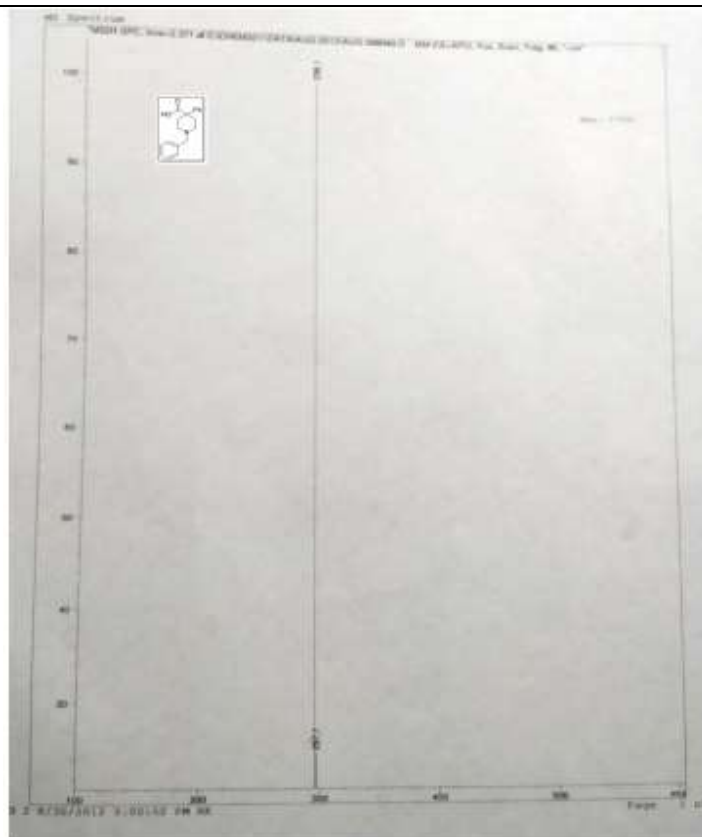


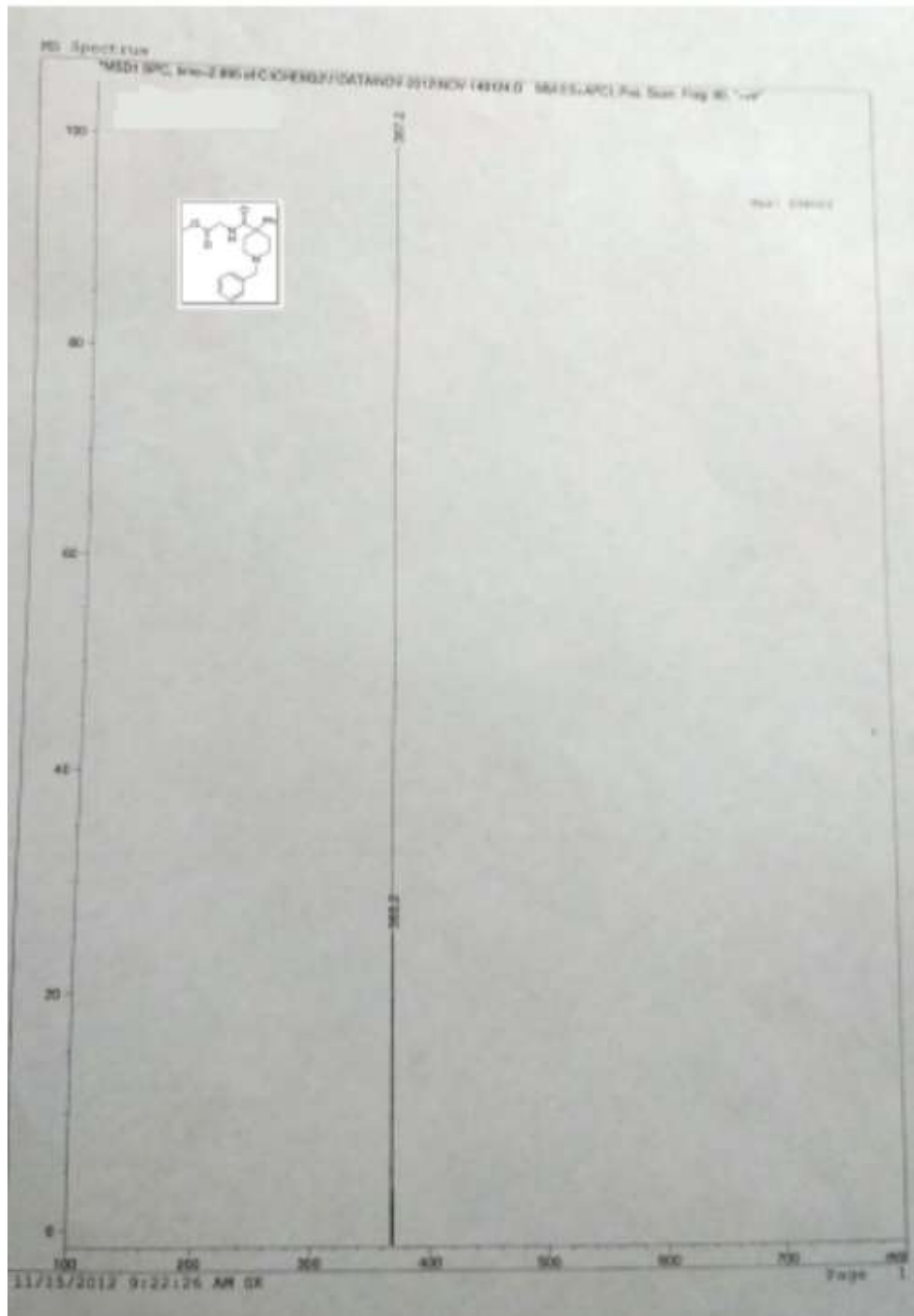
Supplementary File 1

^1H NMR, ^{13}C NMR and HMRMS, mass spectra of compound at different steps of the synthesis.

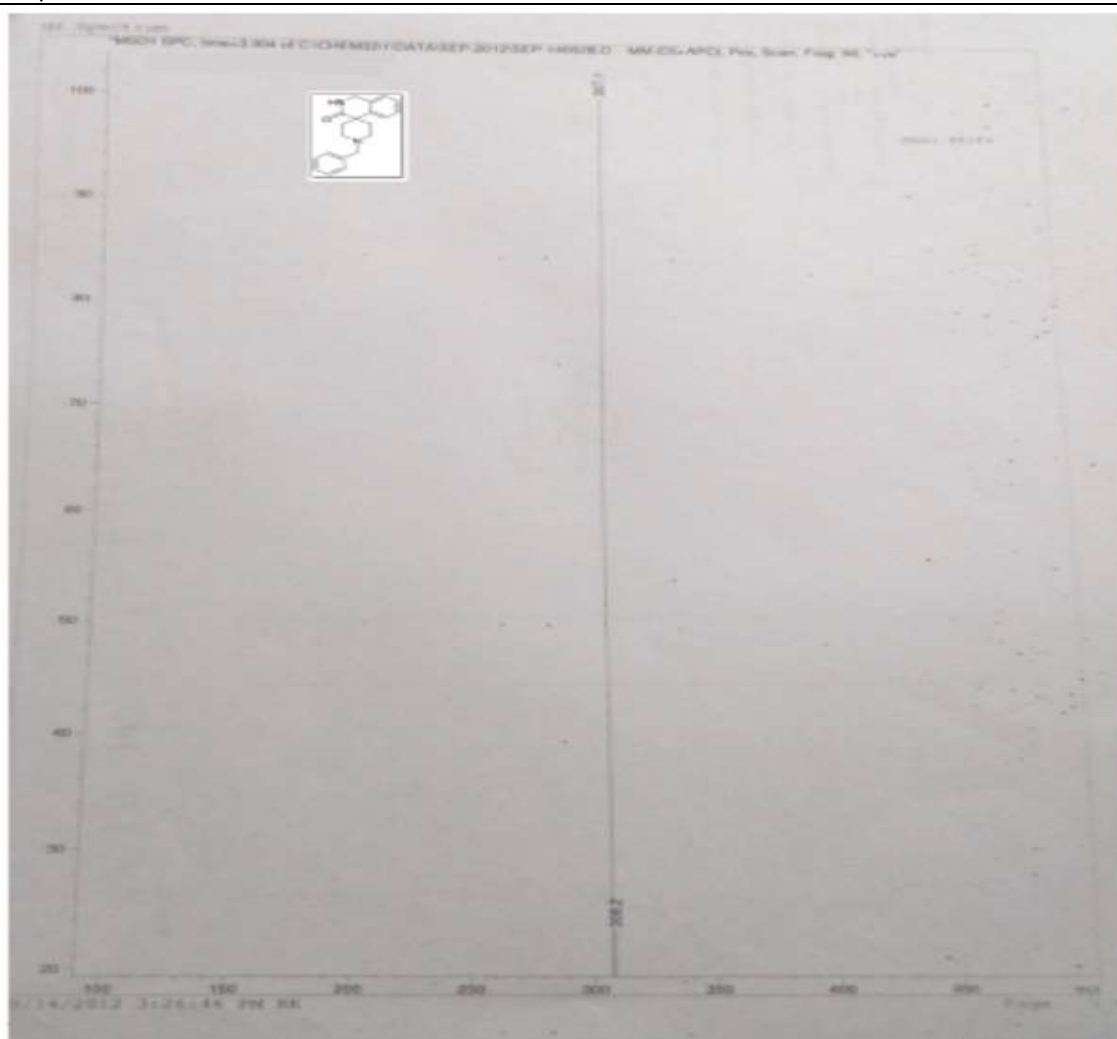
Mass spectra of **3**



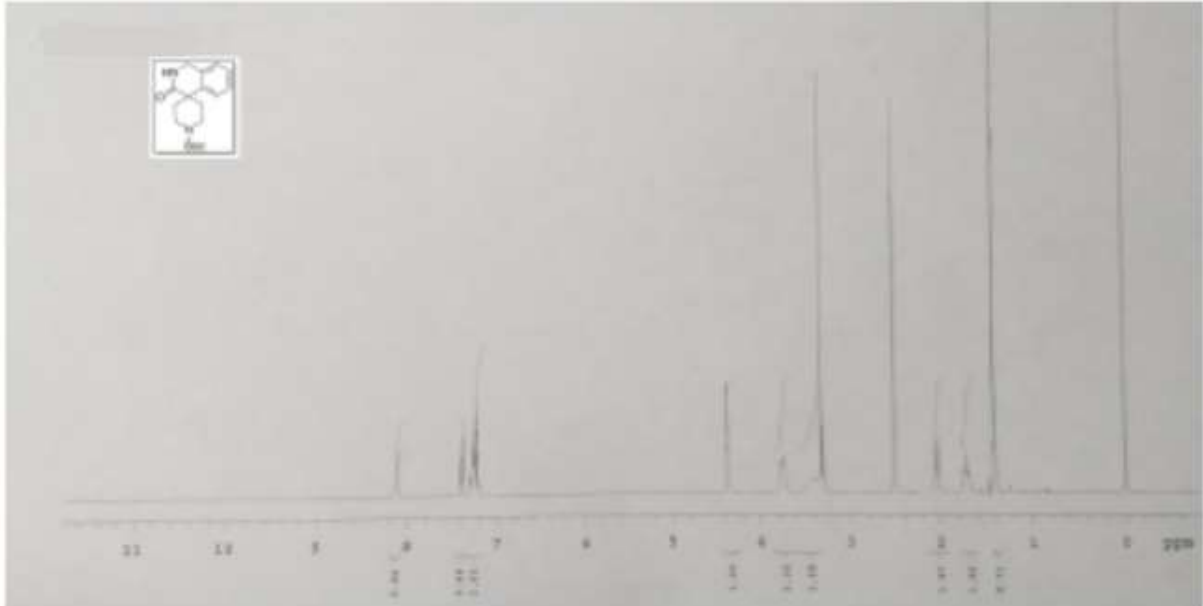
Mass spectra of 6



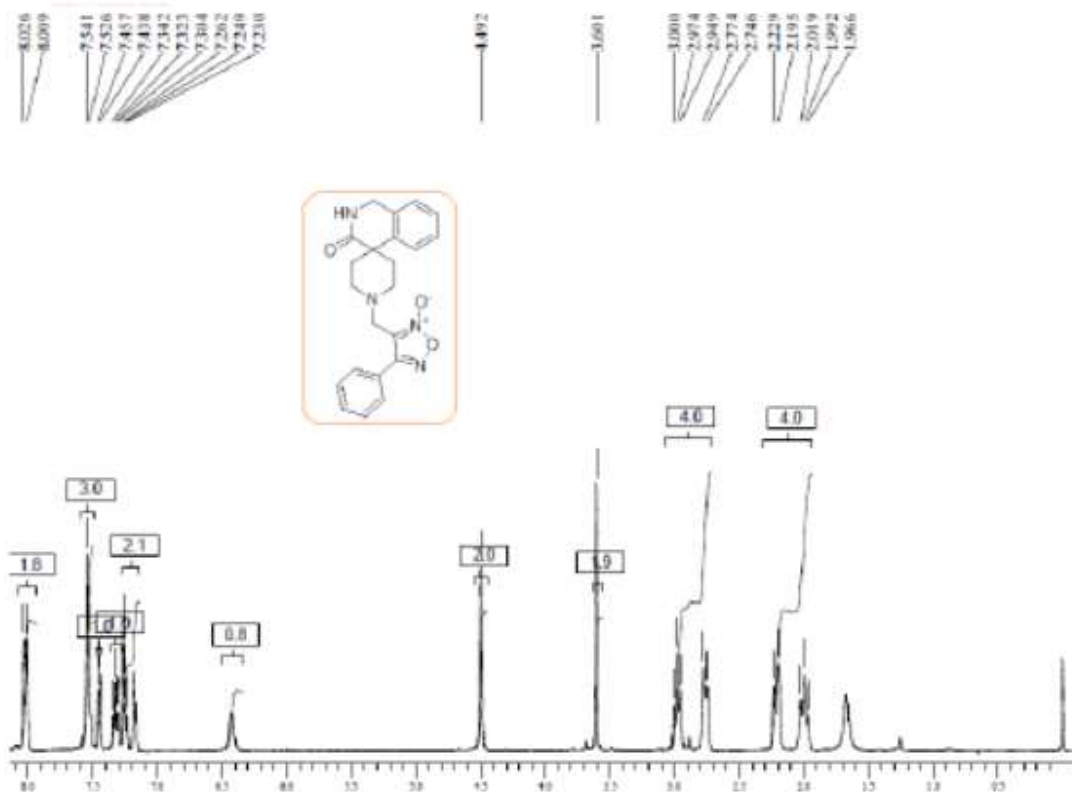
Mass spectra of 7



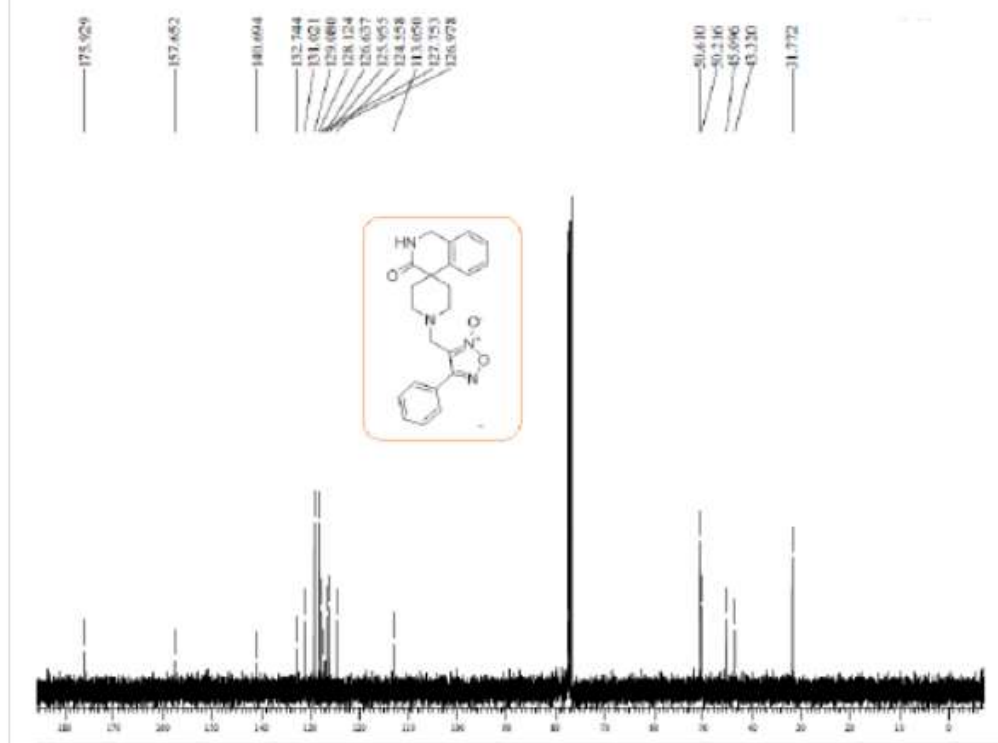
1H NMR spectra of **7**



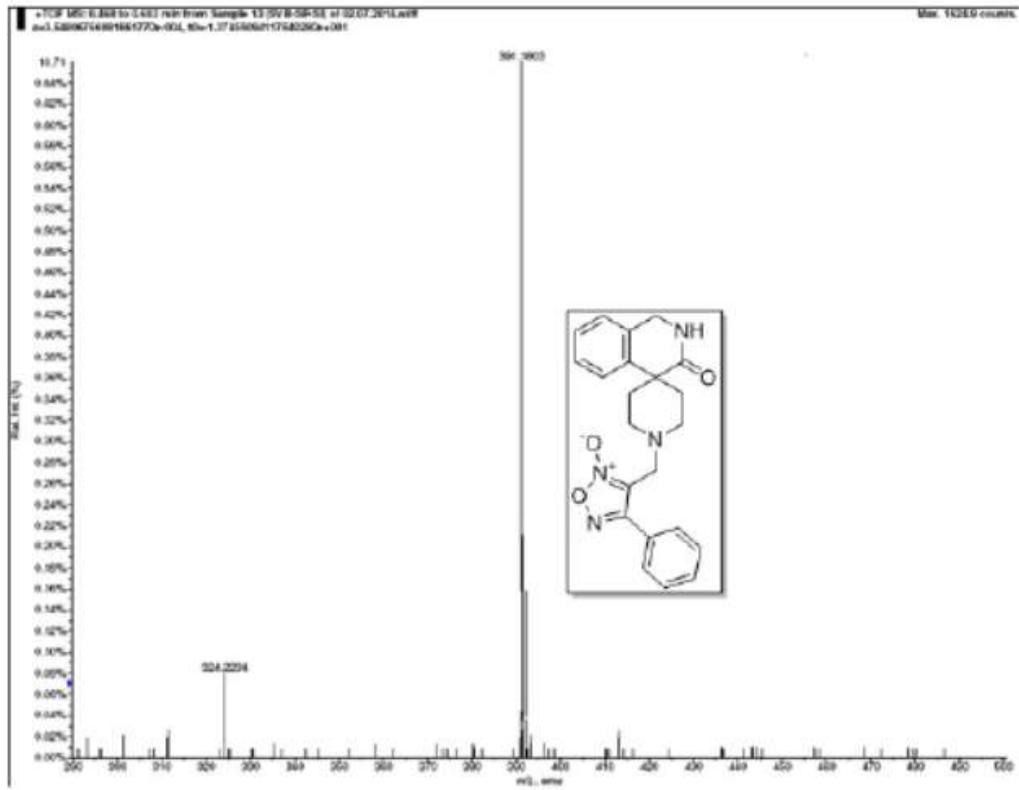
1HNMR spectra of **10a**



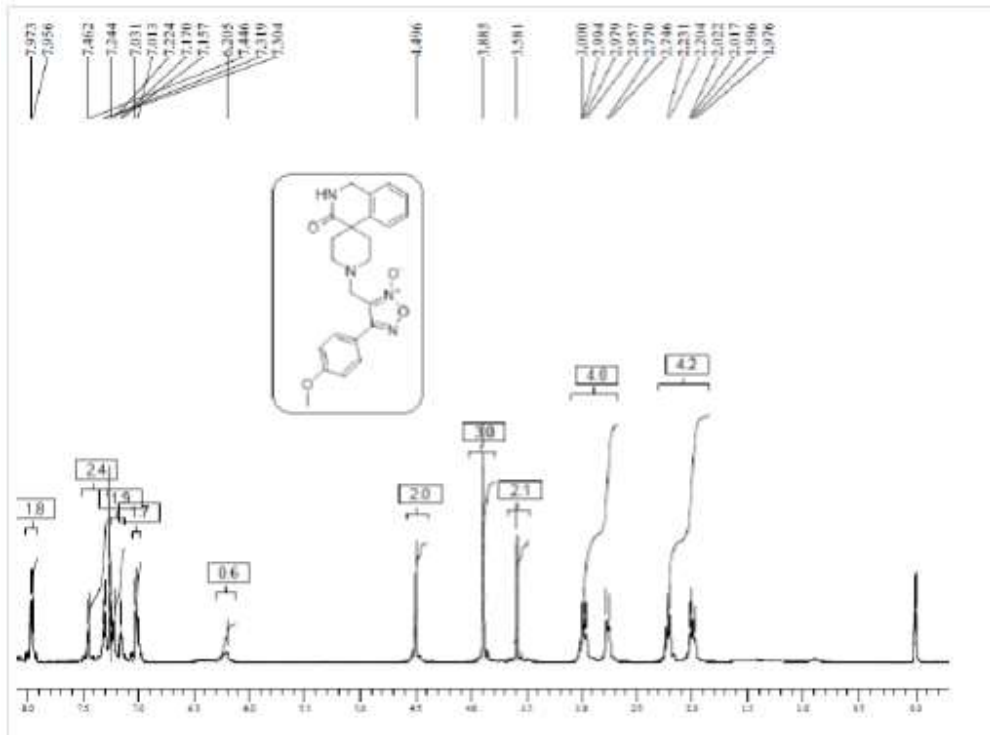
13C NMR spectra of **10a**



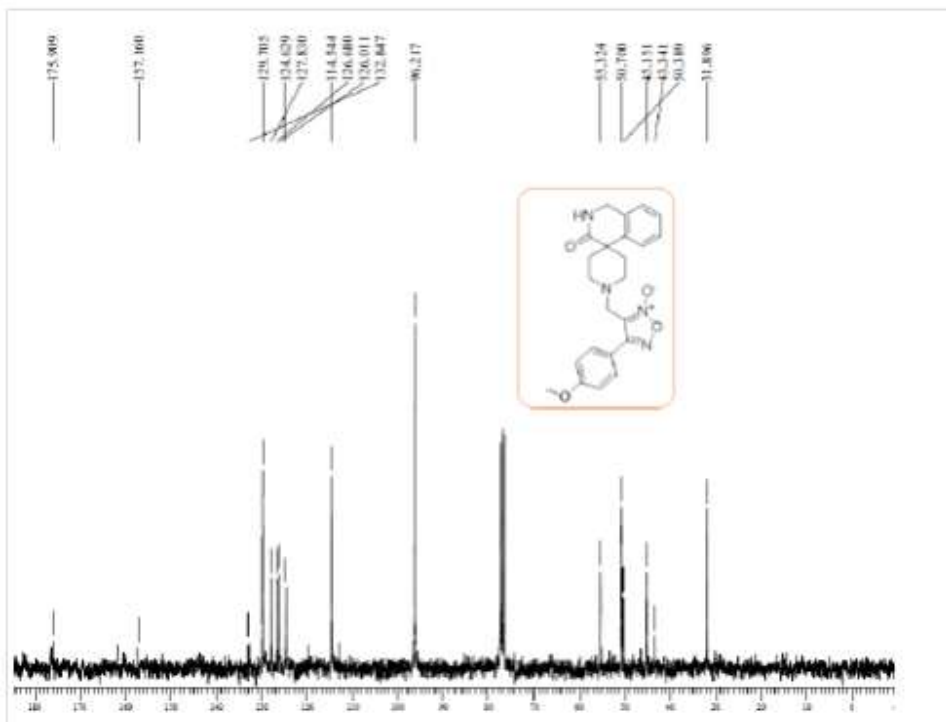
Mass spectra of **10a**



1HNMR spectra of **10b**

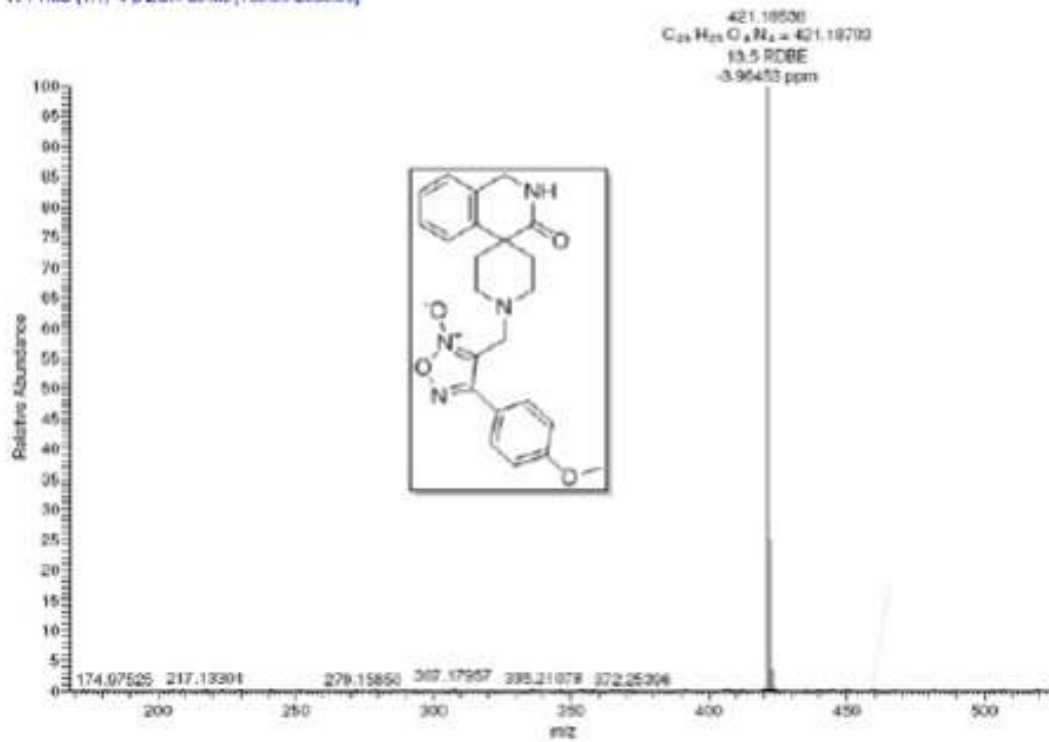


13C NMR spectra of **10b**

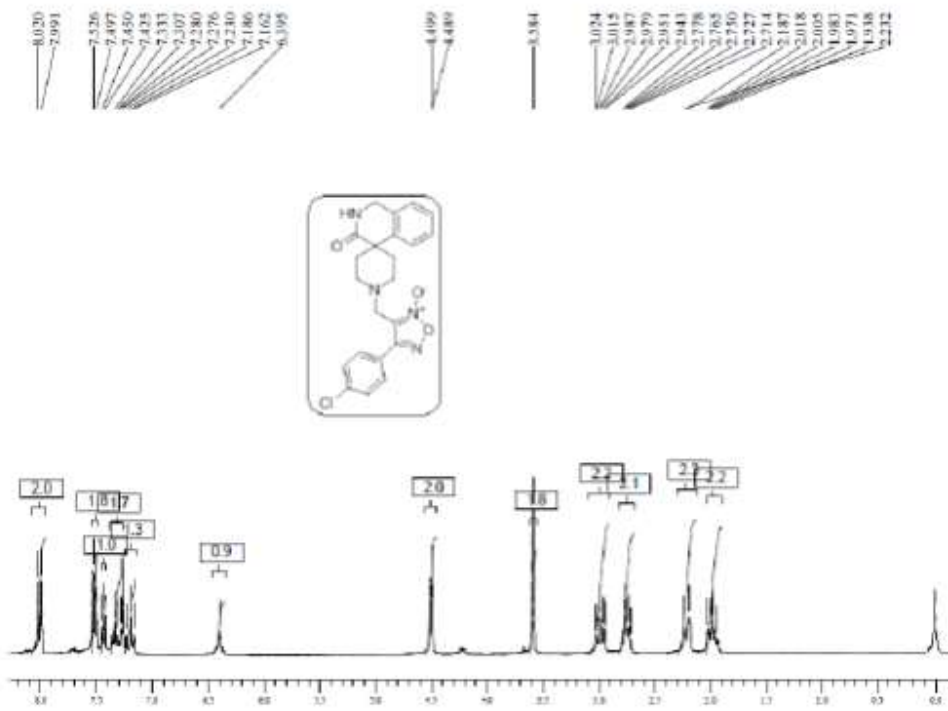


HRMS spectra of 10b

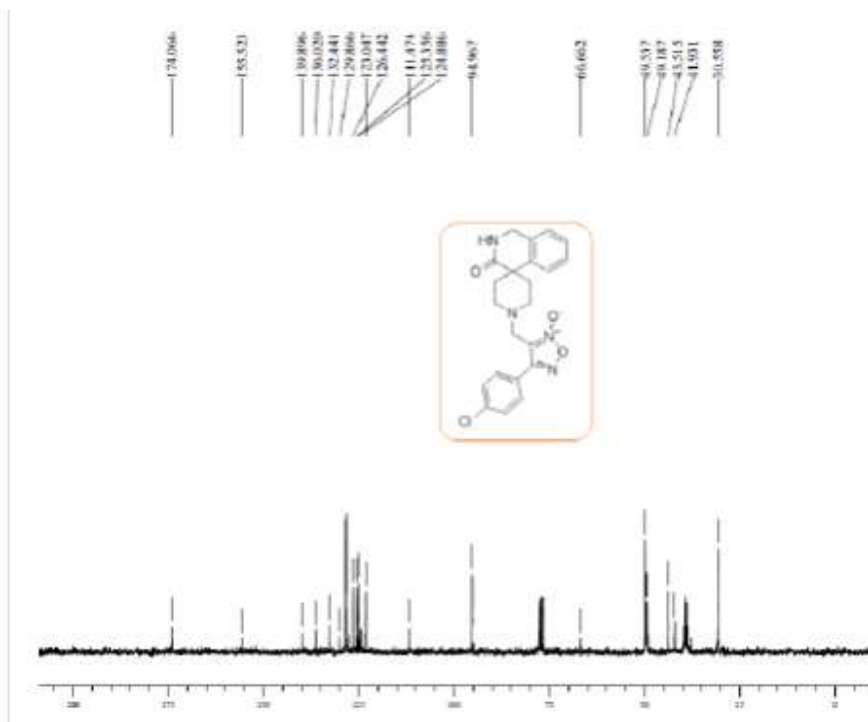
JPAO-SPIRO-4-OME #3-12 RT: 0.03-0.12 AV: 10 NL: 2.09E8
T: FTMS (1.1) + pESI Full ms [100.00-2000.00]



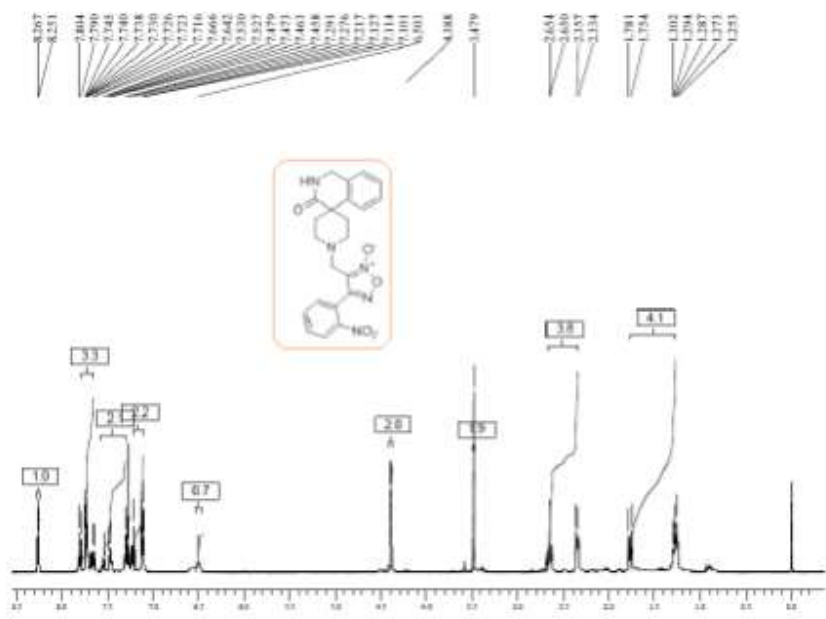
1HNMR spectra of **10c**



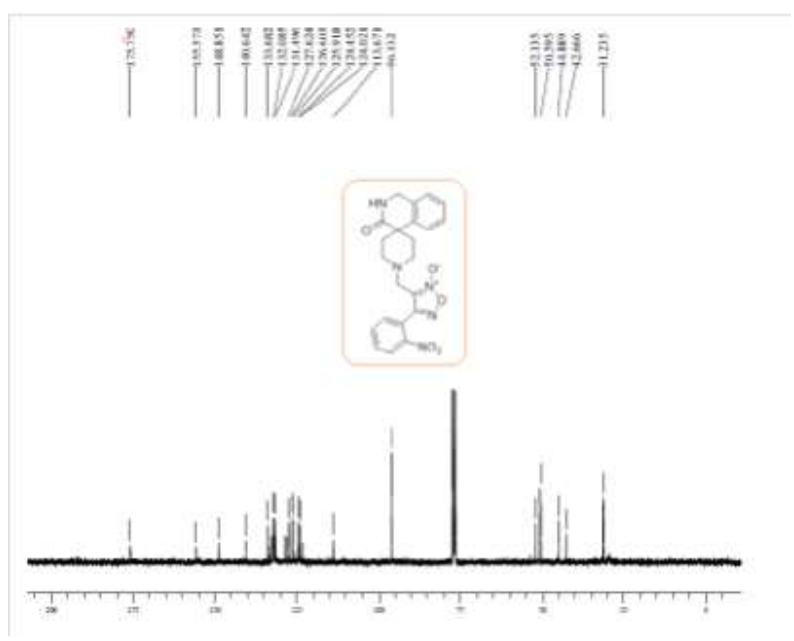
13C NMR spectra of **10c**



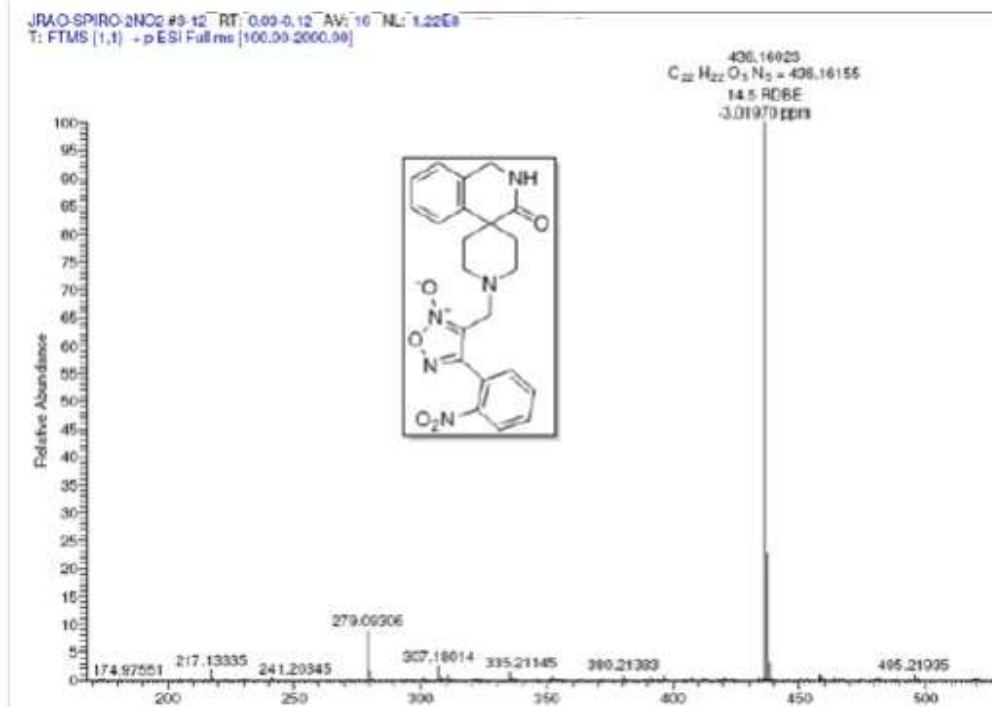
1HNMR spectra of **10d**



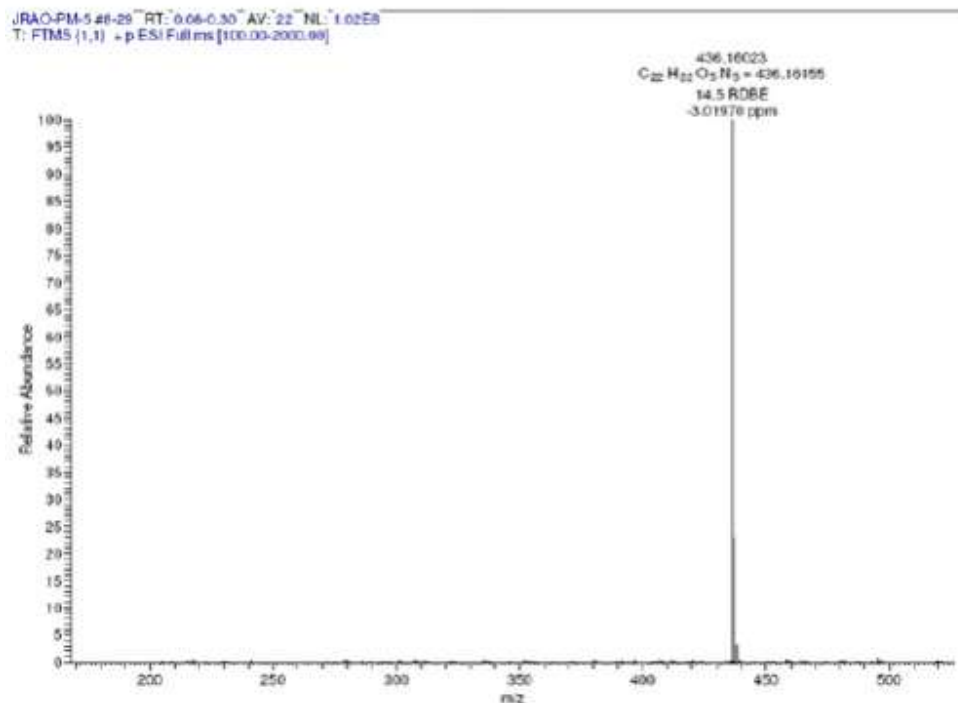
13C NMR spectra of **10d**



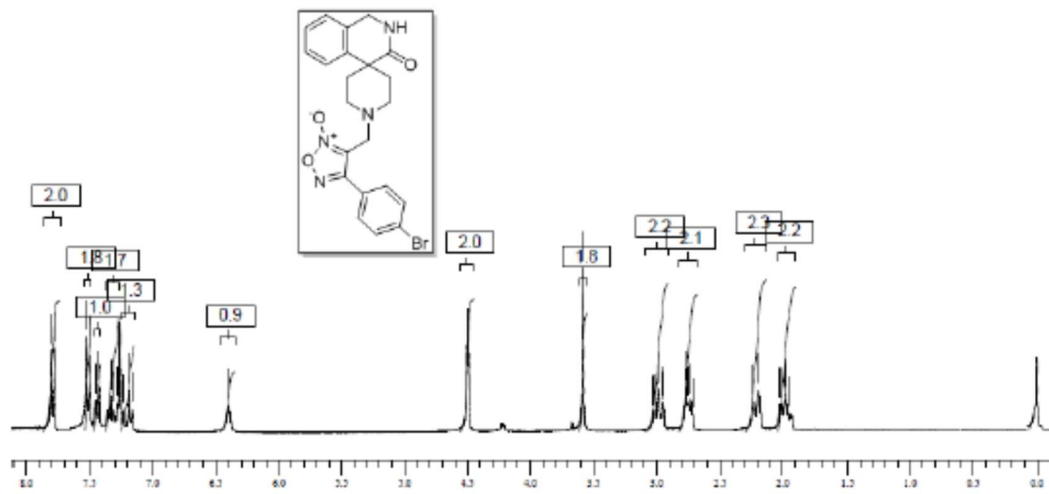
HRMS spectra of 10d



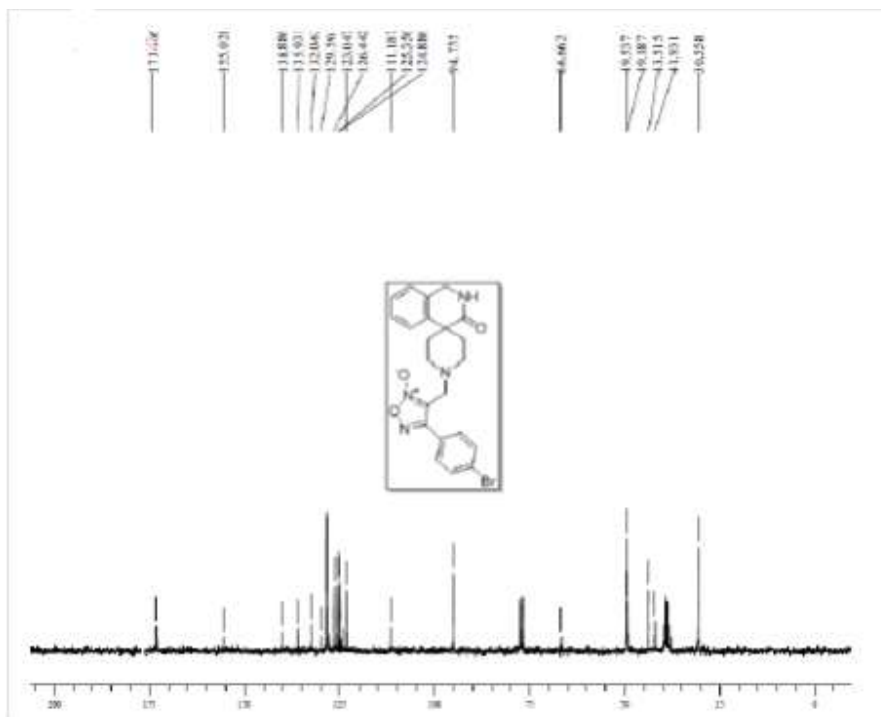
HRMS spectra of 10e



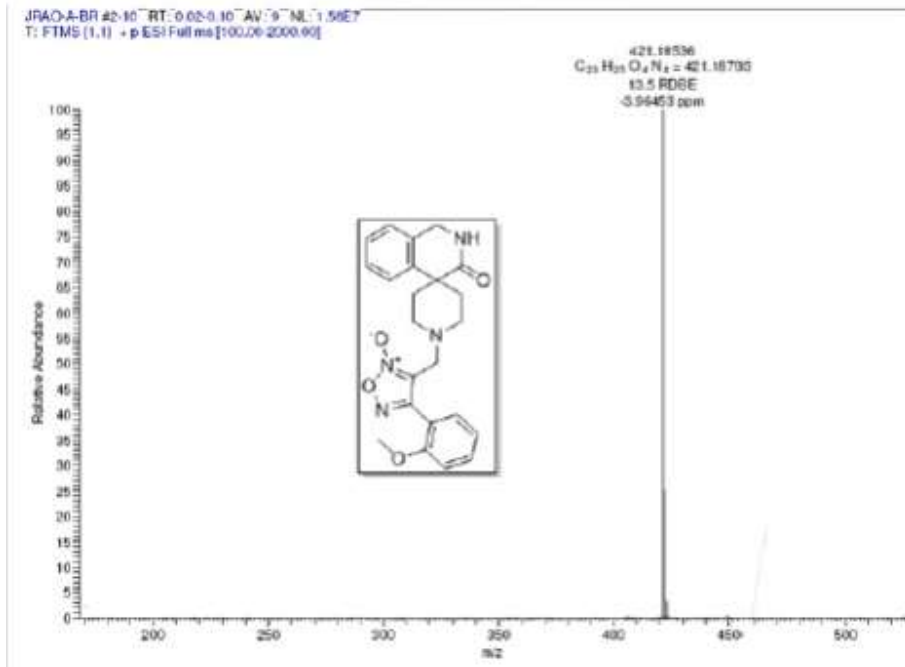
1H NMR spectra of **10f**



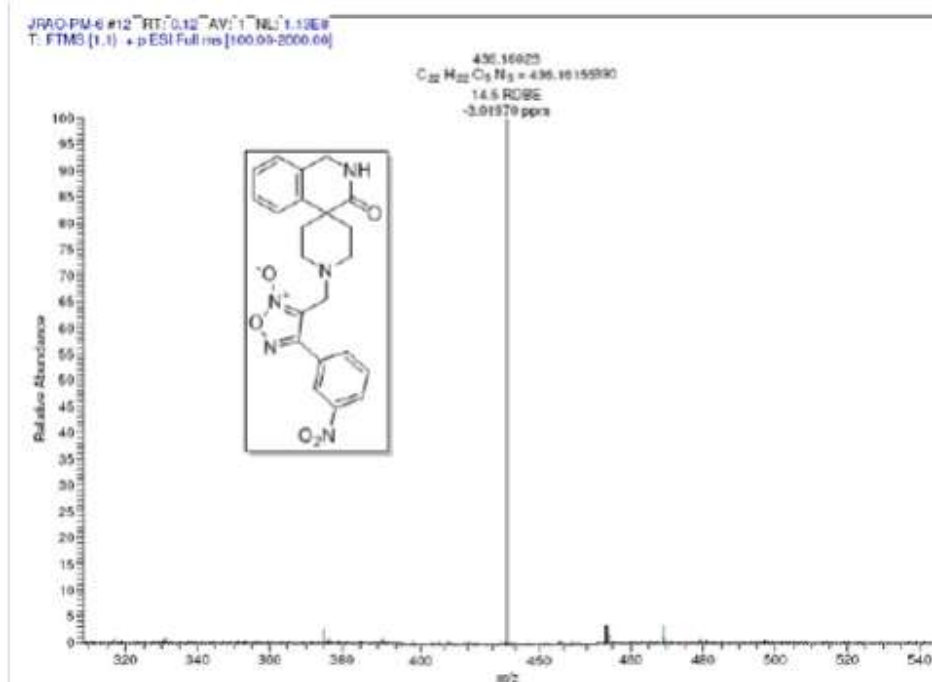
¹³C NMR spectra of **10f**



HRMS spectra of **10g**



HRMS spectra of **10h**



HRMS spectra of **10i**

