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MASS SPECTROMETRY OF NEW 6-NITROQUIPAZINE DERIVATIVES

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Nitroquipazine and some of its derivatives are the potent inhibitors of serotonin transporter (SERT), a protein pump which main task is the reuptake of serotonin from the synaptic cleft.

SERT is the main molecular target for the selective serotonin reuptake inhibitors SSRIs, currently the most frequently prescribed antidepressant drug.

There were synthesised and examined a lot of the nitroquipazines with different substituents in piperazine moiety.

For this presentation we have chosen R-substituted 2-(4-R - piperazin-1-yl)-6-nitro-quinoline, where R = alkyl C8 and C12, cyclopentylmethyl-, cyclohexyl-, benzyl-, and fluorobenzyl-.

They were studied by mass spectrometry by using Electron Impact and Electrospray tandem mass spectrometry.

The comparison of the fragmentation obtained in both ionization techniques, both in positive and negative modes, is presented.

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