Supporting Information

Synthesis of novel spiro-isoxazoline and spiro-isoxazolidine derivatives of tomentosin

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¹ H, ¹³ C NMR spectrum of compounds 3a to 3d	p 22 to 25



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),phenyl-methyl]-11,*N*-epoxy-tomentosin 5a



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(*p*-tolyl)-methyl]-11,*N*-epoxy-tomentosin 5b



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(4-methoxyphenyl)-methyl]-11,*N*-epoxy-



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(4-fluorophenyl)-methyl]-11,*N*-epoxy-

epoxy-tomentosin 5e - 12000 - 11000 - 10000 - 9000 111 - 8000 - 7000 - 6000 - 5000 - 4000 - 3000 - 2000 - 1000 0 3.96-<u>∓</u> 2.02 1.93 **¥** 0.98 ⊒-89.0 1.98 ⊒ 2.134 2.134 2.134 2.134 3.00--1000 6 f1 (ppm) 5 16 8 7 4 3 2 -1 -2 -3 9 0 15 13 12 11 10 1 14 144.93 144.87 130.54 130.54 130.54 128.92 128.92 126.13 126.15 126.15 126.15 126.08 126.15 126.08 125.50 122.90 12.90 12.90 12.90 12.90 12.90 12.90 12.90 12.90 12. 40-11-12-pos13-mz268/12 45.76 43.45 33.12 33.15 30.08 70.08 70.08 70.08 - 69.64 - 10000 - 207 - 9000 - 8000 - 7000 - 6000 - 5000 - 4000 - 3000 2000 - 1000 - 0 -1000 150 140 130 120 110 100 f1 (ppm) -10 210 200 190 180 170 160 90 80 70 60 50 40 30 20 10 0

¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(4-trifluoromethylphenyl)-methyl]-11,*N*-

epoxy-tomentosin 5f 20000 19000 - 18000 -- 17000 - 16000 - 15000 | || - 14000 - 13000 12000 - 11000 10000 - 9000 8000 7000 6000 5000 4000 3000 2000 <u>JI 🗼</u> - 1000 - 0 2.06 2.10 3.06 € 2.06 € 0.93 1.00 1.00 1.00 5.99 1.00 7.53 2.80 2.08 3.00-≖ - -1000 7 6 f1 (ppm) 16 9 5 4 3 2 1 -1 -2 -3 0 15 13 12 11 8 10 14 √ 151.32 √ 150.43 √ 144.68 40-11-12-pos21-mz269/12 128.61 127.72 127.72 127.76 121.16 121.16 116.24 --- 79.64 - 70.25 45.84 45.84 43.80 42.70 42.70 33.31 33.31 33.31 30.07 21.18 --- 208 - 13000 - 12000 - 11000 - 10000 - 9000 - 8000 - 7000 6000 5000 4000 3000 - 2000 - 1000 - 0 - -1000 120 110 100 f1 (ppm) 210 200 190 180 170 160 150 140 130 90 80 70 60 50 40 30 20 10 0 -10

¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(4-dimethylaminophenyl)-methyl]-11,*N*-

¹H, ¹³C NMR spectrum of 13-[(Phenylamine),((4-hydroxy-3-methoxy)phenyl)-methyl]-11,N-



epoxy-tomentosin 5g



¹H, ¹³C NMR spectrum of 13-[(*p*-Tolylamine),phenyl-methyl]-11,*N*-epoxy-tomentosin 5h



¹H, ¹³C NMR spectrum of 13-[(*p*-Tolylamine),(4-methoxyphenyl)-methyl]-11,*N*-epoxy-



¹H, ¹³C NMR spectrum of 13-[(*p*-Tolylamine),(4-fluorophenyl)-methyl]-11,*N*-epoxy-



¹H, ¹³C NMR spectrum of 13-[(*p*-Tolylamine),(4-trifluoromethylphenyl)-methyl]-11,*N*-



¹H, ¹³C NMR spectrum of 13-[(4-Fluorophenylamine),phenyl-methyl]-11,*N*-epoxy-



¹H, ¹³C NMR spectrum of 13-[(4-Fluorophenylamine),(p-tolyl)-methyl]-11,N-epoxy-



150 140 130 120 110 100 f1 (ppm)

90 80 70 60 50 40 30 20 10 0

210 200 190

180 170 160

¹H, ¹³C NMR spectrum of 13-[(4-Fluorophenylamine),(4-methoxyphenyl)-methyl]-11,*N*-

-10



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(pyridin-4-yl)-methyl]-11,*N*-epoxy-tomentosin



¹H, ¹³C NMR spectrum of 13-[(Phenylamine),(furan-2-yl)-methyl]-11,*N*-epoxy-tomentosin

¹H, ¹³C, COSY, DEPT, HMBC, HSQC and NOESY NMR spectrum of 13-

[(Phenylamine),(thiophen-3-yl)-methyl]-11,N-epoxy-tomentosin 5q











¹H, ¹³C NMR spectrum of 13-[Amino,phenyl-methyl]-11,*N*-epoxy-tomentosin 3a



¹H, ¹³C NMR spectrum of 13-[Amino,(*p*-tolyl)-methyl]-11,*N*-epoxy-tomentosin 3b



¹H, ¹³C NMR spectrum of 13-[Amino,(4-methoxyphenyl)-methyl]-11,*N*-epoxy-tomentosin



¹H, ¹³C NMR spectrum of 13-[Amino,(4-fluorophenyl)-methyl]-11,N-epoxy-tomentosin 3d