

Study Design

Please look at the SUPPLEMENTARY MATERIALS if they are cited by the text in the manuscript and it seems like they might have information that you need

Coder

- Jen
- Jenna
- Nam
- Simon
- Marina

Article

Year of Publication

Study Design

- Crossover (patients receive a sequence of treatments during the trial that includes 2 or more periods, of which placebo can be one)
- Parallel (patients receive only one treatment during the trial, of which placebo can be one or two or more treatments can be compared)
- Enriched enrollment randomized withdrawal (patients are all given the drug in the first phase and those that respond are then randomized to drug or placebo)
- Other (please specify)

Sponsor (provide financial support; if only state that a company provided drug or device but not provided general support or sponsorship, do not select industry in this question)

Check all that apply. This information is often found beneath the authorship, in the footnotes, in "methods" or in the "acknowledgements" section.

- Industry
- Institution/University
- Governmental agency
- Professional organization/foundation
- Not reported
- Other (please specify)

Did the authors state that industry provided any supplies for the study (e.g., drug, device)?

- Yes
- No

Did the authors explicitly state that their study was exploratory in nature? (other words to look for: pilot study, feasibility study)

- Yes
- No

Please provide wording that led you to click "Yes"

Was the trial blinded in the randomized phase?

- Yes- single (patient was blinded)
- Yes- double (the patient and anyone interacting with the patient was blinded, ie therapists)
- Yes - assessor only blinded
- Yes - patient and assessor blinded
- No
- Unclear
- Other (please specify. For example, if the intervention is physical therapy and the therapist is not blinded but the assessor is)

Was it clearly a multi-center trial?

- Yes- clearly stated within the article or in the acknowledgements
- Yes- evident due to mention of multiple IRB approvals, multiple study site locations or other indices
- No
- Not clearly stated or evident

If yes, how many centers were involved?

Did the authors state, or provide in a table, a recruitment age range? (i.e. define the age range of eligible participants) An example of a qualifying statement would be the sentence: "patients who were #-# were "included"/"eligible" for the study"? Can look in an "inclusion criteria" table but not in a table of baseline assessment.

- Yes (please provide range in the box below)
- No
- Unclear (please provide range if one was mentioned and discuss confusion in the box below)

Please provide age range below. If authors did not provide whole numbers for the age range, please use conventional rounding when providing the range below. If unclear please provide the range included but please explain why it was unclear

Did the authors state, or provide in a table, the enrollment age range? (i.e. age range of those patients who were randomized in the study). If this range was provided for each study group, please provide the widest age range provided by the authors. For example, if one group was 7-9 and the other was 8-10, please write 7-10.

- Yes (please provide the age range in the box below)
- No
- Unclear (please provide range if one was mentioned and discuss any confusion in the box below)

Please provide the range below. If authors did not provide whole numbers for the age range, please use conventional rounding when providing the range below. If unclear, please provide the range but explain why it was unclear.

Did the authors explicitly state, or provide in a table, the mean and/or median age of enrolled patients? If multiple means/medians were provided (ie authors calculated means/medians for each group)

- Yes (please list any means/medians provided in the box below)
- No

Please provide the mean and/or median age provided by the authors. Please provide the mean and/or median age provided by the authors? Please also provide any comments made by the authors on the significance of this age on their data.

Was there a run-in period prior to trial randomization? A run-in period is a pre-randomization period during which recruited patients are evaluated prior to randomization (various types discussed in the next question). A run-in period must be more than 1 day.

- Yes
- No
- If unclear, please discuss below

If yes, what was it?

- Adherence (patients provided with placebo to determine whether they can be adherent to the trial protocol)
- Placebo-response (patients provided with placebo and those who respond to placebo are excluded from the trial)
- Baseline assessment used to exclude patients (patients are asked to keep a log of their symptoms prior to randomization and those who do not meet inclusion criteria at the time of randomization are excluded from the trial)
- Baseline assessment used to document baseline participant pain level (or other outcome, if applicable), not used to screen/exclude patients
- Enrichment (patients are provided either active drug prior to enrollment and only those who respond to the active drug are then randomized in the trial)
- Flare design (patients are included in the study only if there is an increase in their pain noted during the pre-randomization screening phase following the "washout" (ie discontinuation) of their pre-trial pain management regimen. Typically seen in NSAID trials when NSAIDs are stopped pre-trial and only patients with a pain "flare" during the pre-randomization period are included)
- Washout period (one or all pain medications were discontinued prior to the study)
- N/a
- Other. Please describe the run-in period if different than the options mentioned above or describe anything interesting about the run-in period.

Did exclusion criteria include any of the following?

- Pre-existing mental health condition (ie depression, anxiety, PTSD, abuse, bipolar disorder)
- Prior use of medications in the same class as the experimental treatment (if there is a limited time frame (e.g., no opioids within the last 2 months), please note in the box below)
- Unwillingness to discontinue all or some concomitant pain medications (please list in other box which medications if specified)
- Unwillingness to avoid using all or some rescue medications (please list in the other box which medications if specified)
- Intellectual disability
- Minimum baseline pain intensity
- Maximum baseline pain intensity
- Other pain conditions or conditions that might have symptoms that would be confused with the condition of interest (please list them in the comment box below)
- N/a- no pain-related exclusion criteria
- Other. Please list any interesting **\*\*pain-related\*\*** exclusion criteria. For example, lack of response to certain medications in the past. Please do not include anything that is specific to the treatment (e.g., no pro-biotic use in an IBS trial)

Did the authors have a sample size calculation (i.e. power their study)? If yes, please provide the total number of participants needed, including all groups (not just the active group). If unsure, please explain in the "other" box below.

Please "control F" for "sample size" and "power" when looking for this

Yes

No

If yes, what was the enrollment goal? If unsure, please discuss

Did they randomize at least 90% of the population needed? ( $0.9 \times$  enrollment goal)

Yes

No

N/A, no sample size calculation

Did they discuss enrollment issues? (i.e. poor response to recruitment efforts, patients refused to enroll because they were afraid to be in a placebo arm, patients refused to enroll because they did not want to take medication etc..)

Please note any discussion about inability to recruit the right age ranges or for a secondary outcome measure that wasn't required for the study even if they reached the overall target sample size

Yes

No

N/A, they recruited at least 90% of their target sample size

If yes, please explain. For example, the condition was rare, medication side effects are significant etc...

Was there a CONSORT flow diagram provided? A CONSORT diagram is a flow diagram of the participation progress through all phases of the trial (ie enrolment, randomization, drop-out, follow-up, and data analysis). Please visit the CONSORT website for more details. <http://www.consort-statement.org/consort-statement/flow-diagram>

Yes

No

How many patients were randomized in total (all arms)?

If the number randomized was not directly indicated, please provide a best guess. Authors may use words like "enrolled" or "included"

Was the number of patients who completed the trial reported in the text or provided in a table or CONSORT diagram? If so, please specify the number below. If the number was provided in a table, the table must clearly state that the number corresponds to patients who "completed" the study. "Analyzed" and "completed" are not interchangeable always. Can subtract the number of patients who withdrew from the number who were randomized if those numbers are provided. Cannot use the number from a baseline characterization table alone unless the authors explicitly state that all patients randomized completed the trial.

Yes- explicitly stated in the article

No

Number of people who completed the trial. If not explicitly stated, please explain how the information was provided

If greater than 10% of the randomized participants dropped out, did authors explicitly discuss retention issues? For example, they make a statement like, "We had difficulty keeping patients enrolled in the study because \_\_\_\_." (ie the study was too long, study required too many site visits, patients could not remember to complete their assessments etc..) Mentioning a high drop-out rate alone does not satisfy this question. Authors must provide a discussion regarding why the drop-out rate might be high .

Yes

No

N/A, fewer than 10% of participants dropped out

N/A number who completed the study was not reported

If yes, please list explanation. For example, were patients lost to follow-up due to parental time and/or financial restraints, anxiety generated by the visit etc...

Pediatric survey II

Intervention and trial logistics

What pain condition was studied? (Check all that apply). If unsure click "other" and explain.

- migraine headache
- Non-migraine headache
- Abdominal
- Arthritis
- Sickle Cell
- Fibromyalgia
- Complex Regional Pain Syndrome (CRPS)
- musculoskeletal
- dysmenorrhes / menstrual pain
- Other (please specify)

What type of intervention was evaluated

- Pharmacologic treatment (non-invasive)
- Pharmacologic treatment (invasive; i.e., drug delivered by a method that breaks the skin (e.g., iv, intramuscular)
- Exercise (e.g., physical therapy, yoga)
- Psychological intervention (e.g., cognitive behavioral therapy, mindfulness)
- Acupuncture or TENS
- Procedural treatment (e.g., nerve blocks, spinal chord stimulator)
- Other (please specify)



What type of control group was used

- Placebo (pharmacologic)
- Placebo (other; e.g., sham TENS or acupuncture, or education materials for exercise)
- Active control (i.e., a treatment that has accepted efficacy for the condition)
- Two experimental treatments compared (i.e., neither has established efficacy)
- Two dosages of the same medication
- Standard of care (defined by the protocol)
- Standard of care (what ever the treating physician feels is best- not standardized)
- wait list control
- Other (please specify)

How frequently was the intervention performed/dosed? Note that this does not take into account the therapeutic window (e.g., a single dose of IV antibiotics that lasts 7 days would be coded as 1 time). Please check all that apply if treatment frequency varied between groups and explain in the "other" box below. Please do not make any assumptions. If it isn't clearly stated in the article, please check "unclear."

- One time
- Daily
- Twice daily
- Three times daily
- Four times daily
- Once weekly
- Once monthly
- As needed
- Single dose or one day study (i.e., treatment and follow-up all occur in one day)- please put the #doses in the box below if multiple doses in a single say
- Continuous (ie brace, patch, normal activity, bedrest)
- Unclear
- Other. Please explain frequency. If treatment frequency varied between groups please explain.

Where were efficacy outcomes assessed (primary and other if applicable)? Do not include adverse events. For example, if pain data was collected in the clinic but the patients were called at home every 2 weeks and asked about side effects, the answer to this question would be "study site," NOT "study site AND home." However, if pain data was collected both at the study site as well as over the phone, please check both boxes.

- Inpatient
- Study site (clinician rating involved and patient is not hospitalized, please assume study site)
- Home (if diary, assume done at home)
- School
- Unclear
- Other. Please explain.

How often was pain data reported by the patient AFTER treatment began? Please check the box that corresponds to the frequency with which the primary pain outcome measure was assessed

If no primary outcome measure was identified by the authors, please check the box that corresponds to the highest frequency with which pain data was collected. If pain was assessed at different frequencies throughout the study, please indicate which

frequency the primary analysis was based on. For example, if acute pain was assessed multiple times throughout the day following an intervention and then a daily pain log was kept in the following weeks, and the primary analysis was the pain during the acute phase, please check multiple times daily and then explain the variable frequency in the other box.

- Baseline and endpoint only
- Daily
- Multiple daily
- Weekly
- Monthly
- This was a single dose study (please put # of assessments in the box below)
- Unclear
- Other, please explain.

How many times did participants have to come to the study site? Please include baseline and any pre-randomization visits. If a crossover study, please include only 1 period. If unclear, please state. If participants did not have to come to the study site, or visit frequency varied across participants, please explain below.

How long were the participants followed in the study (**n weeks**)

**Please include pre-randomization periods in this question**

**Please record the time of the longest follow-up that was recorded.**

**\*If it is a cross-over study, please record this for only 1 period.**

**If unclear, please state that**

## Pediatric survey II

### Pain assessment

Was a primary outcome measure identified? If the authors used a word other than "primary" (ie "main outcome") that led you to say that they did identify a primary outcome measure, please state in the comment box below.

If they identify a primary outcome (eg "pain") but there is more than one measure listed to assess it and none is stated as primary, please choose "no outcome measure was identified as primary."

- Yes- there was one primary outcome measure identified
- Yes- the authors defined multiple primary outcome measure
- No outcome measure was identified as primary
- No outcome measure was identified as primary, but the authors specifically state that the trial is exploratory in nature

Please explain how the primary outcome measure was defined by the authors if the term "primary outcome" was not used.

What was the primary outcome measure? If multiple primary outcome measures were defined by the author, please check all that apply. Please also explain in the "other" box if one appeared to be emphasized more.

- VAS (Visual Analog Scale)
- VRS (verbal rating scale) - (i.e., likert scale with descriptions of each numeric rating)
- Wong-Baker
- NRS (numeric rating scale)
- Faces pain scale
- FLACC (Faces Legs Activity Cry Consolability)
- NIPS (Neonatal Infant Pain Scale)
- CHEOPS (Children's Hospital of Eastern Ontario Pain Scale)
- BPS (Behavioral Pain Scale)
- Peds QL
- N/a, a primary outcome measure was not identified
- Number of pain episodes
- Other (please specify other pain scale or pain measure utilized by the study)

Who was responsible for assessing the primary outcome measure?

- The patient rated their pain directly (first party reporting)
- The parent rated the child's pain directly (second party reporting)
- A clinician/investigator rated the child's pain directly (second party reporting)
- Combined reporting (first and second party reporting, including multiple second parties when applicable), data was averaged
- Amount of rescue medication used
- N/a, a primary outcome measure was not identified
- Unclear
- Other (please specify)

Other than primary outcome measure, or if no primary was identified how was pain assessed? Please choose all that apply. If no primary outcome measure was identified, please also check that box below. Please do not include constructs associated with pain (ie sleep problems, depression, fatigue).

- VAS (Visual Analog Scale)
- VRS (verbal rating scale) - (i.e., likert scale with descriptions of each numeric rating)
- Wong-Baker
- FLACC (Faces Legs Activity Cry Consolability)
- NIPS (Neonatal Infant Pain Scale)
- NRS (numeric rating scale, 0-10)
- Faces pain scale
- CHEOPS (Children's Hospital of Eastern Ontario Pain Scale)
- BPS (Behavioral Pain Scale)
- Peds QL
- Number of painful episodes
- N/A, No pain analyses other than primary
- Other. Please list any measures used to assess pain in the study (ie opioid-sparing, days of missed school/activities, mobility etc)

If pain outcomes other than primary were identified, or no primary outcomemeasure was identified, who was responsible for making the assessments during the trial?

Choose all that apply. If unclear, please remember to check that box in addition to the "other" box and explain.

- The patient rated their pain directly (first party reporting)
- The parent rated the child's pain directly (second party reporting)
- A clinician/investigator rated the child's pain directly (second party reporting)
- Combined reporting (first and second party reporting, including multiple second parties when applicable), data was averaged
- N/a- pain was only assessed as primary outcome measure
- Unclear
- Other (please specify)

What constructs generally associated with pain were assessed in the trial? Please do not include anything previously listed as a pain measure or anything related to treatment (eg medication side effects)

Please check all that apply.

Please list the scales used in the other box.

- Days of missed school / activities
- Mobility
- Spasticity
- Speed of ambulation
- Length of ambulation
- Quality of life
- Depression
- Anxiety
- No pain-related constructs were assessed other than primary
- Sleep
- Use of analgesic medications
- Other (please include only things that are have been associated with pain)

Did the authors mention any pre-trial pain assessment training to help calibrate responses and improve accuracy (ie demonstration videos, teaching sessions, on site explanations with examples)? Simply stating instructions for pain measure were provided does not count for this.

- Yes
- No

If yes, please explain the method described by the authors

Did authors state that any of the assessment tool for pain analysis (ie pain scale) was valid or reliable? The term "test-retest" refers to a type of validity.

- Yes, validated for pediatrics
- Yes, validated for adults
- Yes, validated but unspecified for a group
- No, not discussed/mentioned
- Unsure (please provide term used to suggest that the scale was validated in the comment box below)

If yes, please list the name of the validated measure/scale

## Pediatric survey II

### Responder analysis

Did the authors provide a responder analysis (i.e., compare the percentage of people who responded to treatment in each group)?

Please answer this question in regards to any outcome measures

- Yes
- No

If there was a responder analysis, was the definition of a responder reported (e.g., "patients who experienced 30% pain relief from baseline at week 6 were considered responders").

***Note:** Please record any responder definitions in the box below (ok to include more than one and definitions based on outcome measures other than the primary).*

- Yes, please record definition in the box below
- No
- N/A, no responder

Responder definition

Did the authors report the percent change from baseline in each treatment group for any continuous pain measure ?

Please check tables and text.

- Yes
- No
- N/a, no placebo group
- N/A, no continuous outcome measure

Notes box

Did the authors provide mean or median scores for baseline of the any continuous outcome measure of pain for EACH group?

Please check tables and text.

- Yes
- No
- N/A, no placebo group
- N/a, no continuous pain outcome measures reported

notes box

Did the authors provide mean or median scores for baseline of any continuous pain outcome measure for BOTH groups combined?

Please check tables and text.

- Yes
- No
- N/A, no placebo group
- N/A, no continuous outcome measure

Notes box



Did the authors provide mean or median ENDPOINT score of any continuous outcome measure for EACH group?

Please check tables and text.

- Yes
- No
- N/A, no placebo group
- N/A, no continuous outcome measure

Notes box

Q#49 Did the authors discuss the generalizability of their results?

For example, authors might write "a limitation of our study is that we were only able to recruit patients who were in mild pain. Thus, we cannot say there would be significant benefit to those experiencing only severe pain." Or, "we were only able to recruit older children, so it is unclear if the same benefit would be seen in the younger population."

- Yes
- No

If yes, please summarize their comments

Pediatric survey II

Adverse Events

## CONSORT Items

	Yes	No
<b>Title &amp; Abstract</b> 1) If the study collected data on harms and benefits, the title or abstract should so state.	<input type="radio"/>	<input type="radio"/>
<b>Introduction</b> 2) If the trial addresses both harms and benefits, the introduction should so state.	<input type="radio"/>	<input type="radio"/>
<b>Method</b> 3) List addressed adverse events with definitions for each (with attention, when relevant, to grading, expected vs. unexpected events, reference to standardized and validated definitions, and description of new definitions).	<input type="radio"/>	<input type="radio"/>
<b>Method</b> 4) Clarify how harms-related information was collected (mode of data collection, timing, attribution methods, intensity of ascertainment, and harms-related monitoring and stopping rules, if pertinent).	<input type="radio"/>	<input type="radio"/>
<b>Method</b> 5) Describe plans for presenting and analyzing information on harms (including coding, handling of recurrent events, specification of timing issues, handling of continuous measures, and any statistical analyses).	<input type="radio"/>	<input type="radio"/>
<b>Results</b> 6) Describe for each arm the participant withdrawals that are due to harms and their experiences with the allocated treatment.	<input type="radio"/>	<input type="radio"/>
<b>Results</b> 7) Provide the denominators for analyses on harms.	<input type="radio"/>	<input type="radio"/>
<b>Results</b> 8) Present the absolute risk per arm and per adverse event type, grade, and seriousness, and present appropriate metrics for recurrent events, continuous variables, and scale variables, whenever pertinent. This item refers to 1) Outcomes and estimation; 2) Ancillary analyses; and 3) Adverse events.	<input type="radio"/>	<input type="radio"/>
<b>Results</b> 9) Describe any subgroup analyses and exploratory analyses for harms. This item refers to 1) Outcomes and estimation; 2) Ancillary analyses; and 3) Adverse events.	<input type="radio"/>	<input type="radio"/>
<b>Discussion</b> 10) Provide a balanced discussion of benefits and harms with emphasis on study limitations, generalizability, and other sources of information on harms. This item refers to 1) Interpretation; 2) Generalizability; and 3) Overall evidence.	<input type="radio"/>	<input type="radio"/>