

A Global Survey Assessing Risk of Opioid Abuse in Chronic Pain Patients: The Importance of Education Across Specialties

Karyn Ruiz-Cordell, Joanne Nettleship, Greg Salinas, Ann Marie DeMatteo

¹Regeneron Pharmaceuticals, Tarrytown, NY, USA; ²Teva Pharmaceuticals, Amsterdam, The Netherlands; ³CE Outcomes, LLC, Birmingham, AL, USA.

Introduction

- Opioid analgesics are widely used for the management of postoperative pain and severe chronic pain due to advanced cancer and other diseases¹⁻⁴
- Substantial differences exist in opioid-prescribing practices across prescriber specialties^{5,6}
- Identification of these differences and education of best practices across specialties may help reduce the risk of opioid abuse in patients with chronic pain

Objectives

- To identify clinical practice gaps, unmet medical education needs, and practice barriers among clinicians who manage patients with chronic pain
- To compare findings from US clinicians with those in an ex-US cohort (Canada, France, Germany, Italy, Spain, and the UK)

Methods

- An asynchronous, modified Delphi technique was used to identify barriers in focus group sessions of clinicians who treat osteoarthritis (OA) and low back pain (LBP)
- Qualitative analysis: US clinicians who treat OA and LBP were invited to participate in two asynchronous focus group sessions to identify the most significant barriers to effective management of chronic pain with opioids
- Quantitative analysis: US and ex-US clinicians were invited to answer a case-vignette survey of four patients

Results

Qualitative Analysis

- LBP treating clinicians (n=19) considered the potential for opioid abuse to be a more important barrier to effective pain management than OA treating clinicians did (n=17) (Figure 1)
- Focus group participants indicated a need for improving professional education for healthcare providers

Quantitative Analysis

 A total of 1182 clinicians were surveyed, of whom 402 (34%) were in the US cohort. Medical specialties of respondent clinicians are summarized in Figure 2

Figure 1. Barriers to Effective Pain Management With Opioids Listed by US Clinicians who Treat (A) OA Pain and (B) LBP

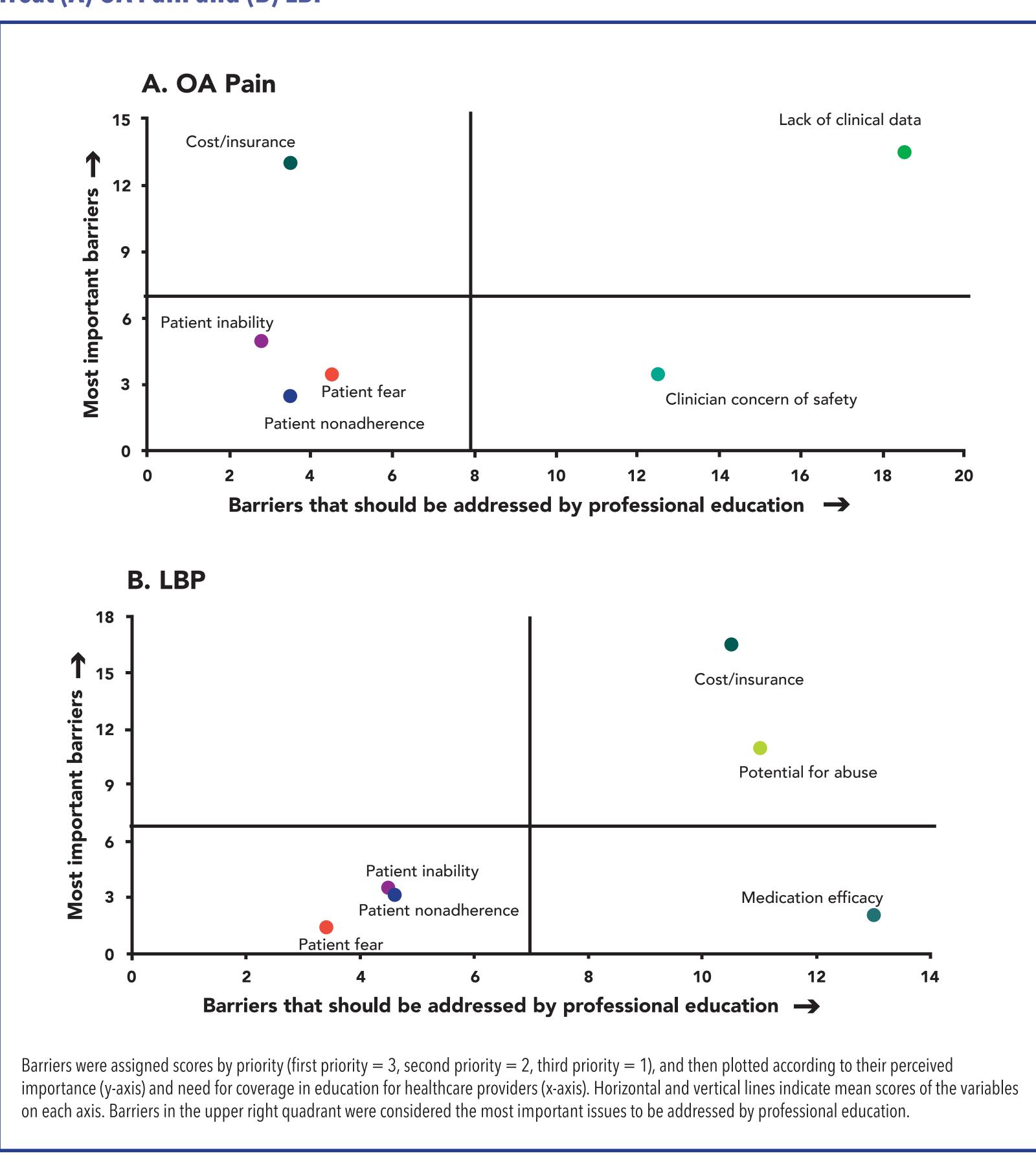
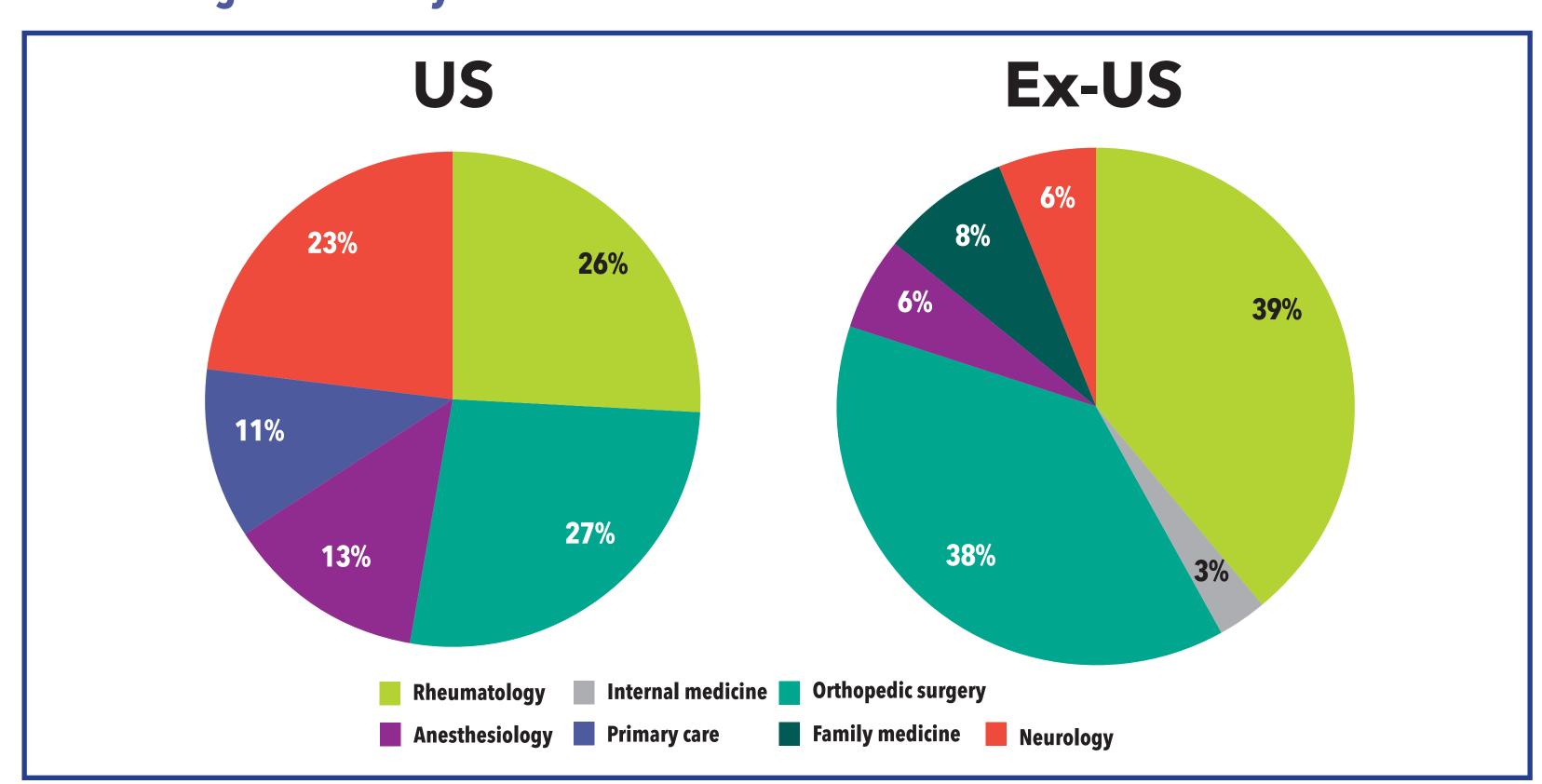


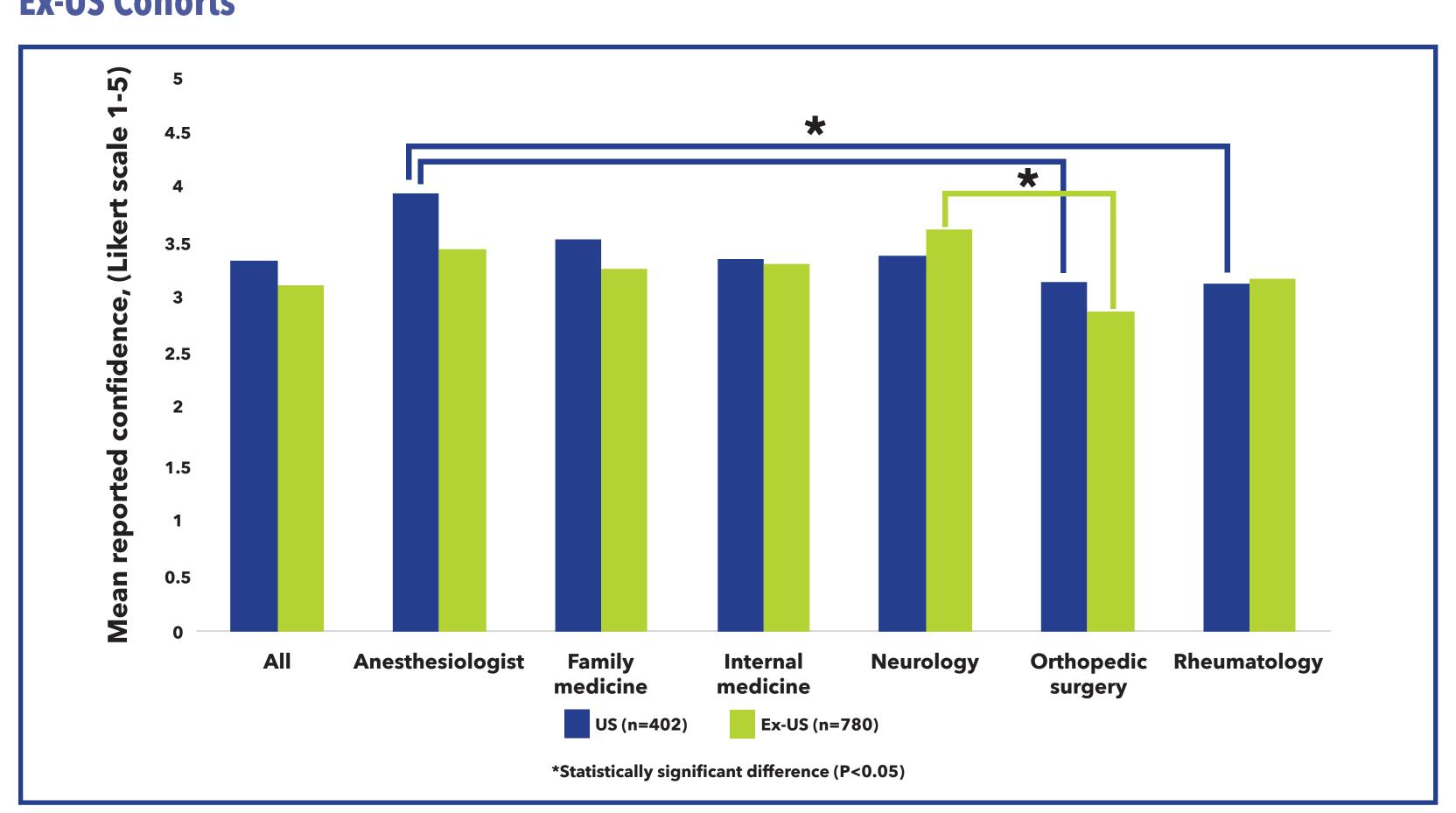
Figure 2. Proportions of US and Ex-US Clinicians by Specialty who Responded to a Chronic LBP Case-Vignette Survey



Confidence and Knowledge

- Overall, clinicians in both the US and ex-US cohorts reported very good knowledge of opioid mechanisms of action (4.36 vs 4.34, Likert scale 1-5) and moderate confidence in assessing the risk of opioid abuse (3.36 vs 3.14)
- In the US, anesthesiologists had the highest confidence in assessing opioid abuse risk, whereas orthopedic surgeons and rheumatologists had the lowest (3.98 vs 3.17 and 3.15, respectively). Outside of the USA, neurologists had the highest confidence, whereas orthopedic surgeons had the lowest (3.65 vs 2.90). The differences between these specialties were statistically significant (P<0.05; **Figure 3**)

Figure 3. Confidence in Assessing the Risk of Opioid Abuse Among Clinicians in US and Ex-US Cohorts



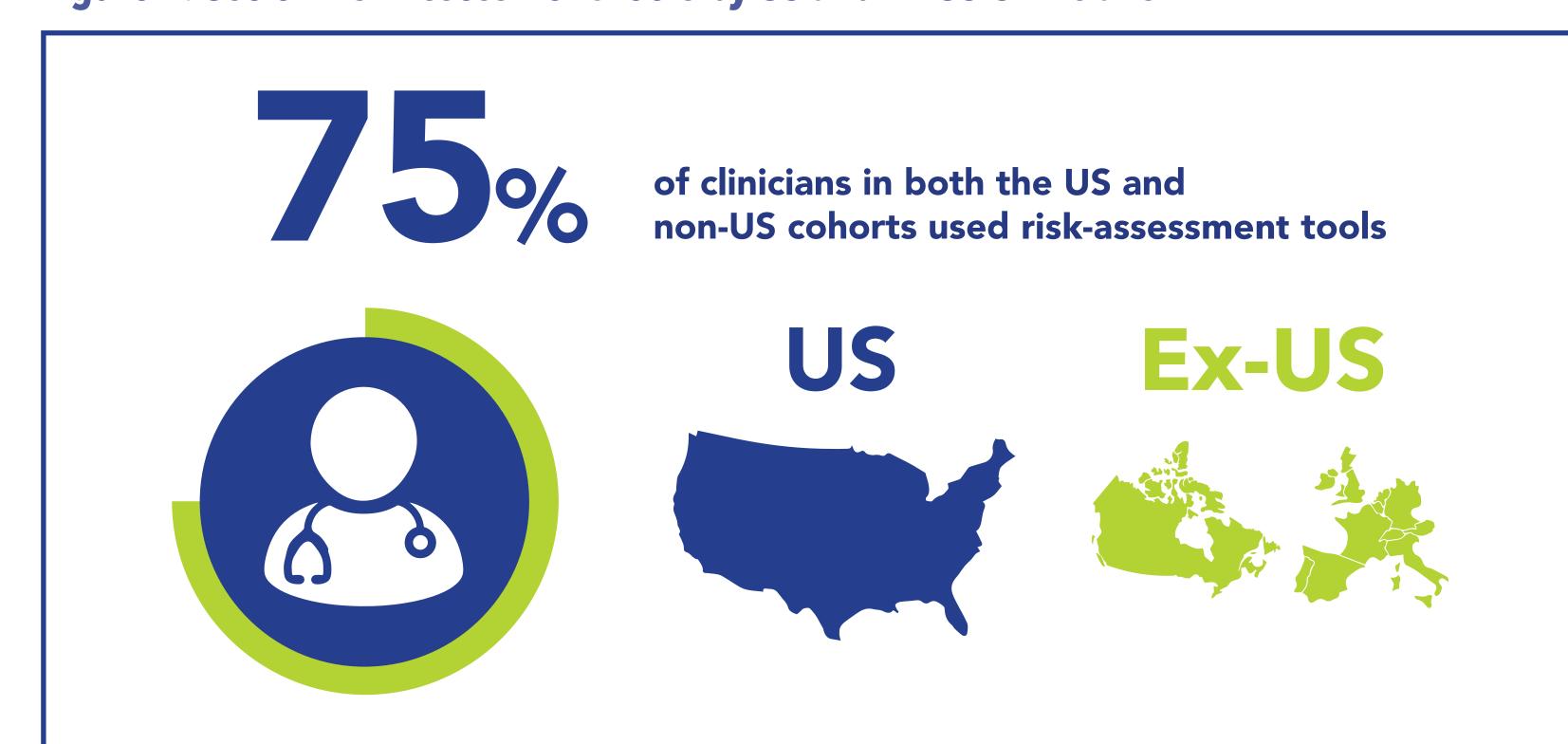
Assessment of Risk

- Clinicians in the US tended to use multiple risk-assessment tools, whereas those outside the US tended to rely solely on patient histories (Figure 4)
- In both the US and ex-US cohorts, anesthesiologists carried out the most opioid abuse risk assessments, whereas orthopedic surgeons carried out the least

Timing of Risk Assessment

- US clinicians preferred to assess risk of abuse before prescribing opioids, whereas ex-US clinicians preferred to assess risk after prescribing or when warning signs of abuse occurred (Figure 5)
- Within specialty groups, anesthesiologists in the US and neurologists outside of the US were most likely to assess risk before prescribing opioids

Figure 4. Use of Risk Assessment Tools by US and Ex-US Clinicians



Correlations

- US cohort:
- For clinicians who identified themselves as pain specialists in a specialty pain center (18%), there were moderately positive and statistically significant correlations with confidence in assessing the risk of opioid abuse, particularly with assessment tools that require knowledge of drug screening, testing, or monitoring (r=0.20-0.30; P≤0.001)
- Overall, there was a moderate statistically significant correlation between specialties and the use of risk-assessment tools (r=0.41; P≤0.001)
- Ex-US cohort:
- No statistically significant relationships were found when data were examined across variables
- Within specialties, correlations were similar to those in the US cohort
- These correlations suggest that practice pattern profiles exist among healthcare practitioners during LBP and OA pain management with opioids

Conclusions

- A small survey of US clinicians who treat OA (n=17) and LBP (n=19) suggested that the potential for opioid abuse is an important barrier to the effective management of patients with chronic pain
- A larger survey of clinicians in the US, Canada, and Europe (n=1182) demonstrated that opioid prescribing practices and risk-assessment timing differ across specialties. Regardless of geography, clinicians who take a more proactive approach to risk assessment tend to be more confident in prescribing opioids and assessing the risk of abuse
- These findings have important implications for both professional and patient-focused education. Targeted education of best practices to specific groups of clinicians, along with more proactive discussions with patients with chronic pain and their family members, could help reduce the risk of opioid abuse

References

- 1. Busse JW et al. *CMAJ*. 2017;189:E659-E666
- 2. Dowell D et al. *MMWR Recomm Rep*. 2016;65:1-49
- 3. Caraceni A et al. *Lancet Oncol*. 2012;13:e58-e68
- 4. Schaefer CP, Tome ME, and Davis TP. Fluids Barriers CNS. 2017;14:32
- Levy B et al. Am J Prev Med. 2015;49:409-413
 Ringwalt C et al. Pain Res Manag. 2014;19:179-185

Acknowledgments

This research was supported by Teva Pharmaceuticals and Regeneron Pharmaceuticals, Inc. Medical writing assistance was provided by Alexander Simon, and editorial assistance by Ian Norton, of Prime, Knutsford, UK.

Disclosures

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

Presented at the 17th World Congress on Pain; September 12-16, 2018; Boston, MA, USA.

Figure 5. Proportions of US and Ex-US Clinicians who Assess Risk Before Prescribing Opioids

