

BS EN 14476:2013+A2:2019

KEY

CPE	Cytopathic effect	
Counts	0-4 indicating degree of cytopathic effect	
	0 = No effect, 1 = 25% CPE, 2 = 50% CPE, 3 = 75% CPE, 4 = 100% CPE	
d	Dilution factor (log)	
Sum px	Sum of % CPE from the highest dilution showing 100% CPE to the lowest dilution assessed.	
n	Number of dilutions	
SD50	Dilution showing 50% of the end point according to Spearman-Kärber method	
SE	Standard error	
хр	Lowest dilution showing 100% CPE	
TCID50	Titre causing 50% of the end point according to Spearman-Kärber	
PASS	 Ig R greater than or equal to 4 	
FAIL	= lg R less than 4	
>	greater than ≥ 0	equal to or greater than
<	less than ≤ 0	equal to or less than

Calculation notes

In cases where the highest dilution assessed has not shown 100% CPE, the value has been calculated assuming the dilution above this would give 100% CPE and the corresponding value has been assigned as < x.

The standard requires the product suppression control to show a <0.5 log reduction in valid titre in cases where the product has failed to achieve the required 4 log reduction, but the product suppression control shows a >0.5 log reduction the result has been deemed as valid for fail as the consequence of inadequate suppression would be a partially extend of ontact time which would generate false positives, but not false negatives.

A similar approach has been taken in regards to the cytotoxicity controls. The standard requires a 4-log difference between the cytotoxicity level and the viral titre. In cases where this is not obtained, but the signed are posserved by the product is within the difference between the cytotoxicity levels and the viral titre the result is deemed accentable has a fail as there will be no impact on the determination of efficacy.

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