



(12) **CORRECTED EUROPEAN PATENT SPECIFICATION**

(15) Correction information:
Corrected version no 1 (W1 B1)
Corrections, see
Bibliography INID code(s) 72

(51) Int Cl.:
A61K 31/00 ^(2006.01) **A61K 31/138** ^(2006.01)
A61K 31/18 ^(2006.01) **A61K 31/222** ^(2006.01)
A61K 31/404 ^(2006.01) **A61K 31/4045** ^(2006.01)
A61K 31/4704 ^(2006.01) **A61K 31/5377** ^(2006.01)
A61K 31/36 ^(2006.01) **A61P 35/00** ^(2006.01)

(48) Corrigendum issued on:
10.07.2013 Bulletin 2013/28

(45) Date of publication and mention
of the grant of the patent:
27.06.2012 Bulletin 2012/26

(21) Application number: **09015563.1**

(22) Date of filing: **16.10.2008**

(54) **Use of a beta blocker for the manufacture of a medicament for the treatment of hemangiomas**

Verwendung von Beta-blockern für die Herstellung eines Medikaments zur Behandlung von
Hämangiomen

Utilisation de bêtabloquants pour la fabrication d'un médicament pour le traitement d'hémangiomes

(84) Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT
RO SE SI SK TR**
Designated Extension States:
AL BA MK RS

(30) Priority: **19.10.2007 EP 07291273**
21.11.2007 US 989507 P

(43) Date of publication of application:
29.09.2010 Bulletin 2010/39

(62) Document number(s) of the earlier application(s) in
accordance with Art. 76 EPC:
08838691.7 / 2 187 878

(73) Proprietors:
• **Université Bordeaux Segalen**
33076 Bordeaux Cedex (FR)
Designated Contracting States:
**AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT
RO SE SI SK TR**
• **Centre Hospitalier Universitaire de Bordeaux**
33404 Talence (FR)

(72) Inventors:
• **Léauté-Labréze, Christine**
33185 Le Haillan (FR)
• **Dumas de la Roque, Éric**
33140 Villenave d'Ornon (FR)

• **Taieb, Alain**
33000 Bordeaux (FR)
• **Thambo, Jean-Benoit**
33000 Bordeaux (FR)

(74) Representative: **Novagraaf Technologies**
122 rue Edouard Vaillant
92593 Levallois-Perret Cedex (FR)

(56) References cited:
WO-A-97/40830 WO-A-2006/015830
WO-A1-2006/122007

• **AH-FAT F G ET AL: "Recurrent visual loss
secondary to an iris microhaemangioma [1]" EYE**
1994 GB, vol. 8, no. 3, 1994, page 357,
XP008089190 ISSN: 0950-222X
• **GOODFIELD M J ET AL: "The clinical
presentation of cutaneous angioliipomata and the
response to beta-blockade." CLINICAL AND**
EXPERIMENTAL DERMATOLOGY MAY 1988, vol.
13, no. 3, May 1988 (1988-05), pages 190-192,
XP008089157 ISSN: 0307-6938
• **BREM H ET AL: "The combination of
antiangiogenic agents to inhibit primary tumor
growth and metastasis" JOURNAL OF**
PEDIATRIC SURGERY 1993 US, vol. 28, no. 10,
1993, pages 1253-1257, XP002473031 ISSN:
0022-3468

- PAPATHANASSIU, ADONIA E.: "Novel inhibitors of angiogenesis and their mechanism(s) of action" 158 PP. AVAIL.: UMI, ORDER NO. DA9828828 FROM: DISS. ABSTR. INT., B 1998, 59 (4), 1454, 1998, XP008089194
- LUTGENDORF SUSAN K ET AL: "Stress-related mediators stimulate vascular endothelial growth factor secretion by two ovarian cancer cell lines." CLINICAL CANCER RESEARCH : AN OFFICIAL JOURNAL OF THE AMERICAN ASSOCIATION FOR CANCER RESEARCH 1 OCT 2003 LNKD- PUBMED:14555525, vol. 9, no. 12, 1 October 2003 (2003-10-01), pages 4514-4521, XP002590205 ISSN: 1078-0432
- THAKER PREMAL H ET AL: "Chronic stress promotes tumor growth and angiogenesis in a mouse model of ovarian carcinoma" NATURE MEDICINE, vol. 12, no. 8, August 2006 (2006-08), pages 939-944, XP002590206 ISSN: 1078-8956
- RAZON MARIA J ET AL: "Increased apoptosis coincides with onset of involution in infantile hemangioma" MICROCIRCULATION (PHILADELPHIA), vol. 5, no. 2-3, September 1998 (1998-09), pages 189-195, XP002590207 ISSN: 1073-9688
- SMITH SALLY K SOMMERS ET AL: "Beta blockade induces apoptosis in cultured capillary endothelial cells" IN VITRO CELLULAR AND DEVELOPMENTAL BIOLOGY ANIMAL, vol. 38, no. 5, May 2002 (2002-05), pages 298-304, XP002590208 ISSN: 1071-2690
- BAGHESTANIAN M: "The role of beta-adrenergic blockers as antihypertensive medication in patients with peripheral arterial disease" ZEITSCHRIFT FUR GEFASSMEDIZIN 2006 AT, vol. 3, no. 2, 2006, pages 11-16, XP002590209
- LÉAUTÉ-LABRÈZE CHRISTINE ET AL: "Propranolol for severe hemangiomas of infancy." 12 June 2008 (2008-06-12), THE NEW ENGLAND JOURNAL OF MEDICINE 12 JUN 2008, VOL. 358, NR. 24, PAGE(S) 2649 - 2651 , XP002523408 ISSN: 1533-4406 * the whole document *
- BONIFAZI E ET AL: "Propranolol in rapidly growing hemangiomas" 2008, EUROPEAN JOURNAL OF PEDIATRIC DERMATOLOGY 2008 IT, VOL. 18, NR. 3, PAGE(S) 185 - 192 , XP008105082 ISSN: 1122-7672 * abstract ** page 185, column 1, paragraph 2 - page 186, column 2, paragraph 21 ** page 186 ** page 192, column 1, paragraph 1 - column 2, paragraph 1 *
- CREMER H -J: "Propranolol: A milestone in the treatment of problematic hemangiomas?" October 2008 (2008-10), MONATSSCHRIFT FUR KINDERHEILKUNDE 200810 DE, VOL. 156, NR. 10, PAGE(S) 942 - 943 , XP002523410 ISSN: 0026-9298 * page 942 *
- LEAUTE-LABREZE C ET AL: "Efficacy of beta-blockers in infantile capillary haemangiomas: The physiopathological significance and therapeutic consequences" December 2008 (2008-12), ANNALES DE DERMATOLOGIE ET DE VENEREOLOGIE, VOL. 135, NR. 12, PAGE(S) 860-862 , XP008105076 ISSN: 0151-9638 * page 860 - page 861, column 1, last paragraph *
- BLANCHET CATHERINE ET AL: "Management of infantile subglottic hemangioma: acebutolol or propranolol?", INTERNATIONAL JOURNAL OF PEDIATRIC OTORHINOLARYNGOLOGY AUG 2010 LNKD- PUBMED:20557953, vol. 74, no. 8, August 2010 (2010-08), pages 959-961, ISSN: 1872-8464
- POPE ELENA ET AL: "Topical timolol gel for infantile hemangiomas: a pilot study.", ARCHIVES OF DERMATOLOGY MAY 2010 LNKD- PUBMED:20479314, vol. 146, no. 5, May 2010 (2010-05), pages 564-565, ISSN: 1538-3652
- AKRAM I ET AL: "Iris microhaemangioma presenting with total hyphaema and elevated intraocular pressure.", EYE (BASINGSTOKE), vol. 17, no. 6, August 2003 (2003-08), pages 784-785, ISSN: 0950-222X
- KHAN ZIA A ET AL: "Multipotential stem cells recapitulate human infantile hemangioma in immunodeficient mice", JOURNAL OF CLINICAL INVESTIGATION, vol. 118, no. 7, July 2008 (2008-07), pages 2592-2599, ISSN: 0021-9738
- RITTER MATTHEW R ET AL: "Pathogenesis of infantile haemangioma: new molecular and cellular insights", EXPERT REVIEWS IN MOLECULAR MEDICINE, vol. 9, no. 32, November 2007 (2007-11), ISSN: 1462-3994
- SUNDINE MICHAEL J ET AL: "Hemangiomas: an overview.", CLINICAL PEDIATRICS APR 2007 LNKD- PUBMED:17416876, vol. 46, no. 3, April 2007 (2007-04), pages 206-221, ISSN: 0009-9228
- FITZGERALD PAUL J: "Testing whether drugs that weaken norepinephrine signaling prevent or treat various types of cancer.", CLINICAL EPIDEMIOLOGY 2010 LNKD- PUBMED: 20865096, vol. 2, 2010, pages 1-3, ISSN: 1179-1349
- Orfanos Garbe: "Therapie der Hautkrankheiten", 2002, Springer-Verlag, Berlin pages 717-718,
- GOODFIELD M J D ET AL: "The clinical presentation of cutaneous angiolipomata and the response to beta-blockade", CLINICAL AND EXPERIMENTAL DERMATOLOGY, BLACKWELL SCIENTIFIC PUBLICATIONS, GB, vol. 13, no. 3, 1 January 1988 (1988-01-01), pages 190-192, XP008089157, ISSN: 0307-6938, DOI: 10.1111/J. 1365-2230.1988.TB01968.X

Remarks:

The file contains technical information submitted after the application was filed and not included in this specification