

Infections



Description:

Infections can induce thrombocytopenia via multiple distinct mechanisms:

- Direct impairment of hematopoiesis: e.g., Parvovirus, Cytomegalovirus (CMV), Epstein-Barr virus (EBV), and many others; typically compromises all cell lines; predominantly transient.
- Immunological phenomena: Production of pathogen-directed antibodies that cross-react with platelet antigens or hematopoietic antigens.
- Coagulation, endothelial cell, and platelet activation: Formed as part of a systemic host response, presenting similarly to disseminated intravascular coagulation (DIC).

Diagnostics:

- Pathogen detection (frequently unachievable)

Treatment:

- Antimicrobial treatment targeted at the underlying etiology
- Corticosteroids for immune-mediated reactions
- Guideline-compliant management of sepsis

References:

Thomas L, Labor und Diagnose, 2023, Release 5: <https://www.labor-und-diagnose.de/index.html>

Parameterkatalog des Klinischen Instituts für Labormedizin, Med.Univ.Wien und AKH Wien:

<https://www.akhwien.at/default.aspx?pid=3982>

Leistungsverzeichnis der Klinischen Chemie, Univ.Klinikum Ulm:

<https://www.uniklinik-ulm.de/zentrale-einrichtung-klinische-chemie/leistungsverzeichnis.html>

Prescott HC, et al. Surviving Sepsis Campaign: international guidelines for management of sepsis and septic shock 2026. Intensive Care Med. 2026 May;52(5):863-936. doi:

[10.1007/s00134-026-08361-1](https://doi.org/10.1007/s00134-026-08361-1).