<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Comments</th>
</tr>
</thead>
</table>
| **Hypertension**                  | • One of the most important modifiable risk factors for ischemic and spontaneous hemorrhagic stroke  
• Risk of hemorrhagic stroke increases markedly with elevations in systolic pressure  
• Control of hypertension significantly decreases the risk of stroke |
| **Cigarette smoking**             | • All of the following smoking effects have been linked to stroke:  
  – Accelerated atherosclerosis  
  – Transient elevations in blood pressure  
  – Release of toxic enzymes (linked to formation of aneurysms)  
  – Altered platelet function and reduced platelet survival  
• Cessation of cigarette smoking reduces the risk of stroke |
| **Transient ischemic attack**     | • Highly significant indicator of a person at increased risk for stroke  
• 25% of stroke patients have had a previous TIA  
• 10% of patients presenting to an ED with TIA will have a completed stroke within 90 days; half of these within the first 2 days  
• Antiplatelet agents (eg, aspirin, clopidogrel) can reduce the risk of stroke in patients with TIA |
| **Heart disease**                 | • Coronary artery disease and heart failure double the risk of stroke  
• Atrial fibrillation increases the risk of embolic stroke  
• Oral anticoagulants, given to patients with atrial fibrillation, reduce the risk of embolic stroke |
| **Diabetes mellitus**             | • Highly associated with accelerated atherosclerosis  
• Careful monitoring and control of hyperglycemia reduce the risk of microvascular complications due to diabetes, and reduction of microvascular complications reduces stroke risk |
| **Hypercoagulopathy**             | • Any hypercoagulative state (eg, protein S or C deficiency, cancer, pregnancy) increases the risk of stroke |
| **High RBC count and sickle cell anemia** | • A moderate increase in RBC count increases the risk of stroke  
• Increases in RBC count can be treated by removing blood and replacing it with intravenous fluid or by administering an anticoagulant  
• Sickle cell anemia increases the risk of stroke because “sickled” red blood cells can clump, causing arterial occlusion. Stroke risk from sickle cell anemia may be reduced by maintaining adequate oxygenation and hydration and by providing exchange transfusions. |
| **Carotid bruit**                 | • Carotid bruits often indicate partial obstruction (atherosclerosis) of an artery  
• Carotid bruits are associated with an increased risk of stroke  
• This risk is reduced by surgical endarterectomy but only in symptomatic patients with >70% stenosis  
• Some evidence suggests that carotid endarterectomy is beneficial in selected asymptomatic patients with high-grade stenosis |

Abbreviations: ED, emergency department; RBC, red blood cell; TIA, transient ischemic attack.