# **cTTP** and the role of **ADAMTS13**

Congenital TTP (cTTP)

First described in 1924.

# **Thrombotic Thrombocytopenic** Purpura (TTP):

A rare blood-clotting disorder characterized by clotting in small **blood vessels** that can limit or block the flow of blood to vital organs.1

**Underlying Cause** 

An ultra-rare inherited form of TTP ADAMTS13 deficiency due to estimated to affect nearly mutations in the gene for ADAMTS13.2,3

0.5 to 2 per 1,000,000 persons<sup>4</sup>

#### Age of Onset<sup>2</sup>

cTTP symptoms often present in childhood prior to 10 years of age. However, many people with cTTP experience disease onset in early adulthood, often during a first pregnancy.



**PREGNANCY** 



## Life-threatening acute TTP events marked by:

**Thrombocytopenia** (significant reduction in platelets)

Microangiopathic Hemolytic Anemia (destruction of red blood cells)

Renal Failure

Neurologic involvement

Symptoms -

Thrombocytopenia

Microangiopathic Hemolytic Anemia

Neurologic involvement

Renal Failure

## Chronic symptoms including:<sup>3</sup>

Brain Fog | Tiredness | Fever Headaches | Abdominal Pain

If left untreated, acute TTP episodes are reported to have a mortality rate that exceeds 90%



#### **Burden of Chronic cTTP**

Risk of acute TTP events<sup>2</sup> Long-term organ damage<sup>2</sup> Cognitive impairment<sup>3,5</sup> Depression<sup>6</sup> Shortened life expectancy<sup>7</sup> Chronic Symptoms ——

**Tiredness** 

Headaches

**Abdominal Pain** 

Brain Fog

Fever



References: 1. Moschcowitz E. Hyaline thrombosis of the terminal arterioles and capillaries: a hitherto undescribed disease. Proc N Y Path Soc. 1924:21-24. 2. Van Dorland H et al. Haematologica 2019;104:2107-16 3. Alwan F, et al., Blood. 2019;133:1644-51 4. Sukumar S, Lämmle B, Cataland SR. Thrombotic Thrombocytopenic Purpura: Pathophysiology, Diagnosis, and Management. J Clin Med. 2021 Feb 2;10(3):536. 5. Alwan F, et al. Br J Haematol. 2020;191(5):868-874 **6.** Chaturvedi S, et al. Thromb Res. 2017;151:51-56. **7.** George JN, Hematology Am Soc Hematol Educ Program.