

CLAIMS

1. Peptidylglycine alpha-amidating monooxygenase (PAM) for use as a medicament.
2. PAM for use as a medicament for treatment of a subject, wherein said treatment comprises:
 - (i) reducing the potential or risk for a disease or disorder, and/ or
 - (ii) reducing the occurrence of a disease or disorder, and/ or
 - (iii) reducing the severity of a disease or disorder.
3. PAM for use as a medicament for treatment of a subject according to claim 2, wherein said disease or disorder is selected from the group comprising dementia, cardiovascular disorders, kidney diseases, cancer, inflammatory or infectious diseases and/or metabolic diseases.
4. PAM for use as a medicament for treatment of a subject according to claim 2 and 3, wherein said subject is characterized by
 - a level of PAM and/or its isoforms and/or fragments thereof below a threshold and/ or
 - a peptide-Gly/ peptide-amide ratio above a thresholdin a sample of bodily fluid of said subject.
5. PAM for use as a medicament for treatment of a subject according to claim 4, wherein said peptide is selected from the group of comprising adrenomedullin (ADM), adrenomedullin-2, intermedin-short, pro-adrenomedullin N-20 terminal peptide (PAMP), amylin, gastrin-releasing peptide, neuromedin C, neuromedin B, neuromedin S, neuromedin U, calcitonin, calcitonin gene-related peptide (CGRP) 1 and 2, islet amyloid polypeptide, chromogranin A, insulin, pancreastatin, prolactin-releasing peptide (PrRP), cholecystokinin, big gastrin, gastrin, glucagon-like peptide 1 (GLP-1), pituitary adenylate cyclase-activating polypeptide (PACAP), secretin, somatoliberin, peptide histidine methionine (PHM), vasoactive intestinal peptide (VIP), gonadoliberin, kisspeptin, MIF-1, metastin, neuropeptide K, neuropeptide gamma, substance P, neurokinin A, neurokinin B, peptide YY, pancreatic hormone, deltorphin I, orexin A and B, melanotropin alpha (alpha-MSH), melanotropin gamma, thyrotropin-releasing hormone (TRH), oxytocin, vasopressin.
6. PAM for use as a medicament for treatment of a subject according to claim 4 and 5, wherein said subject is characterized by

- an ADM-Gly/ bio-ADM ratio above a threshold and/ or
- a bio-ADM concentration below a threshold

in a bodily fluid of said patient.

7. PAM for use as a medicament for treatment of a subject according to claim 3, wherein the level of PAM and/or its isoforms and/or fragments thereof is the total concentration of PAM and/or its isoforms and/or fragments thereof having at least 12 amino acids or the activity of PAM and/or its isoforms and/or fragments thereof.
8. PAM for use as a medicament for treatment of a subject according to claim 7, wherein the total concentration of PAM and/or its isoforms and/or fragments thereof having at least 12 amino acids or the activity of PAM and/or its isoforms and/or fragments thereof is selected from the group comprising SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8 and SEQ ID No. 10.
9. PAM for use as a medicament for treatment of a subject according to claims 4-8, wherein the sample of bodily fluid of said subject is selected from the group of blood, serum, plasma, urine, cerebrospinal fluid (CSF), and saliva.
10. PAM for use as a medicament according to claim 1-9, wherein said PAM is selected from the group comprising isolated and/ or recombinant and/or chimeric PAM.
11. PAM for use as a medicament according to claims 1-10, wherein said recombinant PAM is selected from the sequences comprising SEQ ID No. 1, SEQ ID No. 2, SEQ ID No. 3, SEQ ID No. 4, SEQ ID No. 5, SEQ ID No. 6, SEQ ID No. 7, SEQ ID No. 8 and SEQ ID No. 10.
12. PAM for use as a medicament for treatment of a subject according to any embodiment 1 to 11 wherein PAM is combined with ascorbate and/ or copper.
13. Pharmaceutical formulation comprising peptidylglycine alpha-amidating monooxygenase (PAM).

14. Pharmaceutical formulation comprising PAM according to claim 13, wherein said pharmaceutical formulation is administered orally, epicutaneously, subcutaneously, intradermally, sublingually, intramuscularly, intraarterially, intravenously, or via the central nervous system (CNS, intracerebrally, intracerebroventricularly, intrathecally) or via intraperitoneal administration.
15. Pharmaceutical formulation according to claims 13-14, wherein said pharmaceutical formulation is a solution, preferably a ready-to-use solution.
16. Pharmaceutical formulation according to claims 13-15, wherein said pharmaceutical formulation is in a freeze-dried state.
17. Pharmaceutical formulation according to claims 13-16, wherein said pharmaceutical formulation is administered intra-muscular.
18. Pharmaceutical formulation according to claims 13-17, wherein said pharmaceutical formulation is administered intra-vascular.
19. Pharmaceutical formulation according to claim 13-18, wherein said pharmaceutical formulation is administered via infusion.
20. Pharmaceutical formulation according to claims 13-19, wherein said pharmaceutical formulation is to be administered systemically.
21. Pharmaceutical formulation according to claims 13-20, the formulation comprising PAM and/or optionally one or more pharmaceutically acceptable ingredients
22. Pharmaceutical formulation according to claims 13-21, the formulation comprising PAM, ascorbate and/ or copper.
23. Pharmaceutical formulation according to claims 13-22, the formulation comprising PAM in combination with ascorbate and/ or copper.