SALIVARY PROGESTERONE
QUICK START GUIDE

BIOLOGICAL CONSIDERATIONS

Progesterone (4-pregnen-3,20-dione) is a steroid hormone of primary importance in ovulation, fertility, pregnancy, and menopause. Synthesis of progesterone takes place in the placenta, adrenal glands, and gonads. In addition to its role as a sex hormone, progesterone also serves as a precursor compound for many of the other steroid hormones. Unbound progesterone enters the saliva via intracellular mechanisms, and the majority of progesterone in saliva is not protein-bound.

<table>
<thead>
<tr>
<th>Biological Representation</th>
<th>Systemic</th>
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<tbody>
<tr>
<td>Serum-Saliva Correlation</td>
<td>0.80</td>
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</tbody>
</table>

SAMPLE TIMING AND DESIGN

In normal non-pregnant women during the mid-luteal phase of the menstrual cycle, progesterone exhibits a prominent circadian rhythm with additional ultradian components. Peak production occurs in the evening around 6:00 PM. In pregnant women, progesterone also exhibits a similar rhythm during the second and third trimesters, with a nadir in the morning and a peak in the late evening. Salivary progesterone does not differentiate between participants in different cycle phases. Therefore, salivary progesterone is best used to track intra-individual changes across the cycle and repeated measures from the same individual across their cycle. For males, it is not recommended to measure salivary progesterone due to the existence of low levels of progesterone.

FREQUENTLY STUDIED WITH

Cortisol, Estradiol, Estrone, Estriol, DHEA, Androstenedione

TECHNICAL SUMMARY

Sample Collection Methods & Volumes

<table>
<thead>
<tr>
<th>Passive Drool</th>
<th>✓</th>
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<tbody>
<tr>
<td>SalivaBio Swabs</td>
<td>-</td>
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<tr>
<td>Optimum Collection Volume</td>
<td>125 µL*</td>
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</tbody>
</table>

*Add 300 µL to the total collection volume for all analytes of interest.

EXAMPLE DATA

Klump et al. (2008) calculated the Z score by measuring salivary progesterone throughout the menstrual cycle, using a 5 day rolling averages within subjects.

KEY RESOURCES