

CLAIMS

1. A method of determining diagnosis ~~or prognosis of a neurodegenerative condition of~~ Alzheimer's disease in an individual comprising typing at least 10 chromosome interactions selected from the chromosome interactions represented by the following probe sequences:

- (i) AAGACTGTCTCCAGATATCTTGCTCATTGCTGAAGACTGTCTGCTAGAAAGAATATTCTT
- (ii) GGCAGGCAGATTACTTGAGGTTAGGAATTCGATGCCGATAGAGTAAAAAGCATTCTCTGT
- (iii) GGCAGGCAGATTACTTGAGGTTAGGAATTCGATTCTGACTTAAGAGACATAAACAAGGAA
- (iv) GGCAGTTGGATCATTTGAGTCCAAGAGTTCGACACTCTCATTCTGATTCTGTTTGAACCC
- (v) TTTATTAATAATCACTGAATTATATGGTTCGATGAAAAATATTCTTTAGATCTAAGACCT
- (vi) GAAACAGGTGGGTCATGAGGTCAAGAGATCGATTTATTTATTTTTCATTCATCTTCATA
- (vii) AGAGGGGCCAAGTGTGACTCTCAGGTTTTCGACTCCCTTAGAAACATGCAGTTGTTGTTT
- (viii) CCTCATTTACAAATGAGAAAATAAGAGTCGAAAGAAAATATTCTTCTTCCTGACCATT
- (ix) GTGTGGCCTAATCAAGAACCAATCAGAGTCGAACTCATCATCCTCCCTCCCCGCCACC
- (x) CCATAAAGGAGGGCAATGGAAGAAGAGTCGACTATTTTATTTTGTAGAGACGAGATC
- (xi) TGAATGAGTCACTTAATTTGAGTTTGTATCGACTCACTGTACTCCAGCCTGGCAACAGAG
- (xii) GAAAAGACCCTTCAAGCAGATGGAGAGTTCGAAGGAAGCATTGAGCCATTATTCATAAG
- (xiii) TACCTTCTTCAATCCGGATATTTTCAGTCGATGTAAGAGTAACATATATTGTTCAATAT
- (xiv) GAAAAGACCCTTCAAGCAGATGGAGAGTTCGATTACCTCAAACAAAGAGGAATAGCACTA;

to thereby determine the diagnosis ~~or prognosis~~.

2. A method according to claim 1 which comprises typing a chromosome interaction as defined by any of the probes mentioned in Table 2.

3. A method according to claim 1 or 2 wherein said typing comprises detection of a ligated nucleic acid which represents the regions of the chromosomes which have come together in said interaction.

4. A method according to claim 3 wherein said detection of the ligated nucleic acid is by PCR or by probe hybridisation detection.

5. A method according to any one of the preceding claims wherein the method is carried out to select individuals for a clinical trial.
6. A method according to claim 5 wherein in the clinical trial efficacy of a candidate drug for a neurodegenerative Alzheimer's disease is being tested.
7. A method according to any one of the preceding claims which is carried out to stratify the individuals taking part in a clinical trial based on a characteristic relevant to a neurodegenerative conditionAlzheimer's disease.
8. A method according to any one of the preceding claims in which a probe as shown in Table 2 or a primer as shown in Table 3 is used for the typing of at least one chromosome interaction.