Prenatal (First Trimester) Screening Report

Patient's ID	: MU-A01-ACY0767	**Patient's Ref. ID**	: C1381188
Barcode ID	: FT22096235	**Sample Type**	: Serum
Patient's First Name	: Mrs KARTHIKA M G	**Patient's Last Name**	: VAISAKH A
Age	: 30 Years	**Sample Collection Date & Time**	: 05/09/2022
Referring Doctor	: Dr. Devika Rani	**Sample Received Date & Time**	: 07/09/2022 14:03
Customer Name	: Cosmopolitan Hospitals Pvt. Ltd.	**Report Date & Time**	: 09/09/2022 19:38
Referral Centre	: Cosmopolitan Hospitals Pvt. Ltd.	**Version No.**	: 01

Patient Details:

Date of Birth	: 17/04/1992	Ethnicity	: Indian	Smoking Status	: No
Weight [kg]	: 69	Height [cms]	: 162	Body Mass Index	: 26.29
Bleeding / Spotting	: -	Patient on HCG Injection	: No	Date of HCG Injection Taken	: -

"-" Indicates "Not Known / Not Stated / Not Applicable"

Pregnancy Details:

Conception Method	: Spontaneous / Natural	MAEDD	: 30.90	Calculated EDD	: 13/03/2023
LMP Date	: 12/06/2022	Selected Gest. Method	: CRL		
No. of Fetuses	: 1	Chorionicity	: -		
Previous Down Syndrome	: No	Previous Edward Syndrome	: No	Previous Patau Syndrome :	: No
Previous ONTD	: No	Gestational Diabetes	: No	Insulin Dependent Diabetes Mellitus	: No

"-" Indicates "Not Known / Not Stated / Not Applicable"

Ultrasound Details:

Scan Date	: 05/09/2022			Gest. at Scan Date [W+D]	: 13 W + 0 D		
Sample Collection Date	: 05/09/2022			Gest. at Sample Date [W+D]	: 13 W + 0 D		
CRL [mm]	: 67	BPD [mm]	: -	NT [mm]	: 1.30	NB	: -
DVPI [mm]	: -						

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Patient's First Name : Mrs KARTHIKA M G
Referring Doctor : Dr. Devika Rani
Barcode ID : FT22096235
Patient's Last Name : VAISAKH A
Customer Name : Cosmopolitan Hospitals Pvt. Ltd.

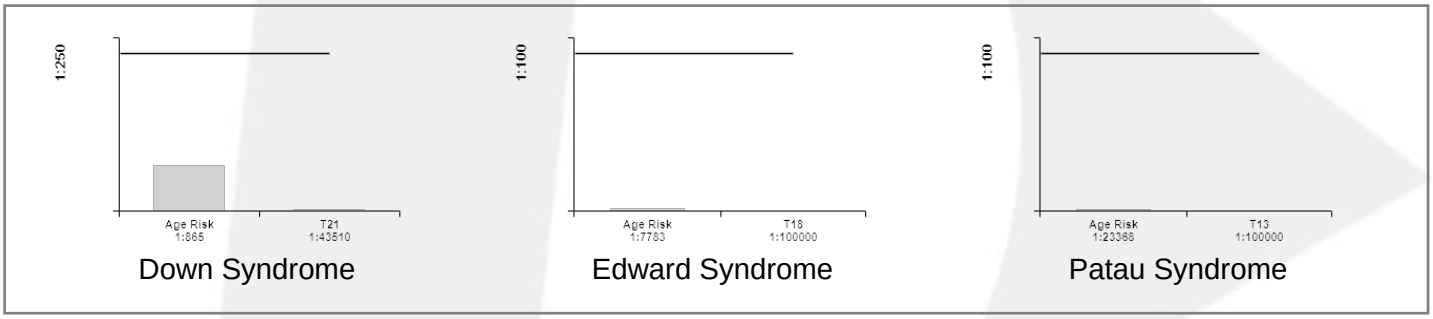
Test Details

Test Name	Observed Value	Unit	Corrected MoM
hCGb	27.940	ng/mL	0.882
PAPP A	4050.000	mU/L	1.332
NT	1.30	mm	0.854

Test Method: Time-resolved fluoroimmunoassay

Probability Assessment:

Condition	By Age	Final	Cut-Off	Interpretation
Trisomy 21	1:865	1:43510	1:250	Low
Trisomy 18	1:7783	1:100000	1:100	Low
Trisomy 13	1:23368	1:100000	1:100	Low



Down Syndrome | Edward Syndrome | Patau Syndrome

Condition	Interpretation
Trisomy 21	This result of the screening test has a probability is **1:43510** for Down Syndrome in this pregnancy. **Screening test is Negative.**

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Referring Doctor	: Dr. Devika Rani	**Customer Name**	: Cosmopolitan Hospitals Pvt. Ltd.

Interpretation Guide

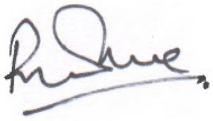
Screen Positive or Screen Negative is based on the Probability Cut-Off. The strategy of Probability Interpretation is as follows:

For Trisomy 21
>=1: 250 – **Increased Probability** <1:251 – **Low Probability**

Low Probability:
The result is considered as "Screen Negative" when the probability ratio of Trisomy 21 falls between 1:251 and 1:100000 births. No further investigation may be required apart from the normal ultrasound monitoring.

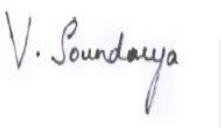
Increased Probability:
The result is considered as “Screen Positive” when the probability ratio of Trisomy 21 falls between 1:2 and 1:250 births. Further investigations like an invasive prenatal diagnostic testing Karyotyping / FISH / QF-PCR / Prenatal BoBs(in CVS / Amniocentesis) may be recommended to confirm or exclude Trisomy 21

Reviewed by



Roseline Sagaya Mary
Senior Lab Technologist
09/09/2022 16:28:21

Approved by



Dr. V Soundarya
Consultant Biochemist
09/09/2022 19:38:03

IMPORTANT NOTE:
This interpretation assumes that patient and specimen details in the test requisition form (TRF) and ultrasound details are accurate and correct. If the risk assessment was performed with LMP based gestational age, the gestational age shall be confirmed by CRL value before taking medical decision. The risk values are significantly influenced by the ultrasound markers such as CRL, BPD, NT values and NB status provided. PerkinElmer Health Science does not bear responsibility for the ultrasound marker values provided by customers. PerkinElmer accept NT values and other ultrasound markers for risk assessment only from qualified individuals currently holding Fetal Medicine Foundation FMF (UK) accreditation and assumes they have used the FMF (UK) guidelines in their measurements. It must be clearly understood that the results represent risks 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. Laboratory reports are not to be interpreted in isolation, the doctors correlate with their clinical findings and other medical records.
Our prenatal screening procedures utilize state-of-the-art DELFIA® technology and kits approved by the Fetal Medicine Foundation (FMF), UK, supported by extensive quality control measures for sample processing and analysis. Patient specific risks are generated using PerkinElmer’s LifeCycle™ (Version 7.0, Revision 3) software utilizing a comprehensive aneuploidy algorithm, validated by the FMF and the ASPRE FMF pre-eclampsia algorithm, which was developed with more than 60,000 Placental Growth Factor (PlGF) results from PerkinElmer’s PlGF 1-2-3™ kit.

----- End of Report -----

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First / Second Trimester Screening Result Easy Interpretation Sheet

Screening results are not diagnostic and only provide Probability estimate of the fetus having one of the condition(s) screened.

Conditions screened during First / Second Trimester are trisomy 21 (Down syndrome), trisomy 18 (Edward Syndrome), trisomy 13 (Patau Syndrome), Pre-Eclampsia and Spina Bifida / Open Neural Tube Defects.

Aneuploidy Screening:

Aneuploidy Screening is an initial assessment of whether or not a fetus is at an increased probability for genetic disorders. However, in the event that screening results indicates that a moderate or high risk for genetic problems is present, further diagnostic testing will be indicated.

Result Interpretation

A "Screen Positive" result

- means that there is an increased probability for fetus to have one of the condition(s) screened.
- does not mean that the fetus will definitely have one of the condition(s) screened.
- Thus a high probability result must be confirmed with a prenatal diagnostic test.

A "Screen Negative" result

- Means that there is a low probability of the fetus to have one of the condition(s) screened.
- Does not guarantee that the fetus will be unaffected by any one of the 3 conditions. This is contingent on the detection rate of the screening test.

Detection Rate is the probability of all individuals who will have the condition and are correctly called "Screen Positive" by the screening test. Higher the detection rate better is the screening test.

Prenatal diagnostic testing includes Karyotyping / FISH / QF-PCR / Prenatal BoBs on CVS / Amniocentesis. Alternatively, non-invasive screening test (NIPT) of higher sensitivity and detection rate is also available.

Detection rate of Down Syndrome using Biochemical Test(s) alone in first trimester is 60% with a false positive rate of 5%. A combination of Nuchal Translucency, Nasal Bone visualization along with Biochemical Test(s) (Combined Screening Test) increases the detection rate of Down Syndrome to 85% at the same false positive rate.

Second Trimester detection rate of Down Syndrome is 60% with a false positive rate of 5%.

Spina Bifida / Open Neural Tube Defects (ONTD):

Spina bifida is a condition that affects the spine and is usually apparent at birth. It is a type of neural tube defect (NTD). A detailed scan is indicated to exclude Neural tube defects. It is to be noted that if detailed scan does not reveal any NTD or any other defects, the patient can have a routine follow-up as per standard protocol of the referring clinician.

Detection rate of ONTD is 63% with 10% false-positive rate.

PreEclampsia Screening:

Pre-eclampsia is a condition that affects some pregnant women, usually during the second half of pregnancy (from 20 weeks) or later in pregnancy. The earlier pre-eclampsia is diagnosed and monitored, the better the outlook for mother and baby.

Detection rate of Pre-Eclampsia using Pregnancy History, Maternal Markers (MAP & UTPI) and/or Biochemical Marker PAPP A in first trimester is 68%, with a false positive rate of 10%. An inclusion of Biochemical Marker, PlGF along with Pregnancy History, Maternal Markers (MAP & UTPI) and Biochemical Marker PAPP A increases the detection rate of Pre-Eclampsia to 75% at the same false positive rate.

Patient should consult screening test results with their primary clinician to determine next steps.

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