Patients may present with the following signs and symptoms

**Thrombocytopenia**¹⁻³
- Purpura
- Petechiae
- Prolonged bleeding
- Bleeding from gums or nose
- Blood in urine or stool, or bleeding from rectum
- Abnormal vaginal bleeding
- Headaches
- Easy bruising, retinal hemorrhage, and hemoptysis

**Microangiopathic hemolytic anemia**⁴
- Fatigue
- Dyspnea
- Dark urine
- Back pain
- Jaundice
- Paleness
- Resting tachycardia with flow murmur

**Organ injury/AKI**³⁻⁵
- Acute kidney injury
  - Listlessness
  - Confusion
  - Fatigue
  - Anorexia
  - Nausea
  - Vomiting
  - Proteinuria
  - Weight gain
  - Edema
  - Oliguria/Anuria
  - Uremic encephalopathy
    - Decline in mental status, asterixis, neurologic symptoms
    - Anemia
  - Uremic platelet dysfunction
  - Microhematuria

**Patients may also present with other signs and symptoms**³⁻⁴⁻⁶⁻⁸
- CNS symptoms: Weakness, transient focal neurologic abnormalities, confusion, headache, paresis, aphasia, dysarthria, visual problems, encephalopathy, seizures, altered consciousness, coma
- Cardiac symptoms: Chest pain, heart failure, hypotension, hypertension, myocardial infarction
- GI symptoms: Severe abdominal pain, diarrhea, pancreatitis, vomiting
- Pulmonary symptoms: Dyspnea, pulmonary hemorrhage, pulmonary edema

TMAAs are a group of disorders characterized by thrombocytopenia, microangiopathic hemolytic anemia, and organ dysfunction, which can affect the brain, kidneys, heart, pancreas, liver, lungs, eyes, and skin.
TMA can also manifest in the presence of clinical conditions such as the following:

- Pregnancy-postpartum
- Malignant/severe hypertension
- Solid organ transplantation

And:

- Autoimmune disease (eg, SLE, scleroderma)
- Hematopoietic stem cell transplantation

Common Signs and Symptoms:

**Neurological symptoms**
- Confusion and/or
- Seizures and/or
- Stroke and/or
- Other cerebral abnormalities

**Renal impairment**
- Elevated creatinine level and/or
- Decreased eGFR and/or
- Elevated blood pressure and/or
- Abnormal urinalysis results

**GI symptoms**
- Diarrhea ± blood and/or
- Nausea/vomiting and/or
- Abdominal pain and/or
- Gastroenteritis/pancreatitis

Other Signs and Symptoms:

**CV symptoms**
- MI and/or
- Hypertension and/or
- Arterial stenosis and/or
- Peripheral gangrene

**Pulmonary symptoms**
- Dyspnea and/or
- Pulmonary hemorrhage and/or
- Pulmonary edema

**Visual symptoms**
- Pain and blurred vision and/or
- Retinal vessel occlusion and/or
- Ocular hemorrhage

Evaluate ADAMTS13 activity and Shiga toxin/EHEC test

While ADAMTS13 results are awaited, a platelet count >30 x 10^9/L and/or sCr >1.7 to 2.3 mg/dL almost eliminates a diagnosis of severe ADAMTS13 deficiency (TTP).

- ≤5% ADAMTS13 activity
  - TTP

- >5% ADAMTS13 activity
  - Atypical-HUS

- Shiga toxin/EHEC positive
  - STEC-HUS

TMA can also manifest in the presence of clinical conditions such as the following:

- Pregnancy-postpartum
- Malignant/severe hypertension
- Solid organ transplantation

Shiga toxin/EHEC test is warranted with history/presence of GI symptoms. Range found in published literature is <5%-10%.