



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

To: Dr.Padmaja Divakar Hospitals-Habsiguda	Sample ID	2270004525
Street No:7, Habsiguda	Patient ID	1002218877
Telangana	Received on	12/05/2022 10:44
Hyderabad - 500007	Registered on	13/05/2022 13:27
Contact: 9014450676	Reported on	13/05/2022 23:30
Report Of: Mrs. B CHAITHANYA SRINIVAS	Referred by	DR.PADMAJA
Pt. Contact: 9491961932	Sonography by	DR.T.L.N.PRAVEEN

# EVICOSCREEN - EVIDENCE BASED COMPREHENSIVE PRENATAL SCREENING REPORT

Patient Name: Mrs. B CHAITHANYA SRINIVAS		Patient DOB: 02/10/1986	
Ethnicity: Asian	City: HYDERABAD	Hospital ID:	

Sample Type: Serum

Method: Time-resolved Fluroimmunoassay

Lilac Insights

**EVIC** Screen<sup>\*</sup> 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 5 lac+ pregnancies for different gestation ages

• Risk calculations from evidence based algorithms validated through large international studies

• External audit of the prenatal screening program by United Kingdom National External Quality Assessment Service (UKNEQAS) scheme and Randox International Quality Assessment Scheme (RIQAS)

RI	SK ASSESSMENT				MULTIPLE OF
T21 (Down syndrome)	1:810	Intermediate Risk	LOW	INTERMEDIATE HIGH	MEDIAN (MoM
T18 (Edwards' syndrome)	1: 100000	Low Risk	LOW	HIGH	Freeß-hCG 3.08
T13 (Patau syndrome)	1: 100000	Low Risk	LOW	HIGH	PAPP-A 0.84

# 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:

a) Integrated screening with detailed Genetic Sonogram (Detection rate: 92-95%), ref: Kypros Nicolaides et al,

Fetal Diagn Ther 2014;35:174-184.

b) Non-Invasive Prenatal Testing/ Screening (NIPT) (Detection rate: ;99%), ref: ISPD guidelines 2015.

c) Definitive testing through Fetal Karyotyping.

UK NEQAS

Lab Reg. No. 90968

In view of the raised serum free  $\beta$ hCG, fetal growth scan is suggested at 28 - 30 weeks in addition to their routine antenatal care.



Verified by **Mr. Pradip Kadam** Incharae Biochemistry

Beele

Verified by

Dr. Suresh Bhanushali MD (Path), Consultant Pathologist Page 1 of 3

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Sample ID: 2270004525

#### Patient name : Mrs. B CHAITHANYA SRINIVAS

PREGNANCY DETAILS							
No. of fetuses : 1	EDD	:21/11/2022	Age at Tern	n :35.9	Years		
GA is Based on : Ass. rep.	LMP Date	: 15/02/2022	LMP Certainty : Unknown		nown		
Smoking:None Parity :	Height	:	Weight	:76.4	0 Kg		
FHR :							
Previous pregnancy history	Pre-ec	lampsia history		Other fin	dings		
Down syndrome Edwards' syndrom	e PE in pre	PE in previous pregnancy		Insulin dependent diabetes			
Patau syndrome NTD syndrome		her had PE					
Assisted Reproduction : IVF Transfer Date : 03		tion Date: 10/12/2021		71			
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 : 2270004525 CRL	: 64 mm	Test Name	Conc.	Unit	Corr. Mom		
Collection Date : 11/05/2022 CRL2	2 :	Free-ß-hCG	117.00	ng/mL	3.08		
Scan Date : 11/05/2022 BPD	:	NT	1.3	mm	0.81		
GA at Coll Date : 12 Weeks 2 Days BPD	2 :	PAPP-A	1810.00	mU/L	0.84		
GA at Scan Date : 12 Weeks 2 Days HC	:						
Received on : 12/05/2022 HC2	:						
GA: Gestation Age   CRL: Crown Rump Length   BPD: Bi-parietal Diameter   HC: Head Circumference   free-ß-hCG: free-Beta Human Chorionic Gonadotropin NT: Nuchal Translucency   PAPP-A: Pregnancy-associated Plasma Protein-A							
RISKS							
Disorder: Down Syndrome		Resu	ılt: Intern	nediate Risl	< <u> </u>		
Final risk: 1:810 Age risk	k: 1:351						
Cutoff 1:250 Risk typ	pe Risk At Term						
Disorder: Edwards' Syndrome		Resu	ılt:	Low Risl	< 🔵		
Final risk: 1:100000 Age risk	k: 1:3160						
Cutoff 1:100 Risk typ	pe Risk At Term						
Disorder: Patau Syndrome		Resu	ılt:	Low Risl	(		



Final risk:

Cutoff

1:100000

1:100



Age risk:

**Risk type** 



1:9483

**Risk At Term** 



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Sample ID: 2270004525

## Patient name : Mrs. B CHAITHANYA SRINIVAS

# 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

Intermediat

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 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

## 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 the NT & CRL measurements. We strongly recommend that NT/ CRL 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.



UK NEQAS International Quality Expertise Lab Reg. No. 90968 END OF REPORT

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