



(12) Translation of  
European patent specification

(11) NO/EP 3628319 B1

NORWAY

(19)	NO	
(51)	Int Cl.	
	<b>A61K 31/437 (2006.01)</b>	<b>A61K 31/606 (2006.01)</b>
	<b>A61K 31/08 (2006.01)</b>	<b>A61K 31/7016 (2006.01)</b>
	<b>A61K 31/352 (2006.01)</b>	<b>A61K 31/785 (2006.01)</b>
	<b>A61K 31/395 (2006.01)</b>	<b>A61K 38/14 (2006.01)</b>
	<b>A61K 31/4164 (2006.01)</b>	<b>A61K 38/31 (2006.01)</b>
	<b>A61K 31/426 (2006.01)</b>	<b>A61K 45/06 (2006.01)</b>
	<b>A61K 31/4439 (2006.01)</b>	<b>A61P 1/16 (2006.01)</b>

**Norwegian Industrial Property Office**

---

(45)	Translation Published	2024.04.29
(80)	Date of The European Patent Office Publication of the Granted Patent	2024.02.14
(86)	European Application Nr.	19207534.9
(86)	European Filing Date	2009.10.02
(87)	The European Application's Publication Date	2020.04.01
(30)	Priority	2008.10.02, US, 102349 P
(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 ; MK ; MT ; NL ; NO ; PL ; PT ; RO ; SE ; SI ; SK ; SM ; TR
(62)	Divided application	EP2350096, 2009.10.02
(73)	Proprietor	Salix Pharmaceuticals, Inc. 8450 Colonnade Center Drive, Colonnade 1 Raleigh, NC 27615, USA
(72)	Inventor	FORBES, William, 1008 Heydon Court, Raleigh, NC 27164, USA
(74)	Agent or Attorney	Novagraaf Brevets, Bâtiment O2, 2 rue Sarah Bernhardt CS90017, 92665 ASNIÈRES-SUR-SEINE CEDEX, Frankrike

---

(54)	Title	<b>TREATMENT OF HEPATIC ENCEPHALOPATHY USING RIFAXIMIN</b>
(56)	References Cited:	WO-A1-2009/108814  SALIX PHARMACEUTICALS ET AL: "Xifaxan Prescribing Information", 20080301 , 1 March 2008 (2008-03-01), pages 1-2, XP008139843, Retrieved from the Internet: URL: <a href="http://www.salix.com/assets/pdf/prescr_ibc_into/xifaxanpi.pdf">http://www.salix.com/assets/pdf/prescr_ibc_into/xifaxanpi.pdf</a> [retrieved on 2011-04-05] R WILLIAMS ET AL: "Evaluation of the efficacy and safety of rifaximin in the treatment of hepatic encephalopathy: a double-blind, randomized, dose-finding multi-centre study.", EUR J GASTROENTEROL HEPATOL, vol. 12, no. 2, 1 February 2000 (2000-02-01), pages 203-208, XP055408536, DOI: 10.1097/00042737-200012020-00012 BASS ET AL: "Emerging therapies for the management of hepatic encephalopathy", SEMINARS IN LIVER DISEASE, THIEME MEDICAL PUBLISHERS, US, vol. 27, no. suppl. 2, 1 August 2007 (2007-08-01), pages 18-25, XP008148563, ISSN: 0272-8087, DOI: 10.1055/S-2007-984575

BASS N M: "Review article: the current pharmacological therapies for hepatic encephalopathy.", ALIMENTARY PHARMACOLOGY & THERAPEUTICS FEB 2007 LNKD- PUBMED:17295849, vol. 25 Suppl 1, February 2007 (2007-02), pages 23-31, XP002669397, ISSN: 0269-2813

ZENEROLI MARIA LUISA ET AL: "Management of Hepatic Encephalopathy: Role of Rifaximin", CHEMOTHERAPY, S. KARGER AG, CH, vol. 51, no. suppl. 1, 1 April 2005 (2005-04-01), pages 90-95, XP008148562, ISSN: 0009-3157, DOI: 10.1159/000081994

STEVEN L. FLAMM: "Rifaximin treatment for reduction of risk of overt hepatic encephalopathy recurrence", THERAPEUTIC ADVANCES IN GASTROENTEROLOGY, vol. 4, no. 3, 1 May 2011 (2011-05-01), pages 199-206, XP055662444, UK ISSN: 1756-283X, DOI: 10.1177/1756283X11401774

GUY NEFF ET AL: "Systematic Review of the Economic Burden of Overt Hepatic Encephalopathy and Pharmacoeconomic Impact of Rifaximin", PHARMACOECONOMICS, vol. 36, no. 7, 12 April 2018 (2018-04-12) , pages 809-822, XP055662447, NZ ISSN: 1170-7690, DOI: 10.1007/s40273-018-0641-6

NATHAN M. BASS ET AL: "Rifaximin Treatment in Hepatic Encephalopathy", THE NEW ENGLAND JOURNAL OF MEDICINE, vol. 362, no. 12, 25 March 2010 (2010-03-25), pages 1071-1081, XP055616660, DOI: 10.1056/NEJMoa0907893

RUIZ J. ET AL: "Development of Escherichia coli rifaximin-resistant mutants: frequency of selection and stability", JOURNAL OF ANTIMICROBIAL CHEMOTHERAPY, vol. 61, no. 5, 5 March 2008 (2008-03-05), pages 1016-1019, XP093013075, GB ISSN: 0305-7453, DOI: 10.1093/jac/dkn078

FARRELL DAVID J.: "Rifaximin in the Treatment of Irritable Bowel Syndrome : Is There a High Risk for Development of Antimicrobial Resistance?", JOURNAL OF CLINICAL GASTROENTEROLOGY., vol. 47, no. 3, 1 March 2013 (2013-03-01), pages 205-211, XP093013279, US ISSN: 0192-0790, DOI: 10.1097/MCG.0b013e31827559a3

Anonymous: "Xifaxan (rifaximin) FDA Approval History - Drugs.com", , 27 May 2015 (2015-05-27), XP093013686, Retrieved from the Internet: URL:<https://www.drugs.com/history/xifaxan.html> [retrieved on 2023-01-13]

Pharmaguide Lebanon: "NORMIX /5ml", , Retrieved from the Internet: URL:<http://pharmaguidelb.com/?q=medicines/normix-5-ml-0> [retrieved on 2023-02-03]

ALS-NIELSEN BODIL ET AL: "Non-absorbable disaccharides for hepatic encephalopathy: systematic review of randomised trials", BMJ, vol. 328, no. 7447, 1 May 2004 (2004-05-01), page 1046, XP093057197, GB ISSN: 0959-8138, DOI: 10.1136/bmj.38048.506134.EE

LAWRENCE KENNETH R ET AL: "Rifaximin for the treatment of hepatic encephalopathy", PHARMACOTHERAPY, WILEY-BLACKWELL, US, vol. 28, no. 8, 1 August 2008 (2008-08-01) , pages 1019-1032, XP008148564, ISSN: 0277-0008, DOI: 10.1592/phco.28.8.1019 [retrieved on 2012-01-06]

"Rifaximin Treatment is Beneficial for Mild Hepatic Encephalopathy", Nathan M. Bass et al., Presented at the "LIVER MEETING", OCTOBER 29 - NOVEMBER 2, 2004, Boston, Massachusetts

MARSHA Y MORGAN ET AL: "The treatment of hepatic encephalopathy", METABOLIC BRAIN DISEASE, KLUWER ACADEMIC PUBLISHERS-PLENUM PUBLISHERS, NE, vol. 22, no. 3-4, 6 September 2007 (2007-09-06), pages 389-405, XP019554851, ISSN: 1573-7365, DOI: 10.1007/S11011-007-9060-7

LEEVY CARROLL B ET AL: "Hospitalizations during the use of rifaximin versus lactulose for the treatment of hepatic encephalopathy.", DIGESTIVE DISEASES AND SCIENCES MAR 2007 LNKD- PUBMED:17245628, vol. 52, no. 3, March 2007 (2007-03), pages 737-741, XP002669396, ISSN: 0163-2116

Enclosed is a translation of the patent claims in Norwegian. Please note that as per the Norwegian Patents Acts, section 66i the patent will receive protection in Norway only as far as there is agreement between the translation and the language of the application/patent granted at the EPO. In matters concerning the validity of the patent, language of the application/patent granted at the EPO will be used as the basis for the decision. The patent documents published by the EPO are available through Espacenet (<http://worldwide.espacenet.com>) or via the search engine on our website here: <https://search.patentstyret.no/>

## PATENTKRAV

1. Rifaksimin for anvendelse for å redusere hyppigheten av sykehusinnleggelsesbesøk i en fremgangsmåte for behandling av hepatisk encefalopati (HE), omfattende administrering av rifaksimin, hvori rifaksiminet administreres oralt i form av en tablett i en dosering mellom 1000 mg til 1200 mg rifaksimin daglig i en periode på 12 måneder eller lengre.
2. Rifaksimin for anvendelsen ifølge krav 1, hvori rifaksimet administreres ved 275 mg fire ganger per dag.
3. Rifaksimin for anvendelsen ifølge krav 1, hvori rifaksimet administreres ved 550 mg to ganger per dag.
4. Rifaksimin for anvendelsen ifølge et hvilket som helst av kravene 1 til 3, hvori rifaksimet administreres til individet i en varighet mellom 12 og 36 måneder.
5. Rifaksimin for anvendelsen ifølge et hvilket som helst av kravene 1 til 3, hvori rifaksimet administreres til individet i varigheten av individets liv.