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## Perception of Breakthrough Pain in Patients with Chronic Painful Conditions

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# Perception of Breakthrough Pain in Patients with Chronic Painful Conditions

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## Background

- Breakthrough pain has been defined as "a transitory increase in pain to greater than moderate intensity, which occurs on a baseline pain of moderate intensity or less in a patient receiving chronic opioid therapy"<sup>1</sup>
- However, pain flares may also be experienced by patients with medical conditions that are not routinely treated with opioids
- An understanding of how patients characterize their pain flares will improve the scientific and clinical communities' ability to communicate with this population

1. Portenoy RK, Hagen NA. Breakthrough pain: Definition, prevalence, and characteristics. Pain 11990;41:273-81.

## Objective

- To understand how patients with chronic non-cancer pain define and describe pain flares

## Study Design

- A 3-month prospective, observational study of outpatients at a large U.S. tertiary care center
- Follow-up consisted of a 1 week diary administered at baseline, then a monthly telephone survey for 3 consecutive months

## Results

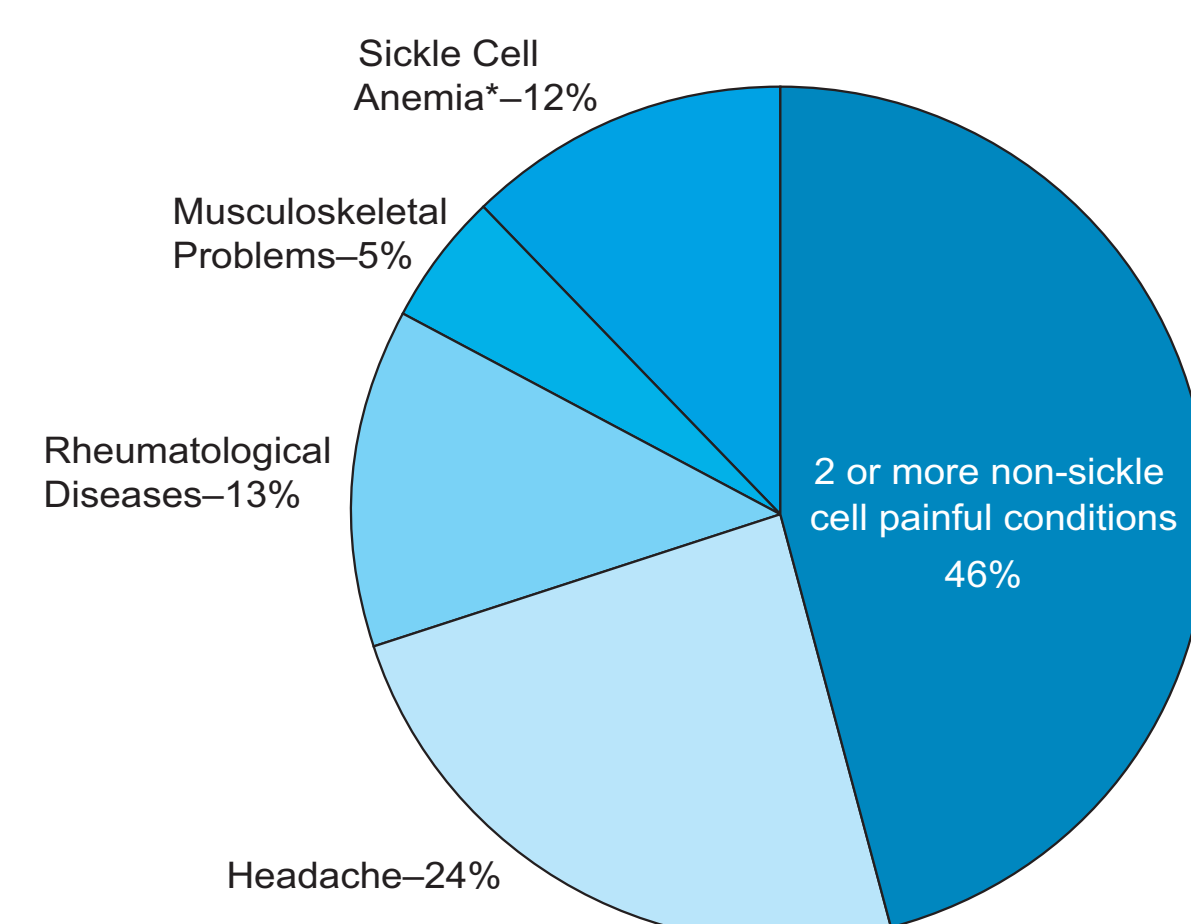
### Demographics

A total of 161 participants completed the diary. Most were female (79%), Caucasian (68%), and experienced at least 1 pain flare during the diary week (88%).

Gender	n	%
Females	127	79%
Males	34	21%
Ethnicity	n	%
Caucasian	106	68%
African American	45	29%
Hispanic	4	3%
Asian	1	1%
Other	1	1%
At Least 1 Pain Flare During Diary Week	n	%
Yes	141	88%
No	15	9%

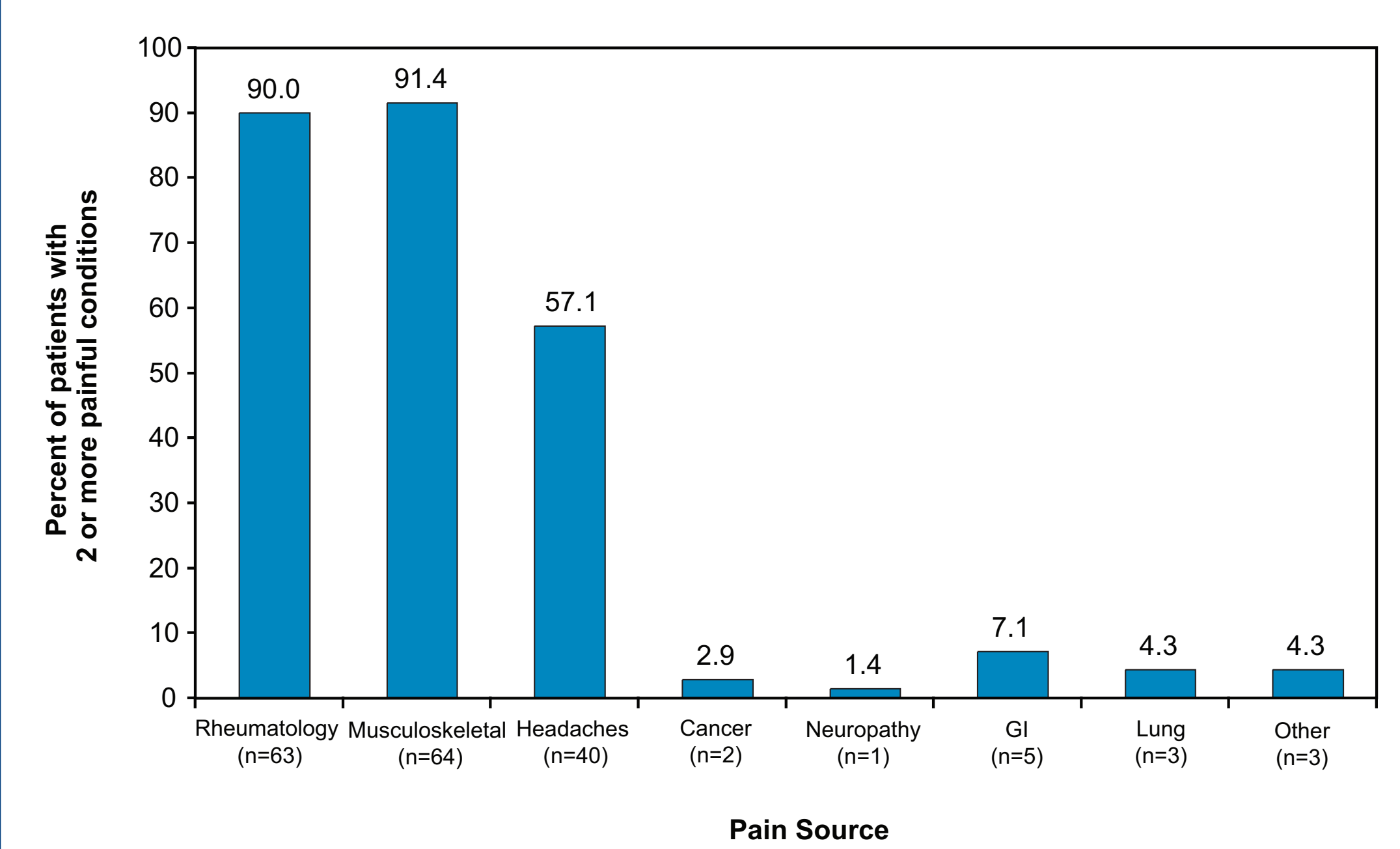
### Enrollment by Pain Source (n=151)

Among the 161 patients enrolled, 151 answered both pain flare definition questions. Of these, 36 suffered from headache, 19 from rheumatological diseases, 8 from musculoskeletal problems, 18 from sickle cell anemia, and 70 with 2 or more painful non-sickle cell conditions



\*Patients with sickle cell anemia and other painful conditions

### Sources of Pain Among Patients with 2 or More Painful Conditions (n=70)\*



\*Patients can have two sources of pain that fall into the same category.

### Demographics

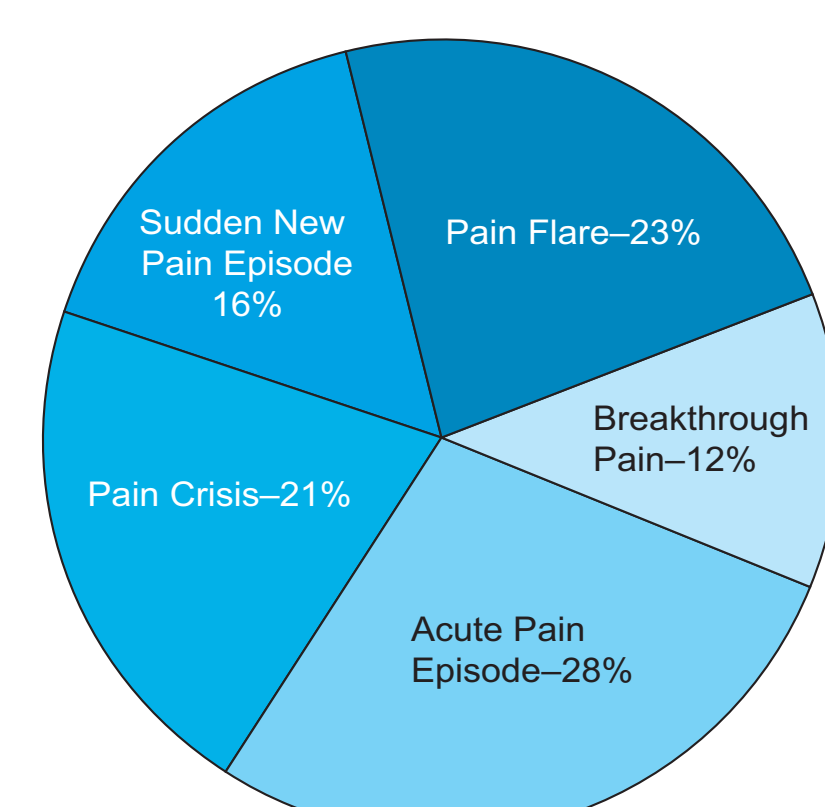
The mean pain level reported during the diary week was 6, and the mean age was 47 years.

	n	Mean	Median	SD	Range
Pain Level*	159	5.77	6	2.1	0.0-10.0
Age (years)	161	47.44	48	14.34	18.0-83.0

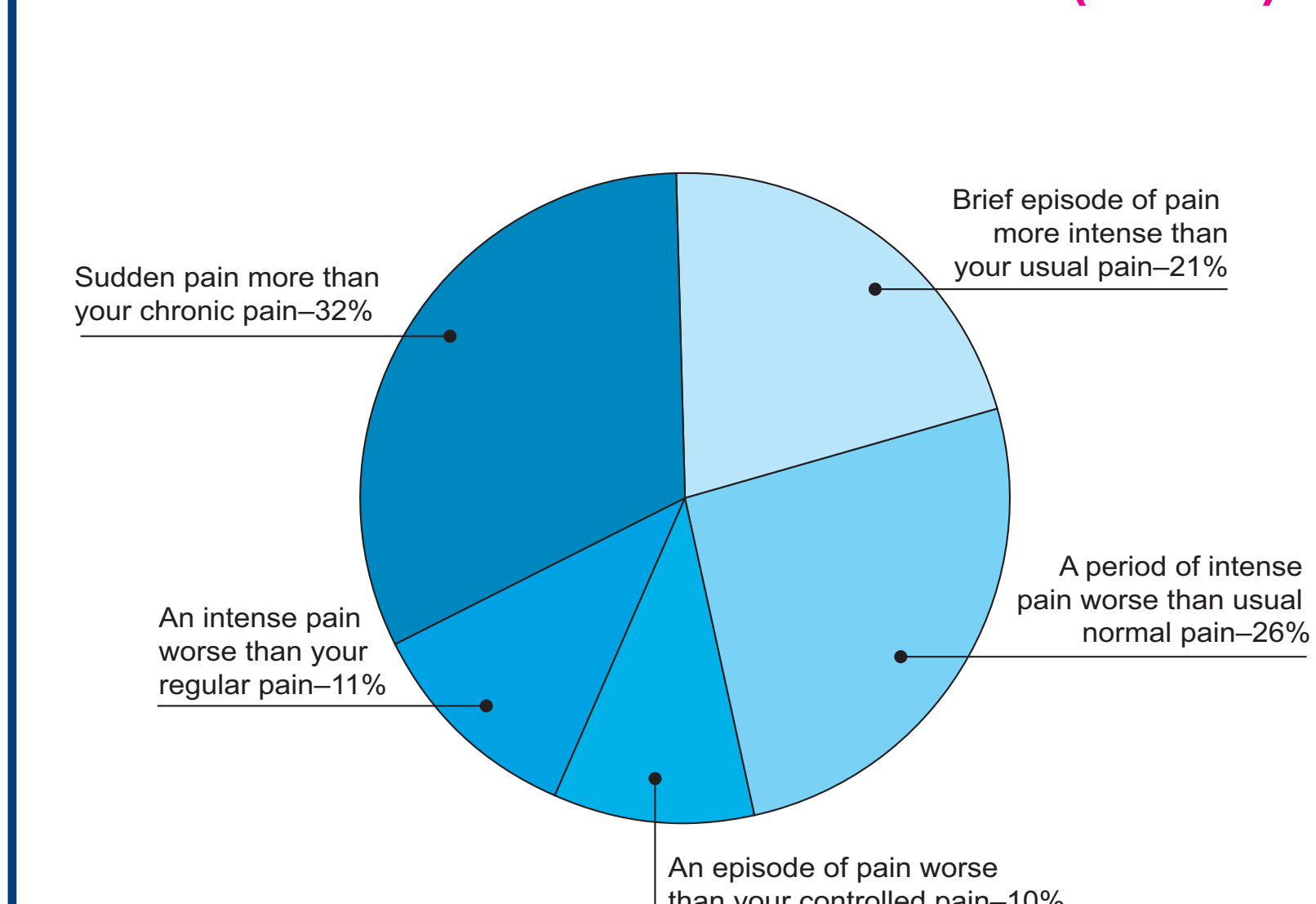
\*Pain scores based on 10-point scale with 0 described as "No Pain" and 10 described as the "Worst Pain Imaginable"

### Term Preferred to Describe a Pain Flare (n=155)

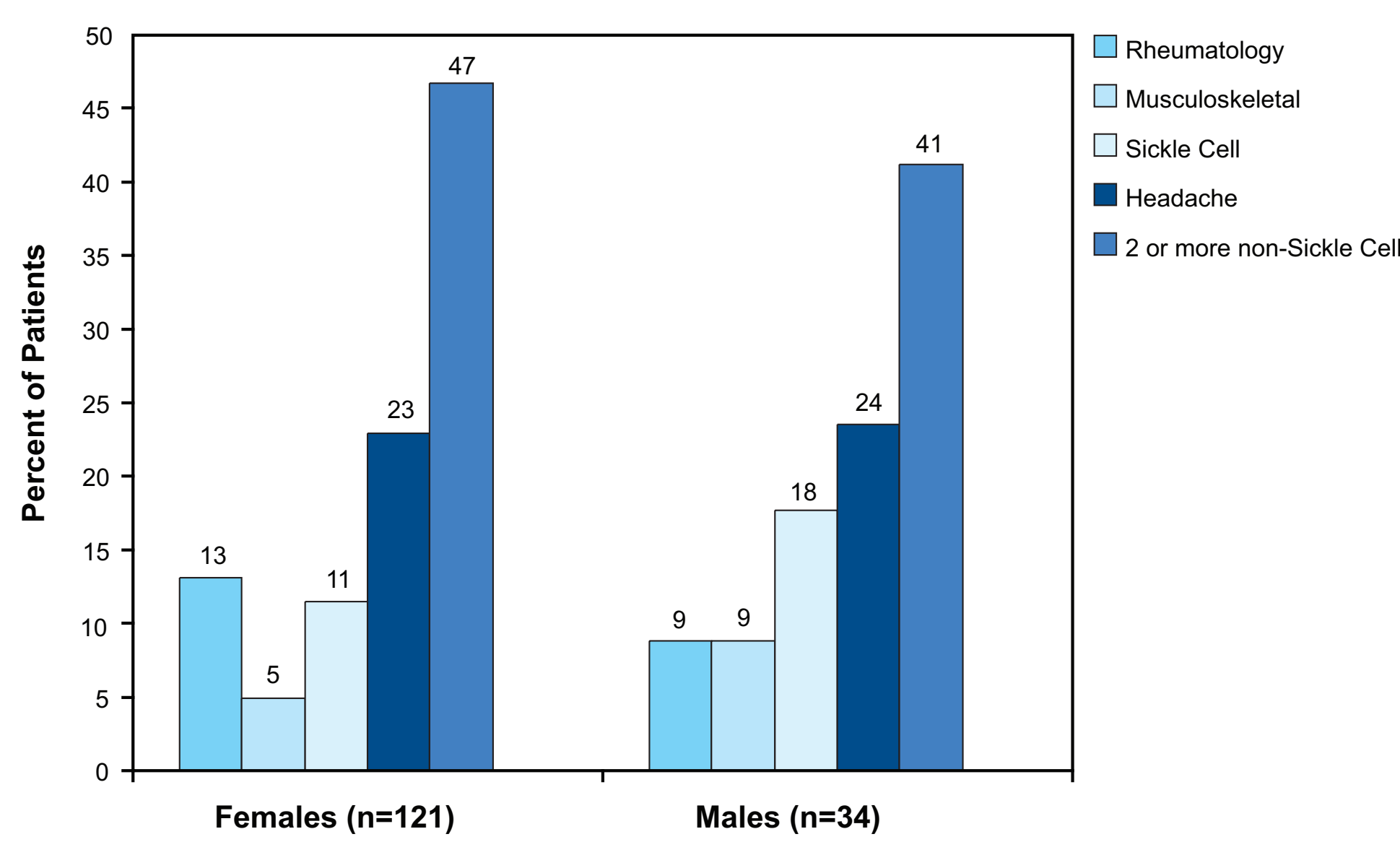
The most common terms used to describe a pain flare were "Acute Pain Episode" (28%), "Pain Flare" (23%), and "Pain Crisis" (21%)



### How Patients Defined a "Pain Flare" (n=154)

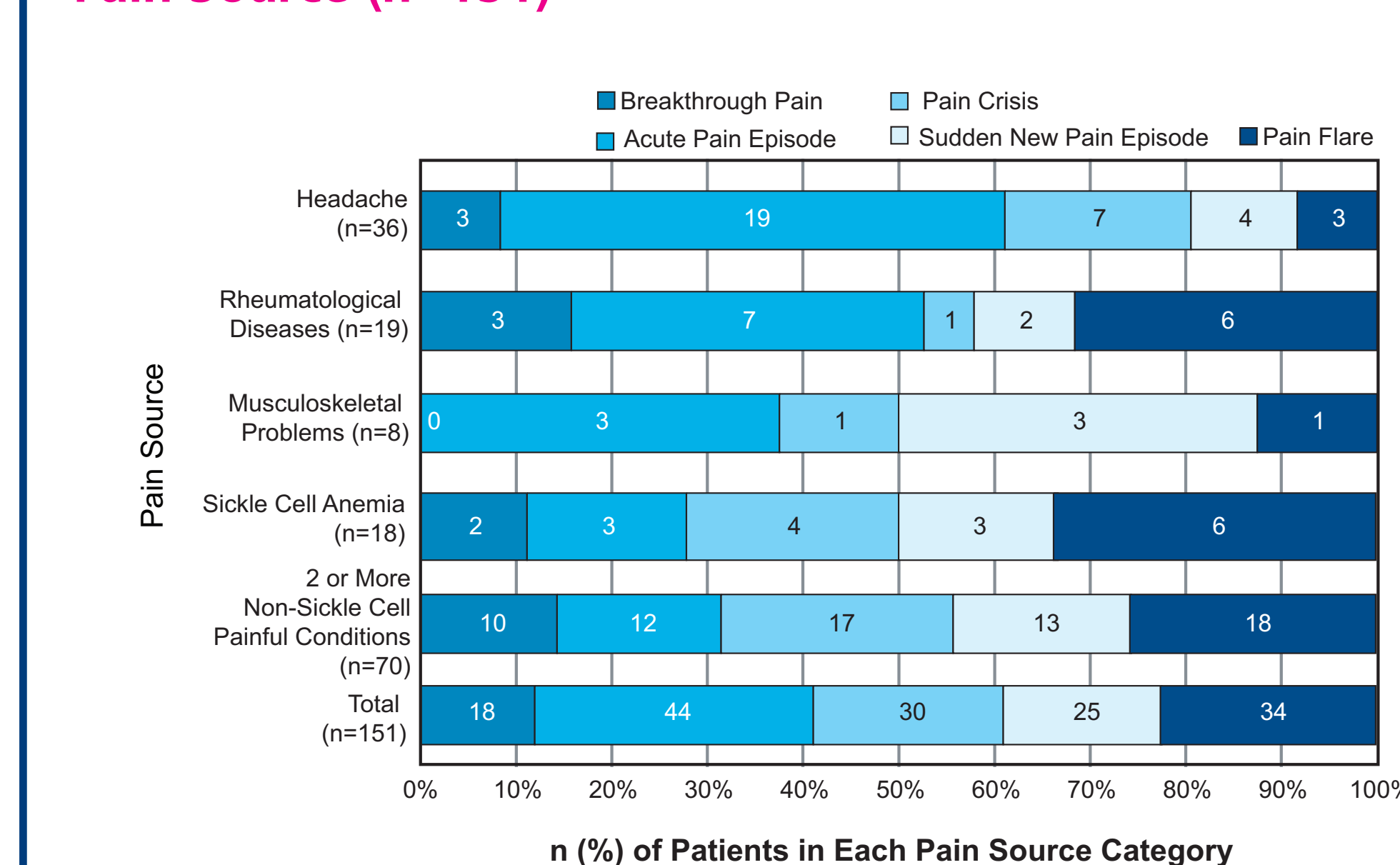


### Pain Source by Gender\*

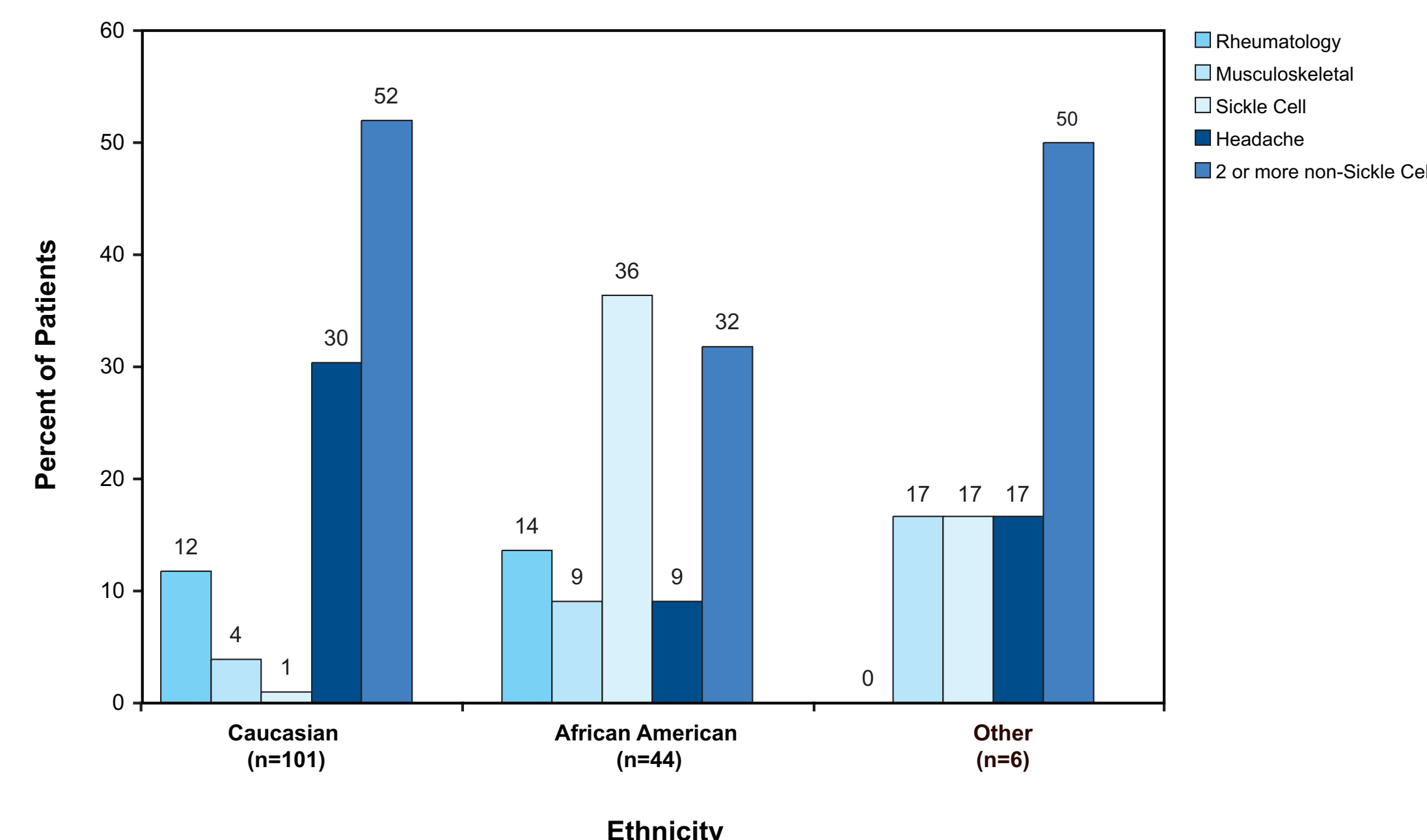


\*Percent of patients within each gender group with specified pain source

### Term Preferred to Describe a Pain Flare, by Pain Source (n=151)



### Pain Source by Ethnicity\*



\*Percent of patients within each ethnicity group with specified pain source

### Disclosure

- This study was funded through an Investigator Sponsored Research grant from Cephalon, Inc.
- Results reflect slight changes to numbers presented in the published abstract because poster analyses are limited to those who responded to both items in the Pain Flare Definitions Questionnaire

### Acknowledgements

- The authors wish to acknowledge Karin Coyne, PhD and United BioSource Corporation for development work on the Pain Flare Definitions Questionnaire
- We also appreciate the assistance of Angela Yin-Chieh Yu, PharmD candidate, in developing the poster

## Limitations

- Patients appear to have severe disease and therefore are not representative of all patients with these conditions
- Analyses are limited by small Pain Source groups
- Study fails to capture patients with neuropathic pain, another important source of chronic non-cancer pain
- Additional analyses of participants with 2 or more sources of pain would be worthwhile to examine whether their perceptions are consistent with the single-source pain groups

## Conclusions

- Participants did not prefer to use the term "Breakthrough Pain" when referring to a pain flare
  - They preferred the terms "Acute Pain Episode" and "Pain Crisis" or simply "Pain Flare"
- Chronic headache patients appeared to prefer the term "Acute Pain Episode"
- The concepts of "Sudden", "Period", and "Brief" appear to be important when defining a pain flare
- Results will be helpful to outcomes researchers who study pain and to clinicians who treat patients with these conditions