

Hormone	Indication	Levels	Notes
Prolactin	Milk production unresponsive to pumping, galactogogues w/otherwise normal appearing breast tissue	Term pg ~400ng/mL <10 days 200 10-90 days 60-110 90-180 days 50 6-12 mos 30-40	<ul style="list-style-type: none"> <li>• Baseline drawn when 2+ hrs no bfg/stimulation; spike drawn 20-40 min into nursing session.</li> <li>• Will not screen for prolactin resistance</li> </ul>
Progesterone	Suspected retained placenta	< 5ng/mL first few wks	<ul style="list-style-type: none"> <li>• Not useful for assessing preg growth pp</li> <li>• Possibly helpful for retained placenta</li> </ul>
HCG	Suspected retained placenta hx of hemorrhage, passing tissue, cramping, placental problems	<5 mIU/ml = non-preg Levels normalize 4-6 wks	Useful to assess for retained placenta, though undetectable level does not guarantee absence of fragments-
Androgens -Testosterone (free) -Testosterone (total) -Androstenedione -Dihydrotestosterone -DHEA -DHEAS -Free Androgen index -SHBG	Signs of hyperandrogenism, or especially virilization	.6 – 3.1pg/ml 6-86 ng/dl .8-2.3 ng/ml (pre) 6-33 ng/ml 130-980 ng/dl 12-535µg/dl <2 Varies by stage.. →	<ul style="list-style-type: none"> <li>• Elevated DHEAS, free androgens associated with more lactation problems.</li> <li>• FAI indicates total free androgens.</li> <li>• Low SHBG indicates more circulating free androgens (bad) as well as insulin resistance. One study showed avg of 59 @ 4wks PP, 49 @ 8wks, 39 @ weaning, ref group 51.</li> </ul>
Oxytocin	Lack of milk ejection	Avg 5.4 pg/ml before bfg to 13.0 pg/ml during bfg	Pulsatile nature- not easily measured ← up to 54 recorded
Thyroid - TSH - free T3 - free T4 T autoantibodies	Poor milk production + history of thyroid problems, infertility, wt gain/loss, fatigue, jitters, or unrelievable milk stasis	~.3-3.0; 1.0 ideal 0.2 - 0.5 ng/dL .7-2.0 ng/dl <9.0 IU/mL	<ul style="list-style-type: none"> <li>• Timing of onset of thyroid dysfunction influences potential impact on lactation.</li> <li>• Antibodies may alert before overt thyroid dysfunction.</li> </ul>
Cortisol	Stretch marks on breast in absence of rapid growth/changes	5-20 µg/ml (140-552 nmol/L)	High levels could indicate some cortisol resistance
Citrate			Indicates transition to lactogenesis II
Insulin	Hx of GDM or signs of IR		IR can affect PTPRF and increase androgens