# C04 Deep-Vein Thrombosis

Develop a diagnosis concept set for *Acute Proximal Lower-Extremity Deep-Vein Thrombosis* (*LE-DVT*)—an incident, clinically acute thrombus in popliteal or more proximal deep veins—to support a cancer-associated thrombosis phenotype. The set must represent current, incident proximal LE-DVT (including incidental events).

This concept set will support an observational study that aims to answer the following research question: Among adults with active malignancy receiving therapeutic anticoagulation, what is the comparative effectiveness of drug A to prevent *Lower-Extremity Deep-Vein Thrombosis*.

The concept set will be used in the phenotype of the outcome *Lower-Extremity Deep-Vein Thrombosis*.

**Clinical case definition:** An acute thrombus in the proximal deep veins of the lower extremity—popliteal, femoral (common/superficial), deep femoral, iliac, or inferior vena cava segments—presenting symptomatically (e.g., unilateral leg swelling/pain) or incidentally on imaging in a patient with active malignancy.

## Diagnostic criteria (objective confirmation).

- Compression duplex ultrasound documenting non-compressibility/intraluminal thrombus in proximal segments; or
- CT/MR venography confirming proximal LE thrombus. (Imaging evidence is captured by procedure codes in the phenotype but not embedded inside this condition concept set.)

**Presentation & course (typical).** Acute onset limb swelling, pain, warmth; occasionally asymptomatic if discovered during cancer imaging. Risk of extension/embolization without treatment.

Differential diagnoses (Conditions to be distinguished and not considered inclusive). Isolated distal calf DVT (peroneal/posterior/anterior tibial, muscular veins), superficial thrombophlebitis, chronic post-thrombotic changes, lympema/venous insufficiency, cellulitis, Baker cyst.

**Common treatments/management (positive proxies).** Therapeutic-intensity DOACs (apixaban/rivaroxaban/edoxaban) or LMWH, less commonly VKA; in select cases thrombectomy/thrombolysis/IVC filter. (Treatment will be enforced by phenotype logic; do not add drug codes to this condition concept set.)

#### **Clinical Scope and Granularity**

- Disease entity: Acute thrombus in proximal lower-extremity deep veins—popliteal, femoral (common/superficial), deep femoral, iliac, or IVC—typically presenting with unilateral leg swelling, pain, warmth; may be incidentally detected on imaging in oncology care. Objective confirmation usually by compression duplex ultrasound or CT/MR venography.
- **Temporality:** Incident/current event only; remote or resolved events are out of scope.
- **Severity & acuity:** All acute severities are in scope, including iliofemoral extension and IVC involvement when proximal LE origin is explicit.
- **Etiology**: Any cause (including cancer-associated or postoperative) provided location is proximal LE; pregnancy-related VTE is not within scope.
- Anatomy: Deep and proximal veins only (ex. thrombophlebitis is not in scope).
- **Population:** adults or pediatrics.
- **Ambiguity tolerance:** Prefer site-specific proximal terms; avoid broad/unspecified venous thrombosis labels unless clearly proximal LE.

## Related, differential conditions or comorbidities that are not sufficient for inclusion

- Distal calf DVT (peroneal/posterior/anterior tibial, muscular veins).
- Superficial vein thrombosis (e.g., great saphenous).
- Chronic post-thrombotic changes; lymphedema; venous insufficiency; cellulitis; Baker cyst.
- Upper-extremity DVT; pulmonary embolism.

# **Synonyms**

- Proximal lower-extremity DVT
- Iliofemoral DVT
- Femoral vein thrombosis
- Popliteal vein thrombosis
- Iliac vein thrombosis
- Lower-limb DVT—proximal