METHODS OF TREATING ALZHEIMER'S DISEASE

Abstract: The invention provides biomarkers that are modulated in Alzheimer's disease including IL-1α, PDGF-BB, TNF-α, M-CSF, G-CSF, GDNF, eotaxin 2, MCP-3, PARC, AgRP, MSP-α, and BTC. Described are methods for preventing, treating, alleviating symptoms of, or delaying the development of Alzheimer's disease (AD) in an individual diagnosed with Alzheimer's Disease or at risk for developing the disease by modulating the biological activity of, or the levels of any one or more of these AD-associated biomarkers. Modulation of biomarker levels by administration of biomarker proteins, biologically active fragments thereof, agonists, antagonists and antibodies are provided.
For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.
### Box No. II  Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. Claims Nos. because they relate to subject matter not required to be searched by this Authority, namely:

2. Claims Nos. because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. Claims Nos. 8, 13-16, 19, 20, 22, and 23 because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6 4(a)

### Box No. III  Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.

4. No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims it is covered by claims Nos.

### Remark on Protest

- The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.
- The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.
- No protest accompanied the payment of additional search fees.

Form PCT/ISA/210 (continuation of first sheet (2)) (April 2005)
INTERNATIONAL SEARCH REPORT

International application No
PCT/US 06/44198

A CLASSIFICATION OF SUBJECT MATTER
IPC(8) - ... Helpdesk 571 272-4300
Facsimile No 571-273-3201 PCT OSP 571 272 7774
Form PCT/ISA/2 I O (second sheet) (April 2005)

B FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
USPC - 514/2, 530/350

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
USPC - 435/7 4, 435/7 7, 435/7 9, 514/2 - see keywords below

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C DOCUMENTS CONSIDERED TO BE RELEVANT

Category* Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No

X US 5,731,284 A (WILLIAMS) 24 March 1998 (24 03 1998); entire document, especially abstract, col 5, in 30-43 and col 19, in 35 - col 20, in 29
Y US 2005/0221348 A1 (RAY et al.) 06 October 2005 (06 10 2005); para [0142] - [0144], [0095], [0096], [0058], [0207], [0014], [0166], [0189]

W relevant to

Further documents are listed in the continuation of Box C

D

Date of the actual completion of the international search
21 March 2007 (21 03 2007)

Date of mailing of the international search report
06 AUG 2007

Name and mailing address of the ISA/US

Inventor of the international application

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