Claims

1. A method for:
   a) diagnosing Alzheimer's disease, or
   b) determining the risk of getting Alzheimer's disease in a subject that does not have Alzheimer's disease, or
   c) monitoring therapy or monitoring or guiding intervention in a subject that has Alzheimer's disease, or
   d) monitoring preventive therapy or monitoring or guiding preventive intervention in a subject that is at risk of getting Alzheimer's disease,

   wherein the level of mature Adrenomedullin (ADM)-NH_2 according to SEQ ID No.: 4 is determined in a sample of bodily fluid of said subject and wherein said level of mature ADM-NH_2 is compared with a threshold level,
   and wherein
   a) said subject is diagnosed with Alzheimer's disease if said level of mature ADM-NH_2 according to SEQ ID No.: 4 is below said threshold level, or wherein
   b) said subject has an enhanced risk of getting Alzheimer's disease if said level of mature ADM-NH_2 according to SEQ ID No.: 4 is below said threshold level, or wherein
   c) the status of said subject having Alzheimer's disease or being at risk of getting Alzheimer's disease is improving under preventive therapy or intervention if said level of mature ADM-NH_2 according to SEQ ID No.: 4 is increased during the course of preventive therapy or intervention and/or wherein intervention maybe continued if said level of mature ADM-NH_2 according to SEQ ID No.: 4 is increased above said threshold.

2. A method for:
   a) diagnosing Alzheimer's disease, or
   b) determining the risk of getting Alzheimer's disease in a subject that does not have Alzheimer's disease, or
   c) monitoring therapy or monitoring or guiding intervention in a subject that has Alzheimer's disease, or
   d) monitoring preventive therapy or monitoring or guiding preventive intervention in a subject that is at risk of getting Alzheimer's disease,

wherein a marker ratio is determined, the marker ratio being the ratio of the level of mature ADM-NH_2 according to SEQ ID No.: 4 to the level of pro-Adrenomedullin or a fragment thereof selected from the group consisting of PAMP (SEQ ID No.: 2), MR-proADM (SEQ ID No.: 3), ADM-Gly (SEQ ID No.: 5) and CT-proADM (SEQ ID No.: 6), determined in a sample of bodily fluid of said subject,

wherein said marker ratio is compared to a ratio threshold

and wherein

a) said subject is diagnosed with Alzheimer's disease if said marker ratio of mature ADM-NH_2/ pro-Adrenomedullin or said fragment thereof is below said ratio threshold, or wherein

b) said subject has an enhanced risk of getting Alzheimer's disease if said marker ratio of mature ADM-NH_2/ pro-Adrenomedullin or said fragment thereof is below said ratio threshold, or wherein

c) the status of said subject having Alzheimer's disease or being at risk of getting Alzheimer's disease is improving under therapy or intervention if said marker ratio is increased during the course of therapy or intervention,

or alternatively to said marker ratio, the level of mature ADM-NH_2 according to SEQ ID No.: 4 and the level of pro-Adrenomedullin or said fragment thereof, are determined in a sample of bodily fluid of said subject, and both determined levels are combined in a mathematical algorithm, wherein the result of said mathematical algorithm is used for diagnosing Alzheimer's disease, or determining the risk of getting Alzheimer's diseasein a subject that does not have Alzheimer's disease, or monitoring therapy or monitoring or guiding intervention in a subject that has Alzheimer's disease, or monitoring preventive therapy or monitoring or guiding preventive intervention in a subject that is at risk of getting Alzheimer's disease.

3. A method according to claim 1, wherein said threshold level of mature ADM-NH_2 according to SEQ ID No.: 4 is equal to or below 15 pg/ml.

4. A method according to claim 2, wherein said ratio threshold is in a range of 0.2 to 0.75.

5. A method according to any one of claims 1 to 4, wherein said sample of bodily fluid is selected from the group consisting of blood, serum, plasma, urine, cerebrospinal fluid (CSF), and saliva.

6. A method according to any one of claims 1 to 5, wherein the sample of bodily fluid is taken from a subject that has never had a diagnosis of Alzheimer's diseaseor mild cognitive impairment at the time of sample taking.

7. A method according to any one of claims 1 to 6, wherein said method is used for patient stratification to select a patient for treatment with an anti-adrenomedullin (ADM) antibody or anti-adrenomedullin antibody fragment or anti-ADM non-Ig scaffold for use in prevention and therapy of Alzheimer's diseasein a subject, wherein said anti-ADM antibody or anti-ADM antibody fragment or anti-ADM non-Ig scaffold binds to the N-terminal part (aa 1-21) of adrenomedullin:
YRQSMNNFQGLRSFGCRFGTC (SEQ ID No. 21).

8. Use of an anti-adrenomedullin (ADM) antibody or anti-adrenomedullin antibody fragment or anti-ADM non-Ig scaffold for the manufacture of a medicament for the prevention or therapy of Alzheimer's diseasein a subject, wherein said anti-ADM antibody or anti-ADM antibody fragment or anti-ADM non-Ig scaffold binds to the N-terminal part (aa 1-21) of adrenomedullin:
YRQSMNNFQGLRSFGCRFGTC (SEQ ID No. 21).

9. The use according to claim 8, wherein said subject has a level of mature ADM-NH_2 according to SEQ ID No.: 4 determined in a sample of bodily fluid below a threshold level and/or has a marker ratio that is the ratio of the level of mature ADM-NH_2 according to SEQ ID No.: 4 determined in said sample to the level of pro-Adrenomedullin or a fragment thereof selected from the group consisting of PAMP (SEQ ID No.: 2), MR-proADM (SEQ ID No.: 3), ADM-Gly (SEQ ID No.: 5) and CT-proADM (SEQ ID No.: 6) determined in said sample and wherein said marker ratio is below a ratio threshold.

10. The use according to claim 8 or 9, wherein said subject is selected by a method according claim 7.

11. The use according to claim 9 or 10, wherein said threshold level of mature ADM-NH_2 according to SEQ ID No.: 4 is equal to or below 15 pg/ml.

12. The use according to claim 9 or 10, wherein said ratio threshold is in a range 0.2 to 0.75.

13. The use according to any one of claims 8 to 12, wherein said subject is selected according to a method of claim 7 and, wherein said sample of bodily fluid is selected from the group consisting of blood, serum, plasma, urine, cerebrospinal fluid (CSF), and saliva.