Synthesis and biological evaluation of amino chalcone

derivatives as antiproliferative agents

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• ¹H NMR of Compound **13a**



Figure S1. ¹H NMR spectrum of compound **13a** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13a**



Figure 2. ¹³C NMR spectrum of compound **13a** (100 MHz, DMSO-*d*₆).

• HRMS of Compound 13a



Figure S3. HRMS spectrum of compound 13a

• ¹H NMR of Compound **13b**



Figure S4. ¹H NMR spectrum of compound **13b** (400 MHz, DMSO-*d*6)

• ¹³C-NMR of Compound **13b**



Figure S5. ¹³C NMR spectrum of compound **13b** (100 MHz, DMSO-*d*6)

• HRMS of Compound 13b



Figure S6. HRMS spectrum of compound 13b

• ¹H NMR of Compound **13c**



Figure S7. ¹H NMR spectrum of compound **13c** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13c**



Figure S8. ¹³C NMR spectrum of compound **13b** (151 MHz, DMSO-*d*6)

• HRMS of Compound **13c**



Figure S9. HRMS spectrum of compound 13c

• ¹H NMR of Compound **13d**



Figure S10. ¹H NMR spectrum of compound **13d** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13d**



Figure S11. ¹³C NMR spectrum of compound 13d (151 MHz, DMSO-*d*₆)



• HRMS of Compound **13d**

Figure S12. HRMS spectrum of compound 13d

• ¹H NMR of Compound **13e**



Figure S13. ¹H NMR spectrum of compound **13e** (400 MHz, DMSO-*d*₆)

<144, 31 144, 05 142, 38 -153, 59 -171.36 -45.44 -32000 30000 28000 26000 HaC 24000 H₂C 22000 H₃C 20000 18000 16000 4000 12000 10000 4000 2000 ıl. -2000 160 150 140 130 120 110 100 90 80 f1 (ppm) 210 200 190 10 -10 180 170 70 60 50 40 20 ò 30

• ¹³C-NMR of Compound **13e**

Figure S14. ¹³C NMR spectrum of compound **13e** (151 MHz, DMSO-*d*₆)

• HRMS of Compound **13e**



Figure S15. HRMS spectrum of compound 13e

• ¹H NMR of Compound **13f**



Figure S16. ¹H NMR spectrum of compound **13f** (400 MHz, DMSO-*d*6)





Figure S17. ¹³C NMR spectrum of compound **13f** (151 MHz, DMSO-*d*₆)

• HRMS of Compound **13f**



Figure S18. HRMS spectrum of compound 13f

• ¹H NMR of Compound **13g**



Figure S19. ¹H NMR spectrum of compound **13g** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13g**



Figure S20. ¹³C NMR spectrum of compound **13g** (100 MHz, DMSO-*d*6)

• HRMS of Compound **13g**



Figure S21. HRMS spectrum of compound 13g

• ¹H NMR of Compound **13h**



Figure S22. ¹H NMR spectrum of compound **13h** (400 MHz, DMSO-*d*6)

• ¹³C-NMR of Compound **13h**



Figure S23. ¹³C NMR spectrum of compound **13h** (100 MHz, DMSO-*d*6)

• ¹H NMR of Compound **13i**



Figure S24. ¹H NMR spectrum of compound **13i** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13i**



Figure S25. ¹³C NMR spectrum of compound **13i** (100 MHz, DMSO-*d*₆)

• HRMS of Compound **13i**



Figure S26. HRMS spectrum of compound 13i

• ¹H NMR of Compound **13**j



Figure S27. ¹H NMR spectrum of compound **13j** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13**j



Figure S28. ¹³C NMR spectrum of compound **13j** (100 MHz, DMSO-*d*₆)

• ¹H NMR of Compound **13**j



Figure S29. HRMS spectrum of compound 13j

• ¹H NMR of Compound **13**k



Figure S30. ¹H NMR spectrum of compound **13k** (400 MHz, DMSO-*d*6)

• ¹³C-NMR of Compound **13**k



Figure S31. ¹³C NMR spectrum of compound **13k** (100 MHz, DMSO-*d*6)



• HRMS of Compound **13k**

Figure S32. HRMS spectrum of compound 13k

• ¹H NMR of Compound **13**l



Figure S33. ¹H NMR spectrum of compound **131** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13**l



Figure S34. ¹³C NMR spectrum of compound **131** (100 MHz, DMSO-*d*6)

• HRMS of Compound 13l



Figure S35. HRMS spectrum of compound 131

• ¹H NMR of Compound **13m**



Figure S36. ¹H NMR spectrum of compound **13m** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13m**



Figure S37. ¹³C NMR spectrum of compound **13m** (100 MHz, DMSO-*d*₆)

• HRMS of Compound 13m



Figure S38. HRMS spectrum of compound 13m

• ¹H NMR of Compound **13n**



Figure S39. ¹H NMR spectrum of compound **13n** (400 MHz, DMSO-*d*₆)

• ¹³C-NMR of Compound **13n**



Figure S40. ¹³C NMR spectrum of compound **13n** (100 MHz, DMSO-*d*6)





Figure S41. HRMS spectrum of compound 13n