

Assessments of Pain in US Adults With Hemophilia Across Patient-Reported Outcomes in the Pain, Functional Impairment, and Quality of Life (P-FiQ) Study

P-W-129

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Objective

- To assess how pain is reported by adults with hemophilia across 3 patient-reported outcome (PRO) instruments in the routine clinical setting

Introduction

- Pain associated with joint disease and recurrent hemarthrosis is a major problem affecting adults with hemophilia
- Standardized and disease-specific PRO instruments have been used in clinical studies, but rarely in the comprehensive care setting

Methods

- Adult males with mild to severe hemophilia with a history of joint pain or bleeding enrolled during comprehensive visits and completed a pain history survey and 5 PROs
- Pain was assessed on 3 of the PROs:
 - EQ-5D-5L with visual analog scale (VAS)
 - Brief Pain Inventory v2 Short Form (BPI)
 - SF-36v2

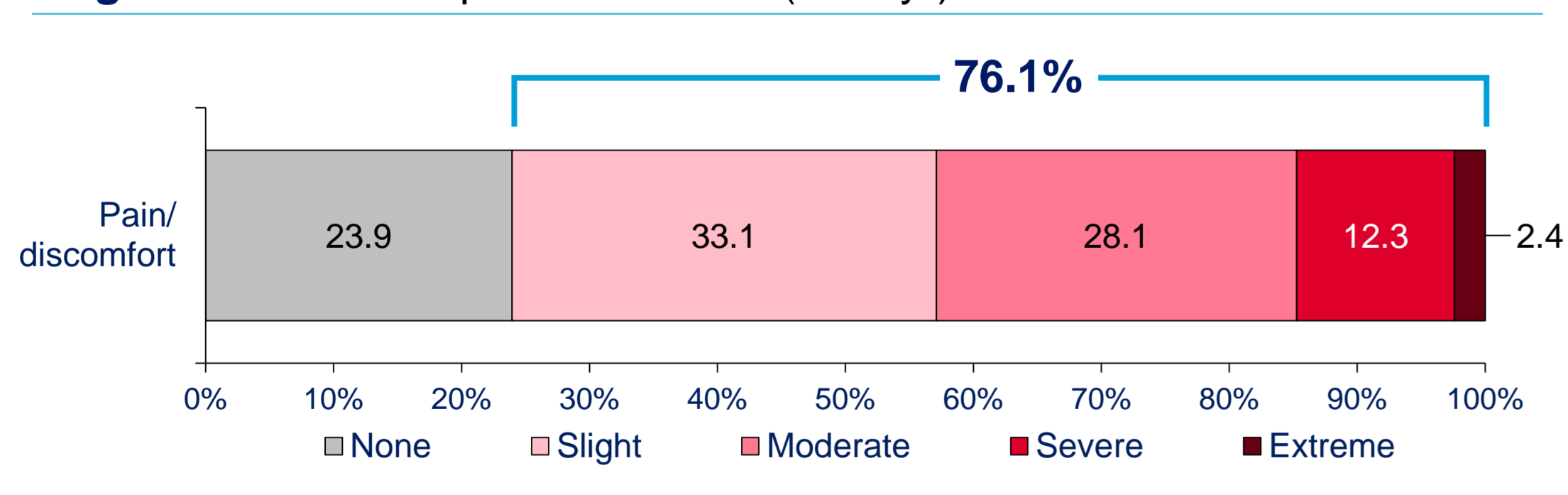
Results

- 381 adults were enrolled
- 77% had hemophilia A and 23% had hemophilia B; 9% had inhibitors
- Median age was 34 years
- Large percentages were overweight or obese (65%) and self-reported arthritis/bone/joint problems (65%)

EQ-5D-5L

- Median (Q1, Q3) VAS score, reflecting "your health today," (range 0 to 100) was 80 (66, 90); health index, derived from the EQ-5D-5L item responses, (range -0.11 to 1) was 0.796 (0.678, 0.861)
- Most subjects (76%) reported pain/discomfort (15% severe or extreme) (Figure 1)

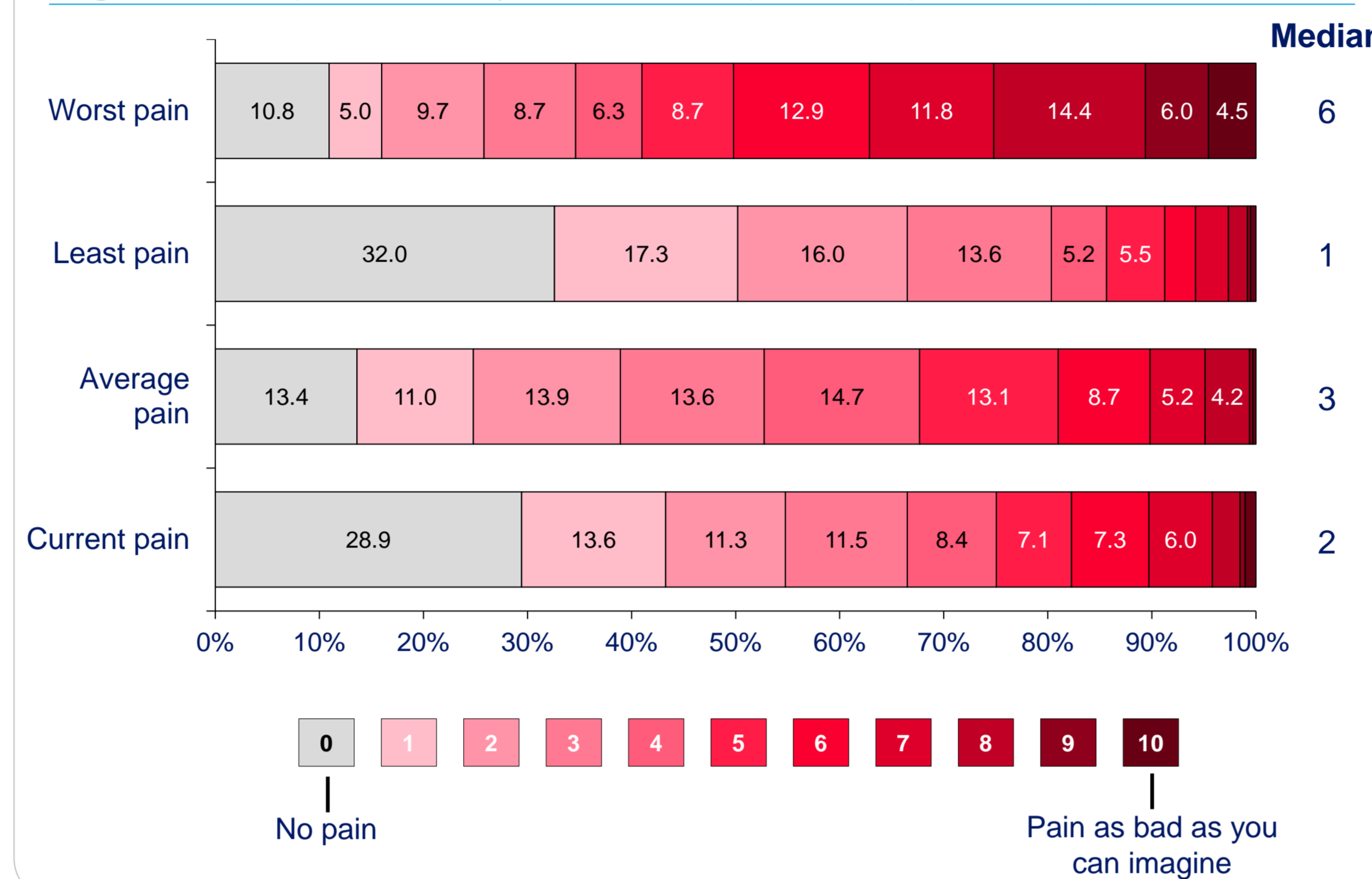
Figure 1 EQ-5D-5L pain/discomfort ("today")



BPI

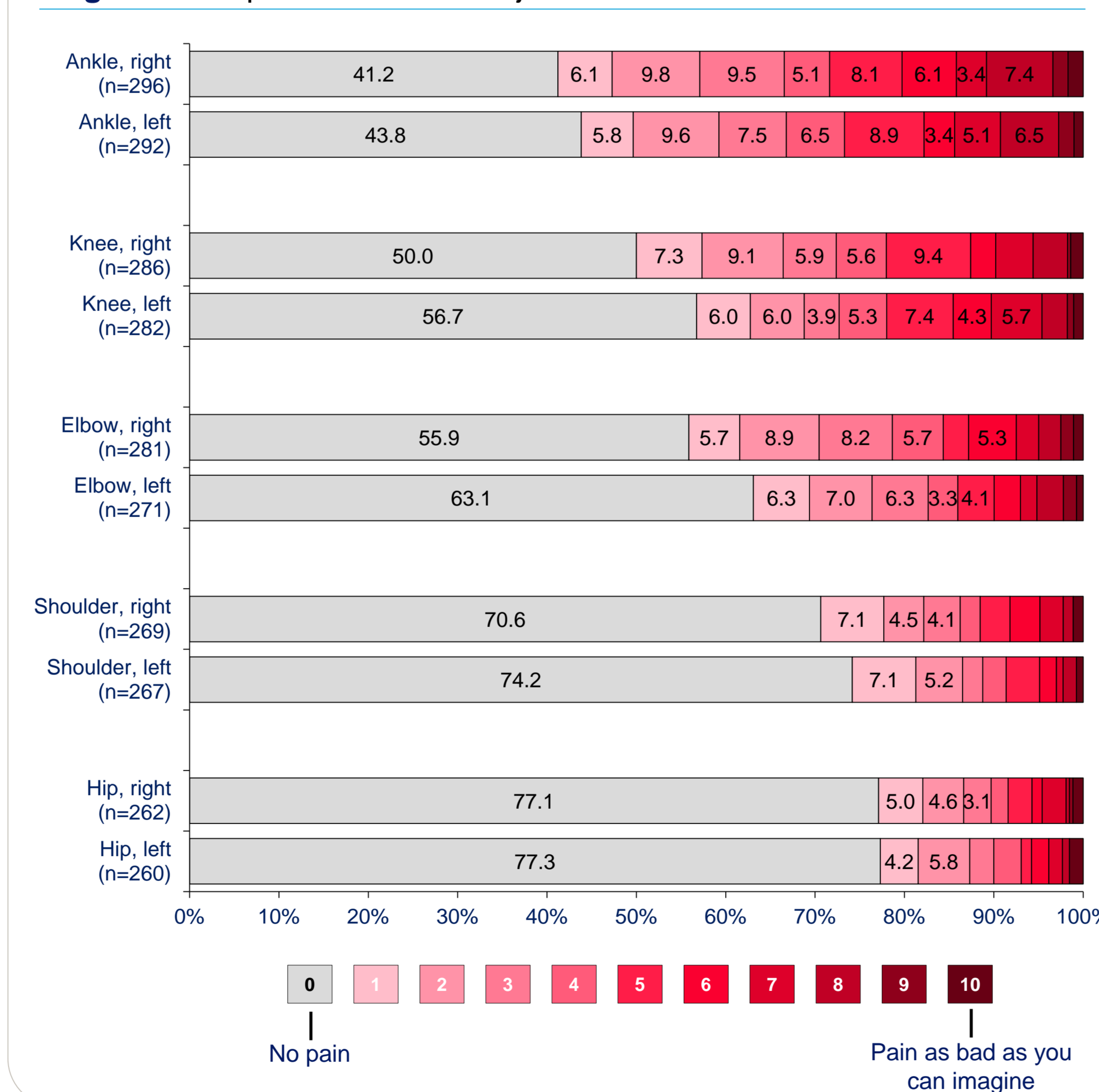
- Median (Q1, Q3) pain severity composite score, reflecting pain "in the last week," was 3.3 (1.3, 5.0); specifically, worst, least, average, and current pain severity item scores are shown in Figure 2

Figure 2 BPI pain severity item scores (over the past week)



- Ankles and knees were associated with the most severe pain (Figure 3)

Figure 3 BPI pain levels in each joint



- Median (Q1, Q3) pain interference composite score was 2.7 (0.6, 5.4); specifically, pain most affected general activity, mood, walking ability, and normal work and least affected relations with other people (Figure 4)

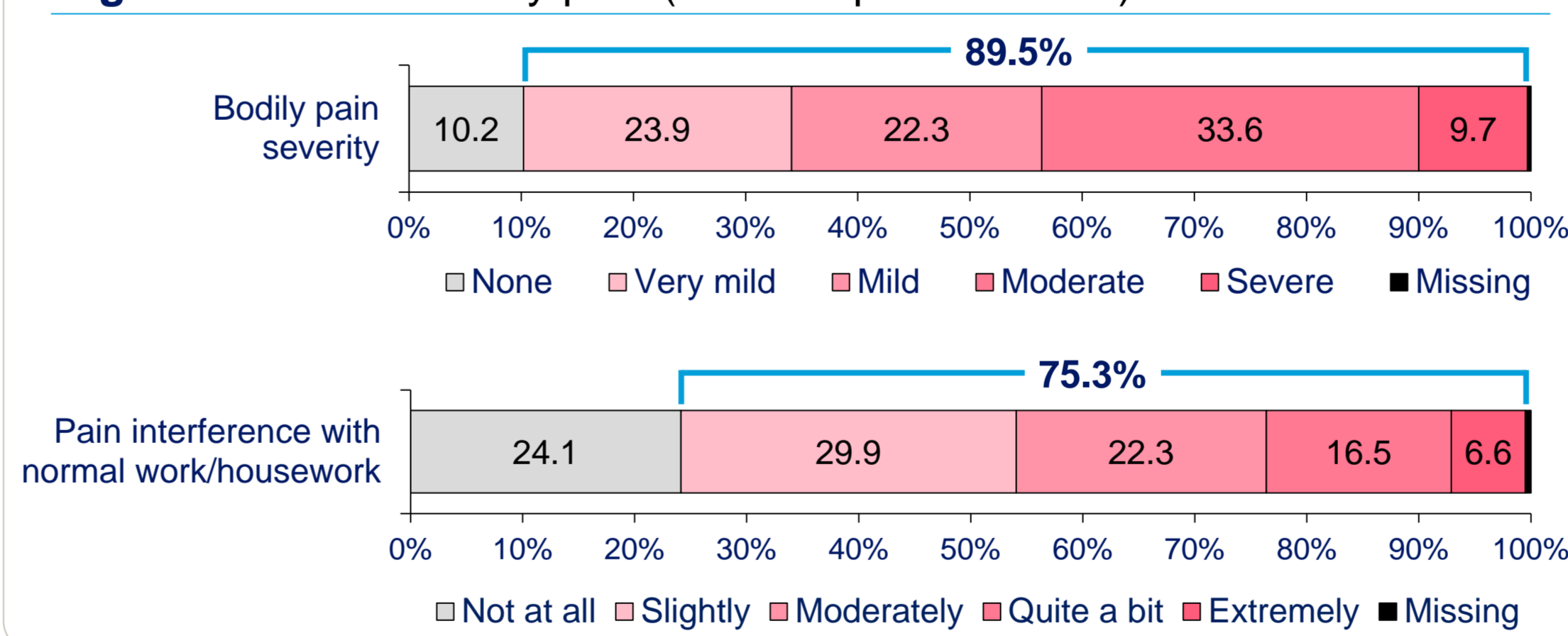
Figure 4 BPI pain interference item scores (over the past week)



SF-36v2

- Median (Q1, Q3) bodily pain domain score (range 0 to 100), reflecting pain and pain interference over the past 4 weeks, was 41.8 (37.2, 51.1)
- During the past 4 weeks, 90% of participants reported bodily pain (43% moderate or severe) (Figure 5)
- 75% reported pain that interfered with normal work/housework (23% quite a bit or extremely) (Figure 5)

Figure 5 SF-36v2 bodily pain (over the past 4 weeks)



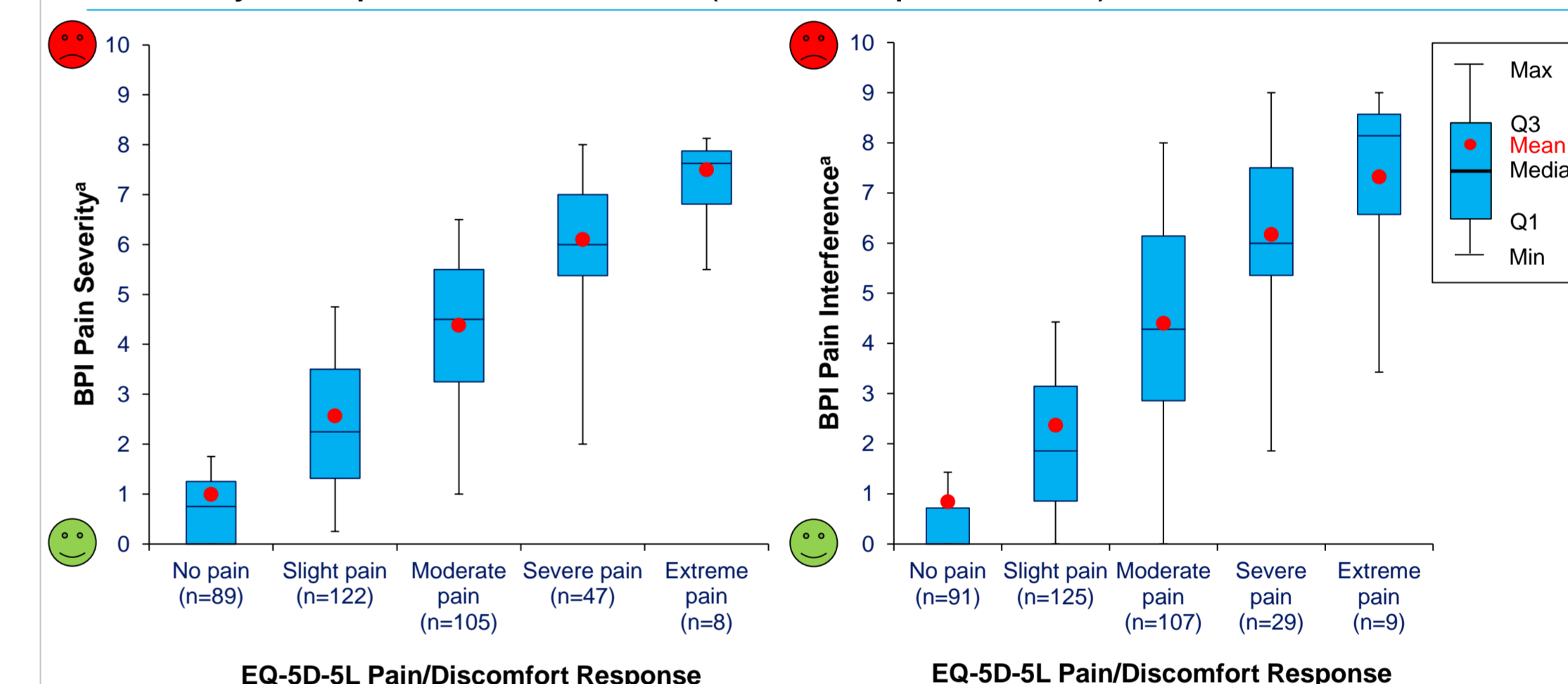
Associations between pain measurements

- To graphically depict how pain scores were similar between PRO instruments, EQ-5D-5L bodily pain responses were compared with BPI pain severity and pain interference (Figure 6) and with SF-36v2 bodily pain (Figure 7) scores
- Increasing EQ-5D-5L pain/discomfort responses were associated with greater BPI pain severity/interference scores (indicating worse pain) and with lower SF-36v2 bodily pain scores (indicating worse pain), demonstrating consistency across pain scales
- These relationships between PRO measures of pain were statistically shown to be correlated as part of the assessment of content validity

Conclusions

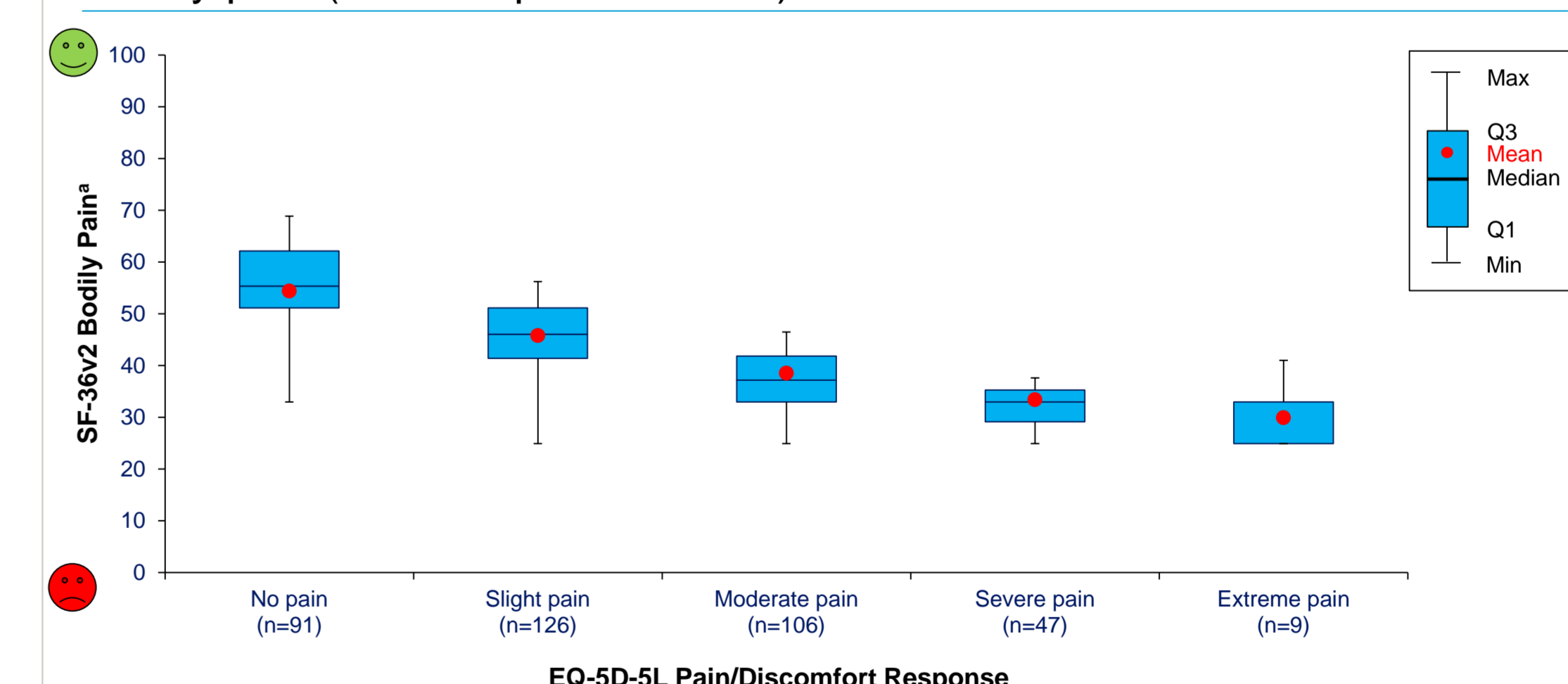
- Pain was frequently observed across all 3 PROs, which differ in time scale and details to provide a complementary assessment of pain severity and interference
- Pain was shown to affect daily activities and quality of life
- Results highlight the importance of routine and quantitative clinical pain assessments and patient dialogue to determine the adequacy of pain management strategies and to individualize the treatment of pain

Figure 6 Association of EQ-5D-5L pain/discomfort ("today") with BPI pain severity and pain interference (over the past week)



*BPI pain severity/interference scores measured on a scale from 0 to 10; higher scores indicate greater pain severity/interference. Pearson's r for correlation with pain severity was 0.7824 (P<0.0001) and with pain interference was 0.6807 (P<0.0001).

Figure 7 Association of EQ-5D-5L pain/discomfort ("today") with SF-36v2 bodily pain (over the past 4 weeks)



*SF-36v2 bodily pain measured on a scale from 0 to 100; higher scores indicate less bodily pain. Pearson's r for correlation with SF-36v2 bodily pain domain was -0.7200 (P<0.0001).

Conflict of interest disclosure

D. Quon is an advisory board member for Baxter, Biogen, and Novo Nordisk, and the speakers bureau for Baxter, Biogen, Grifols, and Novo Nordisk. M. Witkop has received grant funding from Pfizer, is on advisory boards for Baxalta, CSL Behring, Novo Nordisk, Octapharma, and Pfizer, and is on the speakers bureau at Novo Nordisk. T. Buckner has served as a consultant for Baxalta and Novo Nordisk. M. Recht has received grant/research support from Baxter, Biogen, Genentech, Grifols, Novo Nordisk, Octapharma, and Pfizer, and has received grant/research support from Bayer, Novo Nordisk, and Octapharma. K. Batt is a shareholder of Merck and Sanofi and has received grant/research support from Novo Nordisk. K. Baumann has served as a consultant for Bayer and Novo Nordisk and as a speaker for Baxter, Bayer, and Novo Nordisk. D. Cooper is an employee of Novo Nordisk Inc. C. Kempton has served as a consultant for Baxalta, Biogen, CSL Behring, Hoffman-La-Roche, and Kedron and received grant/research support from Novo Nordisk.

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