

## Title (en)

MIXTURES OF CALCITONIN DRUG-OLIGOMER CONJUGATES AND METHODS OF USE IN PAIN TREATMENT

## Title (de)

GEMISCHE VON CALCITONIN-ARZNEIMITTEL-OLIGOMER-KONJUGATEN UND ANWENDUNGSVERFAHREN IN DER SCHMERZBEHANDLUNG

## Title (fr)

MELANGES DE CONJUGUES CONTENANT UN MEDICAMENT A BASE DE CALCITONINE COUPLE A UN OLIGOMERE ET PROCEDES D'UTILISATION DANS LE TRAITEMENT DE LA DOULEUR

## Publication

**EP 1643959 A4 20100609 (EN)**

## Application

**EP 04753588 A 20040527**

## Priority

- US 2004016784 W 20040527
- US 48213003 P 20030624

## Abstract (en)

[origin: WO2005004792A2] A mixture of conjugates in which each conjugate in the mixture comprises a calcitonin drug coupled to an oligomer that includes a polyalkylene glycol moiety is disclosed. The mixture may lower serum calcium levels in a subject by 10, 15 or even 20 percent or more. Moreover, the mixture may be more effective at surviving an in vitro model of intestinal digestion than non-conjugated calcitonin. Furthermore, the mixture may exhibit a higher bioavailability than non-conjugated calcitonin. The compositions of this invention are useful in the treatment of various bone disorders and pain.

## IPC 8 full level

**C07K 1/113** (2006.01); **A61K 38/00** (2006.01); **A61K 47/48** (2006.01); **C07K 7/00** (2006.01); **C07K 14/535** (2006.01)

## IPC 8 main group level

**A61K** (2006.01)

## CPC (source: EP)

**A61K 38/23** (2013.01); **A61K 47/60** (2017.07); **A61P 3/14** (2017.12); **A61P 19/08** (2017.12); **A61P 19/10** (2017.12); **A61P 25/02** (2017.12); **A61P 25/24** (2017.12); **A61P 29/02** (2017.12)

## Citation (search report)

- [XY] WO 02098451 A1 20021212 - NOBEX CORP [US], et al
- [Y] SIMANSKI C ET AL: "[Therapy of phantom pain with salmon calcitonin and effect on postoperative patient satisfaction]", DER CHIRURG; ZEITSCHRIFT FÜR ALLE GEBIETE DER OPERATIVEN MEDIZIN JUN 1999 LNKD- PUBMED:10427454, vol. 70, no. 6, June 1999 (1999-06-01), pages 674 - 681, XP002578700, ISSN: 0009-4722
- [Y] ANTONIO QUATRARO ET AL: "CALCITONIN IN PAINFUL DIABETIC NEUROPATHY", LANCET THE, LANCET LIMITED. LONDON, GB, vol. 339, no. 8795, 1 March 1992 (1992-03-01), pages 746 - 747, XP008073556, ISSN: 0140-6736
- See references of WO 2005004792A2

## Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

## Designated extension state (EPC)

AL HR LT LV MK

## DOCDB simple family (publication)

**WO 2005004792 A2 20050120; WO 2005004792 A3 20050901**; EP 1643959 A2 20060412; EP 1643959 A4 20100609; JP 2007521268 A 20070802; JP 4829783 B2 20111207

## DOCDB simple family (application)

**US 2004016784 W 20040527**; EP 04753588 A 20040527; JP 2006517158 A 20040527