

# Supplementary Materials

For

## Antimicrobial activity of quinoline-based hydroxyimidazolium hybrids

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## Tables of percentages of inhibition for antibacterial activity

**Table S1.** Percentages of inhibition of *Escherichia coli* by hybrids 7a-h

<i>Escherichia coli</i>								
Concentrations in µg/mL	Hybrids							
	7a	7b	7c	7d	7e	7f	7g	7h
10	13.4 ± 0.02	11.7 ± 0.06	9.6 ± 0.01	8.2 ± 0.05	7 ± 0.02	7.7 ± 0.03	3.5 ± 0.07	14.1
20	26 ± 0.02	19.4 ± 0.09	17.5 ± 0.01	12.4 ± 0.04	10 ± 0.006	10.4 ± 0.01	14.2 ± 0.05	28.6
50	60.2 ± 0.02	28 ± 0.05	35.5 ± 0.02	28.2 ± 0.01	23.4 ± 0.01	24.5 ± 0.02	27.8 ± 0.02	50.7
100	100	87.2 ± 0.05	81.5 ± 0.03	100	85.7 ± 0.04	68 ± 0.06	66.2 ± 0.001	100
200	100	100	100	100	100	100	100	100

**Table S2.** Percentages of inhibition of *Klebsiella pneumoniae* by hybrids 7a-h

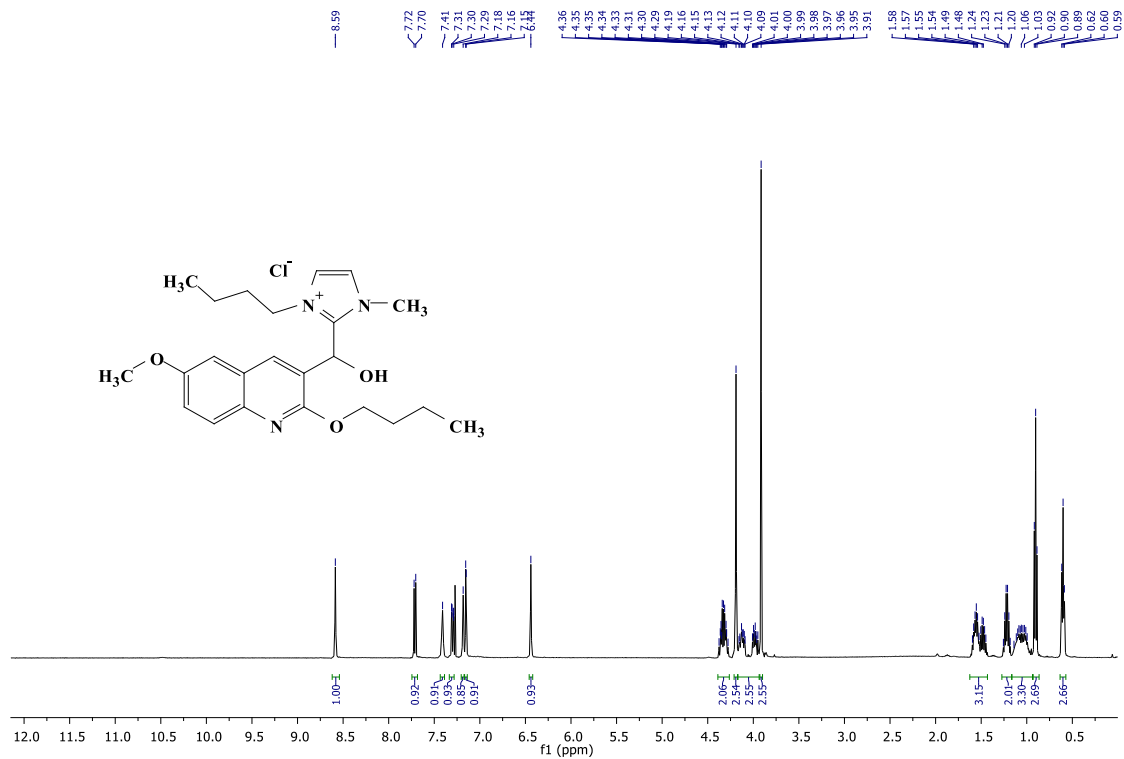
<i>Klebsiella pneumoniae</i>								
Concentrations in µg/mL	Hybrids							
	7a	7b	7c	7d	7e	7f	7g	7h
10	12.5 ± 0.05	25.4 ± 0.01	5.1 ± 0.03	9.8 ± 0.07	10.4 ± 0.03	16.3 ± 0.01	3.0 ± 0.02	13.3 ± 0.01
20	25.9 ± 0.02	57.3 ± 0.03	13.7 ± 0.01	14.9 ± 0.05	16.2 ± 0.01	17.8 ± 0.01	10.2 ± 0.02	16.2 ± 0.03
50	66.1 ± 0.003	100	29.3 ± 0.01	35.4 ± 0.02	36.2 ± 0.003	33.3 ± 0.007	38.0 ± 0.01	30.0 ± 0.01
100	100	100	85.0 ± 0.01	83.9 ± 0.03	100	69.7 ± 0.08	100	100
200	100	100	100	100	100	100	100	100

**Table S3.** Percentages of inhibition of *Staphylococcus aureus* by hybrids 7a-h

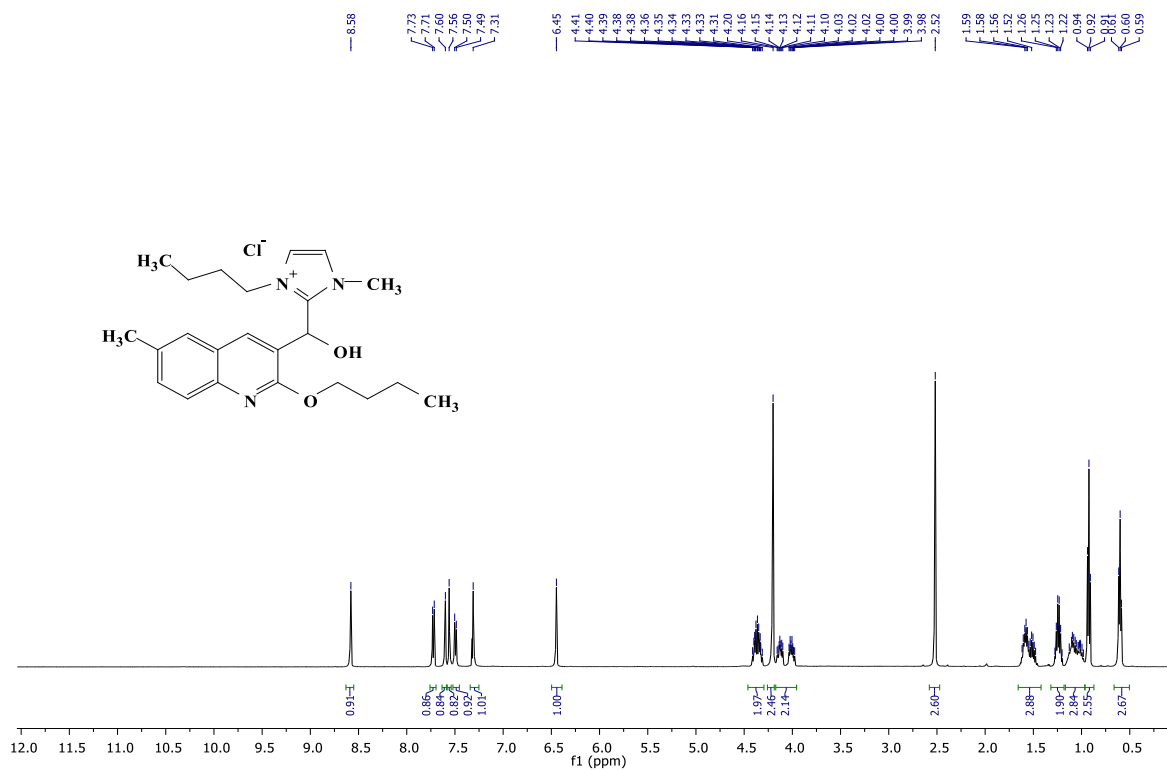
<i>Staphylococcus aureus</i>								
Concentrations in µg/mL	hybrids							
	7a	7b	7c	7d	7e	7f	7g	7h
10	13.2 ± 0.04	100	13.8 ± 0.1	5.8 ± 0.04	5.2 ± 0.05	7.5 ± 0.03	4.4 ± 0.06	100
20	25.8 ± 0.02	100	20.5 ± 0.05	9.3 ± 0.04	6.9 ± 0.05	8.2 ± 0.03	3.90 ± 0.03	100
50	65.1 ± 0.03	100	83.6 ± 0.03	23 ± 0.02	22.9 ± 0.1	26 ± 0.3	23.6 ± 0.05	100
100	100	100	100	100	100	63.5 ± 0.01	100	100
200	100	100	100	100	100	100	100	100

# Figure S1. Copies of <sup>1</sup>H NMR spectra for compounds 7a-h

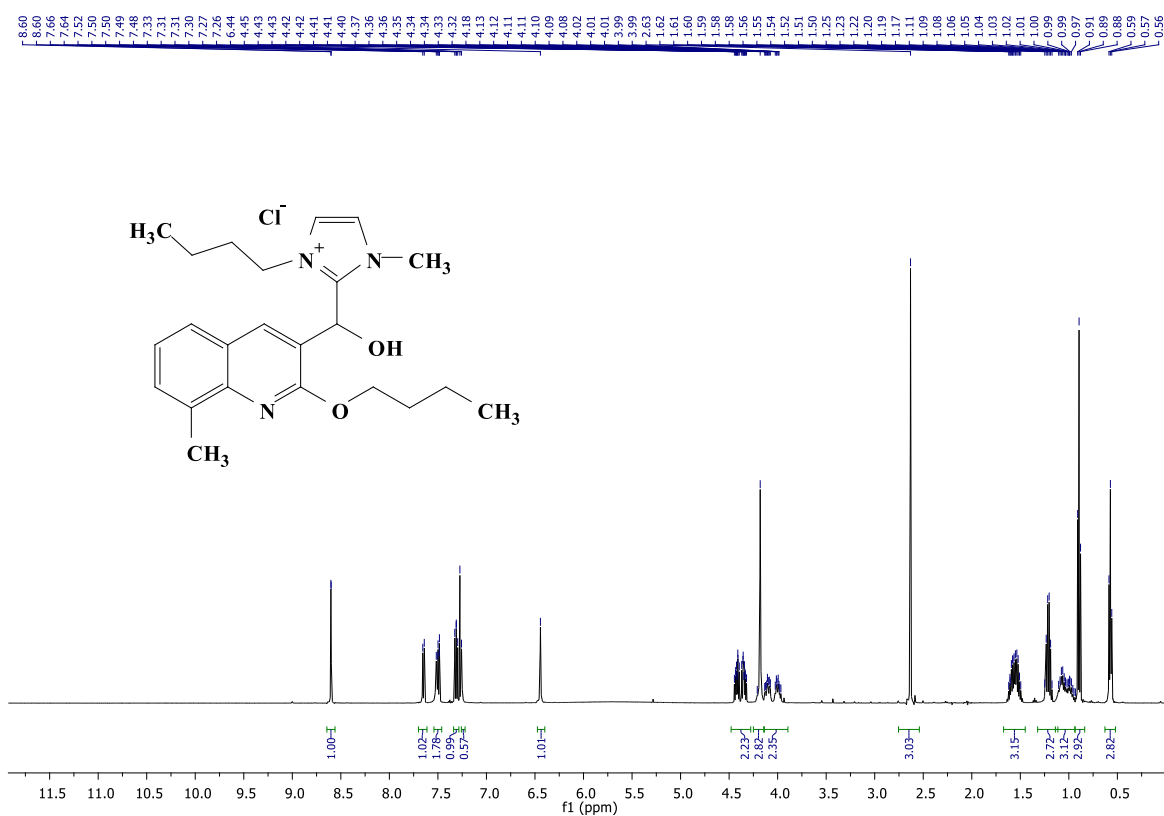
## Compound 7a



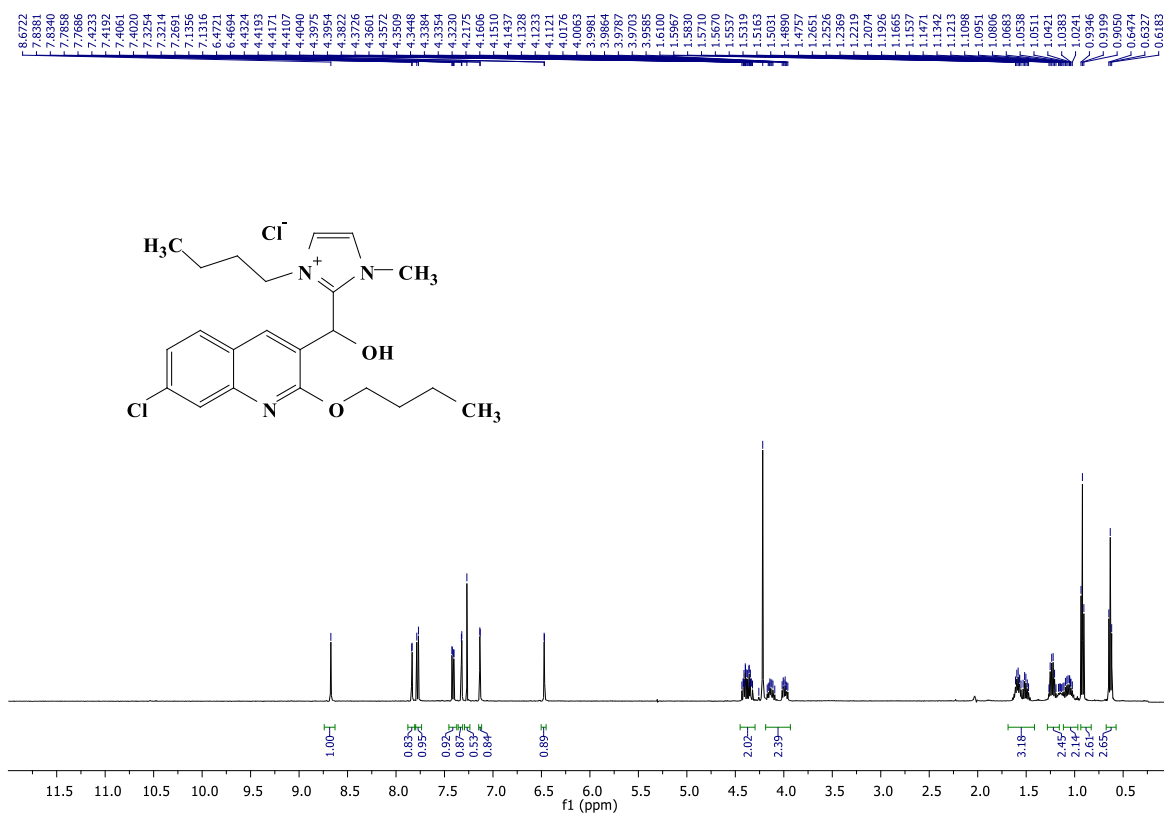
## Compound 7b



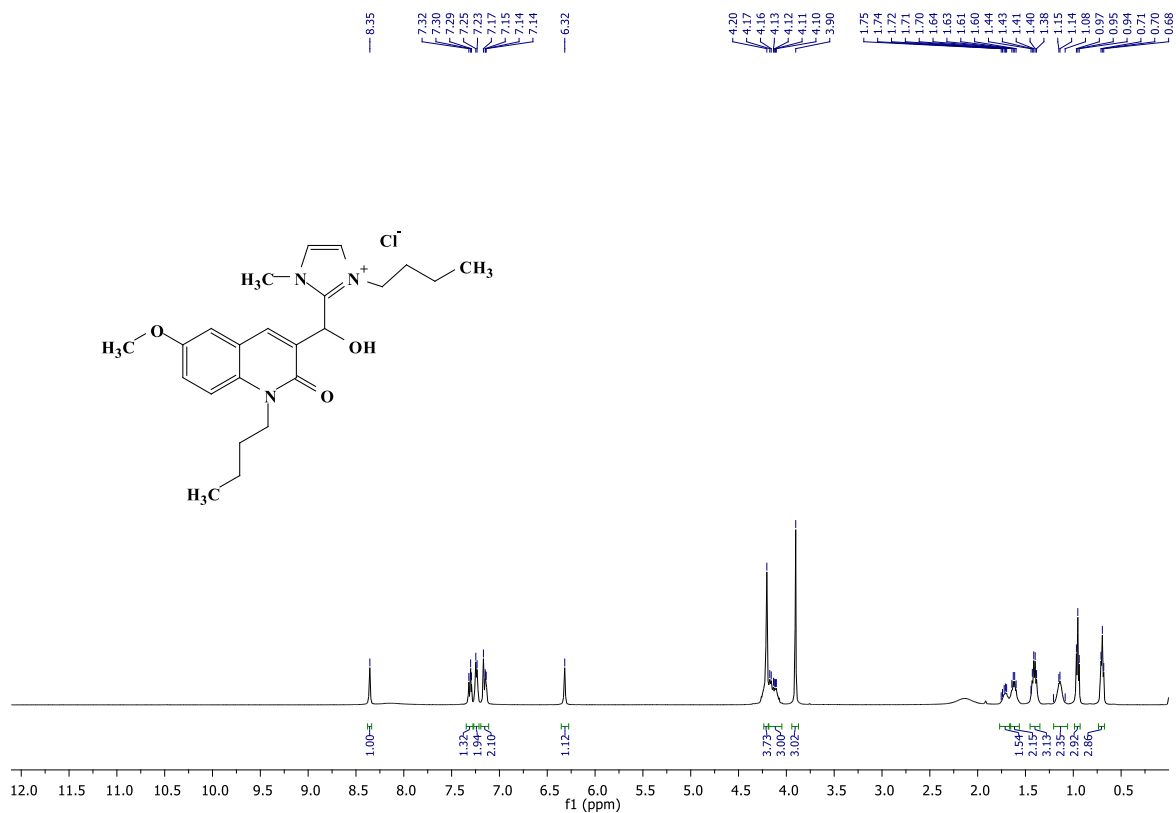
### Compound 7c



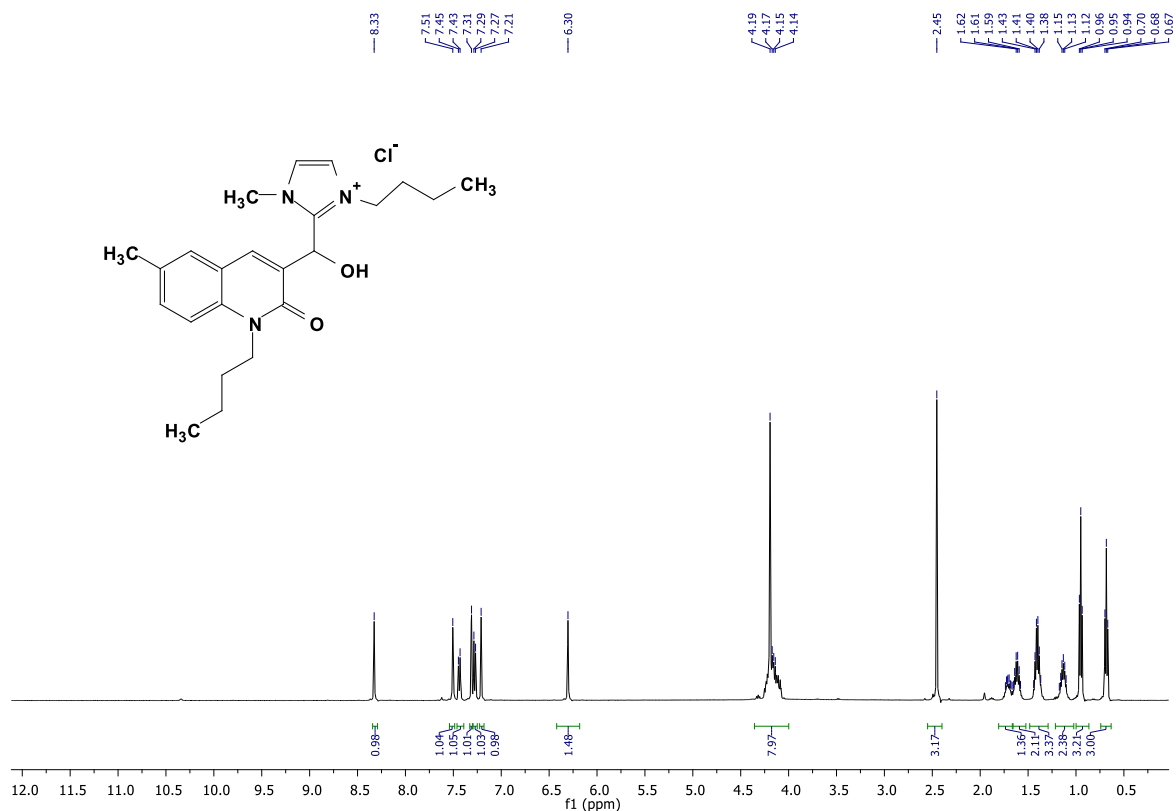
### Compound 7d



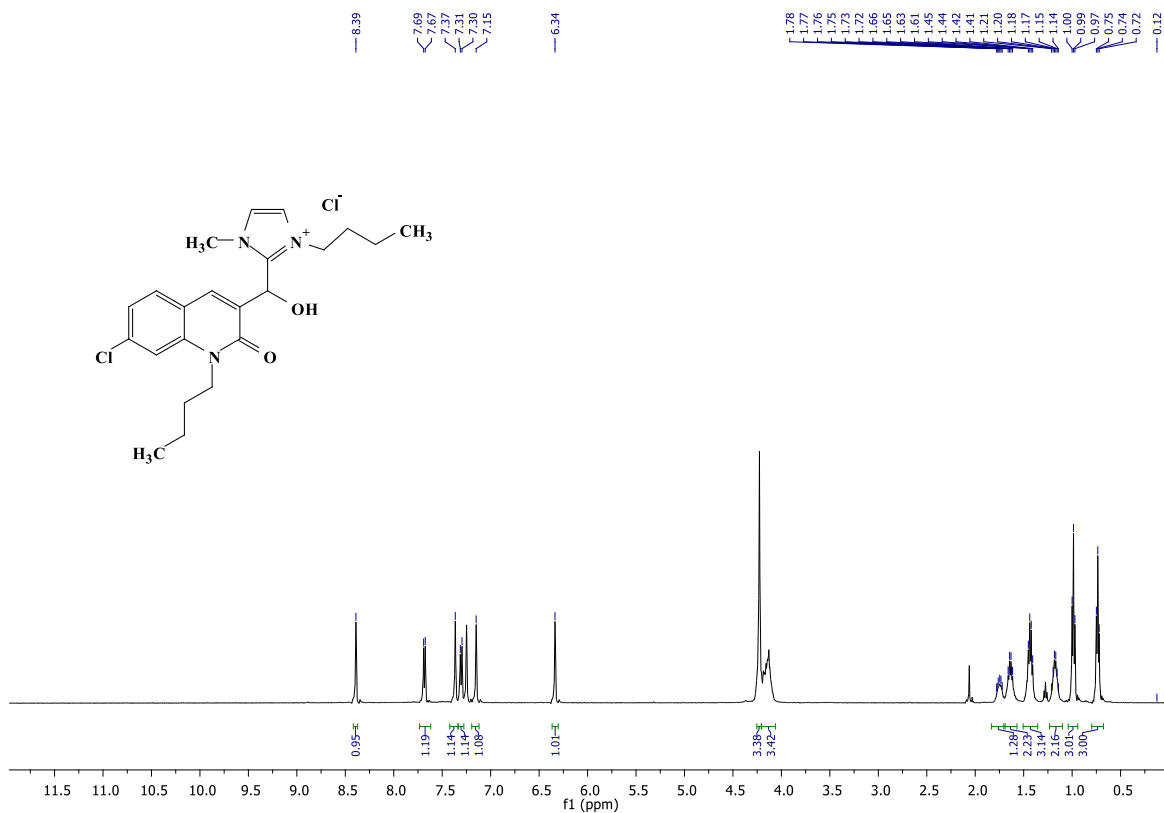
### Compound 7e



### Compound 7f



### Compound 7g



### Compound 7h

