

## Supplementary Materials

### “Sterically Hindered Quaternary Phosphonium Salts (QPSs): Antimicrobial Activity and Hemolytic and Cytotoxic Properties”

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**Table S1.** Antimicrobial activity of QPSs. Minimum inhibitory concentration.

| Compound      | Minimum inhibitory concentration (MIC), µg/ml |           |           |               |               |           |           |           |           |
|---------------|---|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|
|               | <i>Sa</i>                                     | <i>Bc</i> | <i>Ef</i> | <i>MRSA-1</i> | <i>MRSA-2</i> | <i>Ec</i> | <i>Pa</i> | <i>Tm</i> | <i>Ca</i> |
| <b>1a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>1b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>2a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>2b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>3a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>3b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>4a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>4b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>5a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>5b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>6a</b>     | 125±11  | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>6b</b>     | 250±19  | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>7a</b>     | 62.5±5.5                                      | 125±10    | 125±      | -             | -             | -         | -         | -         | -         |
| <b>7b</b>     | 62.5±   | 125±      | 125±      | -             | -             | -         | -         | -         | -         |
| <b>8a</b>     | 15.6±   | 31.3±     | 62.5±     | 15.6±         | 31.3±         | 125±      | -         | -         | -         |
| <b>8b</b>     | 31.3±   | 62.5±     | 62.5±     | 31.3±         | 62.5±         | -         | -         | -         | -         |
| <b>9a</b>     | 7.8±  | 15.6±     | 62.5±     | 7.8±          | 15.6±         | 125±      | -         | -         | -         |
| <b>9b</b>     | 15.6±   | 31.3±     | 31.3±     | 15.6±         | 31.3±         | 250±      | -         | -         | -         |
| Ciprofloxacin | 0.5±0.03                                      | 0.5±0.04  | 3.9±0.3   | 125±11        | 0.9±0.07      | 0.5±0.03  | 0.5±0.03  |           |           |
| Ketoconazole  |   |           |           |               |               |           |           | 3.9±0.2   | 3.9±0.3   |

Average of three values measured; ± standard deviation (SD); - means non-active

**Table S1** (cont.). Antimicrobial activity of QPSs. Minimum bactericidal and fungicidal concentration.

| Compound      | Minimum bactericidal and fungicidal concentration (MBC, MFC), µg/ml |           |           |               |               |           |           |           |           |
|---------------|---|-----------|-----------|---------------|---------------|-----------|-----------|-----------|-----------|
|               | <i>Sa</i>   | <i>Bc</i> | <i>Ef</i> | <i>MRSA-1</i> | <i>MRSA-2</i> | <i>Ec</i> | <i>Pa</i> | <i>Tm</i> | <i>Ca</i> |
| <b>1a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>1b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>2a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>2b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>3a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>3b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>4a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>4b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>5a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>5b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>6a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>6b</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>7a</b>     | -   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>7b</b>     | 62.5±   | -         | -         | -             | -             | -         | -         | -         | -         |
| <b>8a</b>     | 62.5±   | -         | -         | -             | -             | 125±      | -         | -         | -         |
| <b>8b</b>     | 31.3±   | -         | 125±      | -             | -             | -         | -         | -         | -         |
| <b>9a</b>     | 15.6±   | 125±      | 125±      | -             | -             | 125±      | -         | -         | -         |
| <b>9b</b>     | 15.6±   | -         | 125±      | -             | -             | 250±      | -         | -         | -         |
| Ciprofloxacin | 0.5±0.03  | 0.5±0.04  | 3.9±0.3   | 250±19        | 0.9±0.06      | 0.5±0.03  | 0.5±0.03  |           |           |
| Ketoconazole  |   |           |           |               |               |           |           | 3.9±0.2   | 3.9±0.3   |

Average of three values measured; ± standard deviation (SD); - means non-active

**Table S2.** Hemotoxic and cytotoxic activity of QPSs, expressed in terms of HC<sub>50</sub> and IC<sub>50</sub>.

| Compounds  | HC <sub>50</sub> , µg/ml | IC <sub>50</sub> , µg/ml |
|------------|--------------------------|--------------------------|
| <b>1a</b>  | >125                     | >100                     |
| <b>1b</b>  | >125                     | >100                     |
| <b>2a</b>  | >125                     | >100                     |
| <b>2b</b>  | >125                     | >100                     |
| <b>3a</b>  | >125                     | >100                     |
| <b>3b</b>  | >125                     | >100                     |
| <b>4a</b>  | >125                     | >100                     |
| <b>4b</b>  | >125                     | >100                     |
| <b>5a</b>  | >125                     | >100                     |
| <b>5b</b>  | >125                     | >100                     |
| <b>6a</b>  | >125                     | >100                     |
| <b>6b</b>  | >125                     | >100                     |
| <b>7a</b>  | >125                     | >100                     |
| <b>7b</b>  | >125                     | >100                     |
| <b>8a</b>  | >125                     | >100                     |
| <b>8b</b>  | >125                     | >100                     |
| <b>9a</b>  | >125                     | >100                     |
| <b>9b</b>  | >125                     | >100                     |
| <b>10a</b> | >125                     | 66                       |
| <b>10b</b> | >125                     | 71                       |