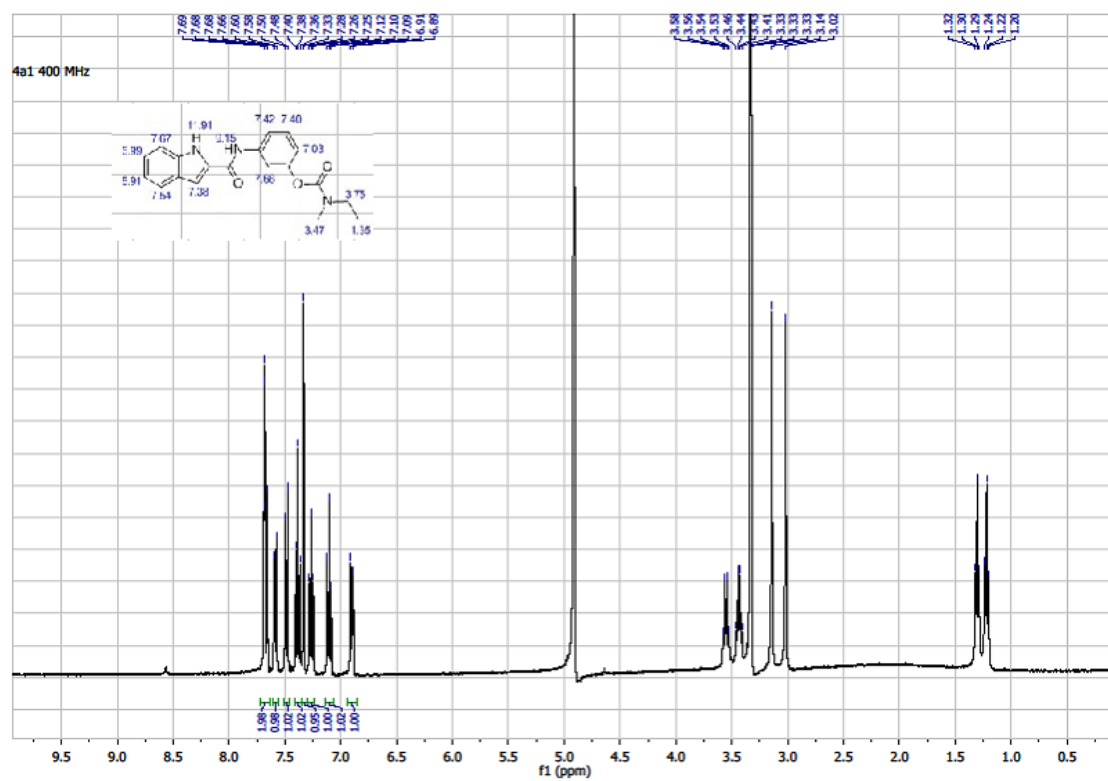


Contents

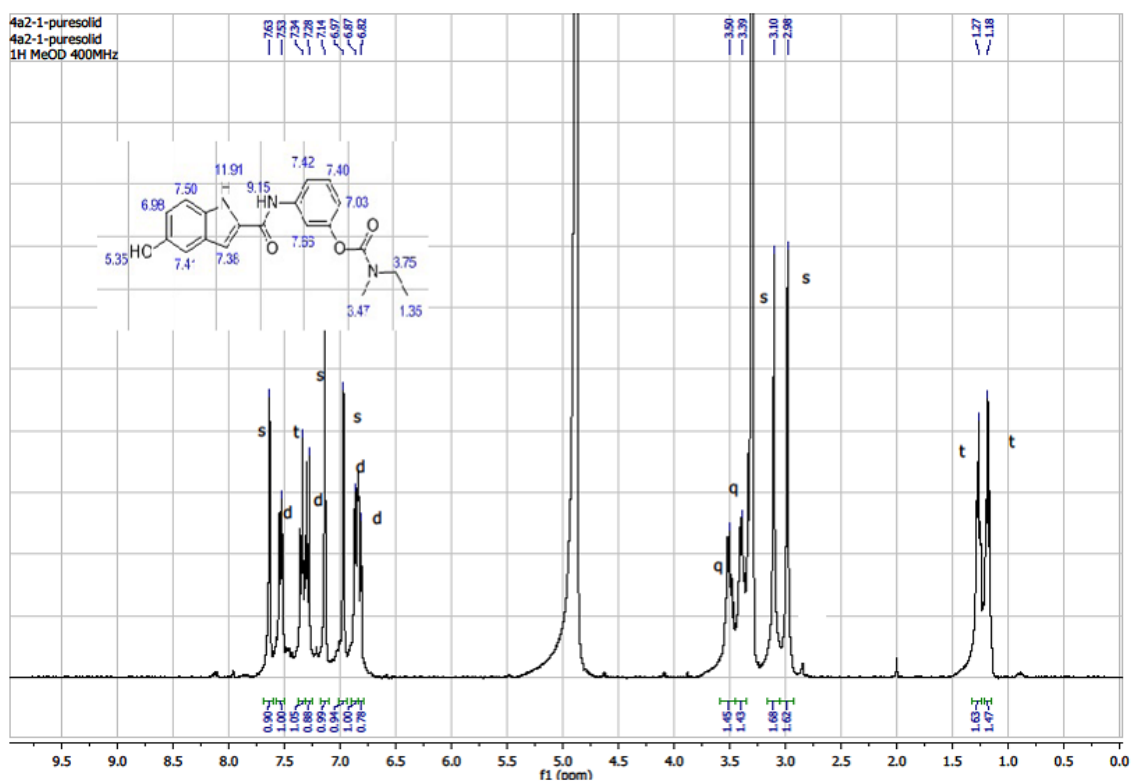
-Figure S1. ¹HNMR spectra in MeOD-*d*₄ for the final compounds, rivastigmine-indole hybrids (**5a1-3**; **5b1-3**; **5c1-3**)

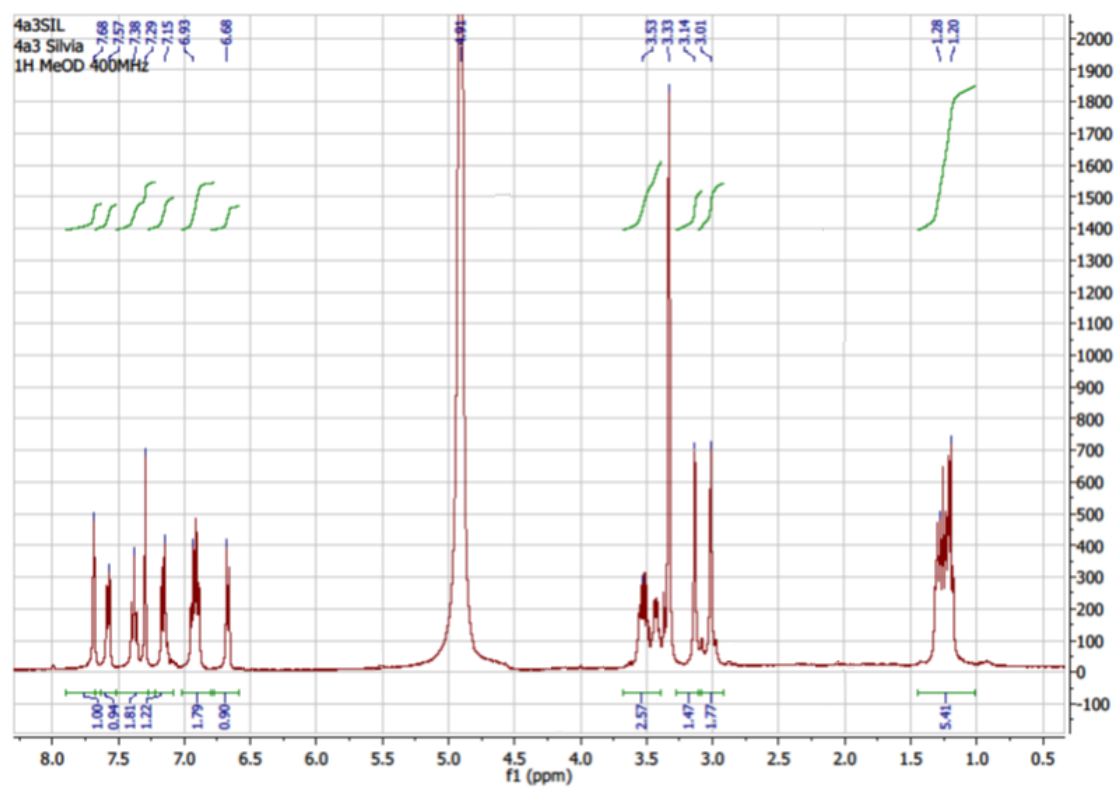
-Figure S2. ¹³CNMR spectra in MeOD-*d*₄ for the final compounds, rivastigmine-indole hybrids (**5a1-3**; **5b1-3**; **5c1-3**)

-Figure S3. Redocking results with superimposition of the crystalized ligand a) donepezil (yellow, PDB code 4EY7 [27]) with the best docked pose within hAChE and b) *N*-((1-(2,3-dihydro-1*H*-inden-2-yl)piperidin-3-yl)methyl)-*N*-(2-methoxyethyl)-2-naphthamide (yellow, PDB code 4TPK [28]) with the best docked pose within hBChE.

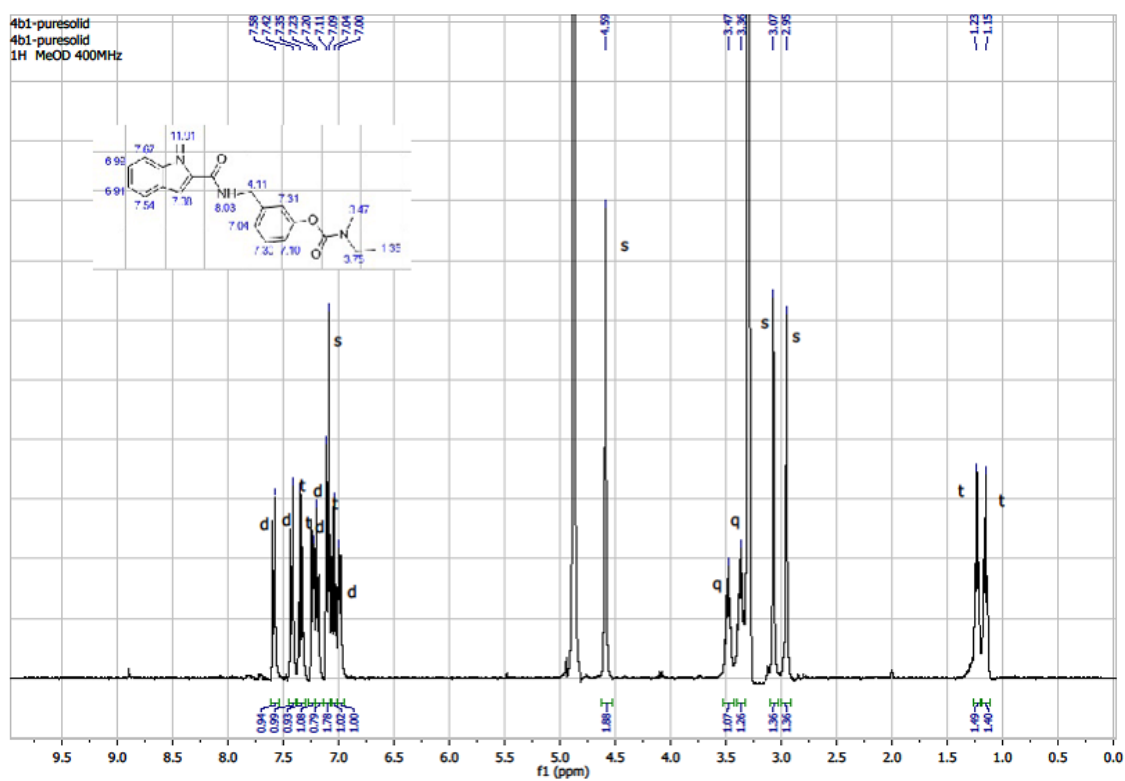


5a1



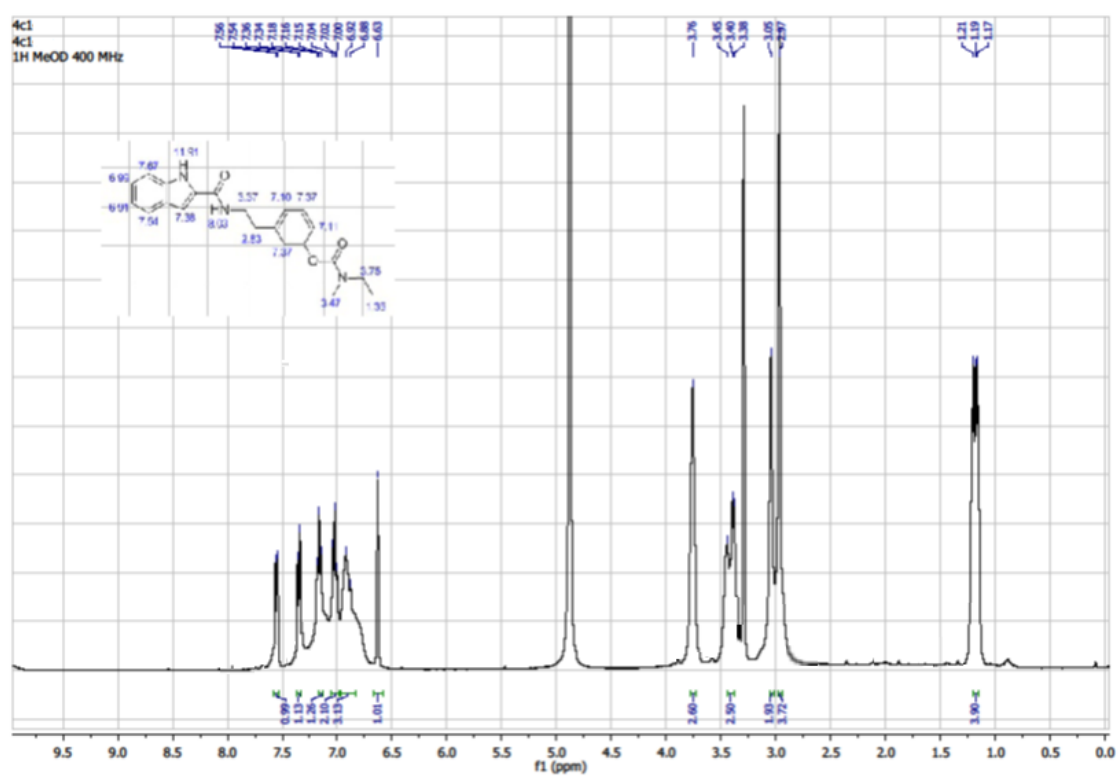


5a3

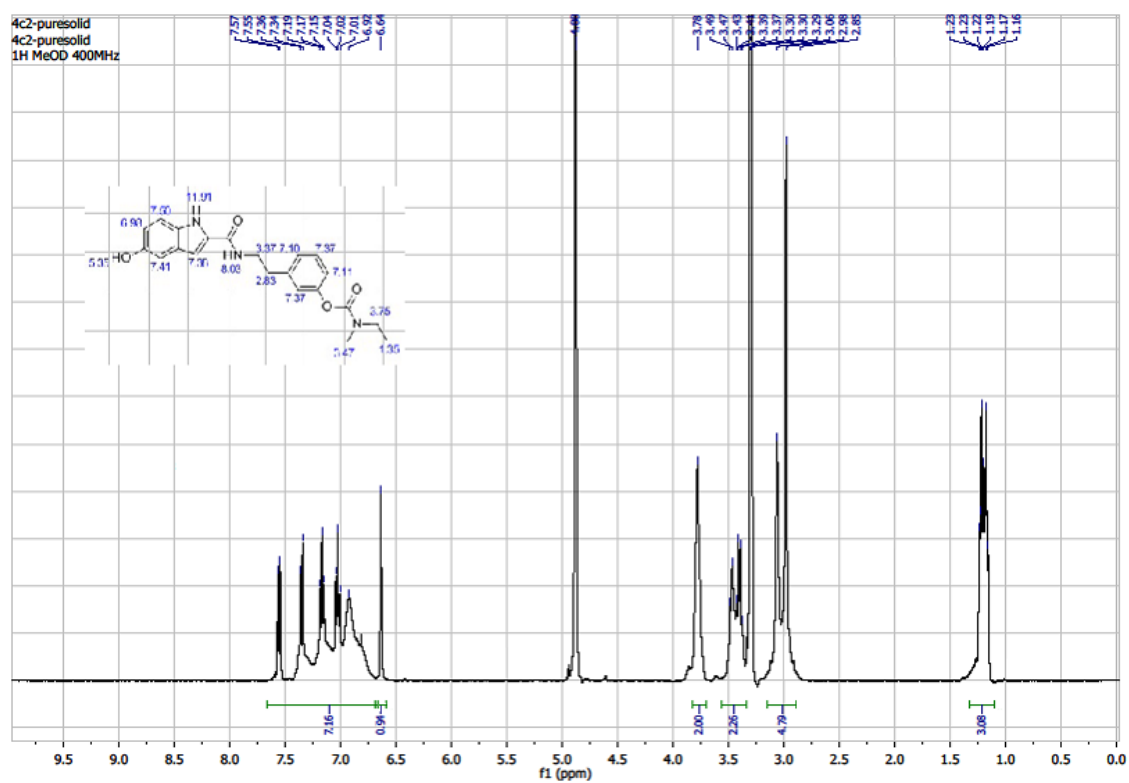


5b1

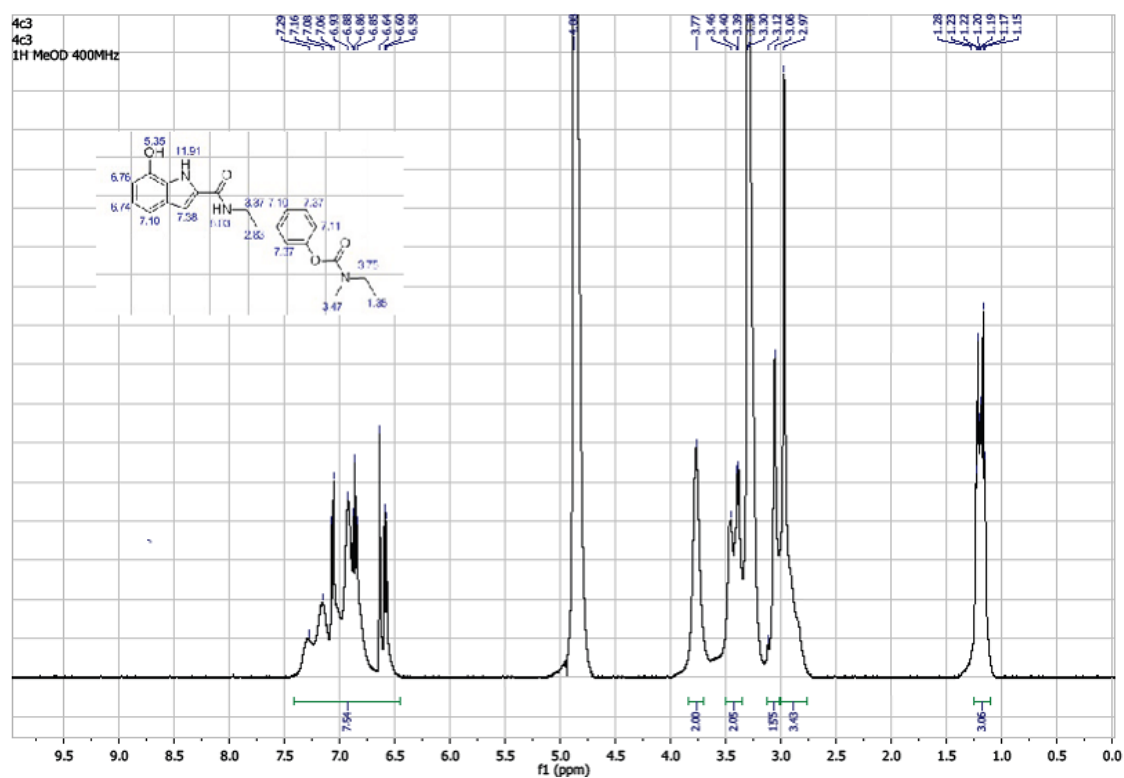
5b3



5C1

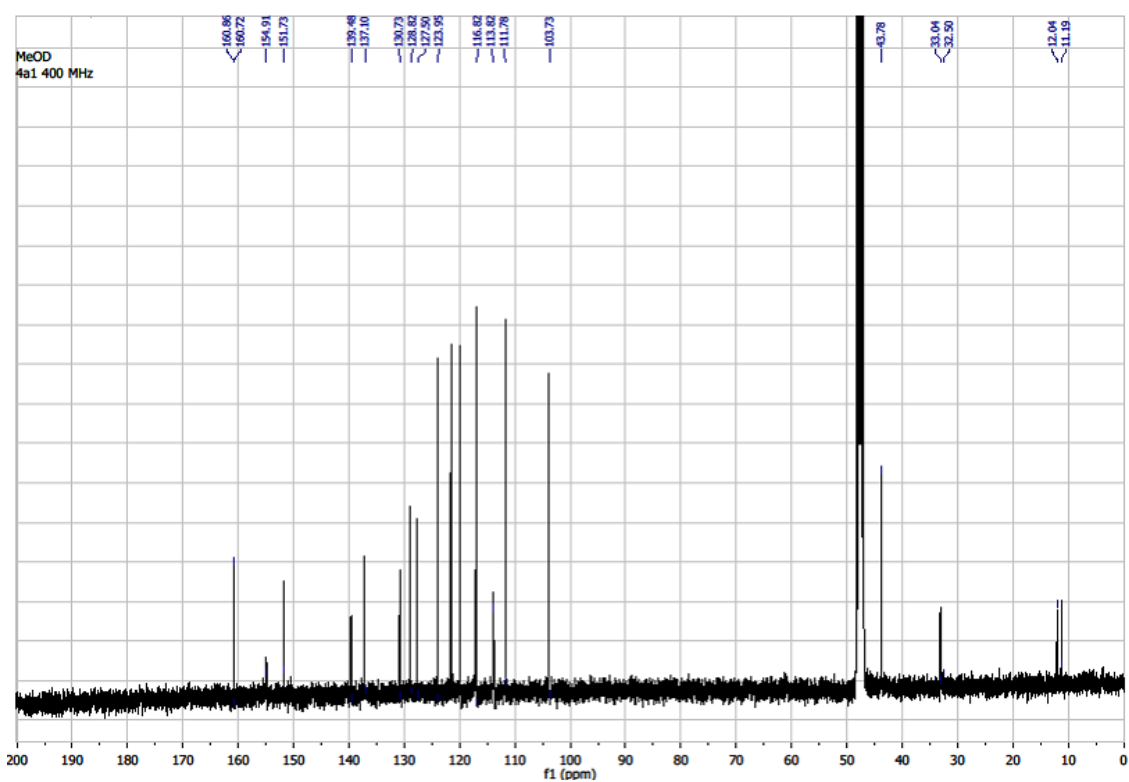


5c2

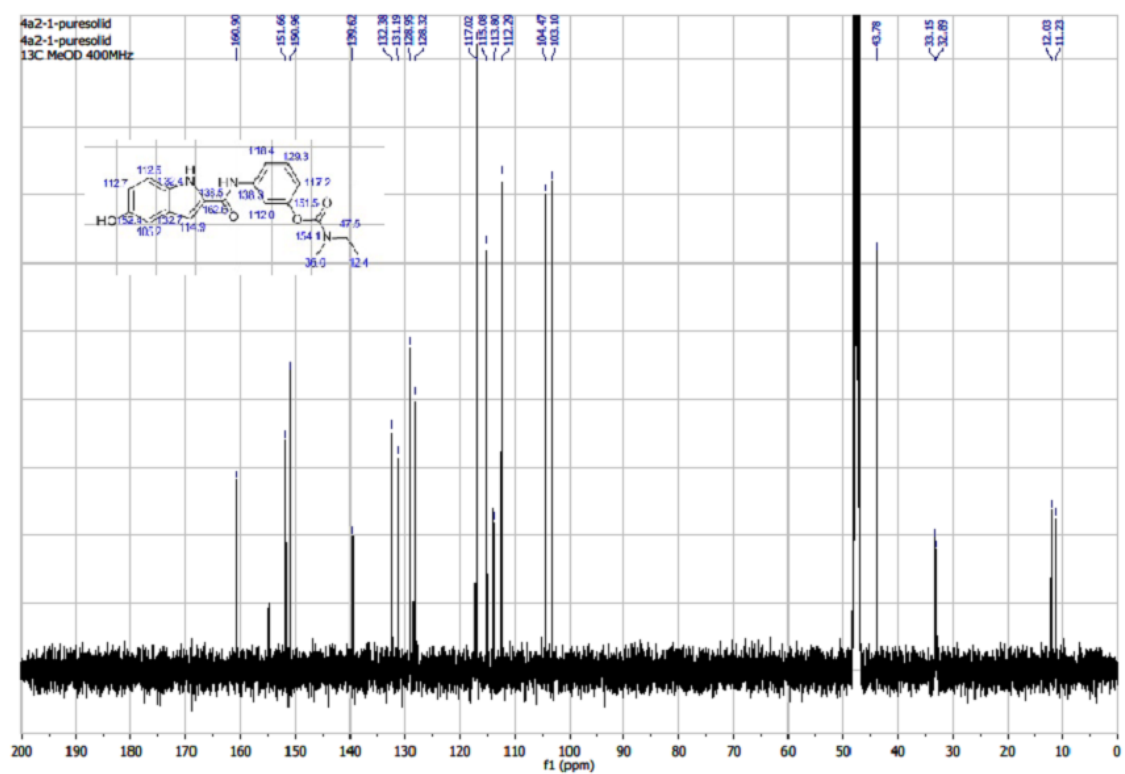


5c3

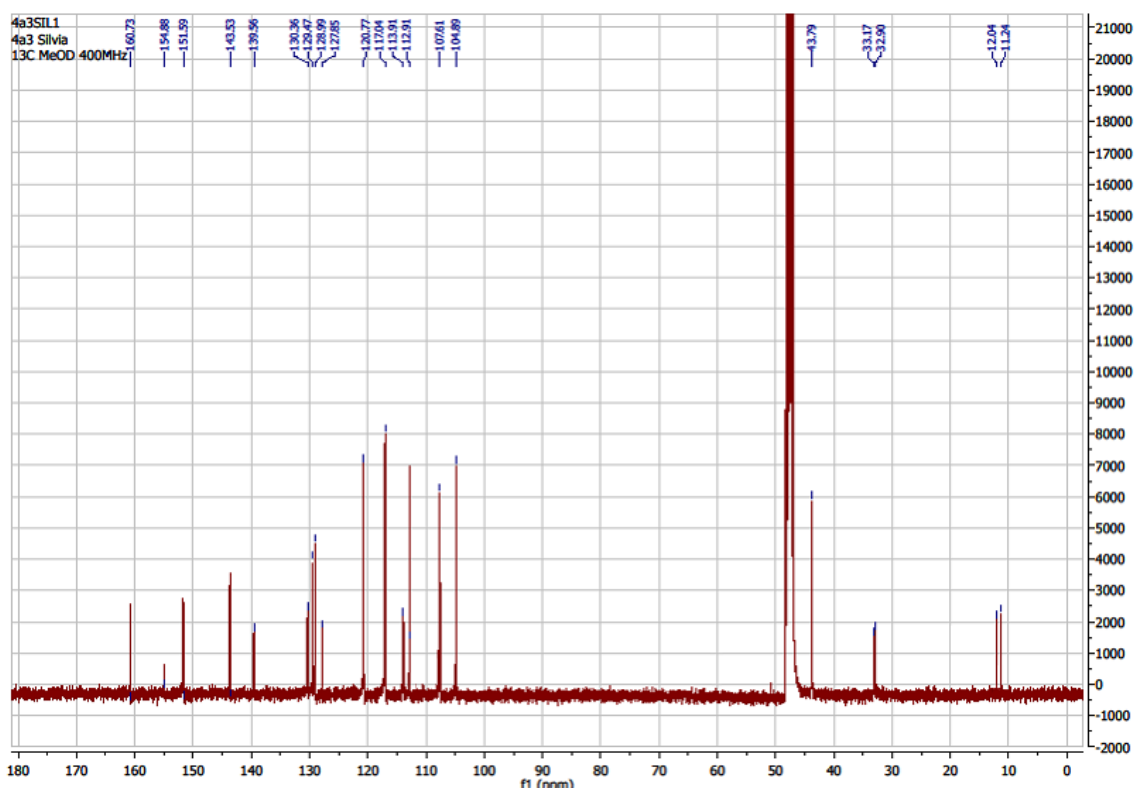
Figure S1. ¹H NMR spectra in MeOD-*d*₄ for the final products, rivastigmine-indole hybrids (**5a1-a3**; **5b1-b3**; **5c1-c3**)



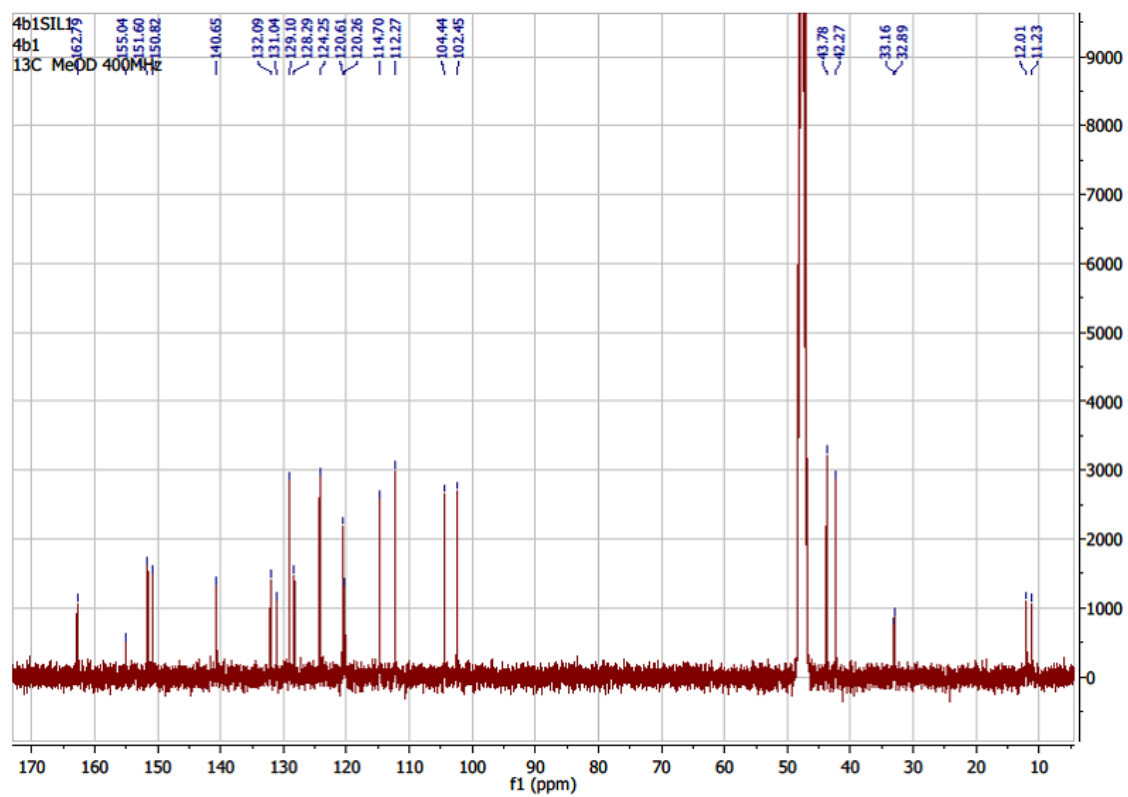
5a1



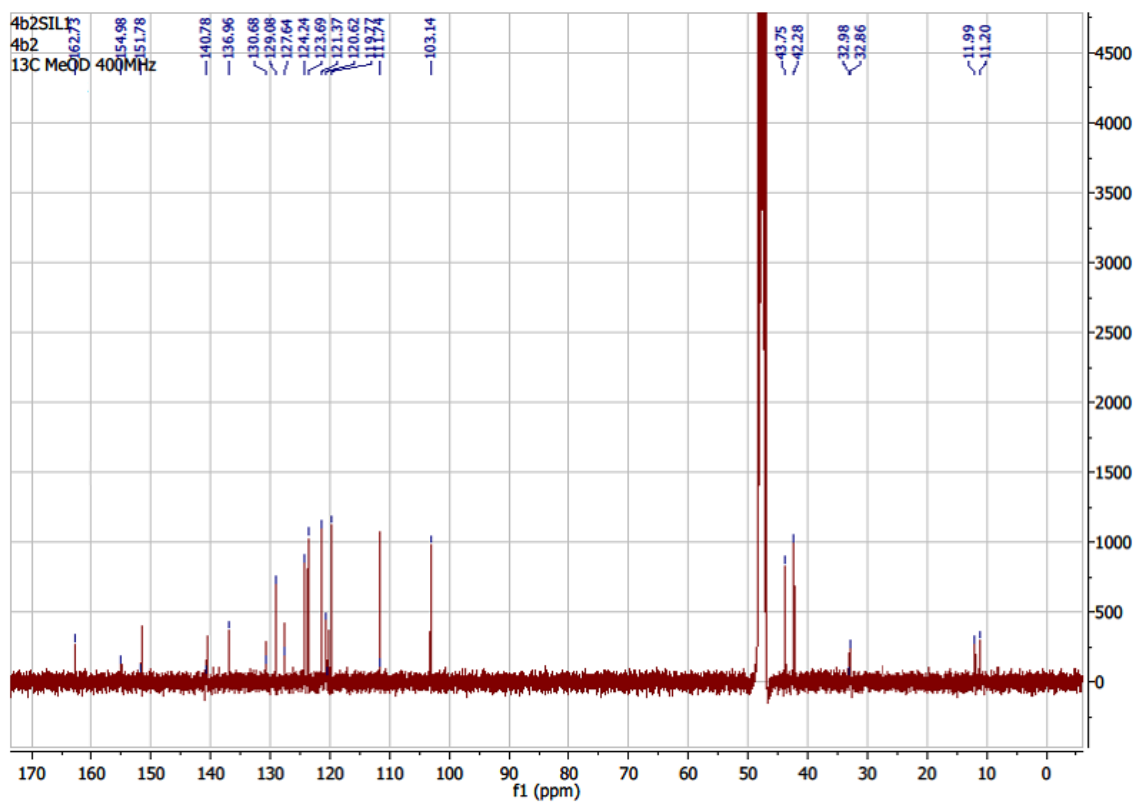
5a2



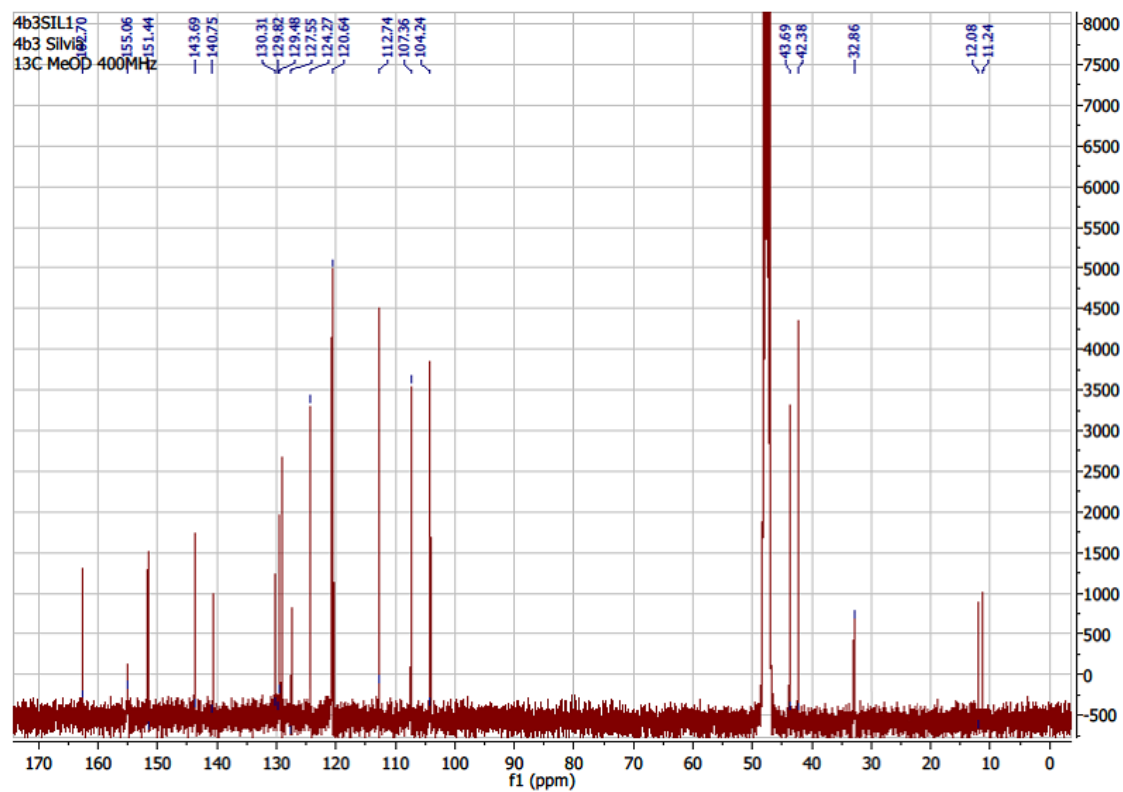
5a3



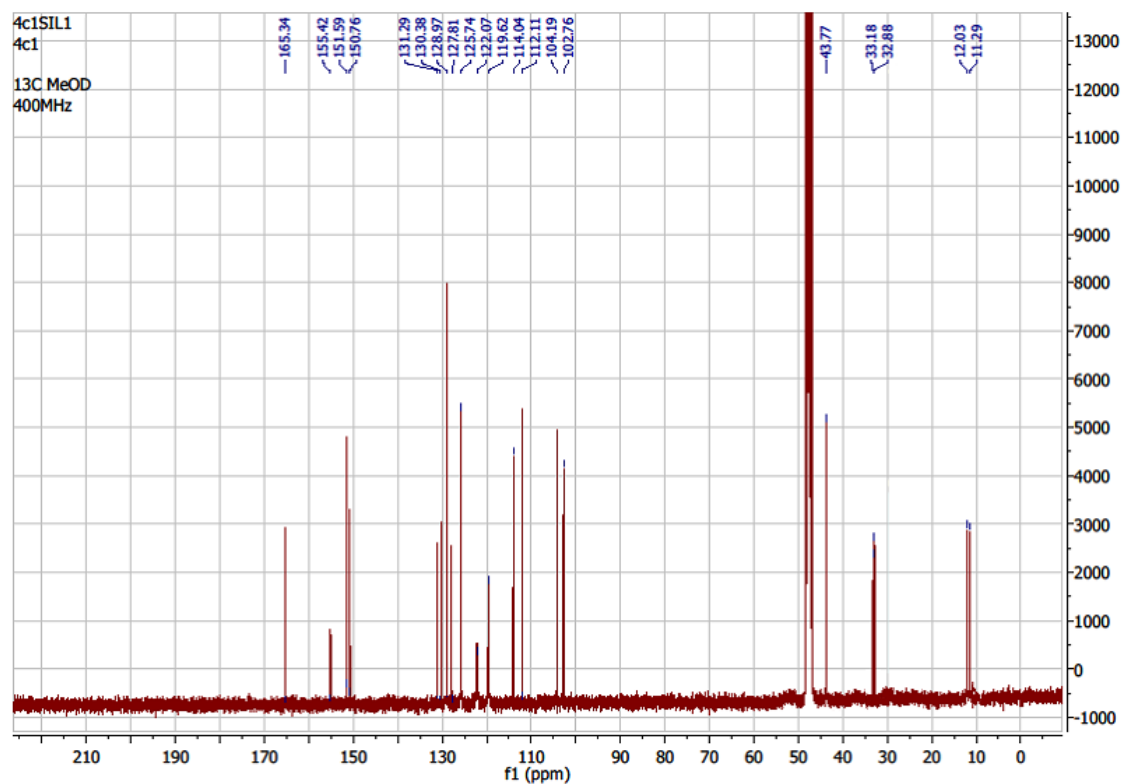
5b1



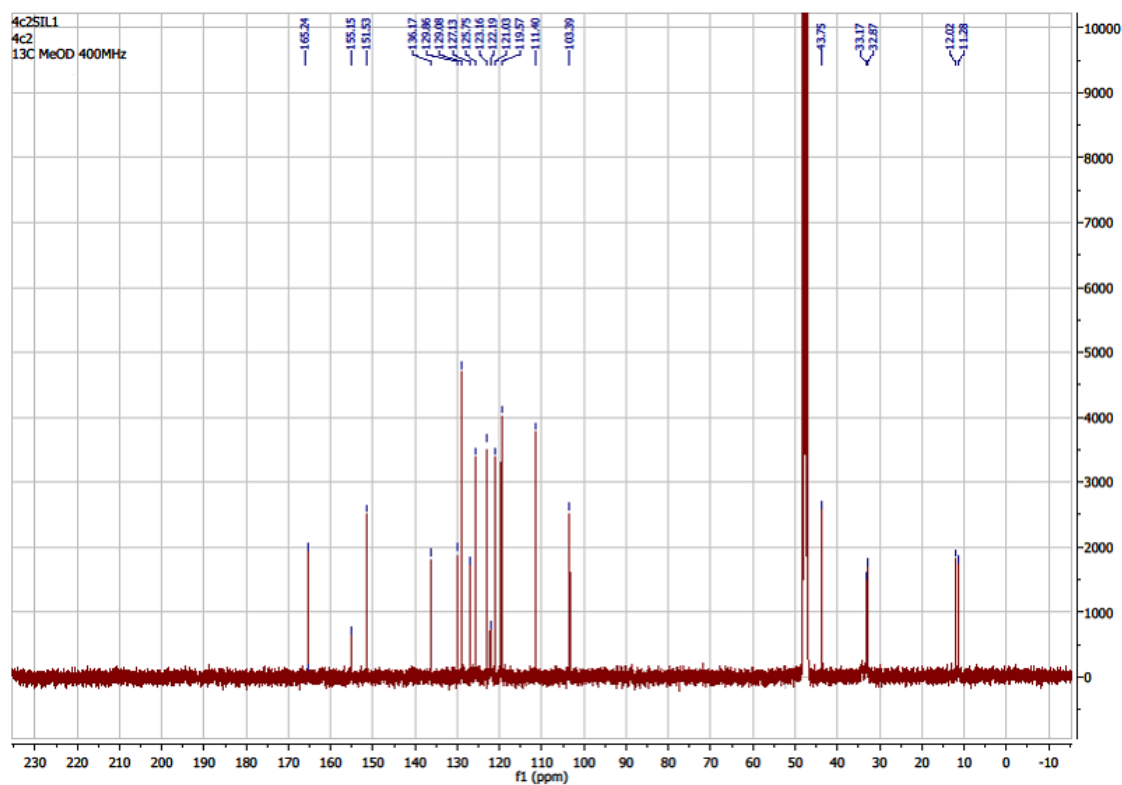
5b2



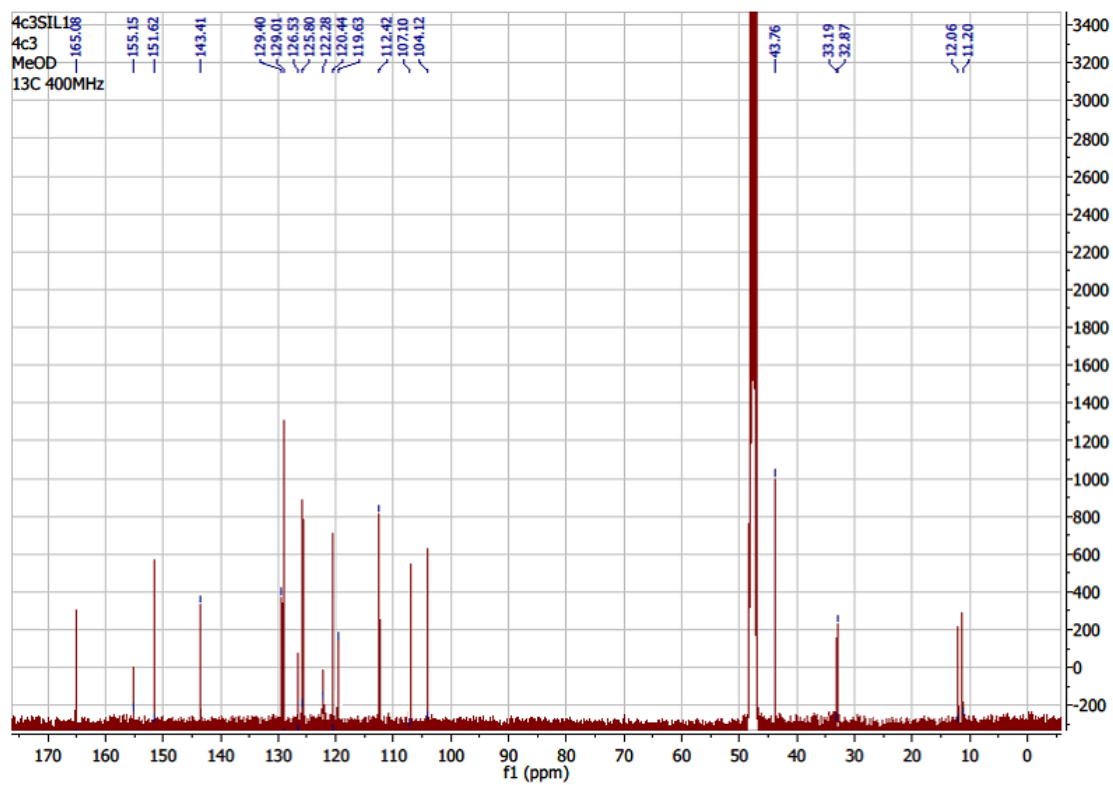
5b3



5c1



5c2



5c3

Figure S2. ^{13}C NMR spectra in $\text{MeOD-}d_4$ for the final products, rivastigmine-indole hybrids (**5a1-a3**; **5b1-b3**; **5c1-c3**)

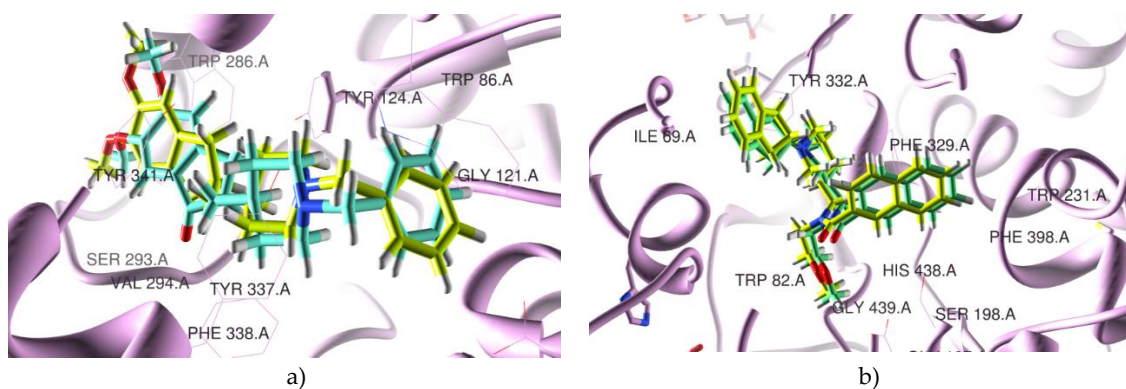


Figure S3. Redocking results with superimposition of the crystalized ligand a) donepezil (yellow, PDB code 4EY7 [27]) with the best docked pose within hAChE and b) *N*-((1-(2,3-dihydro-1*H*-inden-2-yl)piperidin-3-yl)methyl)-*N*-(2-methoxyethyl)-2-naphthamide (yellow, PDB code 4TPK [28]) with the best docked pose within hBChE.

Table S1. Goldscore scoring function values obtained for the RIV-IND hybrids by Gold software [31].

5a1	63.37	57.10
5a2	64.46	53.65
5a3	63.41	56.43
5b1	69.36	62.81
5b2	68.08	60.59
5b3	68.63	60.53
5c1	71.28	64.55
5c2	72.82	64.82
5c3	69.21	65.88
Rivastigmine	47.07	44.28