**WHAT IS ET?**

ET is a specific type of myeloproliferative neoplasm, or MPN. (e-SEN-chel throm-bo-sigh-THEE-me-uh)

**ET IS:**
- A rare blood cancer in which a person's body makes too many blood platelets (also known as thrombocytes)
- Platelets in patients with ET may not function appropriately, and cause a blockage in blood vessels, or less commonly, bleeding problems
- Also known as primary thrombocythemia

**HOW COMMON IS ET?**

- ET is more common in people older than 50 years of age
- About 50% of the people with ET have a specific mutation—in a certain gene in the body called the Janus Kinase 2 (JAK2) gene
- About 50% of people with ET have an enlarged spleen
- Common complications include:
  - Clotting complications
  - Progression to another MPN, such as myelofibrosis (MF)
  - Progression to acute leukemia

**WHAT CAUSES ET?**

The cause of ET is not fully understood

JAK2 Mutation

- Genes: JAK2 is a gene that contains instructions for making a protein called JAK2
- JAK2 is abnormally activated
- JAK2 is inherited

**WHAT FACTORS AFFECT THE COURSE OF ET?**

- Whether the patient has a history of a clot, or other risk factors like diabetes or high cholesterol
- The type and amount of medications taken
- The response to treatment

**WHAT ARE THE SIGNS AND SYMPTOMS OF ET?**

Some people with ET have symptoms. They may not know they have the condition until they develop a blood clot or other complication

**WHAT OTHER HEALTH PROBLEMS CAN ET CAUSE?**

ET can cause more serious problems, including:

- Headaches
- Dizziness
- Blood clots
- Clots caused by ET most often happen in the brain, hands, and feet
- Itching
- Night sweats
- Fatigue or weakness
- Burning or throbbing pain in the feet or hands
- Some people with ET have symptoms. They may not know they have the condition until they develop a blood clot or other complication

**WHAT IS THE PROGNOSIS?**

ET typically does not change the lifespan

- Hematological: medical supervision is important to prevent or treat complications
- Primary MPN-related complications in patients who do not receive treatment are significant
- Long-term outcomes in patients who receive treatment are not yet well understood

**HOW IS ET DIAGNOSED?**

Doctors may perform tests that look for:

- • A high platelet count that persists over time
- • The presence of the JAK2 or other genetic mutation
- • No evidence of a different condition causing increased platelet counts

Some of the blood and bone marrow tests used to help confirm a diagnosis of ET may include:

- Complete blood count (CBC)
- Blood smear
- Genetic testing
- Bone marrow aspiration
- Bone marrow biopsy

**HOW IS ET MONITORED?**

- Doctors may monitor people who have ET with periodic tests to check their platelet count or to look for other complications
- Some patients may not have symptoms from ET. If you are affected by ET, your symptoms, blood counts, and even your feelings can help you identify where you are on your journey with ET.