

## Supporting Information

### Synthesis and Antimicrobial Evaluation of Nitazoxanide-Based Analogues: Identification of Selective and Broad Spectrum Activity

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#### I. Full Activity Table for NTZ Analogues against *S. aureus* and *S. epidermidis*

Analogues	MIC's ( $\mu$ M)	
	<i>S. aureus</i> (MRSA)	<i>S. epidermidis</i>
Nitazoxanide ( <b>1</b> )	39.1	52.1
<b>6</b>	18.7	119.7
<b>7</b>	16.8	22.5
<b>8</b>	8.4	15.0
<b>9</b>	28.0	42.1
<b>10</b>	10.5	28.0
<b>11</b>	28.0	28.0
<b>12</b>	39.6	52.8
<b>13</b>	29.7	66.0
<b>14</b>	33.0	33.0
<b>15</b>	6.2	12.5
<b>16</b>	8.8	47.2
<b>17</b>	3.9	20.9
<b>18</b>	7.8	31.3
<b>19</b>	2.0	26.1
<b>20</b>	43.8	29.2
<b>21</b>	14.6	21.9
<b>22</b>	25.2	25.2
<b>23</b>	3.2	12.6
<b>24</b>	100.9	12.6
<b>25</b>	108.8	40.8
<b>26</b>	10.2	10.2
<b>27</b>	20.4	10.2
<b>28</b>	114.6	114.6
<b>29</b>	14.3	28.6
<b>30</b>	28.6	28.6
<b>31</b>	6.0	12.0
<b>32</b>	92.1	92.1
<b>33</b>	98.7	12.3
<b>34</b>	103.1	77.4
<b>35</b>	8.9	23.9
<b>36</b>	88.3	88.3
<b>37</b>	76.9	51.2
<b>38</b>	2.6	1.9

<b>39</b>	22.7	22.7
<b>40</b>	11.4	11.4
<b>41</b>	2.8	2.8
<b>42</b>	12.0	32.1
<b>43</b>	121.5	22.8
<b>44</b>	115.4	14.4
<b>45</b>	109.8	109.8
<b>46</b>	13.8	13.8
<b>47</b>	106.2	106.2
<b>48</b>	171.0	21.4
<b>49</b>	148.7	37.2
<b>50</b>	131.5	32.9
<b>51</b>	59.0	11.1
<b>52</b>	106.9	106.9
<b>53</b>	125.2	31.3
<b>54</b>	116.2	29.1
<b>55</b>	93.2	2.9
<b>56</b>	127.9	127.9
<b>57</b>	119.3	119.3
<b>58</b>	127.9	127.9
<b>59</b>	119.3	119.3
<b>60</b>	50.2	33.4
<b>61</b>	50.2	66.9
<b>62</b>	6.3	25.1
<b>63</b>	3.8	15.1
<b>64</b>	112.6	28.1
<b>65</b>	101.5	101.5
<b>66</b>	91.5	91.5
<b>67</b>	24.0	12.0
<b>68</b>	11.4	5.7
<b>69</b>	44.4	11.1
<b>70</b>	26.2	13.1
<b>71</b>	99.6	99.6
<b>72</b>	57.0	110.6
<b>73</b>	47.9	23.9
<b>74</b>	23.5	15.7
<b>75</b>	6.2	12.3
<b>76</b>	15.7	31.3
<b>77</b>	10.4	27.6
<b>78</b>	20.7	55.2
<b>79</b>	4.5	23.9
<b>80</b>	14.1	36.2
<b>81</b>	87.5	87.5
<b>82</b>	94.8	94.8
<b>83</b>	24.9	12.4
<b>84</b>	6.6	13.1
<b>85</b>	2.9	5.9
<b>86</b>	2.1	5.6

II. Representative  $^1\text{H}$  and  $^{13}\text{C}$  NMR Spectra





















































