

a) Ruled out Auto Dom.: 2 normal parents (II 5 & II 6) cannot have affected child (III 6)



b) Ruled out X-Dom.: Normal mother (III 5) cannot have affected son (IV 2)



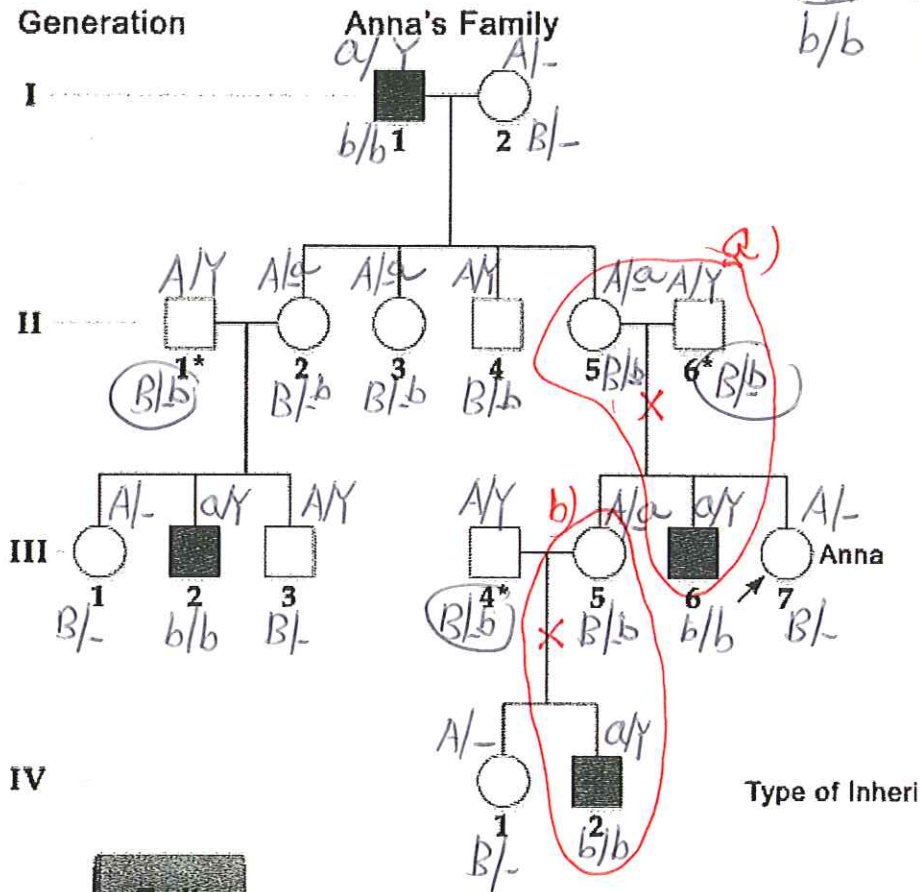
c) cannot rule out Auto Rec, X-Rec

X-Rec

Aff Nor  
a/a A/-  
a/Y A/Y

Auto-Rec

Aff Nor  
b/b B/-



Although we cannot rule out auto Rec, ~~the chance~~ it is unlikely to have all the outsiders (II 1, II 6, III 4) who married into the family to be all carriers. For a rare trait, a normal outsider usually is homozygous normal; not carrier.

Therefore, it is most likely to be a X-Rec inheritance for Anna's family.