

PF-PTD-223

Oestradiol

Synonyms



Estradiol, E2

Clinical Indication

Investigation of amenorrhoea. Investigation of gynaecomastia in men. Monitoring of patients with HRT (oestradiol) implants. There is little value in measuring oestradiol for monitoring of oral HRT or patches other than testing for non-compliance or non-absorption. Be aware of possible interference in the oestradiol assay for patients who are being supplemented with oestradiol.

Oestradiol levels are of no value in investigation of menopause since levels may remain normal for several months following menopause (please refer to protocol on investigation of menopause).

Part of Profile / See Also

Request FormCombined Pathology manual Blood form or ICE request.

Same day (Monday – Friday)

On request

Availability / Frequency of

Analysis

.., 5.15

Patient Preparation None required.

Sample Requirements

Turnaround Time

Specimen Type Serum

Volume 1 mL

Container



Yellow top (SST) tube



Paediatric orange top (lithium-heparin)



Paediatric green top (lithium-heparin)

Reference Range & Units

Patient group	Oestradiol (pmol/L)	Source
0 - 12 months	<193	Caliper
1 - 11 years	<73	Caliper
Men 12 years +	<173	Beckman
Female 12 years +	comment with ranges	Beckman

The following comment is added to all Oestradiol requests on females 12 years and above:

Oestradiol levels:-

Mid-follicular phase: 99 - 448 pmol/L



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Mid-luteal phase: 180 - 1068 pmol/LPeri-ovulatory phase: 349 - 1590 pmol/LPost-menopausal females: $<150 \text{ pmol/L}^1$

¹Beckman ranges, rounded up to 150 pmol/L, actual value 147 pmol/L.

Interferences

Positive or negative interference can be seen in patients who are receiving oestradiol supplementation. This is due to elevated levels of oestrone and oestrone-3-sulphate in these patients. This test should not be used to monitor patients receiving oestradiol supplementation.

Interpretation & Clinical

Decision Value (if applicable)

References

*Karbasya K, Lina D C.C, Stoianov A., Chan M.K., Bevilacqua V, Chen Y. and Khosrow Adeli K. Pediatric reference value distributions and covariate-stratified reference intervals for 29 endocrine and special chemistry biomarkers on the Beckman Coulter Immunoassay Systems: a CALIPER study of healthy community children. Clin Chem Lab Med 2016; 54(4): 643–657 Beckman Coulter FSN April 2021 – IPN-00572

Test code

Lab Handling

Analysed from primary tube and stored at 4°C.

OEST

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