SUPPLEMENTARY MATERIAL

associated with the article

Cholinergic drugs bind at minor groove and reverse induced oxidative stress of calf thymus DNA: A new perspective towards an unexplored therapeutic efficacy

Prayasee Baruah,[a] *Pynskhemborlang Tep Phanrang,*[a] *Ibemhanbi Konthoujam,*[b] *Kripamoy Aguan,*[b] *and Sivaprasad Mitra*[a,]*

Centre for Advanced Studies in Chemistry and Department of Biotechnology & Bioinformatics, North-Eastern Hill University, Shillong – 793 022, India

[a]Centre for Advanced Studies in Chemistry; [b]Department of Biotechnology & Bioinformatics.

Journal: New Journal of Chemistry

CONTENTS

Sr. No.	Item	Page
01	**ST-1.** Time resolved fluorescence decay parameters and calculated average decay times of the AD drugs in aqueous buffer solution.	3
02	**Fig. S1.** Competitive binding of HOESCHT 3338 with ct-DNA in presence of cholinergic drugs TAC, ESE and HuPA.	4
03	**Fig. S2.** Interaction of HOESCHT 3338 with cholinergic drug DON.	5
04	**Fig. S3.** Quenching of drug (TAC, ESE and HuPA) fluorescence by NaF in presence of ct-DNA	6

ST-1. Time resolved fluorescence decay parameters and calculated average decay times of the AD drugs in aqueous buffer solution.

Drug	α_1	τ_1 /ns	α_2	τ_2 /ns	τ_{av} /ns
DON	0.83	1.37	0.17	4.38	2.56
TAC	0.92	1.99	0.08	1.21	1.95
ESE	0.79	4.89	0.21	7.72	5.73
HuPA	0.82	2.99	0.18	3.51	3.10

Fig. S1. Competitive binding of HOESCHT 3338 with ct-DNA in presence of cholinergic drugs TAC, ESE and HuPA.

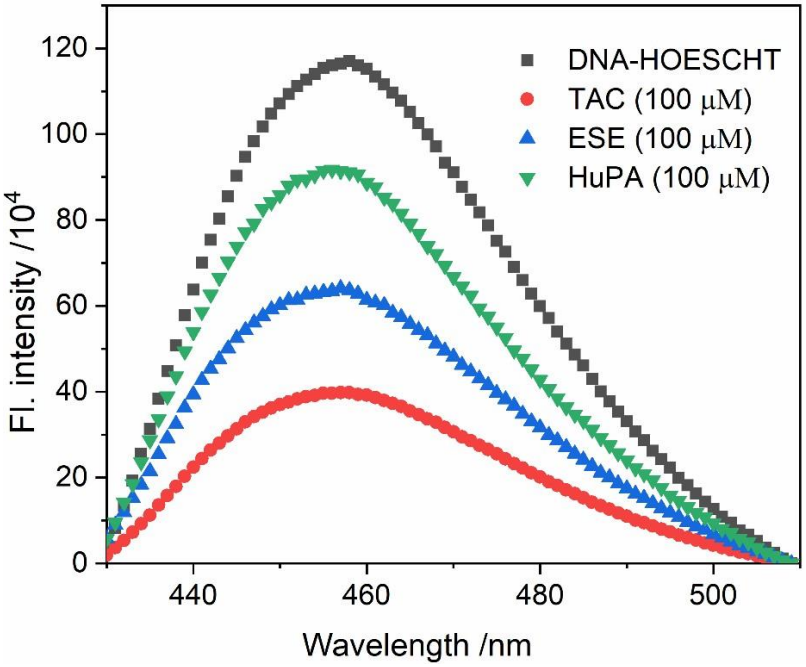

Fig S2. Fluorescence emission of DON in absence and presence of HOESCHT (left spectra) and fluorescence emission of HOESCHT in absence and presence of DON (right spectra).

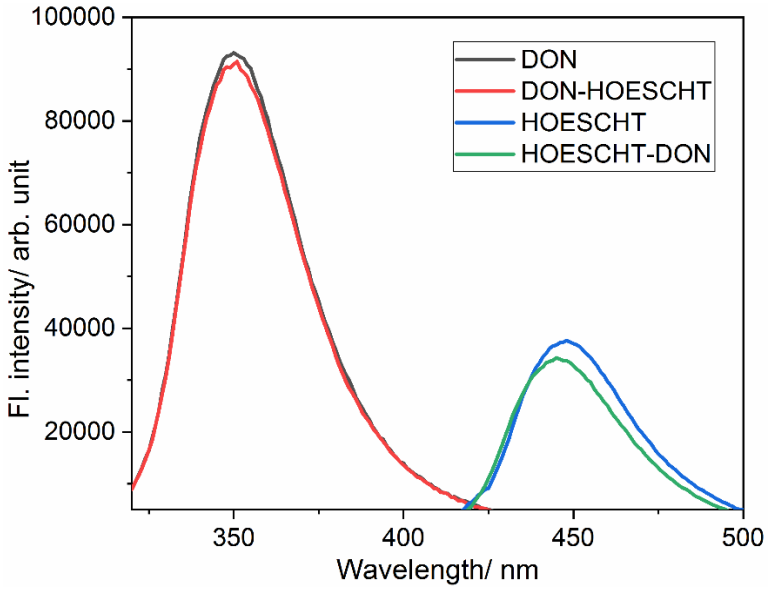

Fig. S3. Quenching of drug (TAC, ESE and HuPA) fluorescence by NaF in presence of ct-DNA.