Supplementary Materials: Design, Synthesis, and Antibacterial Evaluation of Some New 2-Phenyl-Quinoline-4-Carboxylic Acid Derivatives

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Figure S1. $^1$H-NMR Spectrum of compound 5a.

Figure S2. $^{13}$C-NMR Spectrum of compound 5a.
Figure S3. HRMS Spectrum of compound 5a1.

Figure S4. HPLC Spectrum of compound 5a1.
Figure S5. $^1$H-NMR Spectrum of compound 5a.

Figure S6. $^{13}$C-NMR Spectrum of compound 5a.
Figure S7. HRMS Spectrum of compound 5a.

Figure S8. HPLC Spectrum of compound 5a.
Figure S9. $^1$H-NMR Spectrum of compound 5a.

Figure S10. $^{13}$C-NMR Spectrum of compound 5a.
Figure S11. HRMS Spectrum of compound 5a.

Figure S12. HPLC Spectrum of compound 5a.
Figure S13. $^1$H-NMR Spectrum of compound 5a.

Figure S14. $^{13}$C-NMR Spectrum of compound 5a.
**Figure S15.** HRMS Spectrum of compound 5a.

**Figure S16.** HPLC Spectrum of compound 5a.
Figure S17. $^1$H-NMR Spectrum of compound 5a.

Figure S18. $^{13}$C-NMR Spectrum of compound 5a.
Figure S19. HRMS Spectrum of compound 5as.

Figure S20. HPLC Spectrum of compound 5as.
Figure S21. $^1$H-NMR Spectrum of compound 5a.

Figure S22. $^{13}$C-NMR Spectrum of compound 5a.
Figure S23. HRMS Spectrum of compound 5a6.

Figure S24. HPLC Spectrum of compound 5a6.
Figure S25. $^1$H-NMR Spectrum of compound 5a.

Figure S26. $^{13}$C-NMR Spectrum of compound 5a.
Figure S27. HRMS Spectrum of compound 5a.

Figure S28. HPLC Spectrum of compound 5a.
Figure S29. $^1$H-NMR Spectrum of compound 5b.  

Figure S30. $^{13}$C-NMR Spectrum of compound 5b.
Figure S31. HRMS Spectrum of compound 5b1.

Figure S32. HPLC Spectrum of compound 5b1.
Figure S33. $^1$H-NMR Spectrum of compound 5b.$^2$

Figure S34. $^{13}$C-NMR Spectrum of compound 5b.$^2$
Figure S35. HRMS Spectrum of compound 5b2.

Figure S36. HPLC Spectrum of compound 5b2.
Figure S37. $^1$H-NMR Spectrum of compound 5b.

Figure S38. $^{13}$C-NMR Spectrum of compound 5b.
Figure S39. HRMS Spectrum of compound 5b1.

Figure S40. HPLC Spectrum of compound 5b1.
Figure S41. $^1$H-NMR Spectrum of compound 5b.

Figure S42. $^{13}$C-NMR Spectrum of compound 5b.
Figure S43. HRMS Spectrum of compound 5b1.

Figure S44. HPLC Spectrum of compound 5b1.
Figure S45. $^1$H-NMR Spectrum of compound 5b5.

Figure S46. $^{13}$C-NMR Spectrum of compound 5b5.
Figure S47. HRMS Spectrum of compound 5b1.

Figure S48. HPLC Spectrum of compound 5b1.
Figure S49. $^1$H-NMR Spectrum of compound 5bs.

Figure S50. $^{13}$C-NMR Spectrum of compound 5bs.
Figure S51. HRMS Spectrum of compound 5b6.

Figure S52. HPLC Spectrum of compound 5b6.