Supporting Information for RA-ART-07-2014-007004

Design, Synthesis and Preliminary evaluation of a novel SPECT DTPA-bis-triazaspirodecanone conjugate for D_2 receptor imaging.

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Supporting Information Description **Page No.**

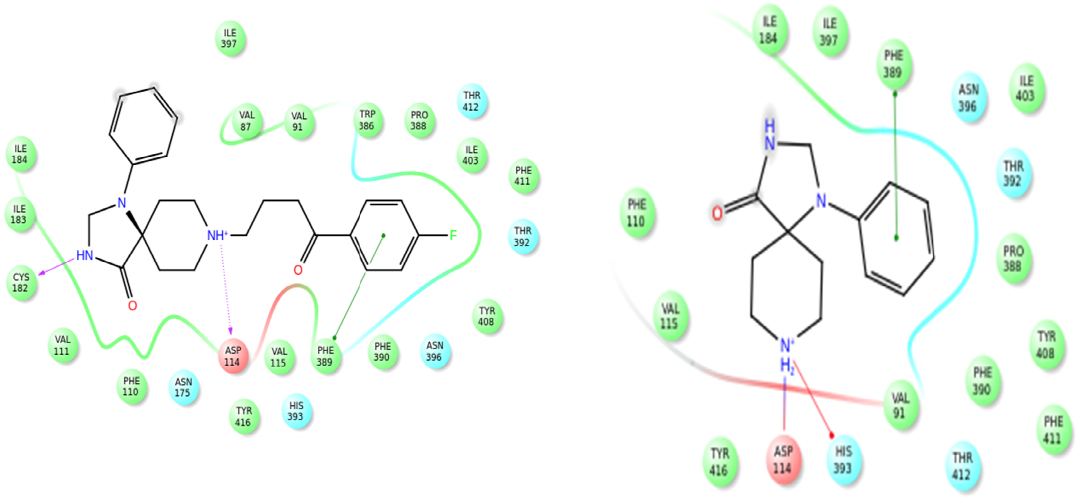


Fig. S1 -Two dimensional view of Spiperone and 1-phenyl1,3,8-triazaspiro[4,5]decan-4-one with D_2 receptor.*

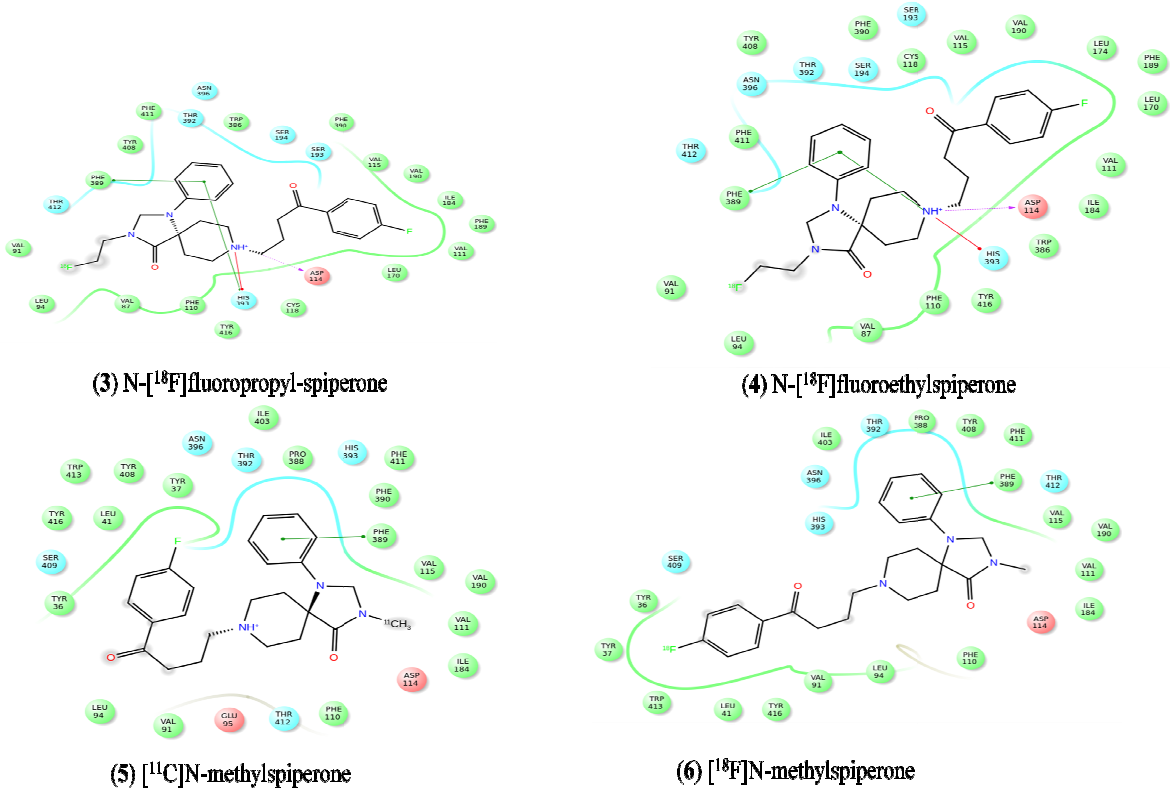


Fig. S2 -Two dimensional view of known Spiperone analogues and 1-phenyl1,3,8-triazaspiro[4,5]decan-4-one with D_2 receptor*

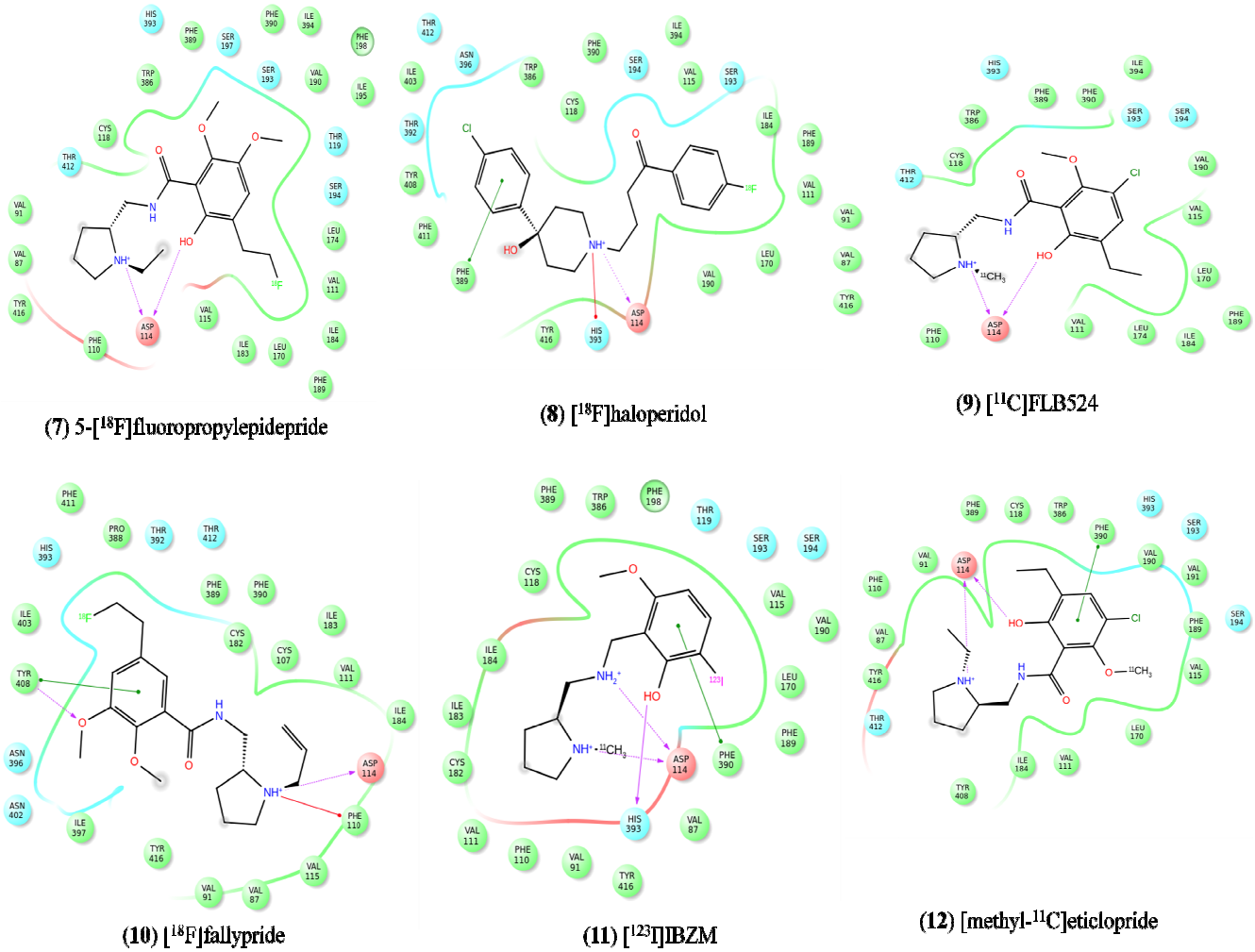


Fig. S3 -Two dimensional views of known structurally similar analogues and with D_2 receptor*

* Where green colored were hydrophobic, light blue were polar and red were positive charged residues. Pink lines represents hydrogen bonds, Green lines for pi-pi stacking.

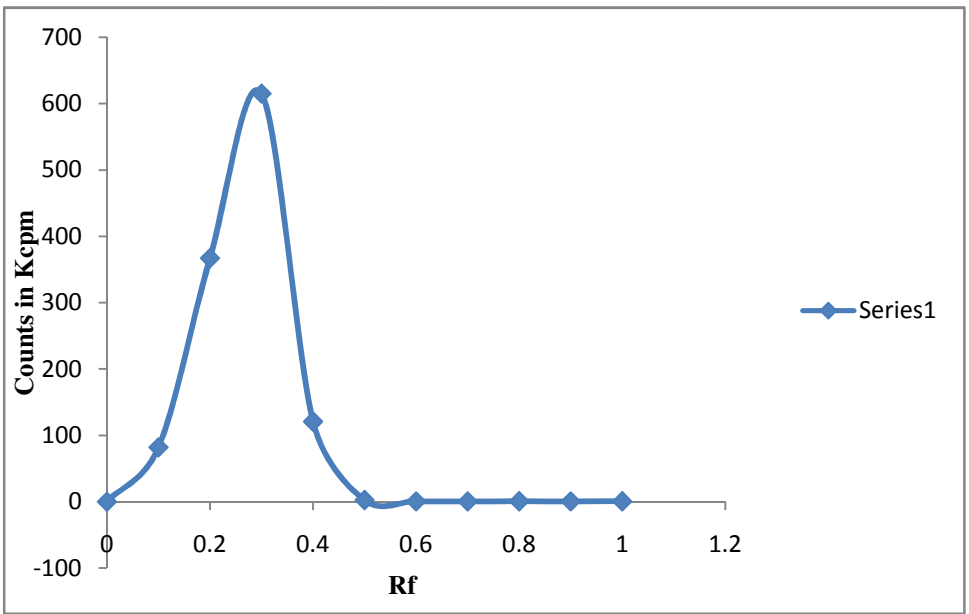
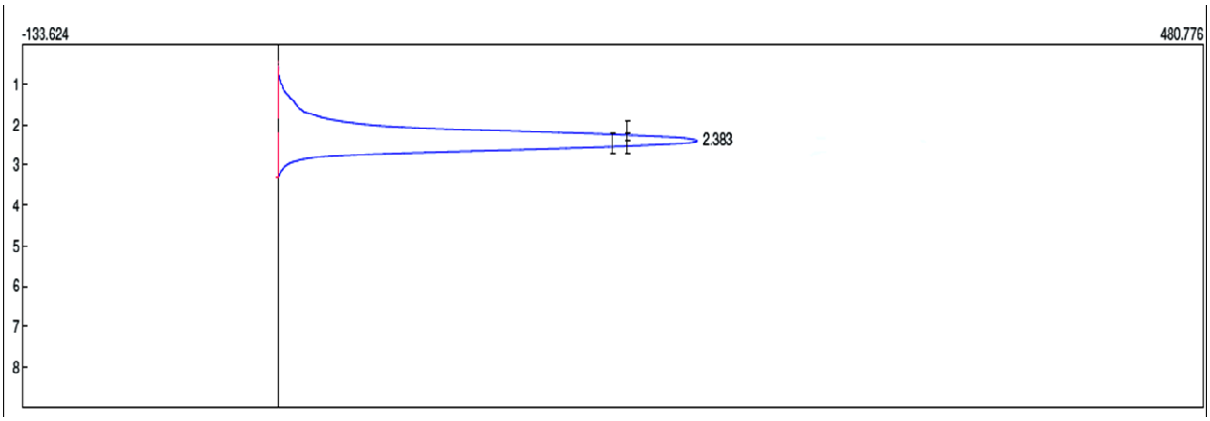


Fig. S4 - Radiochromatogram of ^{99m}Tc-DTPA-bis-(1-phenyl1,3,8-triazaspiro[4,5]decan-4-one) obtained with ITLC-SG paper strip developed in Acetone and 0.01% triethylamine showing one peaks after purification with C-18 reversed phase extraction cartridge.



Component	Retention	Area	Height	External	Units	Area %
DTPA-Conjugate	2.383	7456.5740	217.849	0.0000		99.999

Fig. S5-Radio-TLC of ^{99m}Tc labelled DTPA-bis-(1-phenyl1,3,8- triazaspiro[4,5]decan-4-one) after C-18 reversed phase extraction cartridge purification in 100% Acetone.

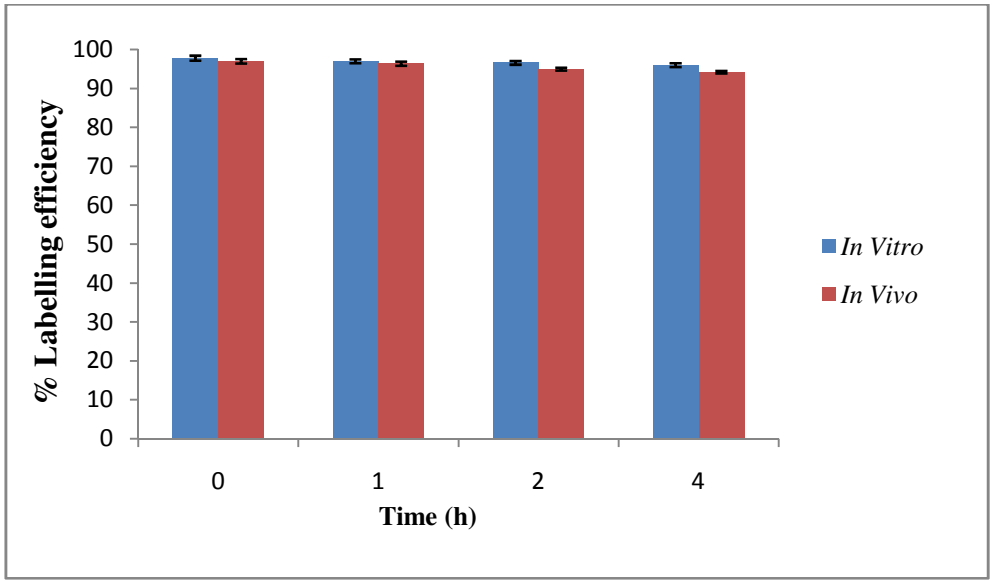


Fig. S6- *In vitro*/*in vivo* stability of ^{99m}Tc labelled DTPA-bis-(1-phenyl1,3,8-triazaspiro[4,5]decan-4-one)