

affigene® VZV tracer in QCMD proficiency program

Background

Quality Control for Molecular Diagnostics (QCMD) specialises in the standardisation and quality control for molecular diagnostics and genomic technologies.

A proficiency panel for Varicella Zoster virus (VZV) was sent out in 2005 to 103 participants. 106 datasets were reported to QCMD, of which 16 were analysed with commercial real-time PCR assays. Three of the 16 data sets were analyzed using affigene® VZV tracer.

Material and methods

The QCMD VZV panel 2005 consisted of twelve samples, with varying VZV concentration. The concentration was unknown to the operator at the time of analysis. The QCMD panel was prepared at three occasions using affigene® DNA extraction. Subsequently, the samples were analysed by real-time PCR using affigene® VZV tracer on the Mx3000P instrument (Stratagene, La Jolla, CA). The samples were analysed based on the qualitative results.

Results and discussion

Of the twelve blinded samples, two were expected to be a negative VZV sample. The other samples had expected viral loads from 260 copies/ml to 10⁶ copies/ml.

For the qualitative performance of the panel QCMD used a scoring system where a correct result gives 2 points and all other results give 0 points. A maximum score of 24 points was attainable. The scoring for each of the three affigene® VZV tracer data sets was 24. The mean scoring for the 16 data sets analysed with commercial real-time PCR assays was 19.5 (see table 1).

Scoring mean commercial real-time PCR assays (n=16)	Scoring affigene® VZV tracer (n=3)	Max scoring
19.5	24	24

Table 1

The table describes the mean scoring for the reported results of all commercial real-time PCR assays used in the QCMD VZV panel 2005 as well as the scoring for the three data sets analysed with affigene® VZV tracer. The maximum scoring is also shown.

Conclusion

- The affigene® VZV tracer assay performed well in the QCMD VZV proficiency panel 2005.
- The qualitative performance of the assay show the highest possible score for all three data sets, 100% correlation to the qualitative result.