

A series of reduced amino pyridine Schiff base platinum(II) complexes were prepared as potential anticancer drugs, and characterized by NMR, IR spectroscopy, elemental analysis, and molar conductivity. UV and CD results showed the binding mode between these compounds and salmon sperm DNA may be intercalation. The cytotoxicity of these complexes was validated against A549, HeLa, and MCF-7 cell lines by MTT assay. Some complexes exhibited better cytotoxic activity than cisplatin against HeLa and MCF-7 cell lines.

We had synthesized 10 platinum(II) complexes with reduced amino pyridine Schiff base and its derivatives as ligands, and characterized by NMR, MS, and IR spectra. The binding mode of complexes with DNA was investigated by UV and CD spectra, the result indicated the intercalation in groove. The cell cytotoxicity of complexes was tested against A549, HeLa, and MCF-7 cell lines by MTT assay in vitro, 5b and 5j exhibited higher cytotoxic activity than cisplatin against HeLa cell line.

