

# Comparison of individual cow SCC estimates using an on-line SCC analyser and conventional herd tests

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## Summary

The ICAR Recording Guidelines include provision for on-line milk analysis. However the guidelines are inconsistent with some of the practical realities of on-line milk analysis and, to date, no milk analyser has been able to meet the ICAR standards. In the case of somatic cell count (SCC), the format of the error limits makes compliance practically unattainable. More generally, the guidelines do not recognise the importance of cow-specific bias (CSB), which should be the main focus of technology evaluation for on-line milk analysers. The level of CSB exhibited by a commercially available on-line SCC analyser was investigated. CellSense® produced an SCC result at each cow milking. Herd tests were conducted at twenty consecutive milking sessions, providing laboratory SCC results. CellSense results were compared with herd test SCC results in two ways: for single tests; and after averaging the results for each cow. For context, cow-mean herd test results from one day were compared with cow-mean herd test results from ten days. CellSense provided a better estimate of ten-day cow-mean SCC than a single-day herd test. Yet this technology falls well short of the accuracy limits for SCC analysers specified in the ICAR Guidelines. This is a compelling demonstration that the ICAR accuracy limits for on-line SCC analysers need to be reviewed.

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