

**Table 2:** Main conditions that can lead to false positive or false negative ST results (non exhaustive list) (14,15)

False positive ST	False negative ST
Technical cause: - Evaporation of sweat sample - Contamination with salt by diluting or rinsing the skin with NaCl instead of aqua - Use of local anesthetic gels	Technical cause: - Dilution of sweat sample - Inadequate sweat collection
Nutritional state: - Severe malnutrition - Anorexia nervosa	Nutritional/circulatory state: - Oedema - Dehydration - Hypoproteinemia
Skin conditions: - Atopic dermatitis - Ectodermal dysplasia	Skin conditions: - Hypohydrotic ectodermal dysplasia
Treatment: - Topiramate	Treatment: - Systemic mineralocorticoids
Endocrinologic cause: - Familial hypoparathyroidism - Pseudohypoaldosteronism - Adrenal insufficiency - Mauriac Syndrome - Non treated hypothyroidism	Some <i>CFTR</i> mutations are associated with a sweat chloride <60mmol/L
Metabolic disorders: - Fucosidosis - Glucose-6-phosphatase deficiency	
Other: - Nephrogenic diabetes insipidus - Klinefelter syndrome - Familial hypercholestatic syndromes	

**Table 3: Reference values for the interpretation of a sweat test**

<b>Sweat Chloride measurement (mmol/L) after QPIT (33)</b>		
≤ 29 mmol/L	30-59 mmol/L	≥ 60 mmol/L
CF unlikely	Intermediate result. Further investigation is required	Supports CF diagnosis
<b>Sweat test by conductivity: NaCl equivalent (mmol/L) (22–25,27–32)</b>		
< 50 mmol/L	50-79 mmol/L	≥ 80 mmol/L
CF unlikely	Intermediate result. Further investigation using QPIT is required	Supports CF diagnosis. Confirmation must be made using QPIT and/or <i>CFTR</i> genetic analysis with the confirmation of 2 CF causing mutations ( <i>in trans</i> )

**Table 4: Written sweat test report (2)**

<b>The minimum content of a sweat test report should include:</b>
<ul style="list-style-type: none"> <li>- Full patient identification</li> <li>- Requester and delivery address</li> <li>- Date and time of test</li> <li>- Date and time of report</li> <li>- The indication for the sweat test (clinical signs/symptoms, NBS, sibling with CF...)</li> <li>- Sweat weight (mg) or volume (µL)</li> <li>- Analytical results (mmol/L)</li> <li>- Which analyte(s) has been measured (chloride versus conductivity)</li> <li>- Reason if no result is available/performed</li> <li>- Reference intervals</li> <li>- Suggestion for further testing if intermediate or abnormal results</li> </ul>