

Electronic Supplementary Information

Development of the Smartphone-based Colorimetry for Multi-analyte Sensing Arrays

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This Electronic Supplementary Information contains the concentration table of the analytes and the matching percent of diagnosis results obtained by a commercial analyser and the smartphone app.

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Table ESI-1. The concentration table of the analytes

Analyte	Negative (-)	Positive			Unit
		Level 1 (+)	Level 2 (++)	Level 3 (+++)	
RBC	0	10	50	250	count / μ L
Bilirubin	0	0.5	1	3	mg / dL
Urobilinogen	0.1	1	4	8	mg / dL
Ketones	0 ~ 5	10	50	100	mg / dL
Protein	0~10	30	100	300	mg / dL
Nitrite	0	found			
Glucose	0 ~ 100	250	500	1000	mg / dL
Leucocyte	0	25	75	500	count / μ L
Ascorbic acid	0	10	25	50	mg / dL

Table ESI-2. The table of matching percentage of diagnosis results obtained by a commercial analyser and the smartphone app.

Analyte	Negative (-)	Positive			Unit
		Level 1 (+)	Level 2 (++)	Level 3 (+++)	
RBC	15 / 15	15 / 15	14 / 15	14 / 15	matching / trial
	100	100	93	93	%
Bilirubin	15 / 15	19 / 21	20 / 21	20 / 22	matching / trial
	100	90	95	91	%
Urobilinogen	15 / 15	n/a	n/a	n/a	matching / trial
	100				%
Ketones	15 / 15	15 / 15	12 / 15	n/a	matching / trial
	100	100	80		%
Protein	15 / 15	11 / 15	14 / 15	15 / 15	matching / trial
	100	73	93	100	%
Nitrite	15 / 15	15 / 15			matching / trial
	100	100			%
Glucose	15 / 15	15 / 15	12 / 15	13 / 18	matching / trial
	100	100	80	72	%
Leucocyte	15 / 15	17 / 20	14 / 19	14 / 15	matching / trial
	100	85	74	93	%
Ascorbic acid	15 / 15	19 / 21	20 / 21	20 / 22	matching / trial
	100	93	93	100	%