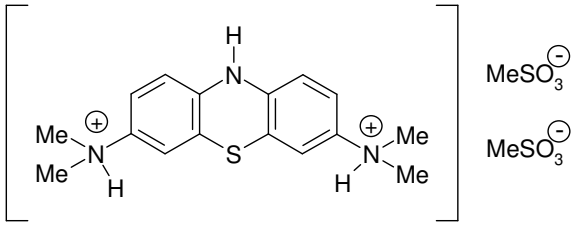
## Claims

1 ~~A method of~~Use of a methylthioninium ("MT")-containing compound in the manufacture of a medicament for use in a method of therapeutic or prophylactic treatment of mild cognitive impairment ~~a neurodegenerative disorder of protein aggregation~~ in a human subject,

~~which method comprises orally administering to said subject a methylthioninium (MT)-containing compound~~ wherein the MT-containing compound is to be administered orally to the subject,

wherein ~~said administration provides~~ a total daily dose of between 0.5 and 20mg of MT is to be administered to the subject per day, optionally split into 2 or more doses,

wherein the compound is LMTM:




.

~~2 A method as claimed in claim 1 wherein the total daily dose is from around any of 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4 mg to around any of 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20 mg.~~

~~3~~2 ~~A method~~Use as claimed in claim 1 ~~or claim 2~~ wherein the total daily dosage is ~~1 to 20mg;~~ 2 to 15 mg; or 3 to 10 mg.

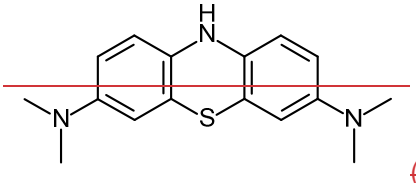
~~4 A method as claimed in claim 3 wherein the total daily dosage is 3.5 to 7 mg.~~

~~5 A method as claimed in claim 4 wherein the total daily dosage is 4 to 6 mg.~~

~~6~~3 ~~A method~~Use as claimed in claim ~~2~~ 1 wherein the total daily dose is about 0.5, 1, 1.5, 2, 2.5, 3, 3.5, 4, ~~5~~, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, or 20mg.

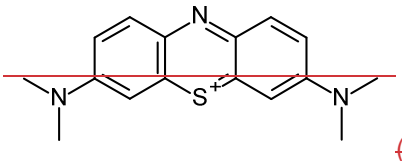
~~7~~4 ~~A method~~Use as claimed in any one of claims 1 to ~~6~~ 3 wherein the ~~total daily dose of the compound~~ medicament is to be administered as a split dose twice a day or three times a day.

~~8 A method as claimed in any one of claims 1 to 7 wherein the compound is a salt of either:~~




~~(LMT)~~

~~or~~



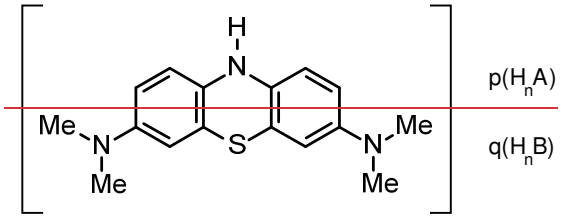
~~(MT+)~~

~~or a hydrate or solvate thereof.~~

~~9 A method as claimed in claim 8 wherein a mixture of LMT and MT+ containing compounds are administered.~~

~~10 A method as claimed in claim 8 wherein the compound is an LMT compound.~~

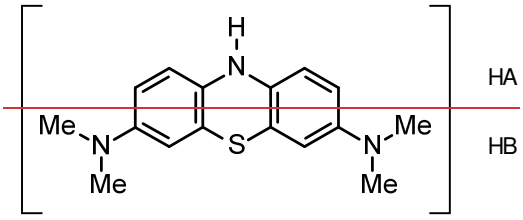
~~11 A method as claimed in claim 10 wherein the compound is an LMTX compound of the following formula:~~



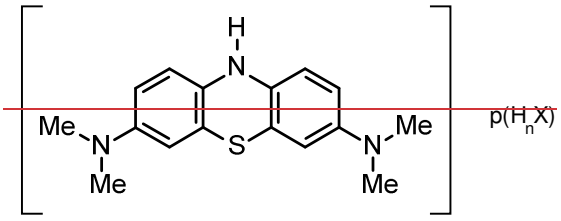

~~wherein each of $H_nA$ and $H_nB$ (where present) are protic acids which may be the same or different,~~

~~and wherein p = 1 or 2; q = 0 or 1; n = 1 or 2; (p + q) × n = 2.~~

~~12 A method as claimed in claim 11 wherein the compound has the following formula, where HA and HB are different mono-protic acids:~~

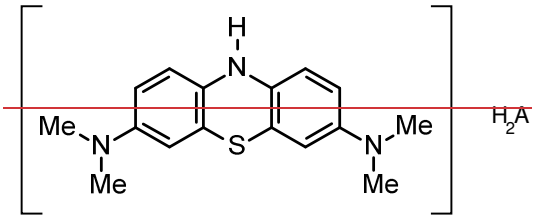



~~13 A method as claimed in claim 11 wherein the compound has the following formula:~~

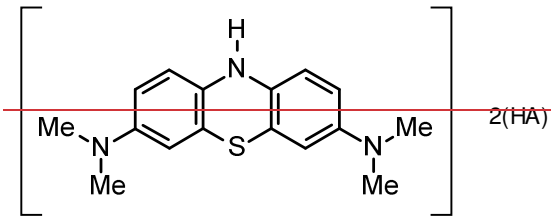



wherein each of $H_nX$ is a protic acid.

14 A method as claimed in claim 11 wherein the compound has the following formula and $H_2A$ is a di-protic acid:




15 A method as claimed in claim 13 wherein the compound has the following formula and is a bis-monoprotic acid:




16 A method as claimed in any one of claims 11 to 15 wherein the or each protic acid is an inorganic acid.

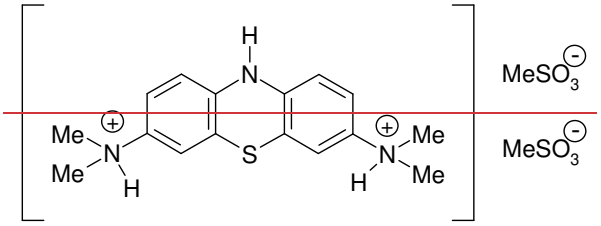
17 A method as claimed in claim 16 wherein each protic acid is a hydrohalide acid.

18 A method as claimed in claim 16 wherein the or each protic acid is selected from HCl; HBr; $HNO_3$; $H_2SO_4$.

19 A method as claimed in any one of claims 11 to 15 wherein the or each protic acid is an organic acid.

20 A method as claimed in claim 19 wherein the or each protic acid is selected from $H_2CO_3$; $CH_3COOH$; methanesulfonic acid, 1,2-ethanedisulfonic acid, ethansulfonic acid, naphthalenedisulfonic acid, p-toluenesulfonic acid.

21 A method as claimed in claim 20 wherein the compound is LMTM:



~~22~~5 ~~A method~~Use as claimed in any one of claims 1 to 4 ~~claim 21~~ wherein the total daily dose of LMTM is ~~around~~ 0.8 to 33 mg/day, more preferably 6 to 12 mg/day of LMTM total.

~~23 A method as claimed in claim 22 wherein the dose of LMTM is around 9 mg/once per day; 4 mg b.i.d.; 2.3 mg t.i.d.~~

~~24 A method as claimed in claim 20 wherein the compound is selected from the list consisting of:~~

