Bleeding and VTE risk assessment in Medical Patients:

Medical Patients:
Definition: any patient without a surgical procedure during their admission

1. Bleeding risk assessment

Contraindication to pharmacologic prophylaxis:
- Active hemorrhage
- Thrombolytics used within the past 24 hours

Strong bleeding risk association:
- Active gastroduodenal ulcer
- Bleeding in the 3 months before admission
- Platelet count < 50 x 10^9/L

Other considerations for bleeding risk (these are NOT contraindications to heparin agents)
- Age ≥ 85
- Hepatic failure (INR > 1.5)
- Severe renal failure (CrCl < 30 mL/min)
- ICU or CCU admission
- Central venous catheter
- Rheumatic disease
- Males
- Dual antiplatelet therapy

2. VTE Risk Assessment

Padua Prediction Score:

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Cancer</td>
<td>3</td>
</tr>
<tr>
<td>Previous VTE</td>
<td>3</td>
</tr>
<tr>
<td>Reduced Mobility</td>
<td>3</td>
</tr>
<tr>
<td>Thrombophilic Condition</td>
<td>3</td>
</tr>
<tr>
<td>Recent (&lt; 1month) trauma/surgery</td>
<td>2</td>
</tr>
<tr>
<td>Age ≥ 70 years</td>
<td>1</td>
</tr>
<tr>
<td>Heart or Respiratory Failure</td>
<td>1</td>
</tr>
<tr>
<td>Acute Myocardial Infarction or Ischemic Stroke</td>
<td>1</td>
</tr>
<tr>
<td>Acute Infection or Rheumatologic Disorder</td>
<td>1</td>
</tr>
<tr>
<td>BMI ≥ 30</td>
<td>1</td>
</tr>
<tr>
<td>Ongoing Hormonal Treatment</td>
<td>1</td>
</tr>
</tbody>
</table>

Active Cancer: local or distant metastases and with chemo or radiotherapy in previous 6 months
Mobility: anticipated bed rest with bathroom privileges for at least 3 days

2. Kahn S. CHEST. 2012; 141:195s-226s
**Assessment:**
- **Low VTE Risk:** < 4 points – no VTE prophylaxis is needed
- **High VTE Risk:** ≥ 4 points – choose a pharmacologic agent only (if low bleed risk)
- **High VTE and Bleed Risk** – choose sequential compression devices

**Validation:**
VTE occurred in 11% of high risk patients who did not receive VTE prophylaxis vs 0.3% of low risk patients.

**VTE Risk Assessment for Critically Ill Medical Patients:**

All critically ill medical patients are considered a high risk for VTE. Determine the most appropriate VTE prophylaxis based on bleeding risk for the patient.

- **High VTE Risk with Low Bleed Risk:** choose a pharmacologic agent only
- **High VTE Risk with High Bleed Risk:** choose sequential compression devices