

Supplementary material

Table S1: Numerical test results of virucidal activity against SARS-CoV-2

	CPC as free active substance		CPC/BH as free active substance		BH/CPC lozenge		Placebo lozenge		Control	
High concentration (dissolved in 4ml)										
Time (min)	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI
0	8.94	0.89	8.99	0.67	8.94	0.89	8.99	0.67	8.99	0.67
1	8.94	0.75	7.43	0.54	4.63	0.33	9.24	0.76	/	/
5	7.07	0.61	4.50	0.00	4.50	0.00	6.99	0.63	/	/
15	4.00	0.00	4.50	0.00	4.50	0.00	6.12	0.50	9.12	0.71
cytotoxic level	3.50	/	4.50	/	4.50	/	4.50	/	/	/
Medium concentration (dissolved in 20ml)										
Time (min)	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI
0	8.50	0.68	9.68	0.67	8.50	0.68	9.68	0.67	9.68	0.67
1	8.44	0.72	7.72	0.67	6.81	0.68	8.87	0.63	/	/
5	7.75	0.71	6.38	0.69	4.94	0.53	8.62	0.71	/	/
15	6.06	0.40	4.32	0.37	3.50	0.00	9.03	0.81	9.78	0.77
cytotoxic level	3.50	/	3.50	/	3.50	/	3.50	/	/	/
Low concentration (dissolved in 30ml)										
Time (min)	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI	log ₁₀ (c) (TCID ₅₀ /ml)	95% CI
0	9.76	0.79	9.95	0.67	9.76	0.79	9.95	0.67	9.95	0.67
1	9.44	0.74	9.06	0.79	8.88	0.78	10.07	0.83	/	/
5	9.06	0.68	8.37	0.73	8.57	0.65	9.49	0.72	/	/
15	8.07	0.67	7.51	0.66	6.75	0.69	8.49	0.71	8.93	0.65
cytotoxic level	3.50	/	3.50	/	3.50	/	3.50	/	/	/

CPC – cetylpyridinium chloride; BH – benzydamine hydrochloride; CI – confidence interval

Table S2: Test product concentrations with pH values and log reduction of infective virus concentration for each of the contact times.

	CPC as free active substance	CPC/BH as free active substance	BH/CPC lozenge	Placebo lozenge
High concentration (disolved in 4ml)				
pH value	7.61	7.80	2.85	2.99
Time (min)	$\Delta\log_{10}(c) \text{ (TCID}_{50}/\text{ml)} \pm 95\% \text{ CI}$			
1	-0.00±1.06	-1.57±0.86	-4.32±0.82	+0.25±1.01
5	-1.88±0.96	-4.49±0.67	-4.44±0.75	-2.00±0.92
15	-4.94±0.75	-4.49±0.67	-4.44±0.75	-2.88±0.83
Medium concentration (disolved in 20ml)				
pH value	7.66	7.73	4.2	4.45
Time (min)	$\Delta\log_{10}(c) \text{ (TCID}_{50}/\text{ml)} \pm 95\% \text{ CI}$			
1	-0.06±0.99	-1.96±0.95	-1.69±0.96	-0.81±0.92
5	-0.75±0.98	-3.30±0.96	-3.56±0.86	-1.06±0.98
15	-2.44±0.79	-5.36±0.77	-5.00±0.68	-0.65±1.05
Low concentration (disolved in 30ml)				
pH value	7.67	7.80	4.64	5.25
Time (min)	$\Delta\log_{10}(c) \text{ (TCID}_{50}/\text{ml)} \pm 95\% \text{ CI}$			
1	-0.32±1.08	-0.89±1.03	-0.88±1.11	+0.13±1.06
5	-0.70±1.04	-1.58±0.98	-1.19±1.03	-0.46±0.98
15	-1.69±1.03	-2.44±0.94	-3.01±1.05	-1.46±0.97

CPC – cetylpyridinium chloride; BH – benzydamine hydrochloride; CI – confidence interval