biosytech
MEDICAL LABORATORY

BML423920

Laboratory Investigation Report

Name	:	Ms. MUNEERA S R A S ALRANDI	**Ref No.**	:	39537
DOB	:	17/08/1974	**Sample No.**	:	2406432901
Age / Gender	:	49 Y / Female	**Collected**	:	18/06/2024 21:00
Referred by	:	Peshawar Medical Center LLC	**Registered**	:	19/06/2024 13:34
Centre	:	Peshawar Medical Center LLC	**Reported**	:	19/06/2024 16:35

ENDOCRINOLOGY

Test	Result	Flag	Unit	Reference Range	Methodology
ESTRADIOL (E2)	106		pg/mL	Follicular Phase: 19.5 - 144.2 Mid Cycle Peak: 63.9 - 356.7 Luteal Phase: 55.8 - 214.2 Post Menopausal: 0.00 - 32.2	ECLIA

Interpretation Notes :

Table 1, Females		
Tanner Stage #	**Mean Age**	**Reference Range**
Stage I (>14 days and prepubertal)	7.1 years	Undetectable - 20 pg/mL
Stage II	10.5 years	Undetectable - 24 pg/mL
Stage III	11.6 years	Undetectable - 60 pg/mL
Stage IV	12.3 years	15 - 85 pg/mL
Stage V	14.5 years	15 - 350 pg/mL **

Table 2, Males		
Tanner Stage #	**Mean Age**	**Reference Range**
Stage I (>14 days and prepubertal)	7.1 years	Undetectable - 13pg/mL
Stage II	12.1 years	Undetectable - 16 pg/mL
Stage III	13.6 years	Undetectable - 26 pg/mL
Stage IV	15.1 years	Undetectable - 38 pg/mL
Stage V	18 years	10 - 40 pg/mL

Increased level is seen in early puberty, tumors in the ovaries or testes, gynecomastia, hyperthyroidism, cirrhosis of liver.
Decreased level is seen in menopause, Turner syndrome, ovarian failure, polycystic ovarian syndrome (PCOS), depleted estrogen production, which can be caused by low body fat, hypopituitarism, hypogonadism.

PROGESTERONE	5.27		ng/mL	Postmenopause :0.108-0.151 1st trimester : 39.6-48.9 2nd trimester : 78.9-99.1 3rd trimester : 191-260 Follicular phase 0.183-0.282 Ovulation:1.94-6.09 Luteal phase: 13.5-20.3	ECLIA

Interpretation Notes :

Progesterone is increased in congenital adrenal hyperplasia , ovarian cancer, adrenal cancer.
Progesterone is decreased in primary or secondary hypogonadism and short luteal phase syndrome, lack of periods, ectopic pregnancy, miscarriage and fetal death.

Dr. Adley Mark Fernandes
M.D (Pathology)
Pathologist

Dr. Vyoma V Shah
M.D (Pathology)
Clinical Pathologist

Pradeep Dhamotharan

This is an electronically authenticated report

Printed on: 19/06/2024 16:37

P.O Box: 49527 Dubai, UAE Tel: +971 4 398 8567 reports@biosytech.ae www.biosytech.com

biosytech
MEDICAL LABORATORY

BML423920

Laboratory Investigation Report

Name	:	Ms. MUNEERA S R A S ALRANDI	**Ref No.**	:	39537
DOB	:	17/08/1974	**Sample No.**	:	2406432901
Age / Gender	:	49 Y / Female	**Collected**	:	18/06/2024 21:00
Referred by	:	Peshawar Medical Center LLC	**Registered**	:	19/06/2024 13:34
Centre	:	Peshawar Medical Center LLC	**Reported**	:	19/06/2024 16:35

ENDOCRINOLOGY

Test	Result	Flag	Unit	Reference Range	Methodology
TESTOSTERONE (TOTAL)	0.67		nmol/L	0.29 - 1.67 Please note change in method and reference range. Source: Roche IFU.	ECLIA

Interpretation Notes :

Tanner Stage Interpretation Table (Source:Roche IFU):

Tanner Stage	Reference Ranges (Male)	Reference Ranges (Female)
Tanner Stage I (> 14 days):	Undetectable - 0.087	Undetectable - 0.21
Tanner Stage II (11.5 years):	Undetectable - 14.99	Undetectable - 0.36
Tanner Stage III (13.6 years):	2.25 - 27.00	Undetectable - 0.82
Tanner Stage IV (15.1 years):	6.24 - 26.45	Undetectable - 0.92
Tanner Stage V (18.0 years):	6.51 - 30.50	0.16 - 1.32

High amounts of testosterone in the body can lead to a lower sperm count.

Low testosterone concentrations can be caused by testicular failure (primary hypogonadism) or inadequate stimulation by pituitary gonadotropins (secondary hypogonadism).

Sample Type : Serum

End of Report

Dr. Adley Mark Fernandes
M.D (Pathology)
Pathologist

Dr. Vyoma V Shah
M.D (Pathology)
Clinical Pathologist

Pradeep Dhamotharan

This is an electronically authenticated report

Printed on: 19/06/2024 16:37

P.O Box: 49527 Dubai, UAE Tel: +971 4 398 8567 reports@biosytech.ae www.biosytech.com