous pregnancy history**

Down syndrome       Edwards' syndrome  
 Patau syndrome       NTD syndrome

**Pre-eclampsia history**

PE in previous pregnancy  
 Pat. mother had PE

**Other findings**

Insulin dependent diabetes  
 Chronic hypertension

EDD: Estimated Due Date | GA: Gestation Age | LMP: Last Menstrual Period | FHR: Fetal Heart Rate | NTD: Neural Tube Defect | PE: Pre-eclampsia | DOB: Date of Birth

**SPECIMEN DETAILS**

Sample ID	: 2300191762	CRL	: 78.1 mm	Test Name	Conc.	Unit	Corr. Mom
Collection Date	: 16/10/2023	CRL2	:	Free-β-hCG	18.30	ng/mL	0.57
Scan Date	: 16/10/2023	BPD	:	NB	Present		
GA at Coll Date	: 13 Weeks 5 Days	BPD2	:	NT	13.5	mm	8.58
GA at Scan Date	: 13 Weeks 5 Days	HC	:	PAPP-A	15966.00	mIU/L	1.86
Received on	: 18/10/2023	HC2	:				

GA: Gestation Age | CRL: Crown Rump Length | BPD: Bi-parietal Diameter | HC: Head Circumference | free-β-hCG: free-Beta Human Chorionic Gonadotropin  
 NT: Nuchal Translucency | PAPP-A: Pregnancy-associated Plasma Protein-A

**RISKS**

<b>Disorder: Down Syndrome</b>		<b>Result:</b>	<b>Intermediate Risk</b> ●
Final risk: 1:674	Age risk: 1:1561		
Cutoff 1:250	Risk type Risk At Term		
<b>Disorder: Edwards' Syndrome</b>		<b>Result:</b>	<b>Low Risk</b> ●
Final risk: 1:32750	Age risk: 1:14038		
Cutoff 1:100	Risk type Risk At Term		
<b>Disorder: Patau Syndrome</b>		<b>Result:</b>	<b>Low Risk</b> ●
Final risk: 1:13284	Age risk: 1:42173		
Cutoff 1:100	Risk type Risk At Term		

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## PRENATAL SCREENING BACKGROUND

Every pregnant woman carries a certain degree of risk that her fetus/baby may have certain chromosomal defect/ abnormalities. Diagnosis of these fetal chromosomal abnormalities requires confirmatory testing through analysis of amniocytes or Chorionic Villous Samples (CVS). However, amniocentesis and CVS procedures carry some degree of risk for miscarriage or other pregnancy complications (Tabor and Alfirevic, 2010). Therefore in routine practice, prenatal screening tests are offered to a pregnant woman to provide her a personalised risk for the most common chromosomal abnormalities (T21-Down syndrome, T18- Edwards' syndrome, T13- Patau syndrome) using her peripheral blood sample. Based on this risk assessment, if the risk is high or intermediate, you can take informed decision of opting for invasive procedure such as amniocentesis or CVS followed by confirmatory diagnostic test(s), as per discussion with your clinician.

### PRENATAL SCREENING TESTS ARE NOT CONFIRMATORY TESTS. THEY ARE LIKELIHOOD ASSESSMENT TESTS.

You may get your prenatal screening result as either of the following:-

#### High Risk

**High Risk or Screen Positive Result:** A High Risk Result does not mean that the pregnancy is affected with the condition. It means that the likelihood of the pregnancy having a condition is higher than the cut-off (Most commonly used cut-off is 1:250 and this represents the risk of pregnancy loss from confirmatory testing through CVS or amniocentesis).

#### Low Risk

**Low Risk or Screen Negative Result:** A Low Risk result does not mean that the pregnancy is not affected with a condition. It means that the likelihood of the pregnancy having a condition is lower than the cut-off.

#### Intermediate Risk

**Intermediate Risk result:** An intermediate Risk result means that the pregnancy has an equivocal or a borderline risk of being affected with a condition. In this case, you may want to choose a second stage screening modality like an Integrated Screening Test that is done between 16 to 20 weeks of pregnancy or a Non-invasive Prenatal Screening Test between 12 to 20 weeks of pregnancy before taking a decision on an invasive confirmatory testing. This will help you improve the sensitivity of the screening test keeping an invasive test a last option were you to come as a high risk in the second stage screening test.

## SIGNIFICANCE OF MULTIPLE OF MEDIANS (MoMs)

Prenatal Screening determines the likelihood of the pregnancy being affected with certain conditions by analysing levels of certain hormones. These hormones are Feto placental products (released by Fetus or placenta). Their levels not only indicate propensity of the fetus being affected with certain chromosomal conditions, they also provide indication of placental insufficiency that can potentially lead to pregnancy complications like Pre-Eclampsia or Intra-Uterine Growth Restriction. It is therefore important to take cognisance of the Reported MoMs alongside the Risk results.

*For more information, visit our website at: [www.lilacinsights.com/faq-pns](http://www.lilacinsights.com/faq-pns)*

## DISCLAIMERS

### Limitations of the Test:

As prenatal screening tests are not confirmatory diagnostic tests, the possibility of false positive or false negative results can not be denied. The results issued for this test does not eliminate the possibility that this pregnancy may be associated with other chromosomal or sub- chromosomal abnormalities, birth defects and other complications.

Nuchal Translucency is the most prominent marker in screening for Trisomy 13, 18, 21 in the first trimester and should be measured in accordance with the Fetal Medicine Foundation (UK) guidelines. Nuchal Translucency or Crown Rump Length measurement, if not performed as per FMF (UK) imaging guidelines may lead to erroneous risk assessments and Lilac Insights bears no responsibility for errors arising due to sonography measurements not performed as per these criteria defined by international bodies such as FMF (UK), ISUOG.

It is assumed that the details provided along with the sample are correct. The manner in which this information is used to guide patient care is the responsibility of the healthcare provider, including advising for the need for genetic counselling or additional diagnostic testing like amniocentesis or Chorionic Villus Sampling. Any diagnostic test should be interpreted in the context of all available clinical findings. As with any medical test, there is always a chance of failure or error in sample analysis though extensive measures are taken to avoid these errors.

### Note:

- Quality of the Down syndrome screening program (Biochemical values, MoMs and Risk assessments) is monitored by UKNEQAS on an ongoing basis.
- This interpretation assumes that patient and specimen details are accurate and correct.
- Lilac Insights does not bear responsibility for ultrasound measurements like CRL,NT,NB etc. We strongly recommend that ultrasound measurements are performed as per FMF (UK)/ISUOG practice guidelines.
- It must be clearly understood that the results represent risk and not diagnostic outcomes. Increased risk does not mean that the baby is affected and further tests must be performed before a firm diagnosis can be made. A Low Risk result does not exclude the possibility of Down's syndrome or other abnormalities, as the risk assessment does not detect all affected pregnancies.
- Each sample received at Lilac Insights' processing centre is handled with the utmost sensitivity and care. All samples received on Sundays and National holidays are stored as per specific guidelines for the respective specimens and processed on the next day.

END OF REPORT