ADAMTS13 ADZYNMA
National Drug Mini-Monograph
January 2026
VA Pharmacy Benefits Management Services and National Formulary Committee

The purpose of VA PBM Services drug monographs is to provide a focused drug review for making formulary decisions. The Product Information or other resources should be consulted for detailed and most current drug information.

Abbreviations: AC, active-controlled; CO, crossover; DB, double-blind; GRADE, Grading of Recommendations, Assessment, Development, and Evaluation; MC, multicenter; MN, multinational; PC, placebo-controlled; Q, GRADE quality of evidence; RCT, randomized clinical trial

FDA PRESCRIBING INFORMATION[1]	
Description / MOA	A recombinant form of ADAMTS13, a plasma zinc metalloprotease that regulates von Willebrand factor (VWF) by cleaving large and ultra-large VWF multimers to smaller units reducing platelet binding properties and propensity to form microthrombi.
Indication Under Review	Prophylactic or on demand enzyme replacement therapy (ERT) in adult and pediatric patients with congenital thrombotic thrombocytopenic purpura (cTTP).
Dosage Regimen	Prophylactic: 40 IU/kg once every other week at 2-4 mL per minute On-demand: at 2-4 mL per minute Day 1 40 IU/kg Day 2 20 IU/kg Day 3 and beyond 15 IU/kg until 2 days after acute event is resolved
Dosage Forms Under Review	Powder for injection 500 and 1500 international units
Treatment Monitoring	□ For on demand replacement: administer daily until 2 days after acute event is resolved

EFFICACY CONSIDERATIONS

Trial 1 — **cTTP Phase 3 Study[2]**

Design — Phase 3, international, open-label, randomized, controlled, crossover

Population — Prophylaxis: N=48 ; Med Age 33 (3-68) Male 42%; Med age at diagnosis: 10

On demand: N=5 (following on-demand completion, pts could receive prophylactic doses)

Intervention — **Prophylactic Therapy**: ADAMTS13 40 IU/kg once every other week IV at 2-4 mL/minute for 6 months OR Standard Therapy (period 1); crossover to the other therapy for 6 months (period 2); then all patients received ADAMTS13 for the final 6 months (period 3)

On-Demand: ADAMTS13 40 IU/kg IV day 1, 20 IU/kg day 2, 15 IU/kg day 3 and onward until 2 days after the acute event resolved OR Standard Therapy. Then, option to join the prophylactic cohort.

Comparator — Standard Therapy: either fresh-frozen plasma, plasma treated with a solvent-detergent process, or plasma-derived factor VIII-von Willebrand factor concentrate

Results — Primary Outcome: new acute TTP events in patients receiving prophylaxis with ADAMTS13 or standard care in any treatment period. (Acute TTP Event=↓platelets by 50% or below 100,000/mcL and an elevation of LDH to >2 times baseline or upper limit of normal). N=46 in modified full analysis population with prophylaxis

Outcome	ADAMTS1	Standard Care	Annualized Event Rate (95% CI)
Acute TTP event	0	1	0.05 (0.00--0.14) for standard care
Subacute TTP event periods 1 and 2	0	5 (most frequently thrombocytopenia)	0.25 (0.05-0.53) for standard care
Subacute events period 3	2	0	0.07 (0.00-0.18) for ADAMSTS13
On-demand therapy	Improved platelet counts and increased ADAMTS13 activity		

Sub-acute event: 2 or more of the following: ↓platelets by at least 25% or to <150,000/mcL, ↑LDH to more than 1.5 x times baseline or upper limit of normal, or organ-specific signs/symptoms of TTP.

Authors' Conclusions

- ADAMTS13 is the first drug FDA approved for prophylaxis and on-demand treatment of congenital TTP.
- There were no acute TTP events with ADAMTS13 and a low number of TTP manifestations.
- ADAMTS13 had an acceptable safety profile compared to standard care
- Due to rarity of disease, the trial did not have sufficient power to detect a difference with standard of care.

SAFETY CONSIDERATIONS	
Boxed Warnings	None
Contraindications	Life threatening or hypersensitivity to ADAMTS13 or any of its components
Other Warnings	• Hypersensitivity • Immunogenicity- may develop neutralizing antibodies
Top 5 AEs	Headache, diarrhea, migraine, abdominal pain, nausea
Drug Interactions	None
Pregnancy	No data; use during pregnancy is left to the clinical judgement of the provider.
Lactation	No data;
Trial Safety Results	71% (ADAMTS13) vs 84% (SOC) during periods 1 and 2; 72% (ADAMTS13) during period 3; most mild-moderate Severe AE: 7% vs 14% during periods 1 and 2 Serious AE: no serious AE in periods 1, 2, 3 due to ADAMTS13; 1 Serious AE in period 1 related to SOC ADAMTS13: no dose interruption or discontinuation; no hypersensitivity events during prophylaxis

OTHER CONSIDERATIONS	
FDA Review	Overall risk-benefit is favorable.

THERAPEUTIC ALTERNATIVES AND THEIR PLACE IN THERAPY

- The International Society on Thrombosis and Haemostasis (ISTH)[3] for patients with cTTP in remission issued a strong recommendation for ADAMTS13 over Fresh Frozen Plasma based on a moderate certainty of evidence.
- For patients with cTTP in remission, the ISTH suggests prophylaxis with plasma infusion over watch-and-wait strategy (conditional recommendation with very low certainty of evidence.
- In FY25, the VA had 68 patients with a diagnosis of cTTP, and 2 patients on ADAMTS13.

POTENTIAL PLACE IN THERAPY OF ——	
ADAMTS13	1. Congenital TTP is a rare, thrombotic microangiopathy resulting from hereditary deficiency of ADAMTS13 which results in the accumulation of ultra large von Willebrand factor with high platelet-binding activity. The result is the formation of platelet-rich microthrombi and end-organ ischemia. Consumption of platelets results in thrombocytopenia, a hallmark of this disease. 2. For cTTP in remission, administer ADAMTS13 prophylaxis if it is available. 3. For cTTP in remission, if ADAMTS13 is not available, discuss use of Fresh Frozen Plasma in a shared decision-making process. 4. Revisit formulary decision for ADAMTS13 as more data becomes available for acquired/autoimmune thrombotic thrombocytopenic purpura.

Revisions:
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Contact person: Mark C. Geraci, Pharm.D., BCOP, National Program Manager, VA Pharmacy Benefits Management Services – Formulary Management (12PBM)

References

1 Adzynma (ADAMTS13) powder for injection, Lexington, MA: Takeda Pharmaceuticals November 2023. Available at: https://content.takeda.com/?contenttype=PI&product=ADZ&language=ENG&country=USA&documentnumber=1 Accessed: January 20, 2026.

2 Scully M, Antun A, Cataland SR, et al. Recombinant ADAMTS13 in congenital thrombocytopenia purpura. New Eng Med 2024; 390: 1584-96.

3 Sheng XL, Al-Housni A, Cataland SR, et al. 2025 focused update of the 2020 ISTH guidelines for management of thrombotic thrombocytopenic purpura. J Thromb Haemostasis2025; 23: 3711-332.