Department of Health and Human Services
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Food and Drug Administration
Center for Drug Evaluation and Research
Office of Surveillance and Epidemiology
Office of Pharmacovigilance and Epidemiology

Pediatric Postmarketing Pharmacovigilance Review

Date:	May 12, 2025
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Product Name:	Simponi Aria (golimumab) injection
Pediatric Labeling Approval Date:	September 29, 2020
Application Type/Number:	BLA 125433
Applicant:	Janssen Biotech, Inc.
TTT Record ID:	2025-14277

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EXECUTIVE SUMMARY

This review evaluates FDA Adverse Event Reporting System (FAERS) reports for Simponi Aria (golimumab) injection, for intravenous use in pediatric patients less than 18 years of age. The Division of Pharmacovigilance (DPV) conducted this review in accordance with the Pediatric Research Equity Act (PREA). This review focuses on United States (U.S.) serious unlabeled adverse events associated with golimumab in pediatric patients.

Simponi Aria (golimumab) injection, for intravenous use is a tumor necrosis factor blocker initially approved in the U.S. on January 18, 2013, for the treatment of adult patients with moderately to severely active Rheumatoid Arthritis (RA). On October 20, 2017, the Simponi Aria indication was expanded to include use in adult patients with active Ankylosing Spondylitis (AS) and Psoriatic Arthritis (PsA). On September 29, 2020, FDA approved expanding the indication for Simponi Aria to include use in active Juvenile Idiopathic Arthritis (pJIA) in patients 2 years of age and older and extension of the psoriatic arthritis indication to include active PsA in patients 2 years of age and older. Simponi Aria is currently indicated for the treatment of:

- Adult patients with moderately to severely active RA in combination with methotrexate
- Active PsA in patients 2 years of age and older
- Adult patients with active AS
- Active pJIA in patients 2 years of age and older.

This pediatric postmarketing safety review was prompted by the September 29, 2020, labeling for Simponi Aria reflecting the new pediatric indications for pJIA and PsA in patients aged 2 years and older.

On May 28, 2019, DPV completed a review of postmarketing adverse event reports for golimumab in pediatric patients. DPV's evaluation did not identify any new safety concerns and recommended return to routine monitoring for adverse events with golimumab. On September 19, 2019, DPV's evaluation was presented to the Pediatric Advisory Committee via webposting.

DPV reviewed all U.S. serious FAERS reports with golimumab in pediatric patients less than 18 years of age from December 28, 2018 – February 25, 2025, and identified 29 reports; however, all reports were excluded from further discussion.

There were no new safety signals identified, no increased severity of any labeled adverse events, and no deaths directly associated with golimumab in pediatric patients less than 18 years of age.

DPV did not identify any new pediatric safety concerns for golimumab at this time and will continue routine pharmacovigilance monitoring for golimumab.

1 INTRODUCTION

This review evaluates FDA Adverse Event Reporting System (FAERS) reports for Simponi Aria (golimumab) injection, for intravenous use in pediatric patients less than 18 years of age. The Division of Pharmacovigilance (DPV) conducted this review in accordance with the Pediatric Research Equity Act (PREA). This review focuses on United States (U.S.) serious unlabeled adverse events associated with golimumab in pediatric patients.

1.1 PEDIATRIC REGULATORY HISTORY

Simponi Aria (golimumab) injection, for intravenous use is a tumor necrosis factor (TNF) blocker initially approved in the U.S. on July 18, 2013, for the treatment of adult patients with moderately to severely active Rheumatoid Arthritis (RA).[1] On October 20, 2017, the Simponi Aria indication was expanded to include use in adult patients with active Ankylosing Spondylitis (AS) and Psoriatic Arthritis (PsA).[2] On September 29, 2020, FDA approved expanding the indication for Simponi Aria to include use in active Juvenile Idiopathic Arthritis (pJIA) in patients 2 years of age and older and extension of the PsA indication to include active PsA in patients 2 years of age and older.[3] Simponi Aria is currently indicated for the treatment of:[4]

- Adult patients with moderately to severely active RA in combination with methotrexate
- Active PsA in patients 2 years of age and older
- Adult patients with active AS
- Active pJIA in patients 2 years of age and older.

Golimumab is also available as Simponi (golimumab) injection, for subcutaneous use. Simponi was initially approved in the U.S. on April 24, 2009.[5] Simponi is not indicated for use in pediatric patients. Simponi is currently indicated for the treatment of adult patients with:[6]

- Moderately to severely active RA in combination with methotrexate
- Active PsA alone, or in combination with methotrexate
- Active AS
- Moderate to severe ulcerative colitis with an inadequate response or intolerant to prior treatment or requirement continuous steroid therapy
    - Inducing and maintaining clinical response
    - Improving endoscopic appearance of the mucosa during induction
    - Inducing clinical remission
    - Achieving and sustaining clinical remission in induction responders.

This pediatric postmarketing safety review was prompted by the September 29, 2020, labeling for Simponi Aria reflecting the new pediatric indications for pJIA and PsA in patients aged 2 years and older.

On May 28, 2019, DPV completed a review of postmarketing adverse event reports for golimumab in pediatric patients. DPV's evaluation did not identify any new safety concerns and recommended return to routine monitoring for adverse events with golimumab. On September 19, 2019, DPV's evaluation was presented to the Pediatric Advisory Committee via webposting.[7]

1.2 RELEVANT LABELED SAFETY INFORMATION

The golimumab for intravenous use labeling contains the following safety information excerpted from the Highlights of Prescribing Information and the *Pediatric Use* subsection. For additional golimumab labeling information, please refer to the full prescribing information.[4]

WARNING: SERIOUS INFECTIONS and MALIGNANCY

See full prescribing information for complete boxed warning.

- Serious infections leading to hospitalization or death including tuberculosis (TB), bacterial sepsis, invasive fungal (such as histoplasmosis), and other opportunistic infections have occurred in patients receiving SIMPONI ARIA (5.1).
- Discontinue SIMPONI ARIA if a patient develops a serious infection or sepsis (5.1).
- Perform test for latent TB; if positive, start treatment for TB prior to starting SIMPONI ARIA (5.1).
- Monitor all patients for active TB during treatment, even if initial latent TB test is negative (5.1).
- Lymphoma and other malignancies, some fatal, have been reported in children and adolescent patients treated with TNF blockers, of which SIMPONI ARIA is a member (5.2).

----------CONTRAINDICATIONS----------

None (4)

----------WARNINGS AND PRECAUTIONS----------

- Serious Infections: Do not start SIMPONI ARIA during an active infection. If an infection develops, monitor carefully, and stop SIMPONI ARIA if infection becomes serious (5.1).
- Invasive Fungal Infections: For patients who develop a systemic illness on SIMPONI ARIA, consider empiric antifungal therapy for those who reside in or travel to regions where mycoses are endemic (5.1).
- Hepatitis B Reactivation: Monitor hepatitis b virus (HBV) carriers during and several months after therapy. If reactivation occurs, stop SIMPONI ARIA and begin anti-viral therapy (5.1).
- Malignancies: More cases of lymphoma have been observed among patients receiving TNF blockers compared with patients in the control groups. Cases of other malignancies have been observed among patients receiving TNF blockers (5.2).
- Congestive Heart Failure: Worsening, or new onset, may occur. Stop SIMPONI ARIA if new or worsening symptoms occur (5.3).
- Demyelinating Disorders: Exacerbation or new onset may occur (5.4).
- Lupus-like Syndrome: Discontinue SIMPONI ARIA if symptoms develop (5.5).
- Hypersensitivity Reactions: Serious systemic hypersensitivity reactions including anaphylaxis may occur (5.11).

----------ADVERSE REACTIONS----------

Most common adverse reactions (incidence ≥ 3%) are: upper respiratory tract infection, alanine aminotransferase increased, viral infection, aspartate aminotransferase increased, neutrophil count decreased, bronchitis, hypertension, and rash (6.1).

8.4 Pediatric Use

Safety and effectiveness of SIMPONI ARIA for active pJIA and PsA have been established in pediatric patients 2 years and older.

Use of SIMPONI ARIA in these age groups is supported by evidence from adequate and well-controlled studies of SIMPONI ARIA in adults with RA and PsA, pharmacokinetic data from adult patients with RA and PsA and pediatric patients with JIA with active polyarthritis, and safety data from a clinical study in 127 pediatric patients 2 to < 18 years of age with JIA with active polyarthritis. The observed pre-dose (trough) concentrations are generally comparable between adults with RA and PsA and pediatric patients

with JIA with active polyarthritis, and the PK exposure is expected to be comparable between adult PsA and pediatric patients with PsA [see Adverse Reactions (6.1), Clinical Pharmacology (12.3) and Clinical Studies (14.2, 14.4)].

Malignancies, some fatal, have been reported among children, adolescents, and young adults who received treatment with golimumab and other TNF-blocking agents [see Warnings and Precautions (5.2)].

The safety and effectiveness in pediatric patients below the age of 2 years have not been established in pJIA or in PsA. The safety and effectiveness of SIMPONI ARIA in pediatric patients with conditions other than pJIA and PsA have not been established.

2 METHODS AND MATERIALS

2.1 FAERS SEARCH STRATEGY

DPV searched the FAERS database with the strategy described in **Table 1**.

Table 1. FAERS Search Strategy*	
Date of search	February 26, 2025
Time period of search	December 28, 2018† - February 25, 2025
Search type	RxLogix Pediatric Focused Review Alert – DPV
Product terms	Product active ingredient: Golimumab
MedDRA search terms (Version 27.1)	All Preferred Terms
Other criteria	Case Seriousness: Serious‡ Country Derived: USA
* See Appendix A for a description of the FAERS database. † Data-lock date from DPV's last Pediatric Postmarketing Pharmacovigilance Review for golimumab ‡ For the purposes of this review, the following outcomes qualify as serious: death, life-threatening, hospitalization (initial or prolonged), disability, congenital anomaly, required intervention, or other serious important medical events. Abbreviations: MedDRA=Medical Dictionary for Regulatory Activities, USA=United States of America	

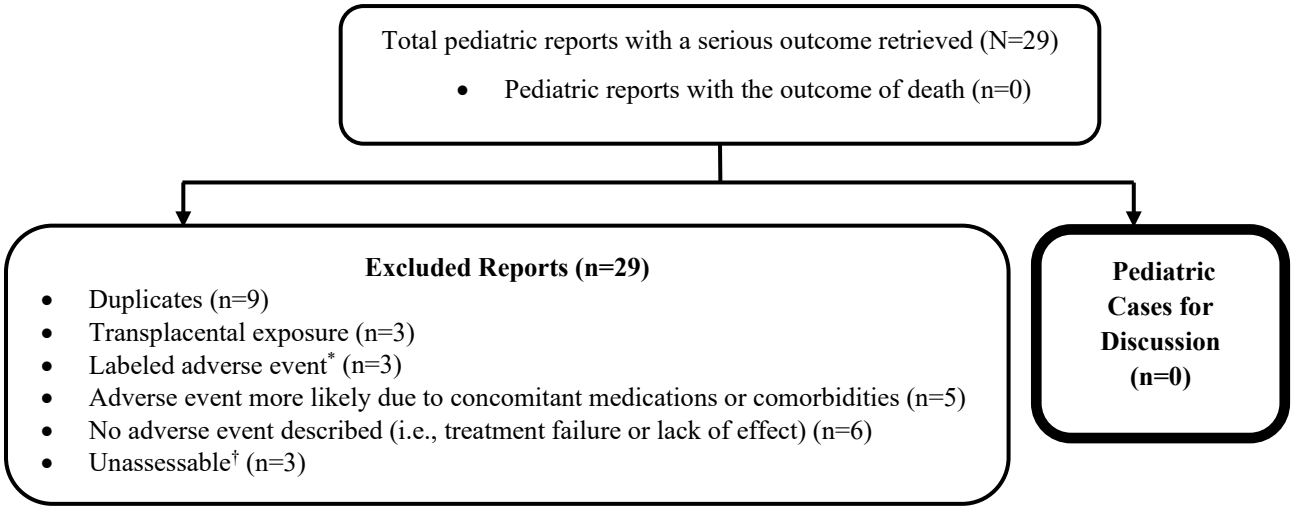
3 RESULTS

3.1 FAERS

3.1.1 Selection of U.S. Serious Pediatric Cases in FAERS

Our FAERS search retrieved 29 U.S. serious pediatric reports for patients less than 18 years old from December 28, 2018 – February 25, 2025. We excluded all 29 reports from the case series for the reasons listed in **Figure 1**. **Figure 1** presents the selection of cases for the pediatric case series.

Figure 1. Selection of U.S. Serious Pediatric Cases With Golimumab



* Labeled adverse event does not represent increased severity.
† Unassessable: The report cannot be assessed for causality because there is insufficient information reported (i.e., unknown time to event, concomitant medications and comorbidities, clinical course and outcome), the information is contradictory, or information provided in the report cannot be supplemented or verified.

3.1.2 Summary of U.S. Fatal Pediatric Cases (N=0)

There are no fatal pediatric adverse event cases for discussion.

3.1.3 Summary of U.S. Serious Non-Fatal Pediatric Cases (N=0)

There are no non-fatal pediatric adverse event cases for discussion.

4 DISCUSSION

DPV reviewed all U.S. serious FAERS reports with golimumab in pediatric patients less than 18 years of age from December 28, 2018 – February 25, 2025, and identified 29 reports; however, all reports were excluded from further discussion.

There were no new safety signals identified, no increased severity of any labeled adverse events, and no deaths directly associated with golimumab in pediatric patients less than 18 years of age.

5 CONCLUSION

DPV did not identify any new pediatric safety concerns for golimumab at this time and will continue routine pharmacovigilance monitoring for golimumab.

6 REFERENCES

1. Simponi Aria (golimumab) injection, for intravenous use. [Prescribing information]. Horsham, PA; Janssen Biotech, Inc.: July 2013.
2. Simponi Aria (golimumab) injection, for intravenous use. [Prescribing information]. Horsham, PA; Janssen Biotech, Inc.: October 2017.
3. Simponi Aria (golimumab) injection, for intravenous use. [Prescribing information]. Horsham, PA; Janssen Biotech, Inc.: September 2020.

4. Simponi Aria (golimumab) injection, for intravenous use. [Prescribing information]. Horsham, PA; Janssen Biotech, Inc.: February 2021.
5. Simponi (golimumab) injection, solution for subcutaneous use. [Prescribing information]. Horsham, PA; Centocor Ortho Biotech, Inc.: April 2009.
6. Simponi (golimumab) injection, solution for subcutaneous use. [Prescribing information]. Horsham, PA; Janssen Biotech, Inc.: September 2019.
7. Pediatric Postmarketing Pharmacovigilance Review. BLA 125289. May 28, 2019. Available at: https://www.fda.gov/media/130843/download

7 APPENDICES

7.1 APPENDIX A. FDA ADVERSE EVENT REPORTING SYSTEM (FAERS)

The FDA Adverse Event Reporting System (FAERS) is a database that contains information on adverse event and medication error reports submitted to FDA. The database is designed to support FDA's postmarketing safety surveillance program for drug and therapeutic biological products. The informatic structure of the database adheres to the international safety reporting guidance issued by the International Council on Harmonisation. Adverse events and medication errors are coded to terms in the Medical Dictionary for Regulatory Activities terminology. The suspect products are coded to valid tradenames or active ingredients in the FAERS Product Dictionary.

FAERS data have limitations. First, there is no certainty that the reported event was actually due to the product. FDA does not require that a causal relationship between a product and event be proven, and reports do not always contain enough detail to properly evaluate an event. Further, FDA does not receive reports for every adverse event or medication error that occurs with a product. Many factors can influence whether an event will be reported, such as the time a product has been marketed and publicity about an event. Therefore, FAERS data cannot be used to calculate the incidence of an adverse event or medication error in the U.S. population.