

Evaluation of an elevated Serum LD

(> 300 U/L)

Suggested scheme for evaluation of a high serum LD

Possible causes

Further investigations

Exclude

<i>In vitro</i> Haemolysis	High K ⁺ values and/or
delayed serum separation	High PO ₄ values
Elevated haemolysis index (HI)	

Serum LD > 4,000 U/L

Consider

Malignancy
Pernicious anaemia
(values for pernicious anaemia may exceed 9,000 U/L)

Serum LD < 4,000 U/L

Liver disease

LFTs

Hepatocellular
Cholecystitis

Cardiac disease

AST: Elevated
CK: Elevated

Infarction
Myocarditis
CCF
Metal Heart valve

Pulmonary disease

AST: Normal

Embolism
Pneumonia

Muscle disease

AST: Elevated
CK: Elevated

Injury
Severe exercise
Muscular dystrophies

Haematological

Blood examination
Serum Bilirubin
Serum Haptoglobin

Haemolysis (*in vivo*)
Megaloblastic anaemia
Leukaemia
Lymphoma

Malignancy

Clinical assessment

All malignancies
(25–80% have an elevated LD)

Infections

Clinical assessment

Viral
Bacterial
Glandular Fever

Autoimmune disorders

Clinical assessment
RF, anti CCP, ANA,
anti DS DNA

Dermatomyositis
Scleroderma
Sjögren's Syndrome
Vasculitis

Cause unclear

LD-isoenzyme evaluation
Macro LDH (LD electrophoresis)