

# bayesian updating

# early HIV testing in the military

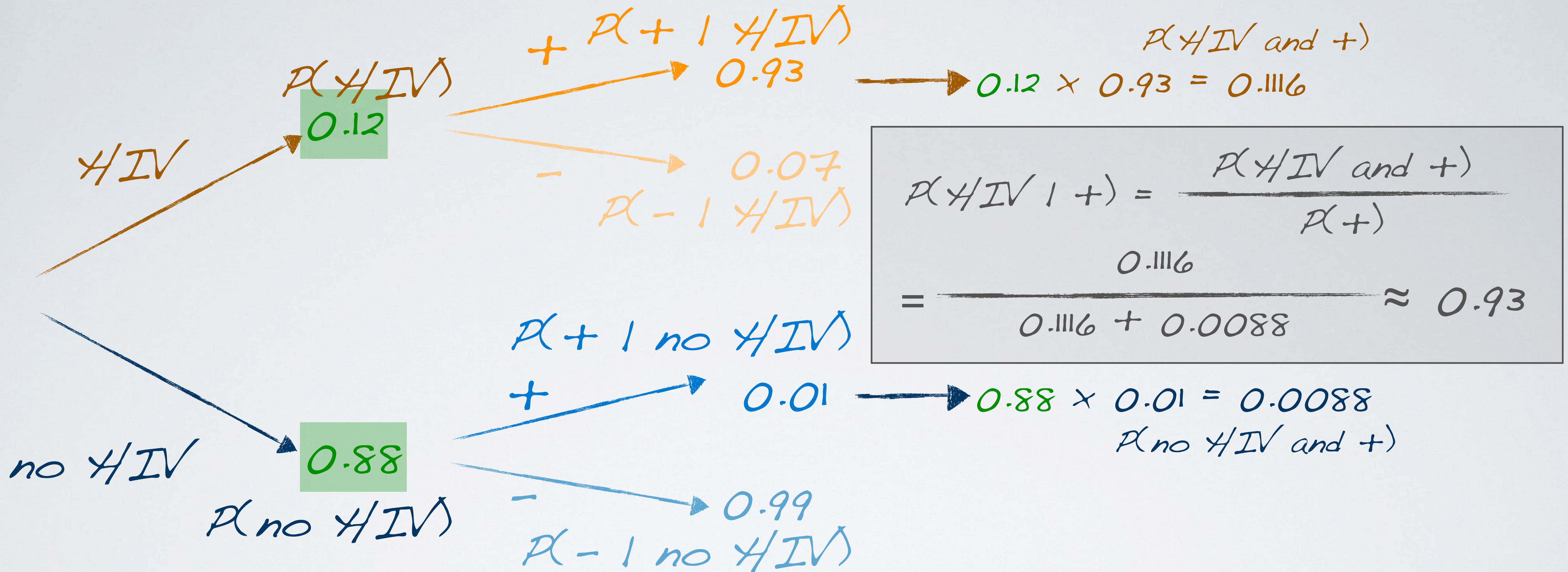
- ▶ first screen with ELISA
- ▶ if positive, two more rounds of ELISA
- ▶ if either positive, two Western blot assays
- ▶ only if both positive, determine HIV infection



## retesting

Since a positive outcome on the ELISA doesn't necessarily mean that the recruit actually has HIV, they are retested. What is the probability of having HIV if this second ELISA also yields a positive result?

# retesting





# summary

- ▶ individual vs. group diagnostics
- ▶ updating only the prior vs. also updating sensitivity and specificity
- ▶ Bayesian updating