

- In the presence of maternal pyrexia, close observation is warranted.
- During pause in the recording or poor signal quality with gaps in the T/QRS ratios of more than 4 min there is a risk of missing significant ST information, and management should be related to the FHR pattern and the clinical situation. Refer to user manual for guidance.
- If intervention is decided during second stage of labor, expeditious operative delivery is recommended, unless spontaneous delivery is anticipated within the next 5-10 minutes.
- If the FHR is Reassuring, no action is recommended regardless of ST Events
- If the FHR trace is a Non-reassuring Grade 1, intervention is recommended if any ST Events occur
- If the FHR trace is a Non-reassuring Grade 2, expeditious delivery is recommended regardless of ST Events
- Non-reassuring Grade 1 FHR pattern lasting more than 60 min (or less if FHR pattern shows rapid signs of fetal deterioration) regardless of ST changes, requires qualified assessment and close observation of the fetal condition.

Information for use of STAN Clinical Guidelines

STAN™ Clinical Guidelines – Checklist

Before using ST Analysis:

- > 36+0 gestational weeks
- Ruptured membranes
- No contraindication for scalp electrode or ST Analysis
- First stage, no active or involuntary pushing

At onset of ST Analysis:

- Check for FHR reactivity and non deteriorating fetal state; classify the FHR
- Check for normal ECG waveform with sufficient signal quality
- Check for message indicating that baseline T/QRS is determined



FHR Patterns

The intended use of this FHR classification system is to suggest clinical conditions in which adjunctive use of ST waveform changes may aid the interpretation of specific non-reassuring FHR patterns.

FHR Classification	Baseline Heart Rate	Variability Reactivity	Decelerations
Reassuring	<ul style="list-style-type: none"> • 110-160 bpm 	<ul style="list-style-type: none"> • Moderate variability (6-25 bpm) • Accelerations present 	<ul style="list-style-type: none"> • Early decelerations • Variable decelerations with a duration of <60 sec and depth <60 beats
Non-Reassuring FHR Grade 1	<ul style="list-style-type: none"> • < 110 bpm -Bradycardia • > 160 bpm -Tachycardia • > 150 bpm with minimal variability 	<ul style="list-style-type: none"> • Minimal variability (≤5 bpm) for >40 min • Marked variability (>25 bpm) for >40 min 	<ul style="list-style-type: none"> • Variable deceleration with a duration of ≥60 sec or depth ≥60 beats • Recurrent late decelerations • Prolonged deceleration for ≥2 min regardless of variability or reactivity
Non-Reassuring FHR Grade 2	<ul style="list-style-type: none"> • Absent variability regardless of other FHR patterns • Sinusoidal pattern 		

ST Analysis

These guidelines may indicate situations in which obstetric intervention¹ is required.

	Reassuring FHR	Non-Reassuring FHR Grade 1	Non-Reassuring FHR Grade 2
No ST Change	<ul style="list-style-type: none"> • Expectant management • Continued observation 	<ul style="list-style-type: none"> • Expectant management, closer observation. • If >60 min (or earlier if FHR shows rapid deterioration of fetal condition), direct physician assessment of fetal state 	<ul style="list-style-type: none"> • Expeditious delivery regardless of any ST changes
Episodic T/QRS Rise log message	<ul style="list-style-type: none"> • Direct physician assessment • Intrauterine resuscitation¹ as appropriate 		
Baseline T/QRS Rise log message	<ul style="list-style-type: none"> • Expectant management • Continued observation 		
2 Biphasic ST log message ²	<ul style="list-style-type: none"> • If no improvement in fetal condition, expeditious delivery • In second stage with active pushing, expeditious delivery 		
	<ul style="list-style-type: none"> • Expeditious delivery regardless of any ST changes 		

¹An intervention may include delivery or maternal-fetal resuscitation by alleviation of contributing problems such as hyper stimulation or maternal hypotension and hypoxia.

²The time span between the Biphasic messages should be related to the FHR pattern and the clinical situation.