Synthesis and Biological Evaluation of Novel Aminochalcones as Potential Anticancer and Antimicrobial Agents

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Figure S1. 1H-NMR (600 MHz, acetone-d6) spectrum of 2′-aminochalcone (1)
Figure S2. $\textsuperscript{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 2'-aminochalcone (1)

Figure S3. FTIR-ATR spectrum of 2'-aminochalcone (1)
Figure S4. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 3'-aminochalcone (2)

Figure S5. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 3'-aminochalcone (2)
Figure S6. FTIR-ATR spectrum of 3’-aminochalcone (2)

Figure S7. 1H-NMR (600 MHz, acetone-\textit{d}6) spectrum of 4’-aminochalcone (3)
Figure S8. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 4’-aminochalcone (3)

Figure S9. FTIR-ATR spectrum of 4’-aminochalcone (3)
**Figure S10.** $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 2'-amino-4-ethylchalcone (4)

**Figure S11.** $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 2'-amino-4-ethylchalcone (4)
**Figure S12.** FTIR-ATR spectrum of 2'-amino-4-ethylchalcone (4)

**Figure S13.** $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 3'-amino-4-ethylchalcone (5)
Figure S14. $^{13}$C-NMR (150 MHz, acetone-d$_6$) spectrum of 3'-amino-4-ethylchalcone (5)

Figure S15. FTIR-ATR spectrum of 3'-amino-4-ethylchalcone (5)
Figure S16. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 4'-amino-4-ethylchalcone (6)

Figure S17. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 4'-amino-4-ethylchalcone (6)
Figure S18. FTIR-ATR spectrum of 4’-amino-4-ethylchalcone (6)

Figure S19. 1H-NMR (600 MHz, DMSO-d6) spectrum of 2’-amino-4-carboxychalcone (7)
Figure S20. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 2'-amino-4-carboxychalcone (7)

Figure S21. FTIR-ATR spectrum of 2'-amino-4-carboxychalcone (7)
Figure S22. $^1$H-NMR (600 MHz, DMSO-$d_6$) spectrum of 3'-amino-4-carboxychalcone (8)

Figure S23. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 3'-amino-4-carboxychalcone (8)
Figure S24. FTIR-ATR spectrum of 3′-amino-4-carboxychalcone (8)

Figure S25. $^1$H-NMR (600 MHz, DMSO-$d_6$) spectrum of 4′-amino-4-carboxychalcone (9)
Figure S26. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 4’-amino-4-carboxychalcone (9)

Figure S27. FTIR-ATR spectrum of 4’-amino-4-carboxychalcone (9)
Figure S28. $^1$H-NMR (600 MHz, DMSO-$d_6$) spectrum of 2'-amino-4-nitrochalcone (10)

Figure S29. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 2'-amino-4-nitrochalcone (10)
Figure S30. FTIR-ATR spectrum of 2'-amino-4-nitrochalcone (10)

Figure S31. $^1$H-NMR (600 MHz, DMSO-$d_6$) spectrum of 3'-amino-4-nitrochalcone (11)
Figure S32. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 3’-amino-4-nitrochalcone (11)

Figure S33. FTIR-ATR spectrum of 3’-amino-4-nitrochalcone (11)
Figure S34. $^1$H-NMR (600 MHz, DMSO-$d_6$) spectrum of 4'-amino-4-nitrochalcone (12)

Figure S35. $^{13}$C-NMR (150 MHz, DMSO-$d_6$) spectrum of 4'-amino-4-nitrochalcone (12)
Figure S36. FTIR-ATR spectrum of 4’-amino-4-nitrochalcone (12)

Figure S37. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 2’-amino-4-benzyloxynaphthalene (13)
Figure S38. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 2'-amino-4-benzyloxychalcone (13)

Figure S39. FTIR-ATR spectrum of 2'-amino-4-benzyloxychalcone (13)
Figure S40. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 3'-amino-4-benzylxychalcone (14)

Figure S41. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 3'-amino-4-benzylxychalcone (14)
Figure S42. FTIR-ATR spectrum of 3'-amino-4-benzyloxychalcone (14)

Figure S43. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 4'-amino-4-benzyloxychalcone (15)
Figure S44. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 4'-amino-4-benzylxochalcone (15)

Figure S45. FTIR-ATR spectrum of 4'-amino-4-benzylxochalcone (15)
Figure S46. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 2′-amino-4-benzyloxy-3-methoxychalcone (16)

Figure S47. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 2′-amino-4-benzyloxy-3-methoxychalcone (16)
Figure S48. FTIR-ATR spectrum of 2'-amino-4-benzyloxy-3-methoxychalcone (16)

Figure S49. $^1$H-NMR (600 MHz, acetone-$d_6$) spectrum of 3'-amino-4-benzyloxy-3-methoxychalcone (17)
Figure S50. $^{13}$C-NMR (150 MHz, acetone-$d_6$) spectrum of 3’-amino-4-benzyloxy-3-methoxychalcone (17)

Figure S51. FTIR-ATR spectrum of 3’-amino-4-benzyloxy-3-methoxychalcone (17)
Figure S52. ^1^H-NMR (600 MHz, acetone-\textit{d}_6) spectrum of 4'-amino-4-benzyloxy-3-methoxychalcone (18)

Figure S53. ^13^C-NMR (150 MHz, acetone-\textit{d}_6) spectrum of 4'-amino-4-benzyloxy-3-methoxychalcone (18)
Figure S54. FTIR-ATR spectrum of 4’-amino-4-benzyloxy-3-methoxychalcone (18)