

- a. Administrating a first dosage of the pharmaceutical composition wherein the first dosage is 20-35% of the total daily dosage of the dopamine replacement agent; and
- b. Continuously administrating a second dosage of the pharmaceutical composition wherein the second dosage adds up to the total daily dosage of the dopamine replacement agent.

[0009a] In one aspect, there is provided the use of a pharmaceutical composition comprising a dopamine replacement agent selected from levodopa, melevodopa, etilevodopa and combinations thereof or a pharmaceutically acceptable salt of levodopa, a dopamine decarboxylase inhibitor (DDI) selected from carbidopa, benserazide and combinations thereof, and a catechol-O-methyltransferase (COMT) inhibitor selected from entacapone, tolcapone, opicapone and combinations thereof, a dopamine decarboxylase inhibitor (DDI), and a catechol-O-methyltransferase (COMT) inhibitor in the manufacture of a medicament for the treatment of a neurodegenerative disorder wherein a total daily dosage of the dopamine replacement agent is to be administered as follows: a. a first dosage of the pharmaceutical composition is to be administered wherein the first dosage is 20-35% of the total daily dosage of the dopamine replacement agent; and b. a second dosage of the pharmaceutical composition is to be continuously administered, wherein the second dosage adds up to the total daily dosage of the dopamine replacement agent, wherein the composition of the second dosage is a liquid composition, a suspension or a gel.

[0010] In another aspect, there is provided a kit comprising a first container and at least one additional container wherein the first and the at least one additional container comprises a first and a second dosage respectively of a pharmaceutical composition as described herein for use as a medicament, wherein:

- a. the first dosage comprises 20-35% of the total daily dosage of the dopamine replacement agent; and
- b. the second dosage adds up to the total daily dosage of the dopamine replacement agent;

and wherein at least the second dosage is a liquid pharmaceutical composition, a suspension or a gel.

[0011] In some embodiments, the present invention relates to a method of administering a total daily dosage of a dopamine replacement agent to a patient in need thereof by a pharmaceutical composition comprising the dopamine replacement agent, a dopamine decarboxylase inhibitor (DDI), and a catechol-O-methyltransferase (COMT) inhibitor, and optionally suitable adjuvants; wherein the method comprises:

a. Administering a first dosage of the pharmaceutical composition wherein the first dosage comprises 20-35% of the total daily dosage of the dopamine replacement agent; and

b. Continuously administering a second dosage of the pharmaceutical composition wherein the second dosage adds up to the total daily dosage of the dopamine replacement agent.

[0012] All embodiments described herein are applicable to all the aspects unless otherwise stated.

CLAIMS

1. Use of a pharmaceutical composition comprising a dopamine replacement agent
selected from levodopa, melevodopa, etilevodopa and combinations thereof or a
pharmaceutically acceptable salt of levodopa; a dopamine decarboxylase inhibitor
(DDI) selected from carbidopa, benserazide and combinations thereof; and a catechol-
O-methyltransferase (COMT) inhibitor selected from entacapone, tolcapone,
opicapone and combinations thereof,~~a dopamine decarboxylase inhibitor (DDI), and a~~
~~catechol-O-methyltransferase (COMT) inhibitor~~ in the manufacture of a medicament
for the treatment of a neurodegenerative disorder wherein a total daily dosage of the
dopamine replacement agent is to be administered by:
 - a. a first dosage of the pharmaceutical composition is to be administered, wherein
the first dosage is 20-35% of the total daily dosage of the dopamine
replacement agent; and
 - b. a second dosage of the pharmaceutical composition is to be continuously
administered, wherein the second dosage adds up to the total daily dosage of
the dopamine replacement agent, wherein the composition of the second
dosage is a liquid composition, a suspension or a gel.
2. The use of claim 1 wherein the total daily dosage of the dopamine replacement agent
is to be administered as follows:
 - a. a first dosage of the pharmaceutical composition is to be administered, wherein
the first dosage is 20-35% of the total daily dosage of the dopamine
replacement agent;
 - b. a second dosage of the pharmaceutical composition is to be continuously
administered, wherein the second dosage adds up to the total daily dosage of
the dopamine replacement agent; wherein a first portion of the second dosage
is to be administered first continuously for a predetermined time where after a
second portion of the second dosage is to be administered continuously,
wherein the sum of the first and second portion adds up to the second dosage
and wherein, for the second portion, a lower amount of the dopamine
replacement agent is to be administrated per time unit.
3. The use of claim 1 or 2, wherein the dopamine replacement agent is levodopa or a
pharmaceutically acceptable salt ~~or derivative~~ thereof.

~~4. The use according to any one of claims 1 to 3, wherein the dopamine decarboxylase inhibitor is selected from the group consisting of carbidopa, benserazide and combinations thereof.~~

5.4. The use according to claim 41, wherein the dopamine decarboxylase inhibitor is carbidopa.

~~6. The use according to any one of claims 1-5, wherein the COMT inhibitor is selected from the group consisting of entacapone, tolcapone, opicapone, and combinations thereof.~~

7.5. The use according to claim 51, wherein the COMT inhibitor is entacapone.

~~8. The use according to any one of claims 1-7, wherein the composition further comprises a substance inhibiting degradation of carbidopa to hydrazine.~~

~~9. The use according to claim 8, wherein the substance comprises entacapone.~~

10.6. The use according to any one of the preceding claims wherein the dopamine replacement agent, the dopamine decarboxylase inhibitor (DDI), and the catechol-O-methyltransferase (COMT) inhibitor, and optionally suitable adjuvants is contained in a single pharmaceutical composition.

11.7. The use according to any one of claims 1 to 10.6 wherein the pharmaceutical composition comprises a first, second and a third part wherein the first part comprises the dopamine replacement agent, the second part comprises the dopamine decarboxylase inhibitor (DDI), and the third part comprises the catechol-O-methyltransferase (COMT) inhibitor, and wherein each part may optionally contain suitable adjuvants, or wherein the pharmaceutical composition comprises a first part comprising the dopamine replacement agent and the dopamine decarboxylase inhibitor (DDI) and a second part comprising the COMT inhibitor and wherein each part optionally contains suitable adjuvants.

12.8. The use according to any one of claims 1 to 10.6 wherein the dopamine replacement agent, the dopamine decarboxylase inhibitor (DDI), and the catechol-O-methyltransferase (COMT) inhibitor, and optionally suitable adjuvants of the first dosage are to be administrated individually, or wherein the dopamine replacement agent and the dopamine decarboxylase inhibitor (DDI) are to be administrated at the same time and wherein the COMT inhibitor is to be administrated essentially at the

same time as the dopamine replacement agent and the dopamine decarboxylase inhibitor (DDI).

~~13.9.~~ The use according to any of the preceding claims wherein the total daily dosage of dopamine replacement agent is 200 to 3500 mg such as 400-3000mg.

5 ~~14.10.~~ The use according to any of the preceding claims wherein the ~~patient suffers from neurodegenerative disorder is~~ Parkinson's disease.

~~15.11.~~ The use according to claim ~~14-10~~ wherein the patient suffers from hyperkinetic sensitivity or has a tendency to become hyperkinetic.

~~16.12.~~ The use according to any one of claims 1 to ~~14-10~~ wherein the continuous administration is performed continuously for 24 hours.

10 ~~17.13.~~ The use according to any one of claims 1 to ~~15-11~~ wherein the continuous administration is performed continuously for 12-18 hours, such as 13-17 hours or 14-16 hours.

~~18.14.~~ The use according to any one of the preceding claims wherein the first dosage is to be administered in the morning such as between 5am and 10am.

15 ~~19.15.~~ The use according to any one of the preceding claims wherein the composition of the first dosage is an oral composition, a liquid composition, a suspension or a gel.

~~20.16.~~ The use according to claim ~~19-15~~ wherein the first dosage is to be administered orally, intravenously, subcutaneously, intra-intestinally or dermally.

20 ~~21.17.~~ The use according to any one of the preceding claims wherein the composition of the second dosage is a liquid composition, a suspension or a gel.

~~22.18.~~ The use according to claim ~~21-17~~ wherein the second dosage is to be administered intravenously, subcutaneously, intra-intestinally or dermally.

25 ~~23.19.~~ A kit comprising a first container and at least one additional container wherein the first and the at least one additional container comprises a first and a second dosage respectively of a pharmaceutical composition as defined in any one of claims 1 to ~~22-18~~ for use as a medicament, wherein:

- a. the first dosage comprises 20-35% of the total daily dosage of the dopamine replacement agent; and
- 30 b. the second dosage adds up to the total daily dosage of the dopamine replacement agent;

and wherein at least the second dosage is a liquid pharmaceutical composition, a suspension or a gel.

24.20. The kit according to claim ~~23~~19, wherein both the first and second dosages are in the form of a liquid pharmaceutical composition, a suspension or a gel.