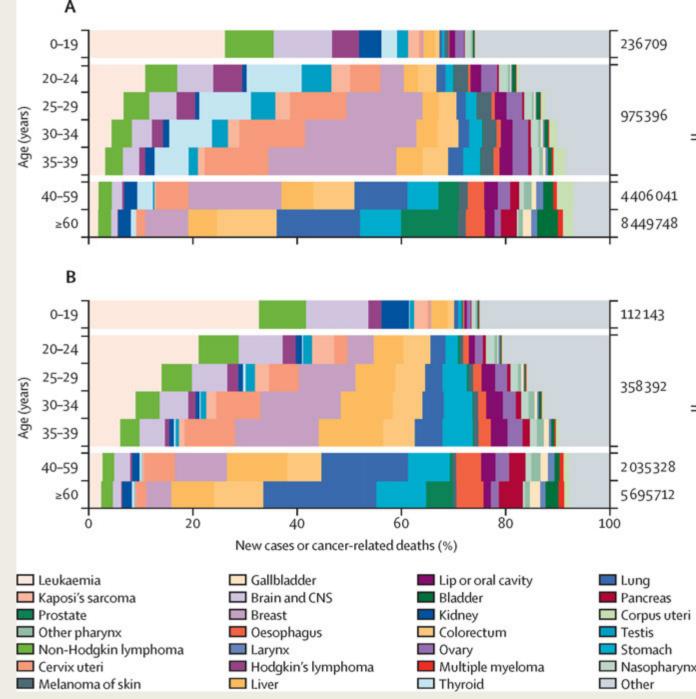
# MONONUCLEOSIS MIMICKING MALIGNANCY

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# Introduction

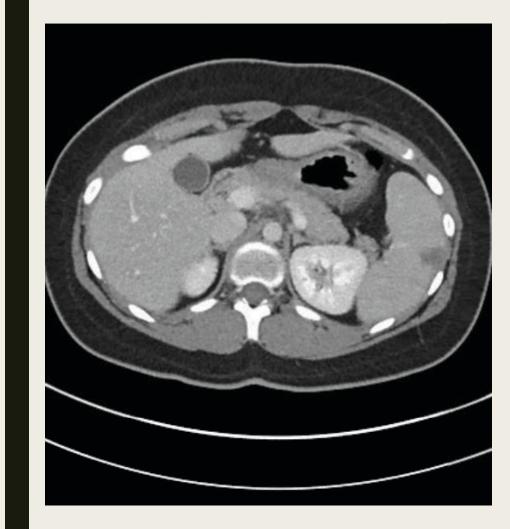
- Symptom overlap
- Demographic overlap
- EBV-associated lymphoproliferative disease
  - Burkitt lymphoma
  - Hodgkin lymphoma
  - DLBCL
- Occurrence of thrombosis
  - EBV: transient elevation of APLA, endothelial damage; rare (Huzmeli et al 2016)
  - Malignancy: cancer cell activation of coagulation cascade, prothrombotic treatments; major cause of mortality in oncology patients (Razak et al 2018)



Fidler et al, "Cancer incidence and mortality among young adults aged 20–39 years worldwide in 2012." Lancet

## Case

- 19yoF PMH hypothyroidism p/w 2 weeks of anorexia c/b 20 lb wt loss, fevers, and abdominal pain
- Found to have a 2 cm wedge-shaped splenic infarct on CT @ OSH for which she was transferred
- No hx of pharyngitis, multiple Monospot tests negative
- Labs: Transaminitis, AKI, increased reactive lymphocytes (17%) and elevated LDH (513)
- Negative studies: CTA, echo, LE doppler, blood cultures, HIV, CMV, Lyme, ANA, APL, beta-2-glycoprotein, anti-cardiolipin Abs
- Ultimately, EBV IgM came back as positive



### Discussion

- Splenic infarct is a rare complication of CMV, EBV, Lyme, and Babesia infections
- There is significant overlap in age range that both young adult cancers and mononucleosis usually present
- Heterophile antibody testing is insensitive especially early in disease course
  - Up to 25% of cases are falsely negative in 1<sup>st</sup> week of illness
  - Up to 10% of cases are falsely negative in 2<sup>nd</sup> week of illness

# Questions?

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