

Effectiveness of opioids for chronic pain

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Chronic pain

- Defined as pain most days for > 6 months
 - Affects 1/5 to 1/3 of US adults
- “High impact” when it interferes with life
 - Low back pain causes more disability than any other health condition (US and worldwide)

Opioid analgesics

- Natural and synthetic relatives of morphine (from opium poppy)
- Traditionally prescribed for acute pain and end-of-life suffering (short-term)
- More recently used for chronic pain (long-term)
 - Serious risks to patients include death, accidental overdose, addiction, depression, and injuries

Evidence from prior clinical trials

- Opioids can reduce chronic back and arthritis pain severity
(compared with placebo)
(for up to 8-12 weeks)
(a small amount)

Strategies for Prescribing Analgesics

Comparative Effectiveness Trial

Objective: To compare opioid therapy versus non-opioid medication therapy over 12 months among patients with moderate-severe chronic back or hip or knee osteoarthritis pain despite pain medication

- Hypothesis 1: Opioids will improve pain-related function and pain intensity more than non-opioids
- Hypothesis 2: Opioids will cause more adverse effects than non-opioids

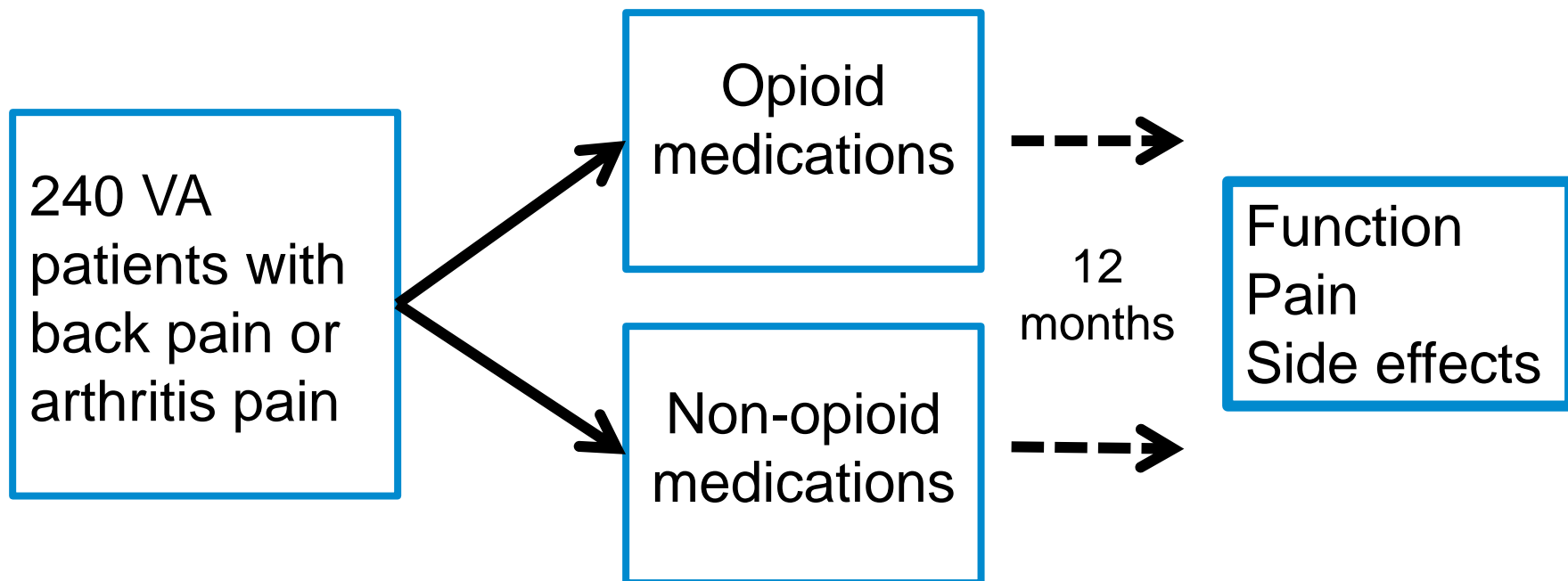
JAMA | Original Investigation

Effect of Opioid vs Nonopioid Medications on Pain-Related Function in Patients With Chronic Back Pain or Hip or Knee Osteoarthritis Pain

The SPACE Randomized Clinical Trial

Erin E. Krebs, MD, MPH; Amy Gravelly, MA; Sean Nugent, BA; Agnes C. Jensen, MPH; Beth DeRonne, PharmD; Elizabeth S. Goldsmith, MD, MS; Kurt Kroenke, MD; Matthew J. Bair; Siamak Noorbaloochi, PhD

Opioid therapy was not superior to non-opioid medication therapy over 12 months



Interventions



- Patients randomly assigned to receive opioid or non-opioid treatment
- Patients in both groups got personalized care
 - Clinical pharmacist care manager
 - In-person visits: initial and 6 month follow-up
 - Phone visits: monthly, then every 1-3 months
 - Prescribing strategy with 3 medication steps (all VA formulary medications)

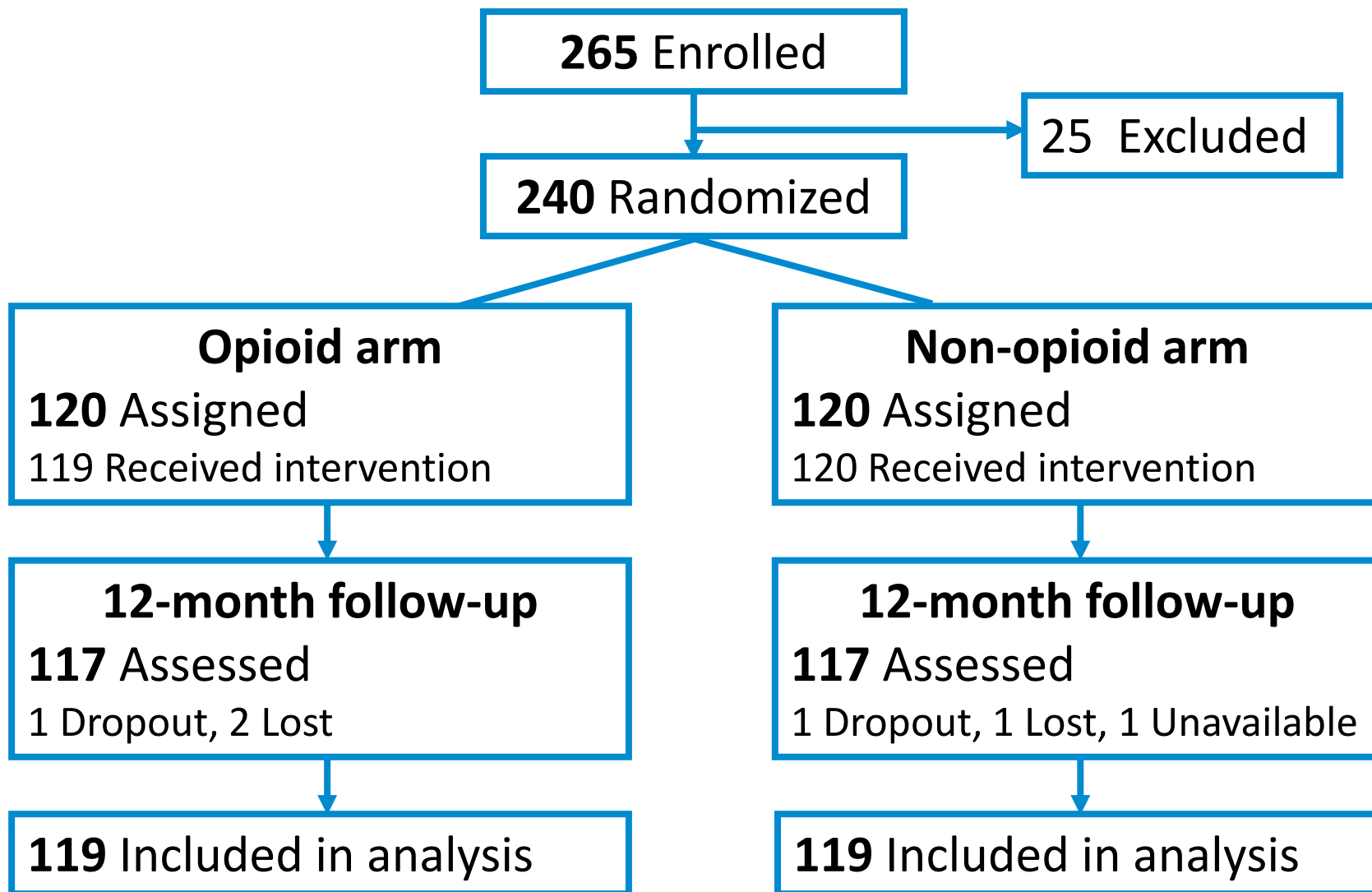
Prescribing strategies



Table: Medications within treatment groups

	Opioid group	Non-opioid group
Step 1	Morphine IR* Oxycodone IR Hydrocodone/APAP	Acetaminophen* Oral NSAIDs Topical diclofenac
Step 2	Morphine SR Oxycodone SA	Nortriptyline, amitriptyline Gabapentin Topical lidocaine, capsaicin
Step 3	Fentanyl transdermal	Pregabalin Duloxetine Tramadol

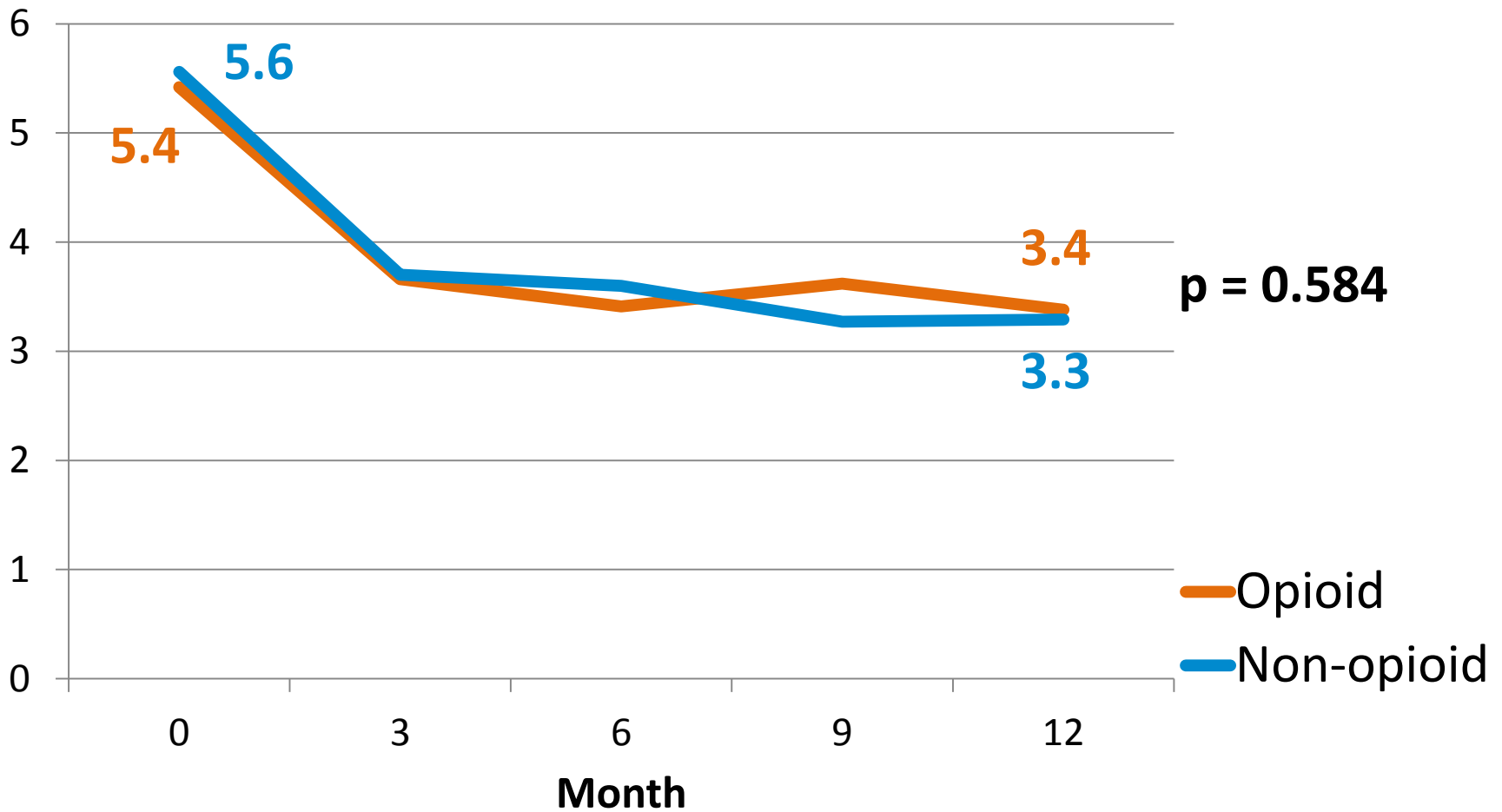
* Preferred initial medication selection



Pain interference with function



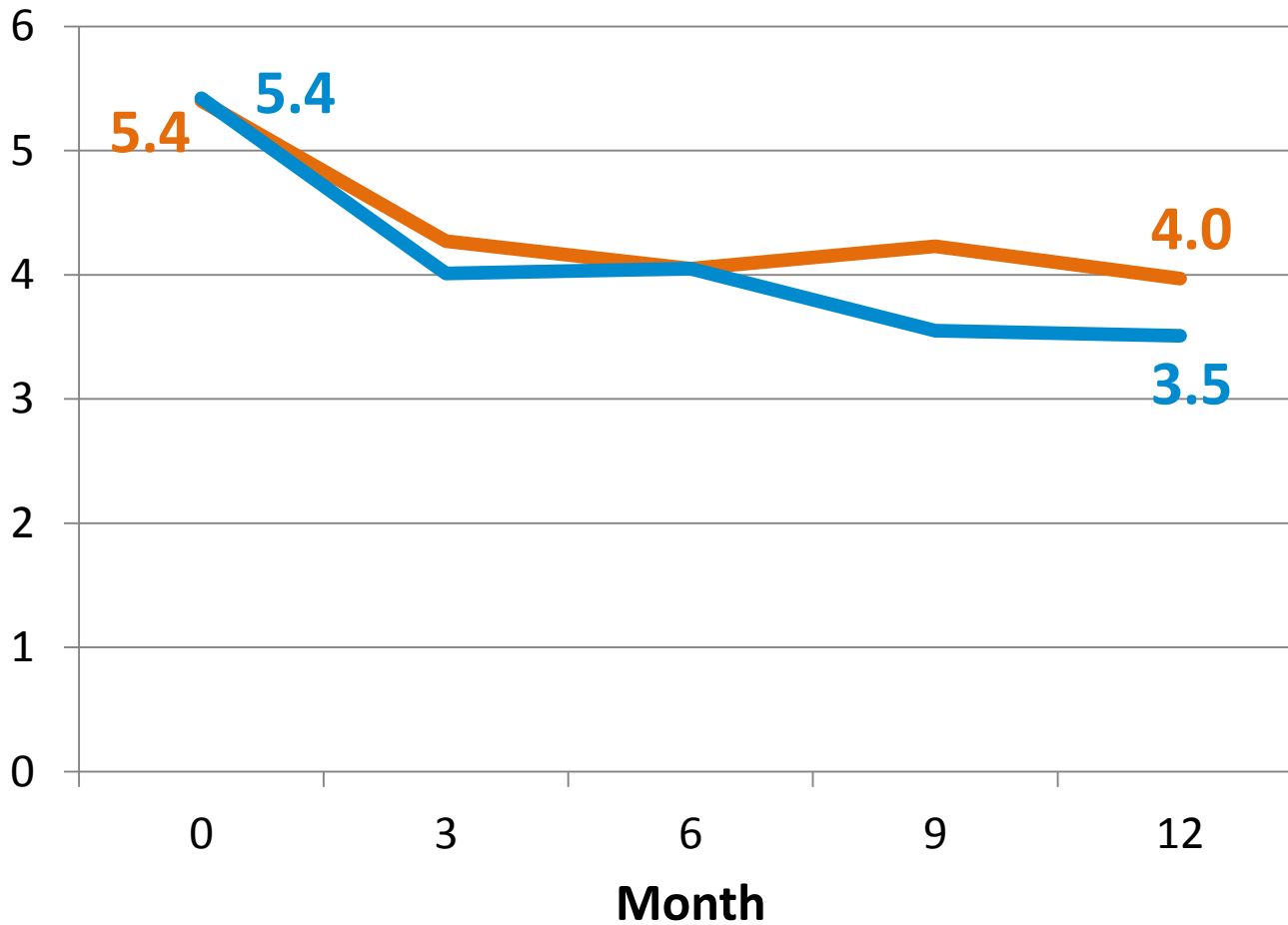
Mean BPI Interference (n=238)



Pain intensity



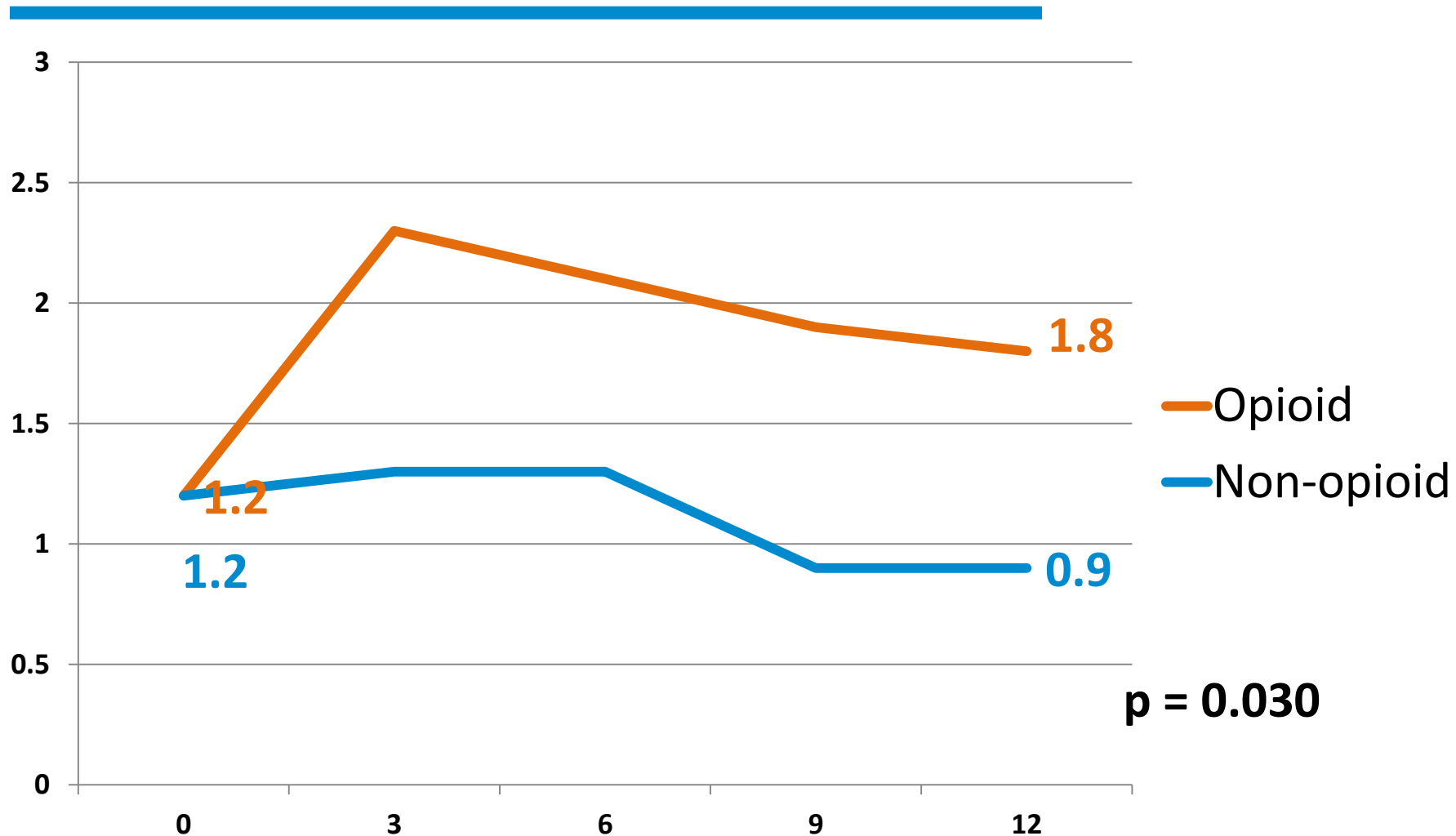
Mean BPI Severity (n=238)



p = 0.034

— Opioid
— Non-opioid

Medication side effects





I'm glad I'm not on opiates anymore. They were effective, but it felt like I was living my life in a sleepy stupor... I wanted to be a more active participant in my life. I wanted to reestablish friendships and I wanted to get projects done around the house. And I felt none of that was going to happen as long as I was on those opiates. All I wanted to do was sleep.

– Study participant (opioid responder)

Results summary



- Opioid therapy was not superior to non-opioid medication therapy over 12 months
 - Pain-related function: no difference
 - Pain intensity: small significant difference favoring non-opioids
 - Opioid therapy caused significantly more medication-related adverse symptoms
- Results consistent with those of short-term trials: opioids have modest benefits & are not superior to other analgesics

Conclusions



- SPACE results do not support initiation of opioids for chronic back pain/arthritis pain that has failed to respond to non-opioid medications
- SPACE results support *current* guideline recommendations
 - CDC 2016: Nondrug therapies and nonopioid medications preferred for chronic pain
 - VA/DOD 2017: Recommends against initiation of long-term opioid therapy for chronic pain

Thank you! Questions?

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