

Beta- HCG

Serum BETA hCG as Pregnancy Test

The hCG beta-subunit becomes detectable 6-12 days post implantation.

Fertility and Sterility 1987;47:584-589

A β -hCG level of >25 IU/L is required for a definitive confirmation.

IU/L	Interpretation
<5	Negative
5-25	Equivocal
>25	Positive

At levels of 1,500 - 2,000 IU/L an intrauterine gestational sac becomes visible on ultrasound examination.

Rate of β -hCG increase in pregnancy ⁽²⁾

β -hCG doubles every 1.5 days for 5 weeks post implantation

β -hCG then doubles every 3.5 days from the 7th week post implantation

Obstetrics & Gynecology 1990;75:417-420

BETA hCG –Other indications

Diagnosis

- Gestational Trophoblastic Disease (GTD)
- Testicular tumors, Ovarian germ cell tumors, Teratomas

Monitor

- Patients for retained products of conception
- Serial measurement following treatment to
 - Monitor therapeutic response in GTD or in hCG-secreting tumors
 - Detect persistent or recurrent GTD or hCG-secreting tumors
- With successful treatment of hCG-producing tumors, hCG levels should fall with a half-life of 24 to 36 hours, and eventually return to the reference range

TEST DETAILS

Test Name	Beta HCG
Technology	CLIA
Detection	Diagnosing or monitoring pregnancy or investigation of suspected ectopic pregnancy.
Starting Material	CSF : 2 ml of CSF Serum: 2ml of Serum Urine (24 hrs.): 15 ml of 24 hrs urine Urine (spot.): 10 ml of spot urine
Turnaround Time	1 day
Result & Interpretation	