

Title (en)

COMPOSITIONS CONTAINING CGMP PDE INHIBITORS AND LOCAL ANAESTHETIC AGENTS FOR NASAL APPLICATION

Title (de)

ZUSAMMENSETZUNGEN ENTHALTEND CGMP PDE-INHIBITOREN UND LOKALANÄSTHETIKA ZUR NASALEN APPLIKATION

Title (fr)

COMPOSITIONS CONTENANT DES INHIBITEURS DE CGMP-PDE ET DES AGENTS ANESTHESIQUES LOCAUX POUR L'ADMINISTRATION NASALE

Publication

EP 1383486 A2 20040128 (DE)

Application

EP 02761908 A 20020410

Priority

- DE 10118305 A 20010412
- EP 0203977 W 20020410

Abstract (en)

[origin: DE10118305A1] A new composition comprises: (1) at least one cyclic guanosine monophosphate phosphodiesterase (cGMP PDE) inhibitor (I); and (2) at least one local anesthetic (II) (other than benzyl alcohol). A new composition comprises: (1) at least one cyclic guanosine monophosphate phosphodiesterase (cGMP PDE) inhibitor (I); and (2) at least one local anesthetic (II) (other than benzyl alcohol). (I) are selected from pyrazolo-pyrimidinone derivatives of formula (I'), pyrazino-pyridino-indole derivatives of formula (I'') and their salts, isomers and/or hydrates. R1 = H, 1-3C alkyl, 1-3C perfluoroalkyl or 3-5C cycloalkyl; R2 = T (optionally substituted (os) by 3-6C cycloalkyl), 1-3C perfluoroalkyl or 3-6C cycloalkyl; T = 1-6C alkyl; R3 = T (os by 3-6C cycloalkyl), 1-6C perfluoroalkyl, 3-5C cycloalkyl, 3-6C alkenyl or 3-6C alkynyl; R4 = 1-4C alkyl (os by OH, NR5R6, CN, CONR5R6 or COOR7); 2-4C alkenyl (os by CN, CONR5R6 or COOR7); 2-4C alkanoyl (os by NR5R6); 2-4C hydroxyalkyl (os by NR5R6); (2-3C) alkoxy-(1-2C) alkyl (os by OH or NR5R6); CONR5R6; COOR7; halo; NR5R6; NHSO2NR5R6; NHSO2R8; SO2NR9R10; or phenyl, pyridinyl, pyrimidinyl, imidazolyl, oxazolyl, thiazolyl, thienyl or triazolyl (all os by Me); R5, R6 = H or 1-4C alkyl; or NR5R6 = pyrrolidino, piperidino, morpholino, 4-(R11)-piperazino or imidazolyl (all os by Me or OH); R7 = H or 1-4C alkyl; R8 = 1-3C alkyl (os by NR5R6); NR9R10 = pyrrolidino, piperidino, morpholino or 4-(R12)-piperazino (all os by 1-4C alkyl, 1-3C alkoxy, NR13R14 or CONR13R14); R11 = H, 1-3C alkyl (os by Ph), 2-3C hydroxyalkyl or 1-4C alkanoyl; R12 = H; T (os by CONR13R14); 2-6C alkyl substituted by 1-3C alkyl, OH or NR13R14; or CONR13R14, CSNR13R14 or C(NH)NR13R14; Q = H, halo or T; Q1 = H, T (os by halo), 2-6C alkenyl, 2-6C alkynyl, 3-8C cycloalkyl, 3-8C cycloalkyl-(1-3C) alkyl or Ar-(1-3C) alkyl; Ar = phenyl, thienyl, furyl or pyridyl (all os by 1-3 of halo, T, OT and OCH2O); Q2 = phenyl, thienyl, furyl or pyridyl (all os); or phenyl fused with a 5- or 6-membered saturated or partially or completely unsaturated ring containing 0-2 of O, N and S as heteroatoms; Q3 = H or 1-3C alkyl; or Q1 + Q3 = 3- or 4-membered alkylene or alkenylene chain completing a 5- or 6-membered ring. (II) is selected from: (1) compounds of formula (II'); (2) compounds of formula (II''); (3) 2-methoxycarbonyl-4-methyl-3-(2-(propylamino)-propionamido)-thiophene; (4) 2-butoxy-4-(N-(2-diethylaminoethyl)-carbamoyl)-quinoline; (5) 3-butyl-1-(2-dimethylaminoethyl)-isoquinoline; (6) N-(N-(1,1-dimethylpropyl)-N-methylcarbamoylmethyl)-N-(2-hydroxyethyl)-glycine N-(1,1-dimethyl-2-phenylethyl)-N-methylamide; (7) polydodecanol; and (8) benoxinate. or their salts or hydrates. A1 = H, NH2, NHT, OT or OCH2Ph; A2 = OT (optionally substituted by NHT, NT2 or Het) or -(CH2)p-Het; Het = saturated 5- or 6-membered heterocycle, which contains and is bonded via N, optionally contains 1 or 2 other N, O or S heteroatoms and is optionally substituted by 1-3 T; A3 = H, halo or OT; B1 = H or OH; B2 = -T'-NT2 or Het'; T' = 1-6C alkylene (optionally substituted by one or more T); Het' = as for Het, but not necessarily bonded via N; B3 = T, halo or COOT; n = 1 or 2. Independent claims are included for nasal spray applicators or powder inhalers (both preferably of unit dose type) containing the compositions.

IPC 1-7

A61K 31/00

IPC 8 full level

A61K 9/72 (2006.01); **A61P 15/10** (2006.01); **A61K 9/00** (2006.01); **A61K 31/00** (2006.01); **A61K 31/165** (2006.01); **A61K 31/167** (2006.01); **A61K 31/245** (2006.01); **A61K 31/381** (2006.01); **A61K 31/47** (2006.01); **A61K 31/4985** (2006.01); **A61K 31/519** (2006.01); **A61K 45/06** (2006.01); **A61P 23/02** (2006.01); **A61P 43/00** (2006.01)

CPC (source: EP US)

A61K 9/0043 (2013.01 - EP US); **A61K 31/519** (2013.01 - EP US); **A61K 45/06** (2013.01 - EP US); **A61P 15/10** (2017.12 - EP); **A61P 23/02** (2017.12 - EP); **A61P 43/00** (2017.12 - EP)

C-Set (source: EP US)

A61K 31/519 + A61K 2300/00

Citation (search report)

See references of WO 02083108A2

Designated contracting state (EPC)

DE ES FR GB IT

DOCDB simple family (publication)

DE 10118305 A1 20021017; AU 2002308134 A1 20021028; CA 2443559 A1 20021024; EP 1383486 A2 20040128; JP 2004525956 A 20040826; US 2004142944 A1 20040722; WO 02083108 A2 20021024; WO 02083108 A3 20030410

DOCDB simple family (application)

DE 10118305 A 20010412; AU 2002308134 A 20020410; CA 2443559 A 20020410; EP 0203977 W 20020410; EP 02761908 A 20020410; JP 2002580912 A 20020410; US 47300004 A 20040223