SG 9611756-9

PCT

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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : C12Q 1/68, A61K 31/645 — A2

(11) International Publication Number: WO 95/29257

(43) International Publication Date: 2 November 1995 (02.11.95)

(21) International Application Number: PCT/CA95/00240

(22) International Filing Date: 26 April 1995 (26.04.95)

(30) Priority Data:
9408465.4 27 April 1994 (27.04.94) GB

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(81) Designated States: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT, UA, US, UZ, VN, European patent (AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG), ARIPO patent (KE, MW, SD, SZ, UG).

Published

Without international search report and to be republished upon receipt of that report.

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(54) Title: APOLIPOPROTEIN E POLYMORPHISM AND TREATMENT OF ALZHEIMER'S DISEASE

(57) Abstract

The present invention relates to a method for the treatment of Alzheimer's disease in a patient, which comprises: a) determining the presence of apolipoprotein E3 and E2 alleles from peripheral tissues of the patient which is indicative of the degree of impairment in brain acetylcholine synthesis; b) administering to the patient a suitable therapeutic agent relative to the degree of impairment in brain acetylcholine synthesis of step a). The present invention also relates to a method for the identification of human subjects (including Alzheimer disease) to be responsive to cholinomimetic therapy, comprises determining the presence of apoE2 and E3 alleles (and the absence of apoE4) in a biological sample of the patient directly using appropriate apoE2 and E3 probes or indirectly by phenotyping, and wherein one or two copies of apoE2 or E3 gene allele indicates a predisposition to respond to cholinomimetics-based therapies.

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