

S24 Appendix. C-Vue liquid chromatograph results

Table S24 A. C-Vue liquid chromatograph detailed performance breakdown..... 1

Table S24 B. C-Vue liquid chromatograph evaluation summary..... 2

Table S24 A. C-Vue liquid chromatograph detailed performance breakdown.

Samples	Good quality samples available for specificity calculation: n=22			
	0% and wrong API samples (n=19)		50% and 80% API samples (n=18)	All poor quality samples (n=37)
	Sensitivity (95% CI)	Specificity (95% CI)	Sensitivity (95% CI)	Sensitivity (95% CI)
Total, not through packaging (n=52)	100 (82.4-100)	60 (32.3-83.7)	100 (81.5-100)	100 (90.5-100)
Antimalarials (n=0)	N/A	N/A	N/A	N/A
AL (n=0)	N/A	N/A	N/A	N/A
ART (n=0)	N/A	N/A	N/A	N/A
DHAP (n=0)	N/A	N/A	N/A	N/A
Antibiotics (n=52)	100 (82.4-100)	60 (32.3-83.7)	100 (81.5-100)	100 (90.5-100)
ACA (n=15)	100 (54.1-100)	0 (0-70.8)	100 (54.1-100)	100 (73.5-100)
AZITH (n=0)	N/A	N/A	N/A	N/A
OFLO (n=19)	100 (54.1-100)	100 (59-100)	100 (54.1-100)	100 (73.5-100)
SMTM (n=18)	100 (59-100)	40 (5.3-85.3)	100 (54.1-100)	100 (75.3-100)

Table S24 B. C-Vue liquid chromatograph evaluation summary.

	<i>Samples</i>	<i>Sensitivity (95% CI)*</i>	<i>Specificity (95% CI)*</i>	<i>Comments</i>
Sensitivity and Specificity Results	<i>0% and wrong API</i>	100 (82.4-100)	60.0 (32.3-83.7)	Performance may be affected by sample extraction.
	<i>50% and 80% API</i>	100 (81.5-100)		
	<i>All poor quality samples</i>	100 (90.5-100)		
Strengths and Limitations	<p><i>Strengths:</i> -High accuracy in identifying samples with no or wrong API. -Correct identification of all 50% and 80% API medicines, with quantitation of API.</p> <p><i>Limitations:</i> -Limited performance to identify genuine samples of co-formulated medicines.</p>			
User Satisfaction	<p><i>Plus:</i> Intuitive system for experienced analysts; no reference library creation required.</p> <p><i>Minus:</i> Intensive operation and set-up; two computers required to run dual detector set-up; destroys sample; chemicals required; requires experienced end-users.</p>			
Comparative Evaluation	No significant differences in sensitivity compared to other devices to identify 0% and wrong API samples; lower specificity than all other devices*			

* Pair-wise comparisons with PharmaChk and RDT could not be performed, no overlapping API.