

# Why STAN might not be dead.

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## ABSTRACT

Recently, a meta-analysis, including 26,526 laboring vertex singletons at term, summarized all available level-1 data from six high-quality randomized clinical trials on the use of ST analysis (STAN) during labor as an adjunct to conventional intrapartum fetal heart rate monitoring. The meta-analysis showed that STAN did not improve perinatal outcomes or decrease cesarean deliveries. Nonetheless there are still reasons to believe STAN may have a role in the future research on intrapartum fetal monitoring. Out of six trials included in the meta-analysis, two included all cephalic singletons in labor, and four enrolled only high-risk pregnant women. This combination of both low- and high-risk populations may have distorted the potential impact of STAN. The test for heterogeneity between both subgroups was found to be statistically significant, indicating that the effect of STAN was different in high-risk women compared to a combination of both low- and high-risk women. Furthermore, the classifications of the fetal heart rate patterns used in the included randomized trials were different. Last but not least, despite >26,000 women with singleton gestations were included in the meta-analysis, the evidence still suffers from a lack of power, especially for subgroup analyses. In summary, while the level-1 data so far indicate overall no perinatal benefit of adding STAN to conventional intrapartum fetal heart rate monitoring for the outcomes most of interest, several issues point to the fact that more research is needed before the STAN technology can be deemed of no value for fetal monitoring in labor.