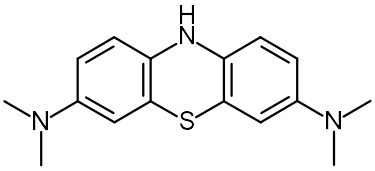
Claims

1 Use of an methylthioninium (“MT”)-containing compound in the manufacture of a medicament for the therapeutic or prophylactic treatment of microvascular brain disease in a human subject,

wherein the methylthioninium (MT)-containing compound is to be orally administered to said subject,

wherein said administration provides a total daily dose of between 8 and 200 mg of MT to the subject per day, optionally split into 2 or more doses,

wherein the MT-containing compound is a salt of



(LMT)

or a hydrate or solvate thereof.

2 The use as claimed in claim 1 wherein the treatment has a disease modifying effect on the microvascular pathology and/or reduces the rate of progression of microvascular pathology in the subject

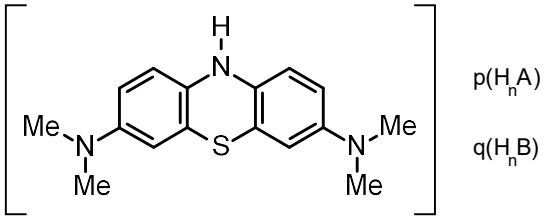
3 The use as claimed in claim 1 or claim 2 wherein the human subject is at least 60 years of age.

4 The use as claimed in any one of claims 1 to 3 wherein the subject has been diagnosed and/or selected as having said microvascular brain disease, optionally by brain imaging.

5. The use as claimed in any one of claims 1 to 4 wherein the total daily dose is between 12 and 60mg, or optionally between 16 and 32mg.

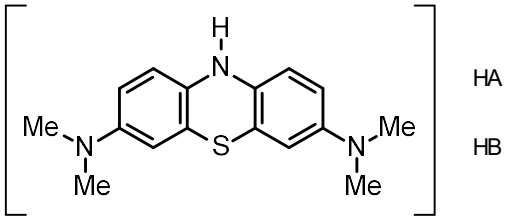
6 The use as claimed in claim 5 wherein the total daily dose is about 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, or 32 mg.

7 The use as claimed in any one of claims 1 to 6 wherein the MT-containing compound is a compound of the following formula:

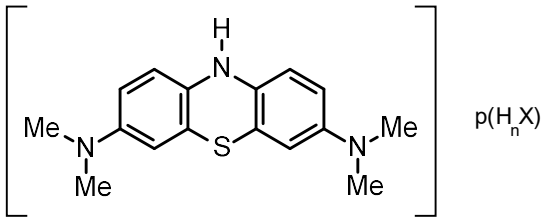


wherein each of H_nA and H_nB (where present) are protic acids which may be the same or different,
and wherein p = 1 or 2; q = 0 or 1; n = 1 or 2; (p + q) × n = 2.

8 The use as claimed in claim 7 wherein the MT-containing compound has the following formula, where HA and HB are different mono-protic acids:

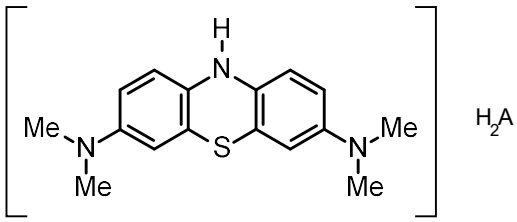


9 The use as claimed in claim 7 wherein the MT-containing compound has the following formula:

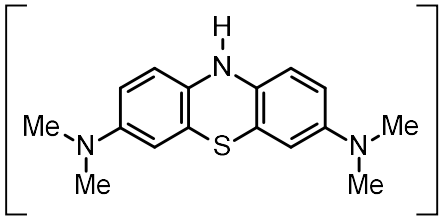


wherein each of H_nX is a protic acid.

10 The use as claimed in claim 7 wherein the MT-containing compound has the following formula and H_2A is a di-protic acid:



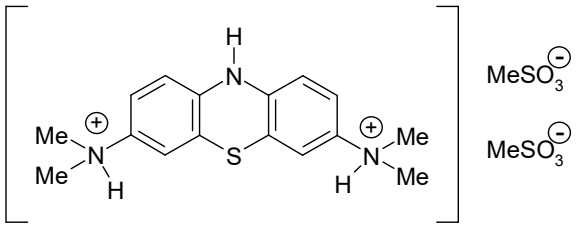
11 The use as claimed in claim 9 wherein the MT-containing compound has the following formula and is a bis-monoprotic acid:



12 The use as claimed in any one of claims 7 to 11 wherein the or each protic acid is an inorganic acid which is optionally a hydrohalide acid or selected from HCl; HBr; HNO_3; H_2SO_4.

13 The use as claimed in any one of claims 7 to 11 wherein the or each protic acid is an organic acid, which is optionally selected from H_2CO_3; CH_3COOH; methanesulfonic acid, 1,2-ethanedisulfonic acid, ethanesulfonic acid, naphthalenedisulfonic acid, p-toluenesulfonic acid.

14 The use as claimed in any one of claims 1 to 7 wherein the MT-containing compound is LMTM:



15 The use as claimed in any one of claims 1 to 7 wherein the MT-containing compound is selected from the list consisting of:

