

Suzetrigine Prescription Fill Patterns in US Patients 11 Months Post-Approval

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KEY FINDINGS

Early real-world evidence of SUZ utilization: Among 5,793 patients with a suzetrigine (SUZ) prescription fill during the first 11 months after US approval, fill patterns reflect a diverse patient population for a newly approved non-opioid analgesic (patients' age ranged from 17–88 years, including 33.7% aged ≥65 years).

Fill patterns were consistent with short-term treatment for acute pain: The median initial supply was 15 days; 81.5% of patients received ≤15 days' supply, only 11.0% had a refill within 30 days.

SUZ was commonly filled without another prescription analgesic at initiation: 73.2% of patients had no other prescription analgesic fill on the SUZ initiation date. 74.3% had no opioid fill from 3 days before through 1 day after SUZ initiation. Approximately 67% of patients had no opioid fill from 3 days before through 7 days after index SUZ fill.

Use spanned diverse patients and care settings: 30.8% of patients had evidence of major surgery (predominantly outpatient). The remaining 69.2% had no evidence of major surgery, supporting use across non-surgical acute-care settings.

OBJECTIVES

- **To describe real-world demographic and clinical characteristics of patients with a SUZ prescription fill during the first 11 months following US regulatory approval.**
- **To characterize SUZ prescription fill patterns, including initial days' supply, refills, and duration of the initial treatment episode, using outpatient pharmacy claims.**
- **To examine prescription analgesic fills occurring on and surrounding the index SUZ fill.**
- **To identify major surgical procedures and non-surgical acute care encounters occurring within 14 days before or after the index SUZ fill.**

BACKGROUND

- Approximately 80 million patients are prescribed medications for acute pain each year in the United States (US), of which 44 million prescriptions are dispensed at retail pharmacies[1].
- Acute pain management commonly involves multimodal analgesia, including opioids, acetaminophen, and non-steroidal anti-inflammatory drugs (NSAIDs), to improve pain control while minimizing opioid exposure[2].
  - However, each prescription option has limitations: opioids carry risks of gastrointestinal effects, respiratory depression, misuse, and dependence,[2] while NSAIDs and acetaminophen may be insufficient for moderate-to-severe pain and are limited by gastrointestinal, renal, and hepatic safety concerns[3].
- Suzetrigine (SUZ) is an oral, non-opioid, first-in-class selective sodium channel 1.8 ($Na_V1.8$) pain signal inhibitor approved in the US in January 2025 for the management of moderate-to-severe acute pain in adults[4,5].
- Real-world evidence provides insight into how a newly approved analgesic is being adopted into routine practice. This study characterizes SUZ prescribing patterns, treatment duration, and care settings during the first 11 months following US approval.

METHODS

- A retrospective, observational, drug utilization study was conducted using pharmacy and medical claims data from Optum Research Database. The study period (including baseline and observation periods) was August 1, 2024, through January 30, 2026. Deidentified administrative claims data were used; therefore, institutional review board approval was not required.
- Patients aged ≥17 years with 6 months of continuous enrolment prior to the index date (baseline period) and ≥1 outpatient pharmacy claim(s) for SUZ (index date = earliest fill) between January 30, 2025, and December 31, 2025, were included in the analysis. The follow-up period was at least 30 days.
- The treatment episode began at the index SUZ fill and ended at the earlier of a gap in days' supply >5 days or the end of follow-up.
- Demographic and clinical characteristics were assessed at index and during baseline. Prescription analgesic fills were evaluated at index (day 0) and over three windows: days -3 to +1 (dispensing near initiation, potentially same episode), days +2 to +7 (subsequent dispensing), and days -3 to +7 (fill around index date).
- Evaluated medical claims ±14 days from the index date to capture SUZ use around major surgical care.
  - Rationale: prescriptions may be filled up to 14 days before or after a procedure.
  - Procedures identified by International Classification of Diseases, 10th Revision, Procedure Coding System (ICD-10-PCS) and Current Procedural Terminology (CPT) codes.
  - Procedures classified as major or non-major surgical care using the Healthcare Cost and Utilization Project (HCUP) procedure classification system[6].
- Descriptive analyses were performed for all study outcomes; no comparative or inferential analyses were conducted.

RESULTS

Demographic and Clinical Characteristics

- A total of 5,793 patients meeting the selection criteria filled a prescription for SUZ and were included in the analysis
- The demographic and clinical characteristics of these patients are shown in **Table 1**
  - The mean (SD) age was 57.4 (15.6) years; most were female (61.9%), and 34.5% were Medicare Advantage Part D beneficiaries
  - Most patients had none or mild comorbidity burden as measured by the CCI (80.3%)
  - 48.0% of patients had prior opioid use; substance or tobacco use were also common

Table 1. Patient Demographics and Clinical Characteristics

Characteristic	All Patients (N = 5,793)
Age, years	
Mean (SD)	57.4 (15.6)
Min, Max	17.0, 88.0
<65, n (%)	3,843 (66.3)
≥65, n (%)	1,950 (33.7)
Sex, n (%)	
Female	3,584 (61.9)
Male	2,209 (38.1)
Payer, n (%)	
Commercial	3,792 (65.5)
Medicare Advantage Part D	2,001 (34.5)
Deyo-Charlson Comorbidity Index, CCI, n (%)	
None (CCI = 0)	2,770 (47.8)
Mild (CCI = 1–2)	1,882 (32.5)
Moderate/Severe (CCI ≥3)	1,141 (19.7)
CCI Comorbidities (≥5% Prevalence), n (%)	
Diabetes mellitus	1,171 (20.2)
Chronic pulmonary disease	1,062 (18.3)
Diabetes mellitus with end organ damage	601 (10.4)
Moderate-severe renal disease	593 (10.2)
Any tumor	520 (9.0)
Baseline opioid use/substance use, n (%)	
Any prior opioid use*	2,778 (48.0)
Any opioid use in past 30 days	1,826 (31.5)
Any prior substance use*	1,790 (30.9)
Tobacco use*, current or former	1,174 (20.3)

SD = standard deviation
* Over 6 months baseline period before index SUZ fill

Suzetrigine Prescription Fill Characteristics

- Characteristics of SUZ prescriptions filled on index and during follow-up are described in **Table 2**
- The median days' supply of the initial SUZ prescription fill was 15 days
  - Almost all (99.7%) initial SUZ prescription fills were for 30 days or less, and 81.5% of patients had an initial fill of 15 days or less
- 11.0% of patients received a SUZ refill within 30 days, most receiving a single refill
- The average duration of the index SUZ treatment episode (inclusive of initial prescription fill and refills) was 16.6 days

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

Suzetrigine Prescription Fill Patterns	All Patients (N = 5,793)
Index Prescription Fill	
Days' Supply, mean (SD)	15.9 (8.0)
Days' Supply, median (Q1, Q3)	15.0 (14.0, 15.0)
Patients with ≤15 Days' Supply, n (%)	4,719 (81.5)
Patients with >15 Days' Supply, n (%)	1,074 (18.5)
Patients with ≤30 Days' Supply, n (%)	5,774 (99.7)
Refills	
Patients with ≥1 Refill, n (%)	637 (11.0)
Number of Refills, mean (SD)	1.1 (0.4)
Number of Refills, median (Q1, Q3)	1.0 (1.0, 1.0)
Refill Days' Supply, mean (SD)	9.6 (5.8)
Refill Days' Supply, median (Q1, Q3)	8.0 (5.0, 14.0)
Duration of Initial Treatment Episode	
Days, mean (SD)	16.6 (7.7)
Days, median (Q1, Q3)	15.0 (14.0, 15.0)

Q1, Q3 = first and third quartiles (interquartile range); SD = standard deviation

Prescription analgesic fills occurring on and surrounding the index SUZ fill (Table 3)

Index fill

- SUZ monotherapy: SUZ was the only analgesic filled on index for 73.2% of patients
- 26.8% of patients filled another prescription analgesic on the index date; 16.5% filled an opioid on the same day as SUZ

Probable concomitant prescription fill

- From 3 days before through 1 day after index, 40.2% of patients filled at least one additional prescription analgesic, most often an opioid (25.7%), followed by an NSAID (17.6%) and acetaminophen (11.7%);
  - 74.3% of the patients had no opioid fill

Subsequent analgesic prescription fill

- During days 2 through 7 after index, approximately 15.2% of patients filled at least one additional prescription analgesic, including 9.9% who filled an opioid

Analgesic prescription fill from 3 days prior through 7 days after index fill

- Approximately 49.2% of patients had filled at least one additional prescription analgesic, including 32.6% who filled an opioid;
  - 67.4% of patients had no opioid fill during this time

Table 3. Prescription analgesic fills occurring on and surrounding the index SUZ fill*

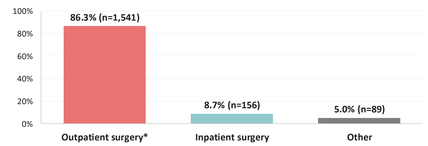
	All Patients (N = 5,793)
Index-Date Prescription Analgesic Fills	
Suzetrigine was the only prescription analgesic filled on index date (day 0); n (%)	4,243 (73.2)
Any other prescription analgesic fills on index date; n (%)	1,550 (26.8)
Opioids on index date, n (%)	953 (16.5)
NSAIDs on index date, n (%)	710 (12.3)
Acetaminophen on index date, n (%)	432 (7.5)
Prescription Fills Near Index	
Any additional prescription analgesic fills on days -3 to +1; n (%)	2,330 (40.2)
Opioids on days -3 to +1; n (%)	1,486 (25.7)
NSAIDs on days -3 to +1; n (%)	1,018 (17.6)
Acetaminophen on days -3 to +1; n (%)	680 (11.7)
Prescription Fills After Index	
Any additional prescription analgesic fills on days +2 to +7; n (%)	883 (15.2)
Opioids on days +2 to +7; n (%)	576 (9.9)
Acetaminophen on days +2 to +7; n (%)	271 (4.7)
NSAIDs on days +2 to +7; n (%)	207 (3.6)
Prescription Fills Around Index	
Any additional prescription analgesic fills on days -3 to +7; n (%)	2,849 (49.2)
Opioids on days -3 to +7; n (%)	1,891 (32.6)
NSAIDs on days -3 to +7; n (%)	1,197 (20.7)
Acetaminophen on days -3 to +7; n (%)	899 (15.5)

*Medications were identified from claims for filled outpatient prescriptions, which capture dispensing but cannot confirm prescriber intent, concurrent use, or actual consumption. Analgesic classes are not mutually exclusive.

Medical Claim Characteristics

- A total of 1,786 patients (30.8%) had evidence of major surgery within 14 days before through 14 days after the index SUZ fill.
  - 86.3% underwent surgery in an outpatient setting* (Figure 1)
  - Top surgery provider specialties and facility types across inpatient and outpatient settings included:
    - Orthopedic (60.4%)
    - Hospital (57.9%)
    - Other Facility (30.3%)
    - Allied Health Professional (27.1%)
- Among 4,007 (69.2%) patients without evidence of major surgery,
  - Common acute pain-related diagnoses included lumbar and cervical radiculopathy, osteoarthritis of the knee, shoulder pain, and neck pain (cervicalgia)
  - Settings of care:
    - 62.0% had an office visit
    - 13.5% had visits in other settings of care
    - 10.6% had a non-surgical hospital visit
    - 3.2% had emergency room or urgent care visits

Figure 1. Surgery characteristics of patients with a suzetrigine prescription fill and evidence of major surgery (n = 1,786)



*Includes surgeries performed in an ambulatory surgery center or hospital outpatient facility

Outpatient surgeries commonly included:

- **Orthopedic** (total knee, hip and shoulder arthroplasty, knee meniscectomy, ACL repair, spinal fusion)
- **General** (cholecystectomy, hernia repair)

Inpatient surgeries were not characterized due to small sample size

LIMITATIONS

- This research studied administrative claims data on commercial and Medicare Advantage beneficiaries, which may limit generalizability to other populations, including uninsured and Medicaid-covered patients. Early post-approval utilization may also be influenced by payer coverage, formulary access, and benefit design.
- Medication use was based on filled outpatient pharmacy claims, which capture retail dispensing but not medications administered during inpatient stays; actual consumption, adherence, and prescriber intent could not be confirmed.
- Prescription analgesic use may be underestimated, as medications obtained through patient support programs, over-the-counter, or paid out of pocket are not captured in claims.
- Clinical indications for SUZ prescriptions cannot be confirmed using claims data. Although major surgical and non-surgical procedures occurring within ±14 days of the index SUZ fill were identified and used as proxies for treatment context, this claims-based analysis cannot determine whether these procedures were the primary indication for the SUZ prescription.
- These findings reflect early adoption within first 11 months following regulatory approval and may evolve as clinical experience, payer coverage, and prescribing practices evolve.

DISCUSSION

- In the first 11 months following regulatory approval in the US, SUZ was filled in a diverse population spanning a broad range of ages (17 to 88 years old). Approximately one-third of patients (33.7%) were aged ≥65 years; 65.5% of all patients had Commercial insurance, and 34.5% were Medicare Advantage beneficiaries.
- Fill patterns within the first 11 months of launch were consistent with short-term use for acute pain. Nearly all patients (99.7%) received an initial fill of ≤30 days' supply and 81.5% received ≤15 days; only 11.0% had a refill within 30 days, and the mean duration of the initial treatment episode was 16.6 days.
- SUZ was the only prescription analgesic filled on the index date for 73.2% of patients
  - From 3 days before through 1 day after index, 40.2% of patients filled at least one additional prescription analgesic: 25.7% filled an opioid, 17.6% filled an NSAID, and 11.7% filled acetaminophen. These fills may reflect use of SUZ as part of a multimodal pain management therapy (MMT) approach. 74.3% had no opioid fill during this period. Analgesic classes were not mutually exclusive.
  - During days 2 through 7 after index, approximately 15% of patients filled at least one additional prescription analgesic, including 9.9% who filled an opioid.
  - From 3 days before through 7 days after index SUZ fill, 49.2% of patients filled at least one additional prescription analgesic, including 32.6% of patients who filled an opioid.
- Nearly one-third of patients (30.8%) had evidence of major surgery within 14 days before through 14 days after the index SUZ fill. Among these patients, 86.3% underwent surgery in an outpatient setting, while 8.7% underwent inpatient surgery. Orthopedic and general surgery were among the most frequently reported procedures.
- Among patients without evidence of major surgery (n = 4,007; 69.2%), 62.0% had an office visit, 10.6% had a non-surgical hospital visit, 3.2% had an emergency room or urgent care visit, and 13.5% had other settings of care visits.

CONCLUSIONS

- **During the first 11 months following US approval, SUZ fills were observed among a diverse patient population across both major surgical and non-surgical acute-care settings.**
- **SUZ fill patterns were consistent with short-term acute pain treatment, with 81.5% of initial fills supplying ≤15 days' supply, and few patients refilling within 30 days (11.0%).**
- **SUZ was frequently the only prescription analgesic filled at initiation (73.2%); most patients had no opioid fill from 3 days before through 1 day after index SUZ fill (74.3%). Approximately 67% of patients had no opioid fill from 3 days before through 7 days after index SUZ fill. Use was observed across both surgical and non-surgical acute pain care settings.**

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