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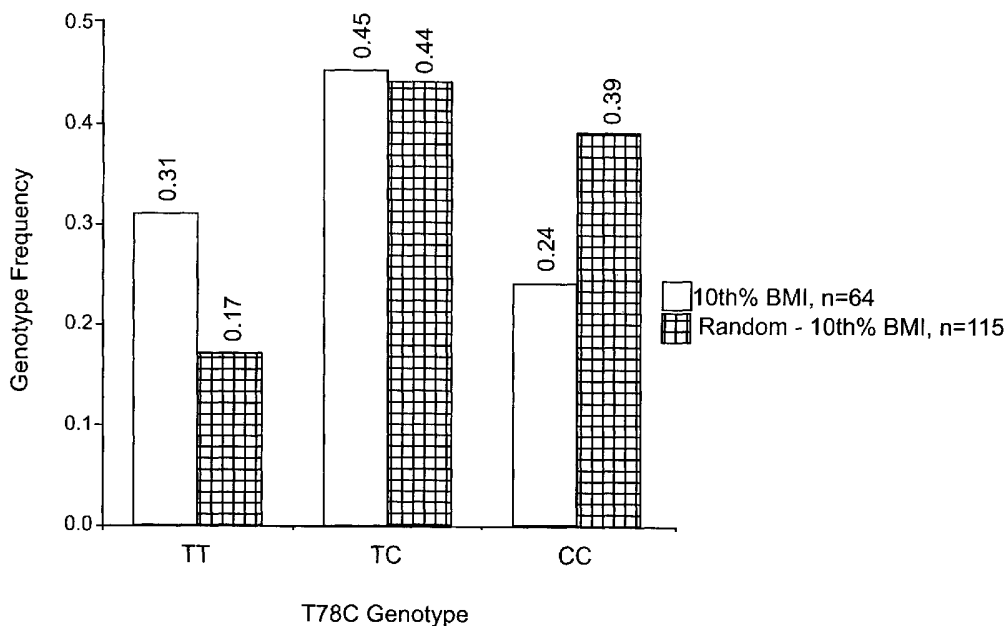
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CASES, Sylvaine [FR/US]; 9 Meadow Park, Belmont, CA 94002 (US).
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- (71) Applicant (for all designated States except US): **THE REGENTS OF THE UNIVERSITY OF CALIFORNIA** [US/US]; 1111 Franklin Street, 12th Floor, Oakland, CA 94607-5200 (US).
- (72) Inventors; and (75) Inventors/Applicants (for US only): **LUDWIG, Erwin, H.** [CA/US]; 48 El Cerrito, San Anselmo, CA 94960 (US). **FARESE, Robert, V.** [US/US]; 25 6th Avenue, San Francisco, CA 94118 (US). **INNERARITY, Thomas, L.**

[Continued on next page]

(54) Title: POLYMORPHISMS IN A DIACYLGLYCEROL ACYLTRANSFERASE GENE, AND METHODS OF USE THEREOF



(57) Abstract: The present invention provides isolated an polynucleotide comprising a polymorphic nucleotide sequences from a diacylglycerol acyltransferase (DGAT) gene, wherein at least one a polymorphism is associated with a condition relating to DGAT activity. The invention further provides diagnostic assays for detecting the presence in a nucleic acid sample of a polymorphism in a DGAT gene that is associated with a condition relating to DGAT activity, and for detecting a propensity to develop a condition associated with DGAT activity. The invention further provides treatment methods.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
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B. FIELDS SEARCHED

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Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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

BIOSIS, MEDLINE, EMBASE, EPO-Internal, WPI Data, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	SMITH STEVEN J ET AL: "Obesity resistance and multiple mechanisms of triglyceride synthesis in mice lacking Dgat." NATURE GENETICS, vol. 25, no. 1, May 2000 (2000-05), pages 87-90, XP002221994 ISSN: 1061-4036 page 89, column 2, paragraph 3 -page 90, column 1, paragraph 2; figure 1A	13
X	WO 99 67268 A (UNIV CALIFORNIA) 29 December 1999 (1999-12-29) page 6, paragraph 1 page 36, paragraph 3 - paragraph 4 page 42, paragraph 3 -page 46, paragraph 1; figure 7 page 24, paragraph 3 -page 27, paragraph 2 -/--	13

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

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Name and mailing address of the ISA
European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Tilkorn, A-C

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International Application No

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 00 01713 A (LARDIZABAL KATHRYN DENNIS ;CALGENE LLC (US); HAWKINS DEBORAH (US);) 13 January 2000 (2000-01-13) page 5, paragraph 2 - paragraph 4 page 26, paragraph 4; claims 42-48 page 29, paragraph 3 -page 31, paragraph 2 ---	11
A	CHEN HC, FARESE RV: TRENDS CARDIOVASC MED, vol. 10, no. 5, July 2000 (2000-07), pages 188-192, XP002221175 page 191, column 1, paragraph 4 -column 2, paragraph 2 ---	11
A	CASES S ET AL: "Identification of a gene encoding an acyl CoA: diacylglycerol acyltransferase, a key enzyme in triacylglycerol synthesis" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, NATIONAL ACADEMY OF SCIENCE. WASHINGTON, US, vol. 95, no. 22, 27 October 1998 (1998-10-27), pages 13018-13023, XP002122745 ISSN: 0027-8424 cited in the application the whole document ---	1-19
E	WO 02 36824 A (COPPIETERS WOUTER HERMAN ROBER ;GEORGES MICHEL ALPHONSE JULIEN (BE)) 10 May 2002 (2002-05-10) the whole document ---	1-19
T	LUDWIG E H ET AL: "DGAT1 promoter polymorphism associated with alterations in body mass index, high density lipoprotein levels and blood pressure in Turkish women." CLINICAL GENETICS, vol. 62, no. 1, July 2002 (2002-07), pages 68-73, XP002221176 July, 2002 ISSN: 0009-9163 the whole document --- -/--	1-19

INTERNATIONAL SEARCH REPORT

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PCT/US 01/21915

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
T	<p>CASES S ET AL: "Cloning of DGAT2, a second mammalian diacylglycerol acyltransferase, and related family members"</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, AMERICAN SOCIETY OF BIOLOGICAL CHEMISTS, BALTIMORE, MD, US, vol. 276, no. 42, 19 October 2001 (2001-10-19), pages 38870-38876, XP002919933 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1-19

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No PCT/US 01/21915

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