



# Introduction

- Osteoarthritis (OA), a progressive, degenerative joint disease, is one of the most common causes of chronic pain and affects nearly 27 million people in the US<sup>1</sup>
- The disease often leads to disability and impairs quality of life in patients<sup>1,2</sup>
- It is associated with a substantial economic burden<sup>3</sup>

# Objective

• To assess practice patterns among clinicians who treat patients with chronic OA pain

# Methods

• A patient case-vignette survey using multiple-choice and rating-scale questions was developed and sent to clinicians who treat patients with OA

### Patient case vignette



### **Initial Visit**

- 52-year-old male with pain in the right hip (4–7 on 10-point scale) and stiffness that progressed over 4 months
- X-ray results suggested mild OA





### **First Follow-up Visit**

Patient complains pain has worsened and he has been less active





### **Second Follow-up Visit**

- Patient continues to complain of worsening pain
- Pain occurs during day and at night
- Physical examination revealed a reduction in the range of motion in the right hip

# Results

### Demographics

### Figure 1. Specialties of US and Ex-US Clinicians who Responded to an OA **Case-Vignette Survey**



### **Treatment Recommendations at Initial Presentation**

# Practice Patterns for Osteoarthritis Pain Management Differ Across Regions and Medical Specialties: A Patient Case-Vignette Survey

 Out of 1182 respondents, 34% were US clinicians (n=402) and 66% were ex-US clinicians (Canada, France, Germany, Italy, Spain, and the UK; n=780)

• In the US, the majority of the respondents specialized in internal medicine (27%) and orthopedic surgery (26%). Outside the US, rheumatology (39%) and orthopedic surgery (38%) were the most common (**Figure 1**)

 Most US and ex-US clinicians recommended prescription nonsteroidal anti-inflammatory drugs (NSAIDS) or nonpharmacologic options (Figure 2)

### Figure 2. Treatment Recommendations of US and Ex-US Clinicians at Initial Visit of a Hypothetical Patient with OA Oral corticosteroid Corticosteroid injection Prescription NSAID Over-the-counter NSAID Acetaminopher Referral to pain management center Referral to orthopedic surgeon Long-acting/extended-release strong opioid analgesic Short-acting weak opioid analgesic Viscosupplementation US Ex-US Non-pharmacologic option Proportion of clinicians (%) NSAID, non-steroidal anti-inflammatory drug 45% 22% **Ex-US** US uggested corticosteroid injection 28% 26% orthopedic surged 17% 13% suggested a short-acting/weak opioid





### **Treatment Recommendations at First Follow-up Visit**

- Compared to the initial presentation, fewer US and ex-US clinicians recommended non-pharmacologic options or NSAIDs (prescription or over-the-counter), while more clinicians recommended referral to an orthopedic surgeon (Figure 2 and Figure 3)
- More ex-US than US clinicians recommended long-acting/ extended-release strong opioid analgesics (14% vs 3%, respectively)

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### Figure 3. Treatment Recommendations of US and Ex-US Clinicians at First **Follow-up Visit**



### **Treatment Recommendations at Second Follow-up Visit**

- More ex-US clinicians recommended long-acting/extendedrelease opioid analgesics at the second follow-visit than at the first follow-visit (18% vs 14%, respectively) (Figure 3 and **Figure 4**). The percentage of US clinicians who recommended this option remained constant at both follow-up visits (3%)
- Across all specialties, 16% of US clinicians referred the patient to a pain management center compared to 8% of ex-US clinicians (**Figure 4**)

### Figure 4. Treatment Recommendations of US and Ex-US Clinicians at **Second Follow-up Visit**





# Conclusions

- In the presented case of OA, practice patterns differed between US and ex-US clinicians with respect to the prescription of opioids and referrals to pain management centers
- Ex-US clinicians were more likely than US clinicians to recommend long acting/extended-release strong opioids at the first and second follow-up visits, which may reflect current US guidelines and regulatory requirements for prescribing opioids for chronic pain<sup>4,5</sup>
- US clinicians were more likely to recommend referral to pain management centers at all stages of the case than ex-US clinicians, potentially reflecting differences among healthcare systems and the availability of pain management centers
- Further research is needed to assess whether patient outcomes are affected by differences in practice patterns

# References

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# Disclosures

Greg Salinas has nothing to disclose. Joanne Nettleship is an employee and stockholder of Teva Pharmaceuticals. Ann Marie DeMatteo and Karyn Ruiz-Cordell are employees of Regeneron Pharmaceuticals, Inc. Ann Marie DeMatteo holds stock in Regeneron Pharmaceuticals, Inc.

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