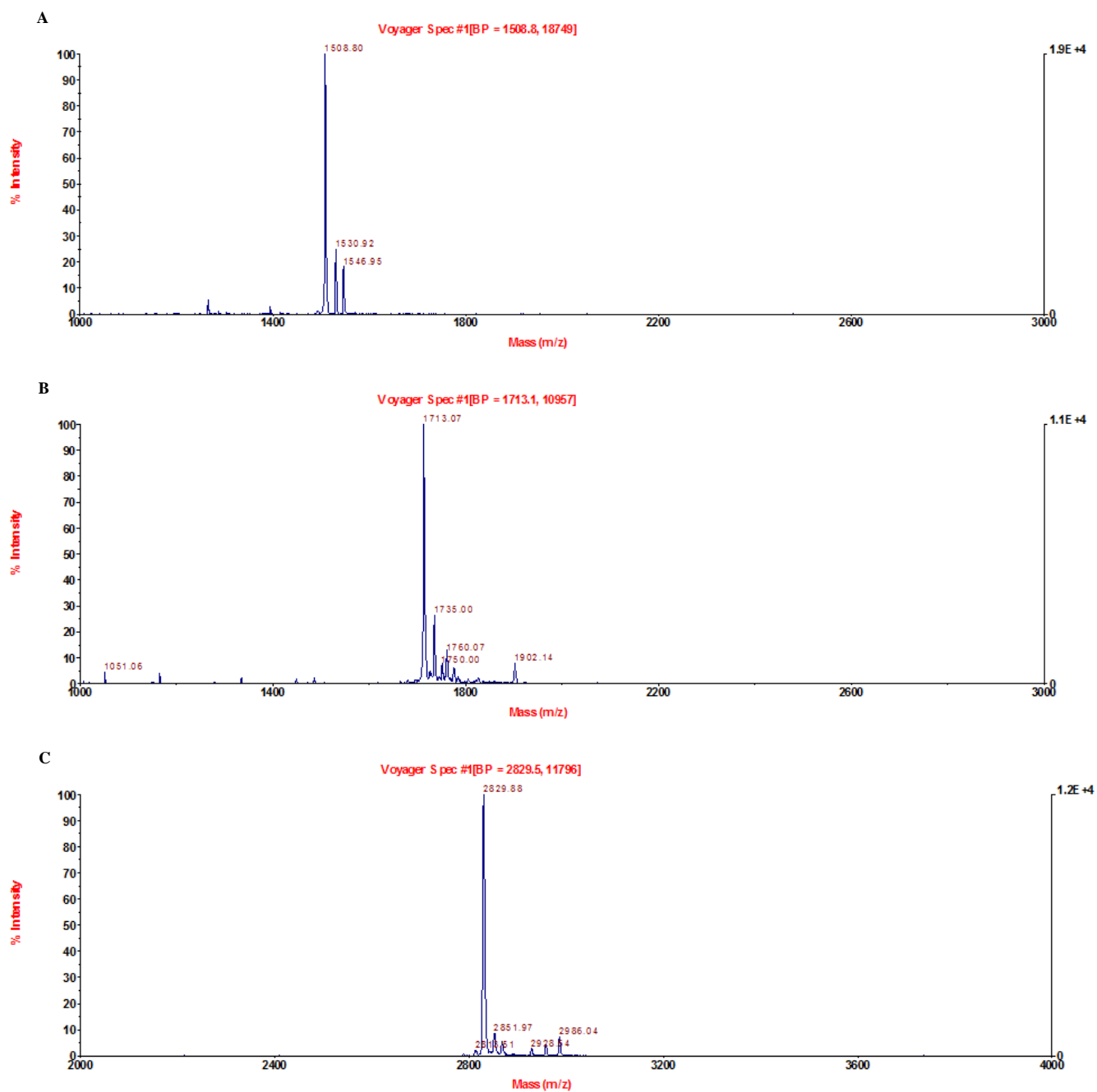


## Supplement Data



**Figure S1.** MALDI-TOF mass spectrum of chemical synthesis (A) MP-C ( $1508.80 (M + H)^+$ ,  $1530.92 (M + Na)^+$  adduct,  $1546.95 (M + K)^+$  adduct), (B) cMP-C ( $1713.07 (M + H)^+$ ,  $1735.00 (M + Na)^+$  adduct,  $1760.07 (M + K)^+$  adduct), (C) tMP-C ( $2829.88 (M + H)^+$ ).

**Table S1.** Two-way ANOVA analysis of membrane permeabilisation of the Gram-positive bacteria as indicated by an increase in the fluorescence of SYTOX Green after 2 h of incubation with MP-C, cMP-C and tMP-C at 1-, 2- and 4-fold concentrations of their MICs against *S. aureus*. \* p<0.05; \*\* p<0.01; \*\*\* p<0.001 and \*\*\*\* p<0.0001; ns: no significance.

Tukey's multiple comparisons test	Mean Diff.	95% CI of diff.	Summary
1-fold MIC:MP-C vs. 1-fold MIC:cMP-C	-105.6	-111.7 to -99.43	****
1-fold MIC:MP-C vs. 1-fold MIC:tMP-C	-0.5000	-6.623 to 5.623	ns
1-fold MIC:MP-C vs. 2-fold MIC:MP-C	-62.00	-68.12 to -55.88	****
1-fold MIC:MP-C vs. 2-fold MIC:cMP-C	-88.18	-94.30 to -82.05	****
1-fold MIC:MP-C vs. 2-fold MIC:tMP-C	-49.35	-55.47 to -43.23	****
1-fold MIC:MP-C vs. 4-fold MIC:MP-C	-104.8	-110.9 to -98.63	****
1-fold MIC:MP-C vs. 4-fold MIC:cMP-C	-47.63	-53.75 to -41.50	****
1-fold MIC:MP-C vs. 4-fold MIC:tMP-C	-67.25	-73.37 to -61.13	****
1-fold MIC:cMP-C vs. 1-fold MIC:tMP-C	105.1	98.93 to 111.2	****
1-fold MIC:cMP-C vs. 2-fold MIC:MP-C	43.55	37.43 to 49.67	****
1-fold MIC:cMP-C vs. 2-fold MIC:cMP-C	17.38	11.25 to 23.50	****
1-fold MIC:cMP-C vs. 2-fold MIC:tMP-C	56.20	50.08 to 62.32	****
1-fold MIC:cMP-C vs. 4-fold MIC:MP-C	0.8000	-5.323 to 6.923	ns
1-fold MIC:cMP-C vs. 4-fold MIC:cMP-C	57.93	51.80 to 64.05	****
1-fold MIC:cMP-C vs. 4-fold MIC:tMP-C	38.30	32.18 to 44.42	****
1-fold MIC:tMP-C vs. 2-fold MIC:MP-C	-61.50	-67.62 to -55.38	****
1-fold MIC:tMP-C vs. 2-fold MIC:cMP-C	-87.68	-93.80 to -81.55	****
1-fold MIC:tMP-C vs. 2-fold MIC:tMP-C	-48.85	-54.97 to -42.73	****
1-fold MIC:tMP-C vs. 4-fold MIC:MP-C	-104.3	-110.4 to -98.13	****
1-fold MIC:tMP-C vs. 4-fold MIC:cMP-C	-47.13	-53.25 to -41.00	****
1-fold MIC:tMP-C vs. 4-fold MIC:tMP-C	-66.75	-72.87 to -60.63	****
2-fold MIC:MP-C vs. 2-fold MIC:cMP-C	-26.18	-32.30 to -20.05	****
2-fold MIC:MP-C vs. 2-fold MIC:tMP-C	12.65	6.527 to 18.77	****
2-fold MIC:MP-C vs. 4-fold MIC:MP-C	-42.75	-48.87 to -36.63	****
2-fold MIC:MP-C vs. 4-fold MIC:cMP-C	14.38	8.252 to 20.50	****
2-fold MIC:MP-C vs. 4-fold MIC:tMP-C	-5.250	-11.37 to 0.8726	ns
2-fold MIC:cMP-C vs. 2-fold MIC:tMP-C	38.83	32.70 to 44.95	****
2-fold MIC:cMP-C vs. 4-fold MIC:MP-C	-16.58	-22.70 to -10.45	****
2-fold MIC:cMP-C vs. 4-fold MIC:cMP-C	40.55	34.43 to 46.67	****
2-fold MIC:cMP-C vs. 4-fold MIC:tMP-C	20.93	14.80 to 27.05	****
2-fold MIC:tMP-C vs. 4-fold MIC:MP-C	-55.40	-61.52 to -49.28	****
2-fold MIC:tMP-C vs. 4-fold MIC:cMP-C	1.725	-4.398 to 7.848	ns
2-fold MIC:tMP-C vs. 4-fold MIC:tMP-C	-17.90	-24.02 to -11.78	****
4-fold MIC:MP-C vs. 4-fold MIC:cMP-C	57.13	51.00 to 63.25	****
4-fold MIC:MP-C vs. 4-fold MIC:tMP-C	37.50	31.38 to 43.62	****
4-fold MIC:cMP-C vs. 4-fold MIC:tMP-C	-19.63	-25.75 to -13.50	****

**Table S2.** One-way ANOVA analysis of the effect on cell proliferation of MP-C, cMP-C and tMP-C on the cancer cell lines H157, MDA-MB-435S, PC-3, U251MG, and MCF-7 as well as HMEC-1. \* p<0.05; \*\* p<0.01; \*\*\* p<0.001 and \*\*\*\* p<0.0001; ns: no significance.

Tukey's multiple comparisons test	H157	MDB-MB-435S	PC-3	U251-MG	MCF-7	HMEC-1
<b>Log peptide (M) = -4.</b>						
MP-C vs. cMP-C	ns	ns	ns	ns	ns	ns
MP-C vs. tMP-C	ns	ns	ns	ns	ns	ns
cMP-C vs. tMP-C	ns	ns	ns	ns	ns	ns
<b>Log peptide (M) = -5.</b>						
MP-C vs. cMP-C	****	****	***	****	****	ns
MP-C vs. tMP-C	****	****	****	****	****	****
cMP-C vs. tMP-C	****	****	****	****	****	****
<b>Log peptide (M) = -6.</b>						
MP-C vs. cMP-C	ns	ns	****	***	ns	ns
MP-C vs. tMP-C	ns	ns	*	***	*	ns
cMP-C vs. tMP-C	*	*	**	ns	ns	ns
<b>Log peptide (M) = -7.</b>						
MP-C vs. cMP-C	ns	ns	ns	ns	****	ns
MP-C vs. tMP-C	ns	ns	**	***	*	ns
cMP-C vs. tMP-C	ns	ns	ns	*	ns	ns
<b>Log peptide (M) = -8.</b>						
MP-C vs. cMP-C	**	ns	ns	****	ns	ns
MP-C vs. tMP-C	ns	ns	**	****	ns	ns
cMP-C vs. tMP-C	***	ns	ns	ns	ns	ns
<b>Log peptide (M) = -9.</b>						
MP-C vs. cMP-C	*	ns	ns	ns	ns	ns
MP-C vs. tMP-C	*	ns	ns	*	ns	ns
cMP-C vs. tMP-C	ns	ns	ns	ns	ns	ns

**Table S3.** One-way ANOVA analysis of the haemolytic activity of MP-C, cMP-C and tMP-C against horse red blood cells. \* p<0.05; \*\* p<0.01; \*\*\* p<0.001 and \*\*\*\* p<0.0001; ns: no significance.

<b>Tukey's multiple comparisons test</b>	<b>Summary</b>
<b>512µM</b>	
<b>MP-C vs. cMP-C</b>	***
<b>MP-C vs. tMP-C</b>	ns
<b>cMP-C vs. tMP-C</b>	ns
<b>256µM</b>	
<b>MP-C vs. cMP-C</b>	***
<b>MP-C vs. tMP-C</b>	ns
<b>cMP-C vs. tMP-C</b>	***
<b>128µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	****
<b>cMP-C vs. tMP-C</b>	****
<b>64µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	****
<b>cMP-C vs. tMP-C</b>	****
<b>32µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	***
<b>cMP-C vs. tMP-C</b>	****
<b>16µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	**
<b>cMP-C vs. tMP-C</b>	****
<b>8µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	**
<b>cMP-C vs. tMP-C</b>	****
<b>4µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	ns
<b>cMP-C vs. tMP-C</b>	****
<b>2µM</b>	
<b>MP-C vs. cMP-C</b>	****
<b>MP-C vs. tMP-C</b>	ns
<b>cMP-C vs. tMP-C</b>	****
<b>1µM</b>	
<b>MP-C vs. cMP-C</b>	*
<b>MP-C vs. tMP-C</b>	ns
<b>cMP-C vs. tMP-C</b>	ns