

Neuropathic Pain

Emerging Drugs and Current Treatment Practices

2010

A comprehensive update on current drugs and emerging candidates for the treatment of Neuropathic Pain

A global survey of current treatment and prescribing practices for Neuropathic Pain.

Focused on drug-based therapies, this report presents the findings of a comprehensive survey on current treatments for Neuropathic Pain, from details provided by more than 350 clinics worldwide.

Providing information relevant to markets and opportunities in the treatment of Neuropathic Pain

This study was conducted between January and June 2009

Report Details

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Overview

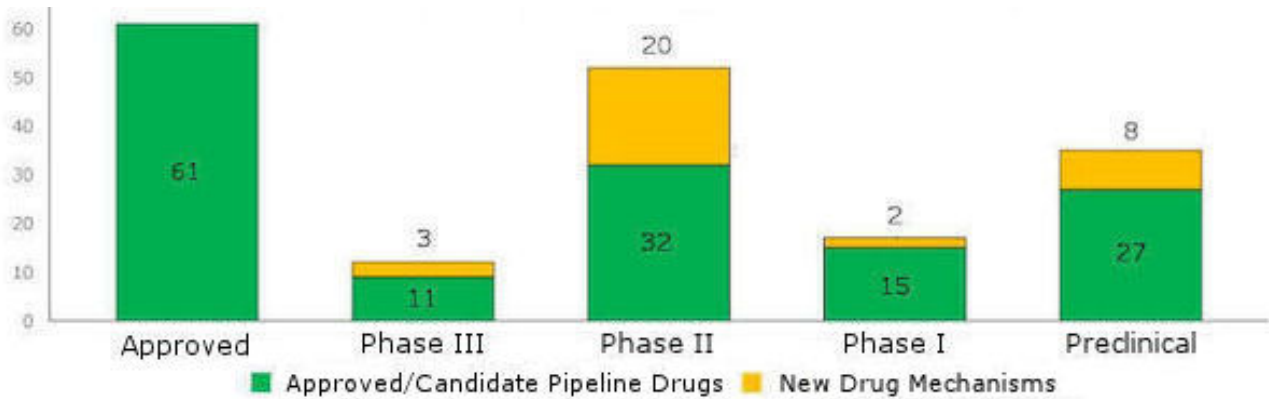
This report presents a comprehensive update on emerging drug candidates for neuropathic pain, (NP) together with the findings of global survey on current treatment practices in the clinic, following the participation of more than 350 physicians worldwide.

- ✚ The global prevalence of NP is unknown; however, recent studies suggest levels of 3-10%. In a 2009 study by Biopharm Reports involving more than 350 physicians, NP was linked to 75 underlying conditions.
- ✚ Today, drugs used to treat NP drugs include more than 60 agents across 20 drug classes. Many of these drugs, such as the anticonvulsants and antidepressants, were developed for other indications, but have utility in the treatment of NP, albeit it in increasingly complex combinations.
- ✚ The current development pipeline shows just 11 Phase III candidates, three of which are based on new or novel drug targeting mechanisms for NP. Phase II however shows a very different picture, with 32 candidates, 20 (63%) of which are based on new or novel mechanisms. Overall, of the 85 pipeline candidates between Phase III and preclinical development, 33 (39%) represent new or novel mechanisms. The drug pipeline is also showing increasing convergence in the targeting strategies that pharmaceutical companies are developing, to combat NP
- ✚ Comprehensive details of current treatments for NP, provided by more than 350 clinics in 56 countries
- ✚ In-depth information relevant to markets and opportunities in the NP field.
- ✚ 98% of participants are practicing physicians, working in specialised areas of NP treatment. Of these, 78% described themselves as specialists in pain treatment.
- ✚ Leading participant countries were USA, Canada, UK, Australia, Denmark, France, Brazil, Germany, Netherlands and Belgium.
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- ✚ 74% of the clinical centres participating in this study were hospital pain departments, specialised pain practices or private pain clinics.
- ✚ Detailed information on the use of specific drug classes including tricyclic antidepressants, SSRIs, SNRIs, anticonvulsants, sodium channel blockers, opioids, NSAIDs, cannabinoids and Capsaicin.
- ✚ Physicians have provided detailed feedback on the underlying pathologies associated with NP, seen in their patients.
- ✚ Comprehensive information on the most frequently prescribed drugs from nine drugs classes, including drug combinations, for the treatment of NP. Biopharm Reports believes this provides the most comprehensive and up-to-date review and analysis in this area, that is currently available.
- ✚ A detailed analysis of interventional methods used for the treatment of NP (e.g. peripheral nerve block, TENS).
- ✚ An assessment of average levels of pain relief achieved in the treatment of NP, in relation to 12 underlying conditions.
- ✚ Informative views of participating physicians on current limitations, challenges and issues relating to the treatment of NP.

Part 1

Today, drugs used to treat NP drugs include more than 60 agents across 20 drug classes. Many of these drugs, such as the anticonvulsants and antidepressants, were developed for other indications, but have utility in the treatment of NP, albeit it in increasingly complex combinations. Part 1 of this report presents a comprehensive update on emerging drug candidates for NP.

The current development pipeline shows just 11 Phase III candidates, three of which are based on new or novel drug targeting mechanisms for NP. Phase II however shows a very different picture, with 32 candidates, 20 (63%) of which are based on new or novel mechanisms. Overall, of the 85 pipeline candidates between Phase III and preclinical development, 33 (39%) represent new or novel mechanisms. The drug pipeline is also showing increasing convergence in the targeting strategies that pharmaceutical companies are developing, to combat NP.



Part 2

Part 2 of this report presents the findings of a global survey on current therapeutic approaches to the treatment of Neuropathic Pain (NP). These findings were made following the participation of more than 350 physicians, who provided details of their treatments and prescribing practices. NP is highly individual in its presentation, level, underlying pathology and response to therapy. For some patients, available therapies give satisfactory pain control. For many others, treatments are poor or do not work at all.

Therapeutic options include up to 20 drug classes, which are commonly prescribed in combinations tailored to individual patient needs. Interventional treatments, such as peripheral nerve block and transcutaneous electrical nerve stimulation, are also used as physicians seek other approaches to treating NP. This background, the individual nature of NP and the drug (or drug combination) options used to treat patients, has created a complex therapeutic picture.

In a therapeutic field where treatments are often unsatisfactory, physicians seek to extent their understanding of NP in an effort to define needs and limitations. Knowledge in these areas is also important to drug developers, who seek a better understanding of patient needs and outcomes as part of their own efforts to develop more effective therapies.

To meet interest in these areas, Biopharm Reports has conducted an in-depth global survey on current treatments and drug prescribing practices, relating to NP. This survey involved the participation of more than 350 physicians and clinical centres in 56 countries. As part of this study, pain physicians were asked to described current limitations relating to the treatment of neuropathic pain. This report presents an an analysis of these findings. The report includes:

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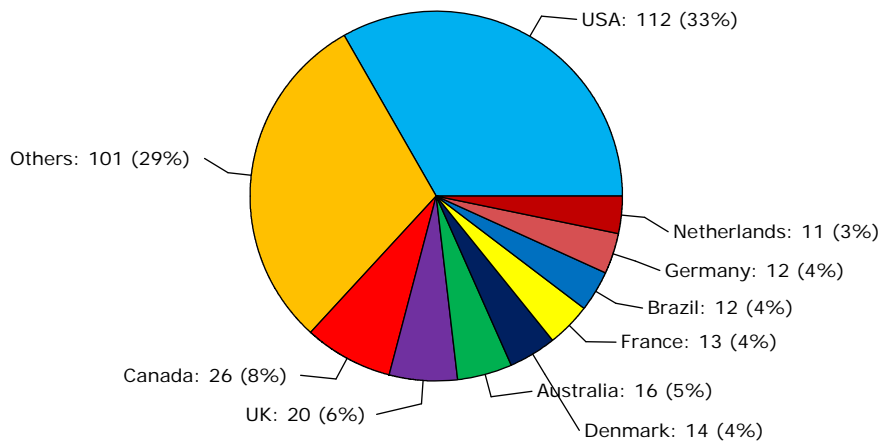
In a therapeutic field where treatments are often unsatisfactory, physicians seek to extent their understanding of NP in an effort to define limitations and needs. Knowledge in these areas is also important to drug developers, who seek a better understanding of patient needs and outcomes, as part of their own efforts to develop more effective therapies. To meet current interest in these areas, Biopharm Reports has conducted an in-depth survey on current clinical approaches to the treatment of NP. This survey involved the participation of more than 330 clinical centres in 56 countries worldwide.

Information Surveyed

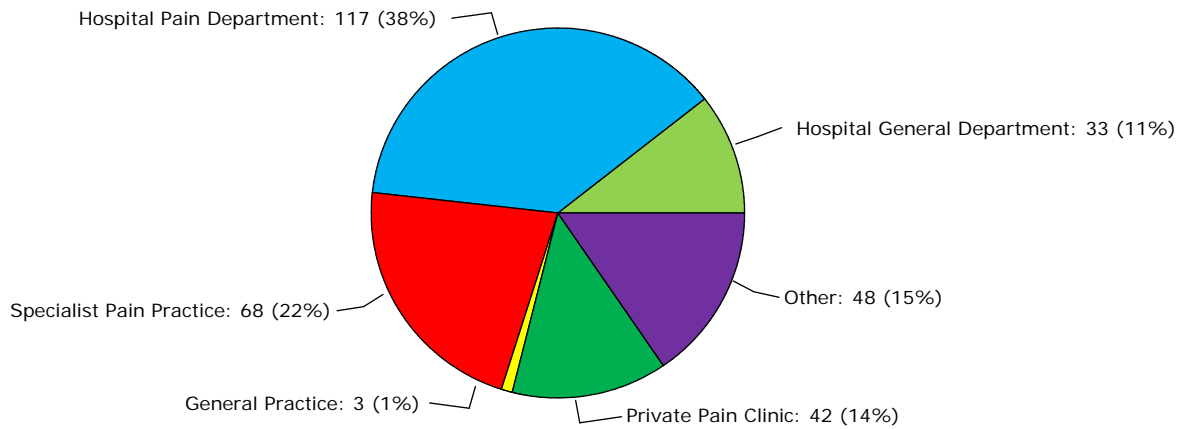
- ◆ Participant details: Participant organisation, type of clinical practice or department; type of pain physician
- ◆ NP treatment strategies: Relative proportion of drug and interventional treatments
- ◆ Diagnoses and underlying pathologies: For example, Diabetes, post cancer radiotherapy or chemotherapy, post general surgery, Trigeminal Neuralgia, viral Infections, injury/trauma, post back surgery, primary back problems, complex regional pain syndrome (CRPS), Multiple Sclerosis, central pain, Arthritis, Others NP pathologies
- ◆ Single or combined drug treatments
- ◆ Drug classes used: For example, tricyclic antidepressants, selective serotonin reuptake inhibitors (SSRIs), serotonin-noradrenalin reuptake inhibitors (SNRIs), anticonvulsants, sodium channel blockers, opioids, non-steroidal anti-inflammatory drugs, cannabinoids, Capsaicin and others
- ◆ Tricyclic Antidepressants: First, second and third most frequently used
- ◆ Selective serotonin reuptake inhibitors: First, second and third most frequently used
- ◆ Serotonin-noradrenalin reuptake inhibitors: First, second and third most frequently used
- ◆ Anticonvulsants: First, second and third most frequently used
- ◆ Sodium Channel Blockers: First, second and third most frequently used
- ◆ Opioids: First, second and third most frequently used
- ◆ Non-steroidal anti-inflammatory drugs: First, second and third most frequently used
- ◆ Cannabinoids
- ◆ Capsaicin
- ◆ Drug combinations: First, second and third most frequently used drug combinations (i.e. combinations of two, three or more than three specific drug classes)
- ◆ Pain relief: Pain relief profile for the major underlying pathologies (levels of pain relief for each underlying pathology)
- ◆ Interventional treatments: use of interventional treatments such as epidural injections, facet joint injections, facet joint denervation, large joint injections, medical acupuncture, nerve root blocks, peripheral nerve blocks, prolotherapy, sympathetic blocks, lumbar sympathectomy, spinal manipulation, trigger point injections, tendon sheath/bursa injections, intrathecal injection, spinal chord stimulation, intramuscular stimulation, TENS and others.
- ◆ Clinical issues and challenges in the treatment of NP: Individual responses from physicians to this question
- ◆ Any other comments on the treatment of Neuropathic Pain: Individual responses from physicians to this question

Study Participants

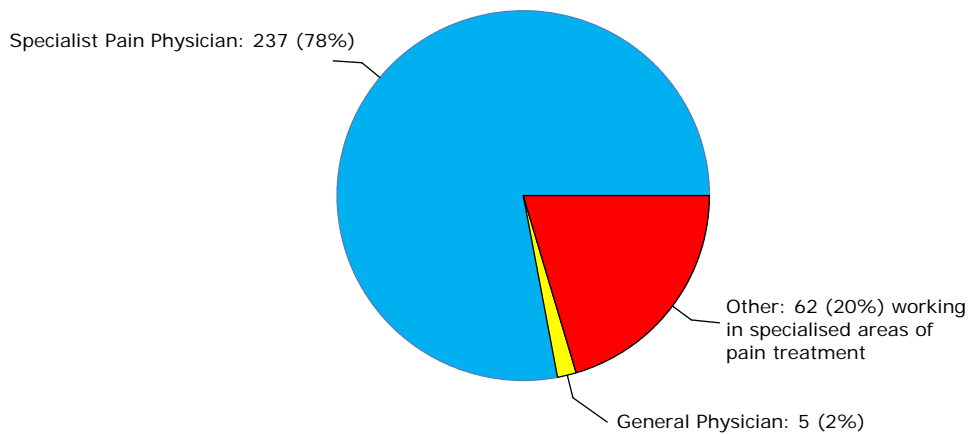
Countries



Clinical Centres

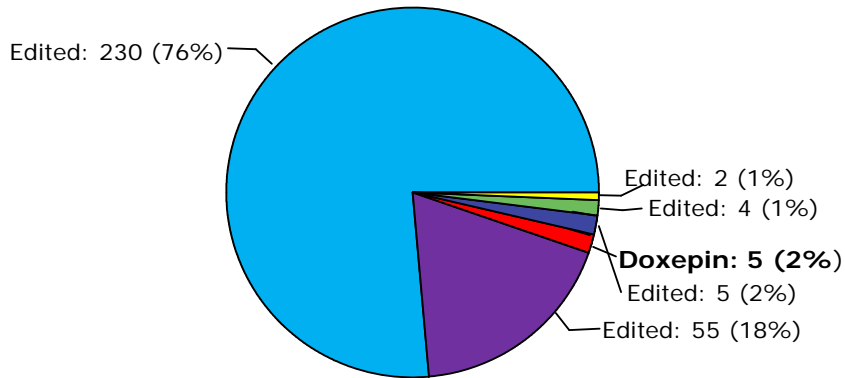


Physicians



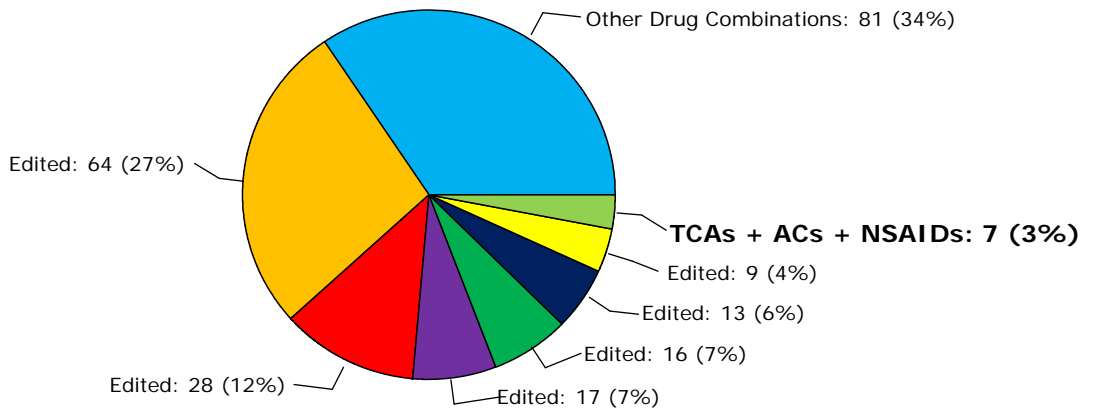
Sample Data (Restricted)

Most frequently prescribed tricyclic antidepressants



Sample Data (Restricted)

Most frequently used drug class combinations



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Table 25.1 General limitations and issues associated with the treatment of neuropathic pain.

Appendix 1. Responses of study participants to the question: What are the major issues and challenges associated with the treatment of neuropathic pain? Responses given by physicians to this question (which in some cases may be brief, informal or abbreviated) are presented "as is", except in those some cases where minor grammatical or typographical corrections have been made for reasons of clarity.

Appendix 2. Responses of study participants to the question: Any further comments relating to the treatment of Neuropathic Pain? Responses physicians to this question by physicians (which in some cases may be brief, informal or abbreviated) are presented "as is", except in those cases where minor grammatical or typographical corrections have been necessary for reasons of clarity.

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