Dehydroepiandrosterone Sulfate

Assay Method: ELISA

Accuracy
ZRT has established the first salivary proficiency testing program, which includes most of the major salivary testing laboratories in the US. Twice yearly, results from carefully selected pooled samples are compared to those from 4 other laboratories that test DHEA-S. As shown in the graph below, ZRT results compare very favorably to the consensus of all 5 salivary testing laboratories for the DHEA-S assay.

Precision/Reproducibility
Inter-assay precision was determined by choosing pooled saliva samples spanning the reference range for DHEA-S, and analyzing them multiple times over a 30-60 day period. Results are shown below:

<table>
<thead>
<tr>
<th>Mean DHEA-S Concentration (ng/mL)</th>
<th>Coefficient of Variation (C.V. %)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>20.0</td>
</tr>
<tr>
<td>6.0</td>
<td>7.6</td>
</tr>
<tr>
<td>8.1</td>
<td>14.3</td>
</tr>
</tbody>
</table>

Linearity
The ZRT saliva DHEA-S assay gives excellent linearity over the reportable range of 1.0-125 ng/mL. Samples giving results >125 ng/mL are diluted and re-assayed for accurate reporting. Values below 1.0 ng/mL are not sufficiently precise and are reported as <1.0 ng/mL.

Sensitivity
The analytical limit of detection for DHEA-S is 0.17 ng/mL.

Stability
Saliva samples are stable at room temperature for 30 days for DHEA-S determination, but customers are advised to mail samples as soon as possible after collection. Samples are rejected for analysis if they were not received within 30 days of collection and were not refrigerated or frozen.

Accreditation
ZRT Laboratory is a CLIA and New York State certified testing laboratory.