

# Thank you for creating your osteoarthritis landscape!

We hope you found it informative and engaging. Explore this document to discover the data that maps your personalized landscape.

Large real-world study

## Notable increase

in patient NSAID prescribing and dispensing following an OA diagnosis<sup>1\*</sup>

Home-use studies analysis

## 30–48% reductions

in OA hip and knee pain with acetaminophen, plus improved physical function and stiffness<sup>2†</sup>

Large real-world study

## More than 50%

of patients with OA have  $\geq 1$  comorbidity that may increase the risk of side effects associated with NSAID use<sup>1\*</sup>

## Multimodal approaches

combining pharmacologic methods with lifestyle changes can effectively manage OA symptoms<sup>3,4</sup>

## Suitable to consider for certain common comorbidities

TYLENOL<sup>®</sup> is an appropriate analgesic choice for patients with GI, renal, and CV risks

\*A retrospective cohort of 17,842,628 OA patients, constructed from three large US administrative claims databases (mean age: 61.4 years). †Analysis of 5 randomized, double-blind, active-controlled, multiple-dose, parallel, multicenter, home-use studies of acetaminophen in individuals with radiographically confirmed hip or knee OA, with dosing  $\geq 4$  weeks, conducted between 1993 and 2004. CMOI, coexisting medical condition of interest; CV, cardiovascular; GI, gastrointestinal; NSAID, non-steroidal anti-inflammatory drug; OA, osteoarthritis.





# Notable increase in patient NSAID prescribing and dispensing following an OA diagnosis<sup>1</sup>



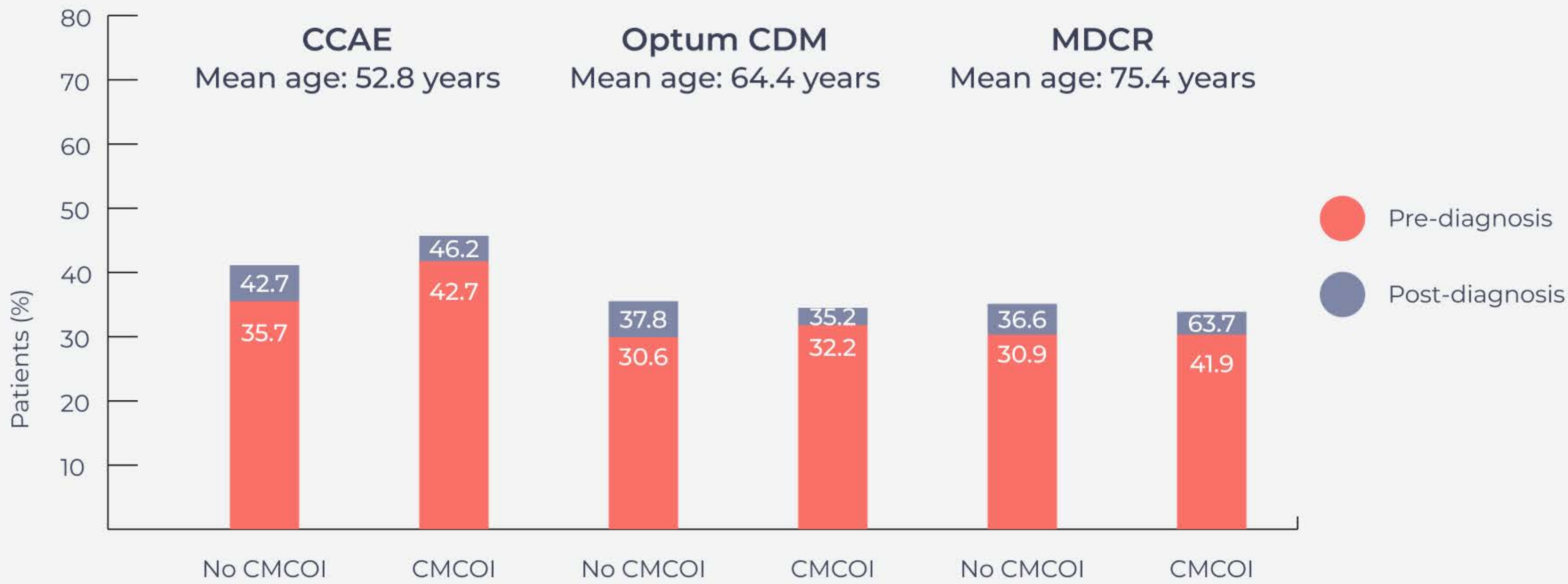
The aim of this study was to estimate the prevalence of prescribing and dispensing of NSAIDs pre- and post-OA diagnosis in patients with and without a coexisting medical condition of interest (CMCOI).



A retrospective cohort of 17,842,628 OA patients, constructed from three large US administrative claims databases (mean age: 61.4 years). The selected CMCOIs were CV risk,\* GI bleeding risk, asthma, and renal impairment.

Databases leveraged were IBM MarketScan Medicare Supplemental Database (MDCR), IBM MarketScan Commercial Database (CCAE), and Optum’s de-identified Clinformatics Data Mart Database (Optum CDM).

Proportion of patients prescribed and dispensed NSAIDs increased following diagnosis of OA



Similar trends of prescribing and dispensing NSAIDs were observed among those with and without comorbidities, highlighting the need for alternative pharmacological options for those with comorbid conditions.

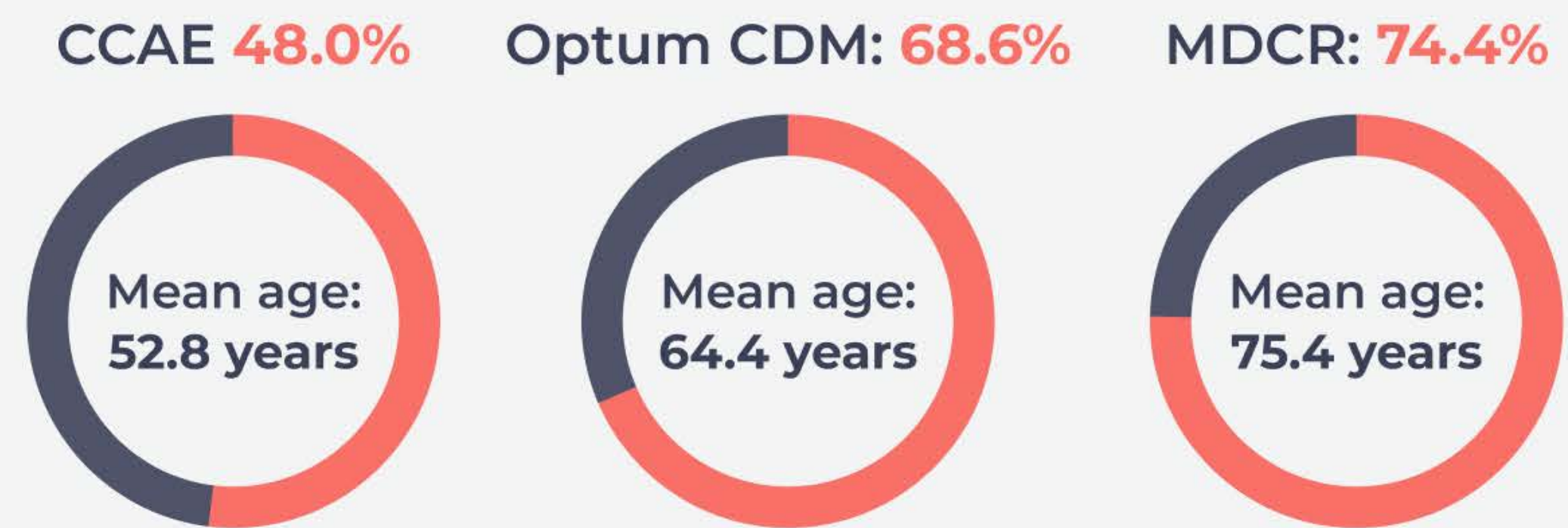
<sup>1</sup>To include diseases such as hypertension, cerebrovascular disorders, and heart failure.  
CCAE, Commercial Claims and Encounters; CDM, Clinformatics Data Mart Database; CMCOI, coexisting medical condition of interest; CV, cardiovascular; GI, gastrointestinal; MDCR, MarketScan Medicare Supplemental Database; NSAID, non-steroidal anti-inflammatory drug; OA, osteoarthritis.



Large real-world study

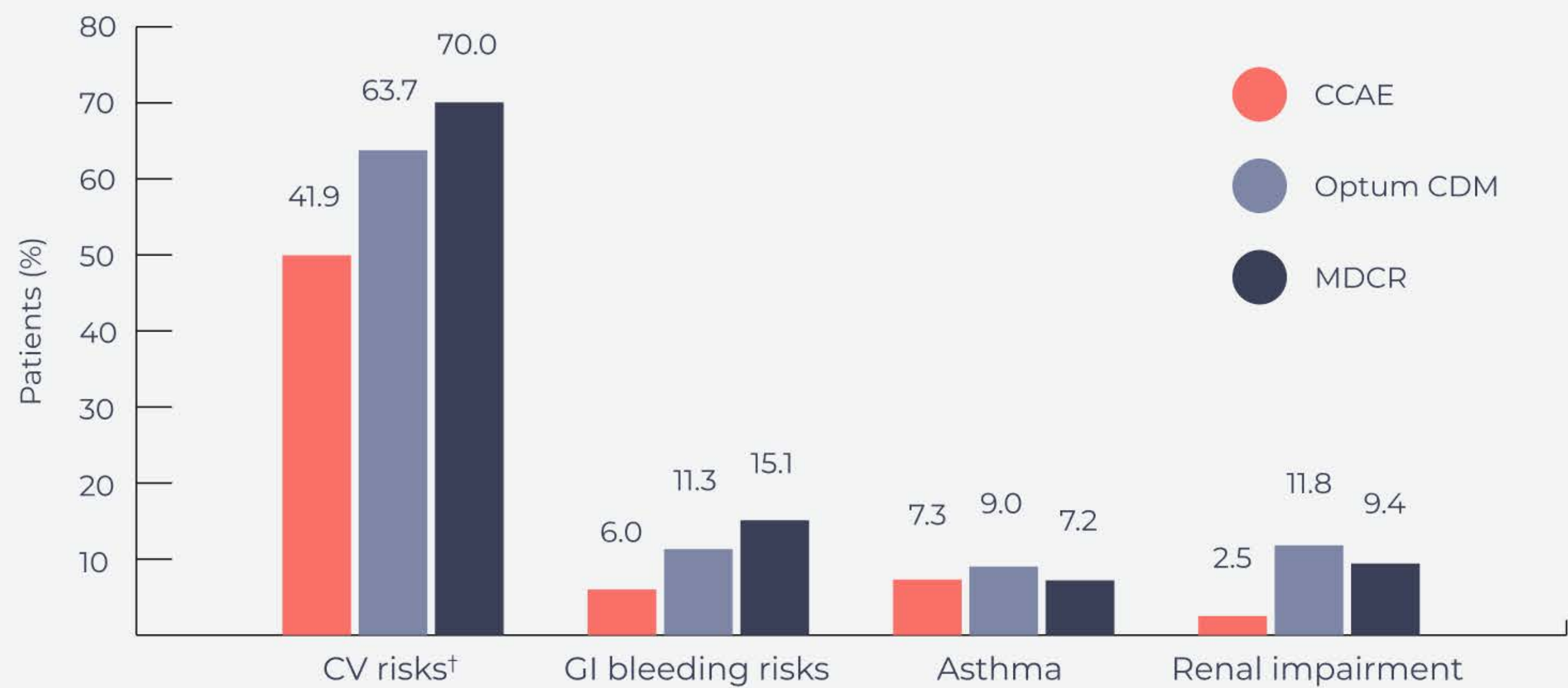
# More than **50%** of patients with OA have $\geq 1$ comorbidity that may increase the risk of side effects associated with NSAID use<sup>1</sup>

The proportion of patients in each database with at least one CMCOI increases with age



Up to **46%** of these patients were prescribed and dispensed NSAIDs\*

CV risks\* were the most common CMCOI among patients diagnosed with OA



Patients with CMCOIs “may benefit from alternative analgesic options.”

\*Among patients with OA with CMCOI, NSAID dispensing increased post-index across all three databases, with a range from 30.8% (MDCR) to 42.7% (CCAE) at baseline and 33.0% (MDCR) to 46.2% (CCAE) during the follow-up. <sup>†</sup>To include diseases such as hypertension, cerebrovascular disorders, and heart failure. CCAE, Commercial Claims and Encounters; CDM, Clinformatics Data Mart Database; CMCOI, coexisting medical condition of interest; CV, cardiovascular; GI, gastrointestinal; MDCR, MarketScan Medicare Supplemental Database; NSAID, non-steroidal anti-inflammatory drug; OA, osteoarthritis.



# Suitable to consider for **certain common comorbidities**



Acetaminophen won't increase the risk of heart attack, heart failure, and stroke the way ibuprofen or naproxen sodium can<sup>5</sup>

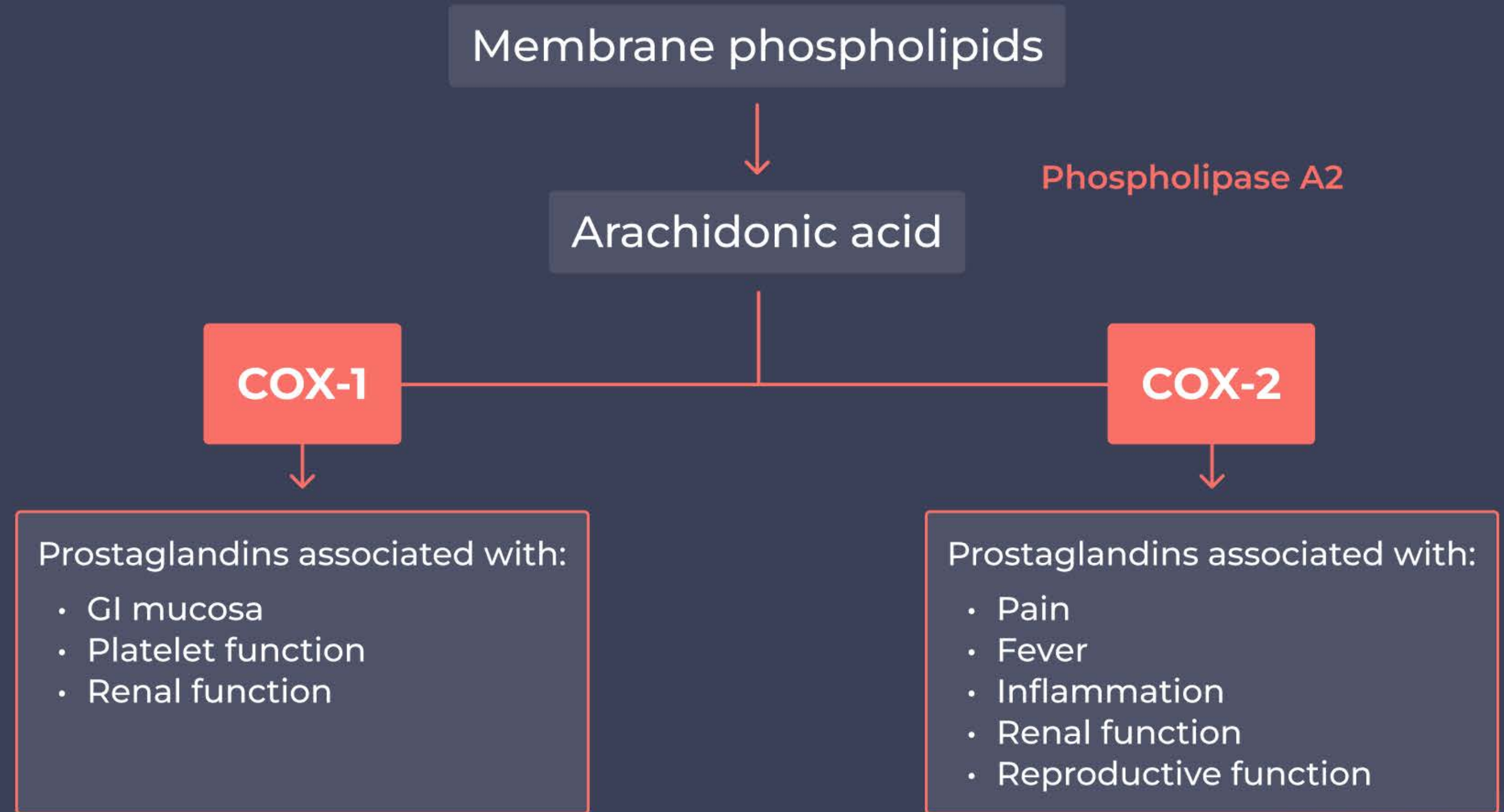


Acetaminophen does not inhibit COX-1, an important enzyme in GI mucosal protection, the way NSAIDs can<sup>6-9</sup>



Acetaminophen does not compromise renal function in patients with existing kidney dysfunction when taken at recommended doses<sup>10-12</sup>

Cyclooxygenase pathways are inhibited by NSAIDs<sup>13</sup>



**TYLENOL® is an appropriate analgesic choice for people with certain comorbid conditions, such as GI bleeding, renal impairment and CV risk.**



# 30–48% reductions in OA hip and knee pain with acetaminophen, plus improved physical function and stiffness<sup>2</sup>



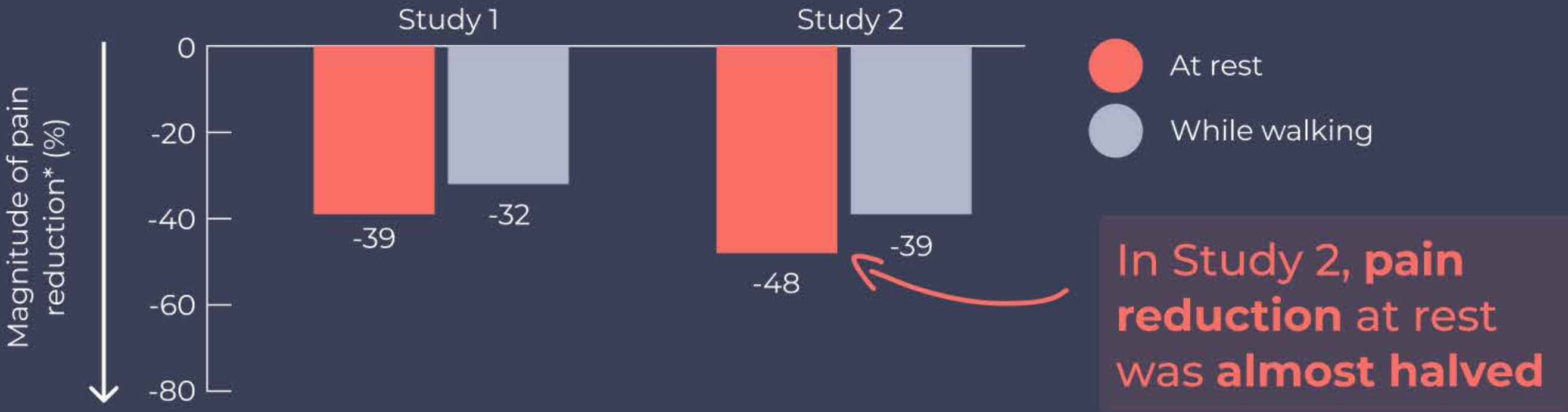
This study aimed to examine the efficacy and safety of acetaminophen using patient-reported outcomes from 5 home-use studies.



Analysis of 5 randomized, double-blind, active-controlled, multiple-dose, parallel, multicenter, home-use studies of acetaminophen in 856 individuals with radiographically confirmed hip or knee OA, with dosing ≥4 weeks, conducted between 1993 and 2004. This study analyzed 5 studies (2 unpublished, 3 published) following 1, 2, and 4 weeks of treatment with acetaminophen-IR 4000 mg or acetaminophen-ER 3900 mg. Study populations were similar across the 5 studies.

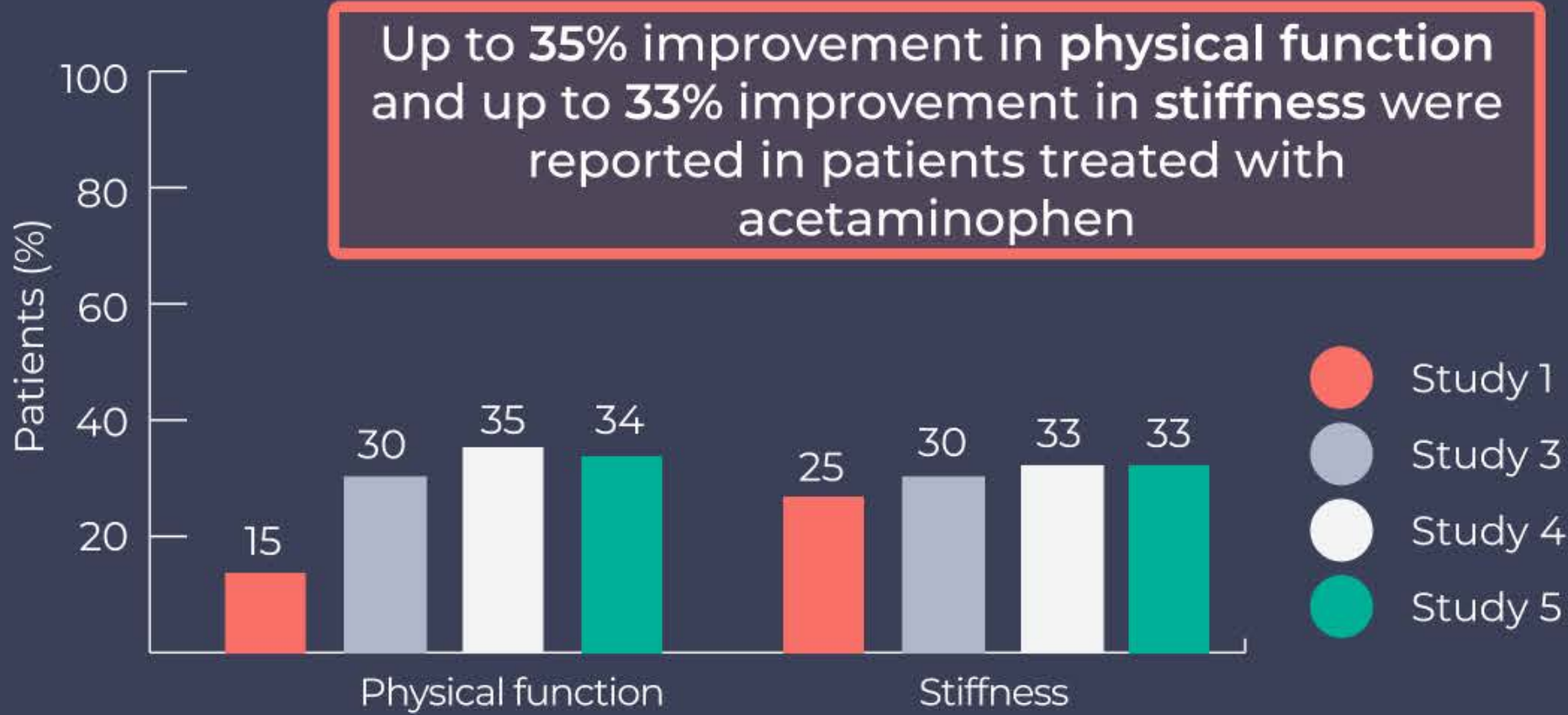
- In Study 1, 46 participants, in Study 2, 96, and in Study 3, 287 used acetaminophen-IR 4000 mg/day
- In Study 4, 160 participants and in Study 5, 267 used acetaminophen-ER 3900 mg/day

Pain reduction at Weeks 1, 2, and 4 in Studies 1 and 2\*



This analysis confirms the **analgesic effectiveness and safety of acetaminophen** in the management of “moderate to moderately severe pain related to hip and knee OA”, while also improving physical function and reducing stiffness.

Improvements in physical function and stiffness on the WOMAC scale




\*Presented is the highest recorded pain reduction at rest and on walking in each study, reported via a 5-point scale. Ranges are as follows: In Study 1, participants reported 36–39% reduction in pain at rest and 30–32% reduction in pain on walking; in Study 2, participants reported 38–48% reductions in pain at rest and 30–39% reduction in pain on walking.  
ER, extended release; IR, immediate release; OA, osteoarthritis; WOMAC, Western Ontario and McMaster Universities Osteoarthritis Index.




# Multimodal approaches combining pharmacologic methods with lifestyle changes can effectively manage OA symptoms<sup>3,4</sup>


A multimodal approach to pain management that addresses several aspects of chronic pain conditions, such as biopsychosocial effects of the condition, has been documented to:<sup>3</sup>



Reduce pain severity



Improve mood and overall QoL



Increase physical functioning



Improving physical function can help patients integrate exercise into their OA management, potentially reducing pain and further enhancing physical function<sup>14,15</sup>



Losing **1 pound** of body weight = Losing **4 pounds** of pressure on the knees<sup>15</sup>



In a study of older persons with knee OA, moderate exercise **3 times per week** reduced the risk of developing ADL disability by **43%**<sup>14</sup>

Studies show that combining **lifestyle changes**, such as exercise, with **pharmacologic approaches**, as well as considering the biopsychosocial effects of a condition can **reduce pain and improve outcomes** for patients with OA.



Patients with OA with and without comorbidities show similar trends in NSAID prescribing and dispensing,<sup>1</sup> yet those with comorbid conditions may benefit from alternative analgesics such as TYLENOL®, which is suitable for individuals with conditions such as GI bleeding, renal impairment, and CV risk.<sup>5-12</sup>

Research supports the efficacy and safety of acetaminophen in managing moderate to moderately severe pain related to hip and knee OA while also improving physical function and reducing stiffness.<sup>2</sup> Additionally, combining lifestyle changes, such as exercise, with pharmacologic treatments and addressing the biopsychosocial aspects of OA can further reduce pain and improve patient outcomes.<sup>3,4,14,15</sup>

Acetaminophen aligns well with holistic and integrative treatment methods, offering effective pain management that complements other therapies while ensuring comprehensive care for patients with OA and comorbidities



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