





To: SMB Diagnostics-Hubli
Patted's Building, Ground Floor, Opp. State Bank Of India,
Shirur Park Branch, Vidyanagar
Karnataka
Hubli - 580031
Contact:
Report Of: Mrs. SHANTA MADAR
Pt. Contact:

| Sample ID     | 2210030779       |
|---------------|------------------|
| Patient ID    | 1102214824       |
| Received on   | 30/07/2022 14:26 |
| Registered on | 30/07/2022 16:01 |
| Reported on   | 02/08/2022 15:27 |
| Referred by   | DR.SHILPA GOKAVI |
| Sonography by | DR.SHILPA GOKAVI |

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

| Patient Name: Mrs. SHANTA MADAR |             | Patient DOB: <u>15/06/1982</u> |  |  |  |
|---------------------------------|-------------|--------------------------------|--|--|--|
| Ethnicity: Asian                | City: HUBLI | Hospital ID:                   |  |  |  |
|                                 |             |                                |  |  |  |

Sample Type:Serum

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

Method: Chemiluminescence

**EVIC** Screen is an evidence based prenatal screening program curated by Lilac Insights in accordance with the international guidelines for prenatal 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 ASSESSN | MENT      |     |      |
|---------------------------------------|------------|-----------|-----|------|
| T21 (Down syndrome)                   | 1:11       | High Risk | LOW | HIGH |
| T18 (Edwards' syndrome)               | 1:481      | Low Risk  | LOW | HIGH |
| Neural tube/<br>Abdominal wall defect | -          | Low Risk  | LOW | HIGH |

| MULTIPLE OF<br>MEDIAN (MoM) |            |      |  |  |  |
|-----------------------------|------------|------|--|--|--|
|                             | Free ß-hCG | 4.38 |  |  |  |
|                             | AFP        | 1.86 |  |  |  |
|                             | uE3        | 0.22 |  |  |  |
|                             | Inhibin-A  | 1.74 |  |  |  |

## **INTERPRETATION**

The Quadruple Screening for the given sample is found **SCREEN POSITIVE for Down syndrome**.

# **SUGGESTIONS AND OTHER FINDINGS**

- Detailed anomaly scan and Genetic Sonogram to assess for markers and defects for chromosomal abnormalities.
- Definitive testing through fetal karyotyping to confirm.

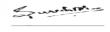
In view of the raised serum free  $\beta$ hCG, fetal growth scan is suggested at 28 - 30 weeks in addition to their routine antenatal care.







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



Verified by **Dr. Suresh Bhanushali**MD (Path), Consultant Pathologist

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Patient name: Mrs. SHANTA MADAR Sample ID: 2210030779

| PREGNANCY DETAILS   |                              |               |                          |                              |                            |                         |                    |
|---|------------------------------|---------------|--------------------------|------------------------------|----------------------------|-------------------------|--------------------|
| No. of fetuses  | :1                           |               | EDD                      | : 10/01/2023                 | Age at Terr                | n :40.6 Y               | ears ears          |
| GA is Based on  | :EDD                         |               | LMP Date                 | :05/04/2022                  | LMP Certa                  | LMP Certainty : Regular |                    |
| Smoking: None   | Parity:                      |               | Height                   | : 162.0 cm                   | Weight                     | : 45.80                 | Kg                 |
| FHR :   |                              |               |                          |                              |                            |                         |                    |
| Prev  | vious pregnancy histo        | ory           | Pre-ecla                 | npsia history Other findings |                            |                         | ings               |
| Down synd   | drome Edwards's              | yndrome       | PE in previous pregnancy |                              | Insulin dependent diabetes |                         |                    |
| Patau syndrome NTD syndrome   |                              |               | Pat. mother had PE       |                              | Chronic hypertension       |                         |                    |
| EDD: Estimated D  | Due Date   GA: Gestation Age | LMP: Last Mei | nstrual Period   FHR:    | Fetal Heart Rate   NTD: N    | eural Tube Def             | ect   PE: Pre-ecl       | ampsia   DOB: Date |
|   |                              |               | of Birth                 |                              |                            |                         |                    |
|   |                              |               | SPECIMEN E               | DETAILS                      |                            |                         |                    |
| Sample ID   | :2210030779                  | CRL :         |                          | Test Name                    | Conc.                      | Unit                    | Corr. Mom          |
| Collection Date   | : 28/07/2022                 | CRL2 :        |                          | Free-ß-hCG                   | 79.59                      | ng/mL                   | 4.38               |
| Scan Date   | : 12/07/2022                 | BPD :         |                          | AFP                          | 71.23                      | ng/mL                   | 1.86               |
| GA at Coll Date   | : 16 Weeks 2 Days            | BPD2 :        |                          | uE3                          | 0.95                       | nmol/L                  | 0.22               |
| GA at Scan Date   | e: 14 Weeks 0 Days           | HC :          |                          | Inhibin A                    | 398.01                     | pg/mL                   | 1.74               |
| Received on   | :30/07/2022                  | 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  | •                            |               |                          | Resu                         | lt:                        | High Risk               |                    |
|   | :11                          | Age risk:     | 1:111                    |                              |                            |                         |                    |
| Cutoff 1:   | :250                         | Risk type     | Risk At Term             |                              |                            |                         |                    |
| Disorder: Edwards' Syndrome   |                              |               |                          | Resu                         | lt:                        | Low Risk                |                    |
|   | :481                         | Age risk:     | 1:996                    |                              |                            |                         |                    |
| Cutoff 1:   | :100                         | Risk type     | Risk At Term             |                              |                            |                         |                    |
| Neural tube / Abdominal wall defect Result: Low Risk  |                              |               |                          |                              |                            |                         |                    |
| Final risk: -   |                              | Age risk:     |                          |                              |                            |                         |                    |



Cutoff

2.5





Risk at Term

Risk type











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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.

#### 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's Syndrome & ONTD screening program (Biochemical values, MoMs and Risk assessments) 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 Ultra sound measurements.
- This is a risk estimation test and not a diagnostic test. An increased risk result does not mean that the fetus is affected and a low risk result does not mean that the fetus is unaffected. Reported risks should be correlated and adjusted according to the absence/presence of sonographic markers observed in the anomaly/malformation scan.
- The above risk has been calculated based on Biochemistry values alone.
- 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.

**END OF REPORT** 

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