A Appendix

Table A.1: Example of human-generated explanatory data

Key	Value
problem	A 45-year-old woman. She was noted to have liver dysfunction in two consecutive yearly company health examinations and came to our hospital. She does not drink alcohol. Her height is 158 cm and her weight is 46 kg. Abdominal examination reveals no abnormalities, and the liver is not palpable. Blood chemistry findings: fasting blood glucose 86 mg/dL, total protein 7.6 g/dL, AST 62 U/L, ALT 106 U/L, ALP 200 U/L (reference range $\leq$260), γ-GTP 35 U/L (reference range 8–50). Which autoantibodies are useful for diagnosis? Choose two.
choices	a. Anti-nuclear antibody (ANA) b. Anti-ENA antibody c. Anti-Jo-1 antibody d. Anti-smooth muscle antibody (ASMA) e. Anti-mitochondrial antibody (AMA)
explanation	A young female with no history of alcohol consumption presenting with liver function abnormalities. While AST and ALT show mild elevations, ALP and γ-GTP remain within normal limits, suggesting autoimmune hepatitis. a and d are correct: anti-nuclear antibodies and anti-smooth muscle antibodies are positive in autoimmune hepatitis. b Anti-ENA antibodies are elevated in systemic lupus erythematosus (SLE), Sjögren's syndrome, mixed connective tissue disease (MCTD), etc. Note that patients with autoimmune hepatitis may also have comorbidities such as Sjögren's syndrome or Hashimoto's disease. *Currently, anti-ENA antibody testing is not covered by insurance and is not generally performed. c Anti-Jo-1 antibody is elevated in polymyositis/dermatomyositis. e Anti-mitochondrial antibody is elevated in primary biliary cholangitis (PBC).
answer	a, d