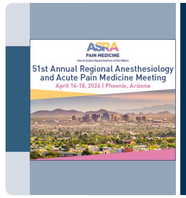

Nine-months Post-launch Suzetrigine Utilization Patterns in Real-world Settings: Orthopedic Surgery Subgroup Analysis

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BACKGROUND

- Approximately 11 million orthopedic procedures are performed annually in the United States (US)[1]
- Nearly 90% of patients experience acute pain after surgery, with 75% reporting moderate-to-severe pain[2]
- Despite treatment with prescription acetaminophen, non-steroidal anti-inflammatory drugs (NSAIDs), and opioids, many patients experience inadequate pain control following surgery, creating a clinical gap[3]
- Suzetrigine (SUZ) is a novel, oral, highly-selective voltage-gated sodium channel 1.8 ($Na_V1.8$) pain signal inhibitor approved in the US for the management of moderate-to-severe acute pain in adults[4]
- This analysis describes patterns of SUZ utilization in the first 9-months following approval in the US among a subgroup of patients who underwent orthopedic surgery

OBJECTIVES

- To describe demographic and clinical characteristics of patients prescribed SUZ in real-world settings
- To characterize SUZ utilization patterns and prescribing of other analgesics using administrative claims representing discharge and retail prescriptions
- **To evaluate the types of procedures and care settings among patients who underwent orthopedic surgery within 30 days before or after their initial SUZ prescription**

METHODS

- A retrospective, observational, drug utilization study was conducted using the Merative™ MarketScan® Commercial Claims and Medicare databases. The study period (including baseline and observation periods) November 1, 2024, through November 30, 2025.
- Patients aged ≥17 years with 90-days of continuous enrollment prior to the index date (baseline period) and ≥1 outpatient pharmacy claim for SUZ (index date = earliest fill) between February 1, 2025, and October 31, 2025, were included in the analysis. The follow-up period was 30 days.
- Patient demographic and clinical characteristics were assessed during the baseline period and at index. SUZ utilization and co-prescribing patterns were assessed on index and throughout the follow-up period.
- In this subgroup analysis, medical claims were evaluated 30-days before and after index to identify SUZ use associated with orthopedic surgeries based on International Classification of Disease 10th Clinical Modification procedure codes, (ICD-10-PCS), Current Procedural Terminology (CPT) codes, and diagnosis related group (DRG) codes
- Descriptive analyses were performed for all study outcomes; no comparative or inferential analyses were conducted
- Deidentified administrative claims data were used; therefore, institutional review board approval was not required

RESULTS

Demographic and Clinical Characteristics

- A total of 1,012 patients had evidence of at least one orthopedic surgery and filled a prescription for SUZ
- Demographic and clinical characteristics of these patients are shown in **Table 1**
  - The mean (SD) age was 58.2 (13.6) years; most were female (60.5%), and most were commercially insured (72.6%)
  - SUZ was prescribed to patients ranging from 17 to 90 years old, and 27.5% of patients were aged ≥65 years
  - The most common CCI comorbidities were diabetes and chronic pulmonary disease

Table 1. Patient Demographic & Clinical Characteristics

	All Patients (N = 1,012)
Age, years	
Mean (SD)	58.2 (13.6)
Min, Max	17, 90
<65 n (%)	734 (72.5)
≥65 n (%)	278 (27.5)
Sex, n (%)	
Female	612 (60.5)
Male	400 (39.5)
Payer (n,%)	
Commercial	735 (72.6)
Medicare	277 (27.4)
Deyo-Charlson Comorbidity Index, CCI, n (%)	
None (CCI = 0)	632 (62.5)
Mild (CCI = 1-2)	289 (28.6)
Moderate/Severe (CCI ≥3)	91 (9.0)
CCI Comorbidities (≥5% Prevalence)	
Diabetes without chronic complications*	132 (13.0)
Chronic pulmonary disease	103 (10.2)
Diabetes with chronic complications*	56 (5.5)
Renal disease	53 (5.2)
Rheumatologic disease	53 (5.2)
Any malignancy	52 (5.1)

CCI, Charlson Comorbidity Index; SD, Standard Deviation.
*Categories are mutually exclusive.

Suzetrigine Treatment Characteristics

- Characteristics of SUZ prescribing on index and during follow-up are described in **Table 2**
- The median days' supply of the initial SUZ filled prescription was 15 days
  - Almost all (>99%) of initial SUZ prescriptions were for 30 days or less, and 81.4% of all prescriptions were for 15 days or less
- Approximately 11% of patients received a SUZ refill within 30 days, most receiving a single refill
- Average duration of the index SUZ treatment episode (inclusive of initial prescription and refills) was 17.5 days

Table 2. Patterns of Suzetrigine Prescribing on Index and During Follow-up

	All Patients (N = 1,012)	
	Mean (SD)	Median (Q1-Q3)
Index Prescription		
Days' Supply	**16.7** (13.9)	**15.0** (14.0, 15.0)
Refills		
Patients with ≥1 Refill After the Index Date, n (%)	**113** (11.2)	
Number of Refills Among Patients with ≥1 Refill	**1.3** (1.6)	**1.0** (1.0, 1.0)
Refill Days' Supply	**23.2** (30.1)	**15.0** (10.0, 30.0)
Duration of Initial Treatment Episode*		
Days	**17.5** (7.1)	
	Patients with ≤15 Days' Supply, n (%)	**Patients with >15 Days' Supply, n (%)**
Index Prescription		
Number (%) of Patients	**824** (81.4)	**188** (18.6)

Q1, first quartile; Q2, third quartile; SD, standard deviation.
*The SUZ treatment episode began at the first SUZ prescription fill and continued until a gap in days' supply exceeding 5 days or censoring at the end of follow-up. Gaps ≤5 days were permitted.

Co-Prescribing with Suzetrigine

- SUZ was the only analgesic prescribed on index for 76.2% of patients
- Approximately 24% of patients initiating SUZ were co-prescribed another prescription analgesic on the index date (**Table 3**)

Table 3. Co-prescribing* of Suzetrigine with Other Analgesics on the Index Date

	All Patients (N = 1,012)	
Patients with Prescription Analgesics Co-Prescribed on the Index Date, n (%)	**241** (23.8)	
	Mean (SD), days	**Median (Q1-Q3), days**
Patients Co-prescribed Opioids, n (%) — 178 (17.6)		
Opioid Days' Supply	**8.0** (7.2)	**7.0** (5.0, 7.0)
Patients Co-prescribed NSAIDs, n (%) — 116 (11.5)		
NSAID Days' Supply	**25.3** (15.0)	**30.0** (14.0, 30.0)
Patients Co-prescribed Acetaminophen, n (%) — 77 (7.6)		
Acetaminophen Days' Supply	**9.4** (8.7)	**7.0** (5.0, 7.0)

NSAIDs, non-steroidal anti-inflammatory drugs; Q1, first quartile; Q2, third quartile; SD, standard deviation.
*All medications were identified by claims for filled outpatient prescriptions; patients' actual usage of medications, including analgesics purchased out-of-pocket or over-the-counter cannot be ascertained from healthcare claims.

Surgical Characteristics

- Patients underwent orthopedic surgeries in inpatient (n=97, 9.6%) and outpatient (937, 92.6%) settings of care (**Table 4**)
- Nearly half of outpatient surgeries were performed in the hospital outpatient department (n=454; 44.9%), and one-third were performed at ambulatory surgical centers (ASC; n=324, 32.0%)

Table 4. Surgery Characteristics of Patients Receiving Suzetrigine

Most Frequent Orthopedic Surgeries by Setting	All Patients (N = 1,012)
Patients who Underwent Inpatient Orthopedic Surgery*, n (%)	**97 (9.6)**
Commonly Reported Inpatient General Surgeries:	
• Spinal procedures (e.g., spinal fusion, insertion of biomechanical device, laminectomy/facetectomy/foraminotomy, spinal autograft or allograft)	
• Hip/knee replacement or revision	
• Major joint or limb reattachment procedure of upper extremities	
Patients who Underwent Outpatient Orthopedic Surgery*, n (%)	**937 (92.6)**
Most Frequent Outpatient Orthopedic Surgeries (Prevalence ≥5%)†	
Total knee arthroplasty	197 (19.5)
Total hip arthroplasty	86 (8.5)
Shoulder arthroscopy with rotator cuff repair	53 (5.2)
Shoulder arthroscopy (subacromial decompression with acromioplasty)	51 (5.0)

*Not mutually exclusive, some patients may have undergone an inpatient and outpatient surgery within the identification window.
†Not including therapeutic injections classified as procedures.

LIMITATIONS

- This research studied commercial and employer-sponsored Medicare beneficiaries, which may limit generalizability to other insurance types
- Medication use was based on dispensed outpatient pharmacy claims; actual use and over-the-counter (OTC) analgesics or out-of-pocket purchases are not captured
- Co-prescribing of prescription analgesics was assessed on the day of index, which may not capture the complete scope of prescribing patterns
- Clinical indications for SUZ prescriptions cannot be confirmed in claims; temporal links between surgery and SUZ use for acute pain were assumed

DISCUSSION

- SUZ was used across a wide range of ages (17 to 90 years old), and approximately one-quarter of patients in the study were aged ≥65 years. 72.6% of all patients in the study had Commercial insurance, and 27.4% were Medicare beneficiaries
- SUZ is being used for acute pain management. More than 99% of initial SUZ prescriptions were for ≤30 days, with approximately 80% of prescriptions written for ≤15 days; the average SUZ treatment duration was approximately 18 days
- SUZ was the only prescription analgesic filled on index for 76.2% of patients; the remaining 23.8% of patients were co-prescribed other analgesics including opioids, prescription NSAIDs, and prescription acetaminophen
- Patients receiving SUZ underwent a wide range of orthopedic surgeries, including hip, knee, and joint repair, spinal fusion, hammertoe correction, and ACL repair/reconstruction, in both inpatient and outpatient settings of care

CONCLUSIONS

- **SUZ was used to manage acute pain, irrespective of age (range: 17-90), and was used across a wide range of orthopedic surgeries performed in inpatient and outpatient settings of care**
- **SUZ was the only prescription analgesic filled on index for the vast majority of patients; initial prescriptions for acute pain were a median of 15 days**

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