Thrombocytosis is an elevated platelet count. Platelets are microscopic particles in the blood that are necessary for normal blood clotting. A normal platelet count is 150,000 to 450,000/mm³. They are produced in the bone marrow.

Essential thrombocytosis (ET, aka thrombocythemia) is overproduction of platelets by the bone marrow in the absence of another identifiable cause. Reactive thrombocytosis and other primary hematological disorders must be ruled out before the diagnosis is made because elevated platelet counts can be a sign of serious underlying illness such as polycythemia vera, myelofibrosis, myelodysplasia, leukemia, other malignancies, and bone marrow diseases. Platelet counts can be expected to rise with acute hemorrhage and after the spleen has been removed.

ET is usually asymptomatic, even when platelet counts are very high (> 1 million), but on occasion, it is associated with a thromboembolic event (such as clots, MI, TIA/stroke) or abnormal bleeding. Lesser problems include migraines, erythromelalgia (pain and redness), burning sensation, and acrocyanosis.

Appropriate work-up includes bone marrow biopsy and aspiration, iron studies, leukocyte alkaline phosphatase, and molecular studies for BCR-ABL.

Treatment with aspirin is common, especially to relieve symptoms of erythromelalgia and burning sensation, but it can increase the risk of hemorrhage. Severe cases require other treatment choices as hydroxyurea, interferon alpha, and others.

Platelet counts can rise in reaction to some other conditions (as stated above). Their risk must be assessed in the context of the underlying condition.

**UNDERWRITING CONSIDERATIONS**

- For essential thrombocytosis (aka thrombocythemia), the applicant must have had an evaluation by a hematologist to definitively make the diagnosis and to rule out other hematological disorders such as burgeoning leukemia. If applicant has not seen a hematologist, the case will be postponed for a minimum of three years since the first appearance of a high platelet count (> 500,000).

- The rest of the CBC should be within normal limits to be considered.

- When thrombocytosis appears in combinations with other disorders prone to clotting or hemorrhagic events (such as carotid disease, coronary artery disease, atrial fibrillation), the case will generally be declined.

- A rising platelet count implies an unfavorable prognosis and is generally postponed.

- If essential thrombocytosis, and no physician consulted within 5 years, the case will be postponed for current evaluation.
If an adult and it’s unknown if disease is essential or reactive, it will be underwritten as essential.

### ESSENTIAL THROMBOCYTOSIS

<table>
<thead>
<tr>
<th>Value Range</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 650,000</td>
<td>Table B</td>
</tr>
<tr>
<td>650,000 to 1 million</td>
<td>Table C</td>
</tr>
<tr>
<td>&gt; 1.0 million</td>
<td>Decline</td>
</tr>
</tbody>
</table>

Treatment (past or present) with anagrilide or hydroxyurea, with or without single hemorrhagic or clotting event, using highest known value since stabilized on medication.

<table>
<thead>
<tr>
<th>Value Range</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 650,000</td>
<td>Postpone one year after any hemorrhagic or clotting event or medication change, then Table D.</td>
</tr>
<tr>
<td>Others</td>
<td>Decline</td>
</tr>
<tr>
<td>Treatment (past or present) with 32P or alkylating agents</td>
<td>Decline</td>
</tr>
</tbody>
</table>

### REACTIVE THROMBOCYTOSIS OR UNEXPLAINED THROMBOCYTOSIS

<table>
<thead>
<tr>
<th>Value Range</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 500,000</td>
<td>Rate for cause</td>
</tr>
<tr>
<td>Others</td>
<td>Individual consideration</td>
</tr>
</tbody>
</table>

To get an idea of how a client with a history of Thrombocytosis would be viewed in the underwriting process, use the Ask “Rx”pert Underwriter on the next page for an informal quote.
**Ask “Rx”pert Underwriter (Ask Our Expert)**

After reading the *Rx for Success* on Thrombocytosis, use this form to Ask “Rx”pert Underwriter for an informal quote.

| Producer ____________________________ | Phone ____________________________ | Fax ____________________________ |
| Client ____________________________ | Age/DOB ____________________________ | Sex ____________________________ |

If your client has a history of Thrombocytosis, please answer the following:

1. **When was Thrombocytosis diagnosed?**
   
   ___________________________________________________________

2. **What were the bone marrow results?**
   
   ___________________________________________________________

3. **How is it being treated?**
   
   ___________________________________________________________

4. **Date and results of the most recent CBC.**
   
   - [ ] Hemoglobin (Hb)
   - [ ] Hematocrit (Hct)
   - [ ] White blood count (WBC)
   - [ ] Platelet count (plct)

5. **What other medical conditions does the client have?**
   
   ___________________________________________________________

6. **List all medications.**
   
   ___________________________________________________________

7. **Does the client smoke?**
   
   - [ ] Yes
   - [ ] No