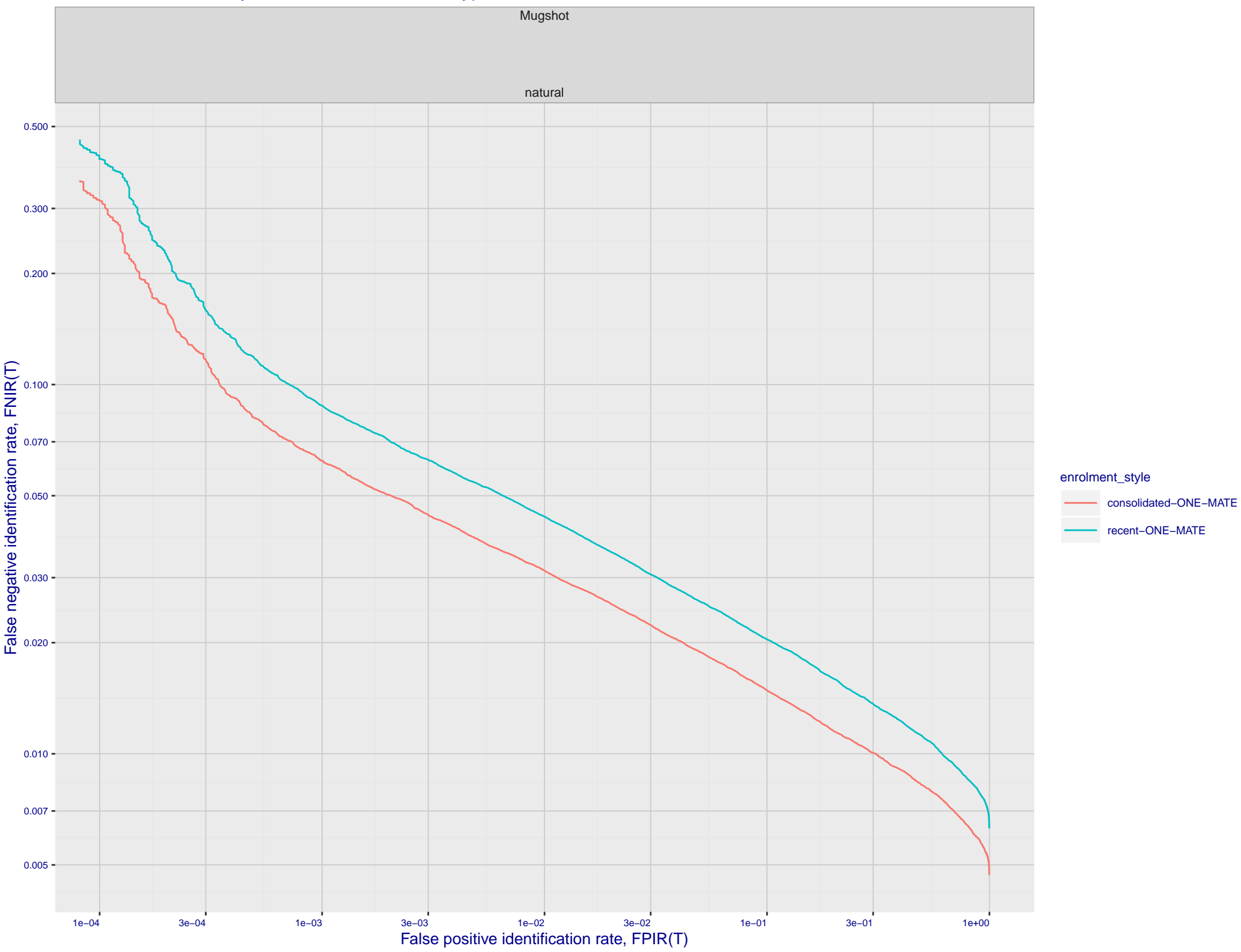
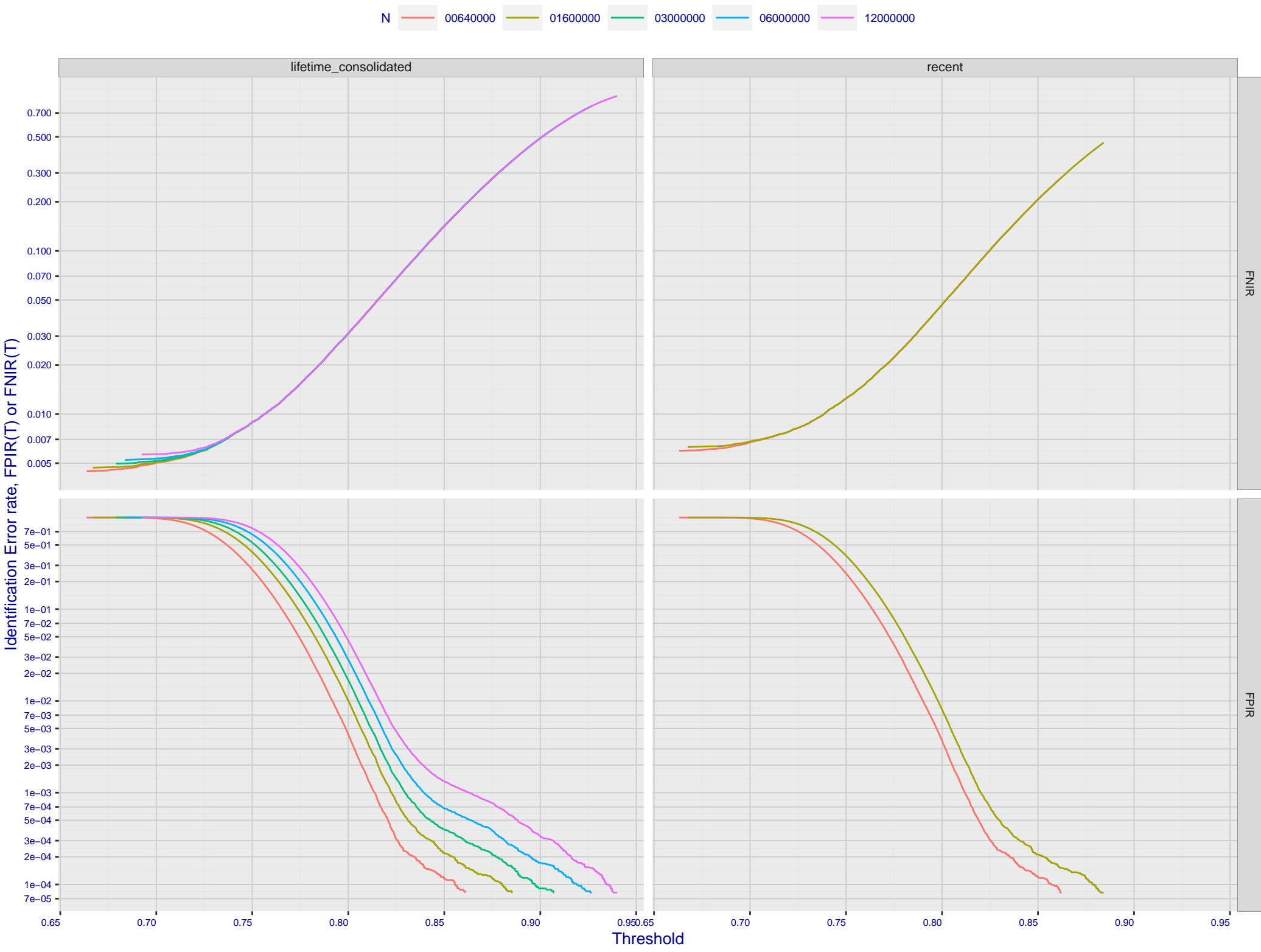


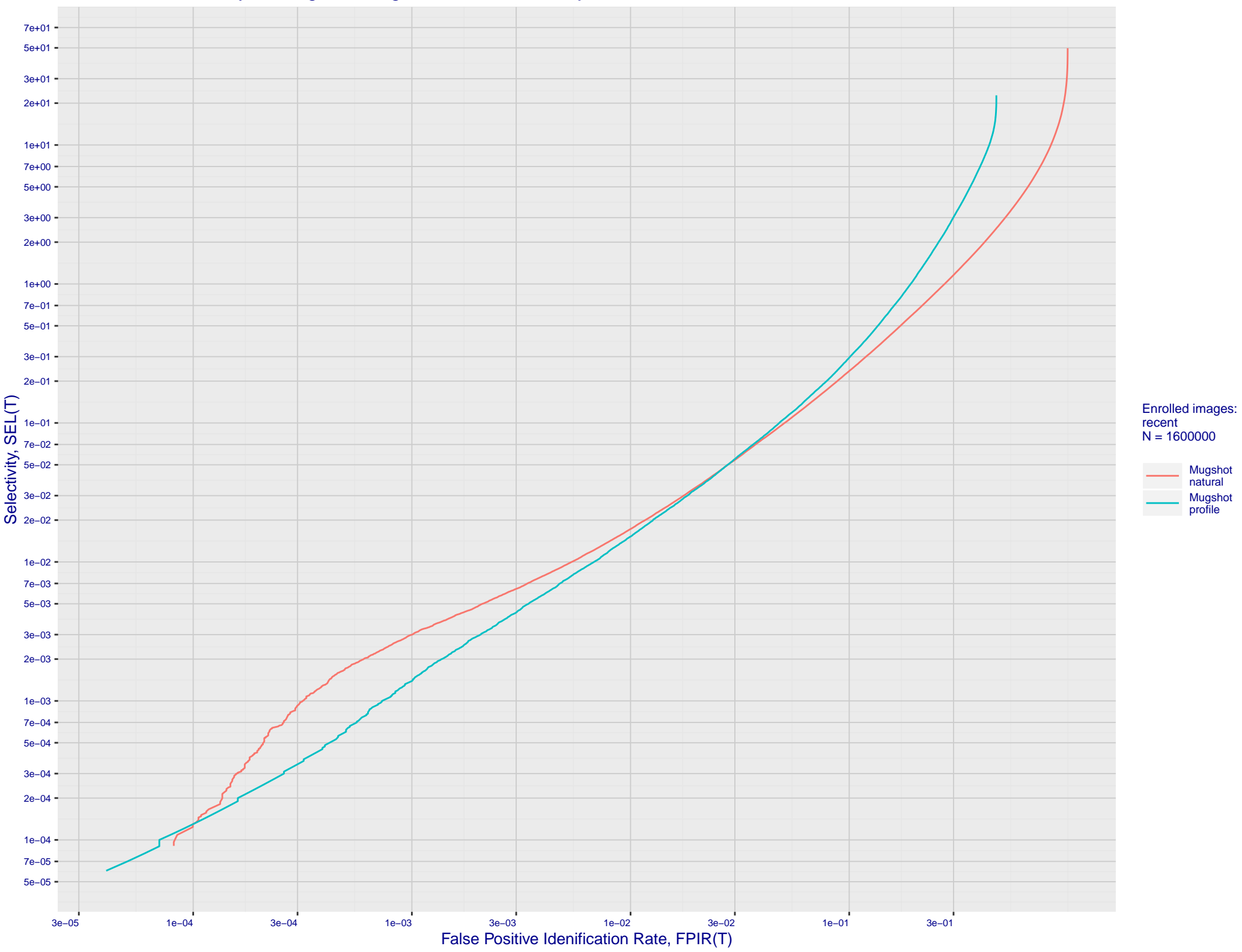
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



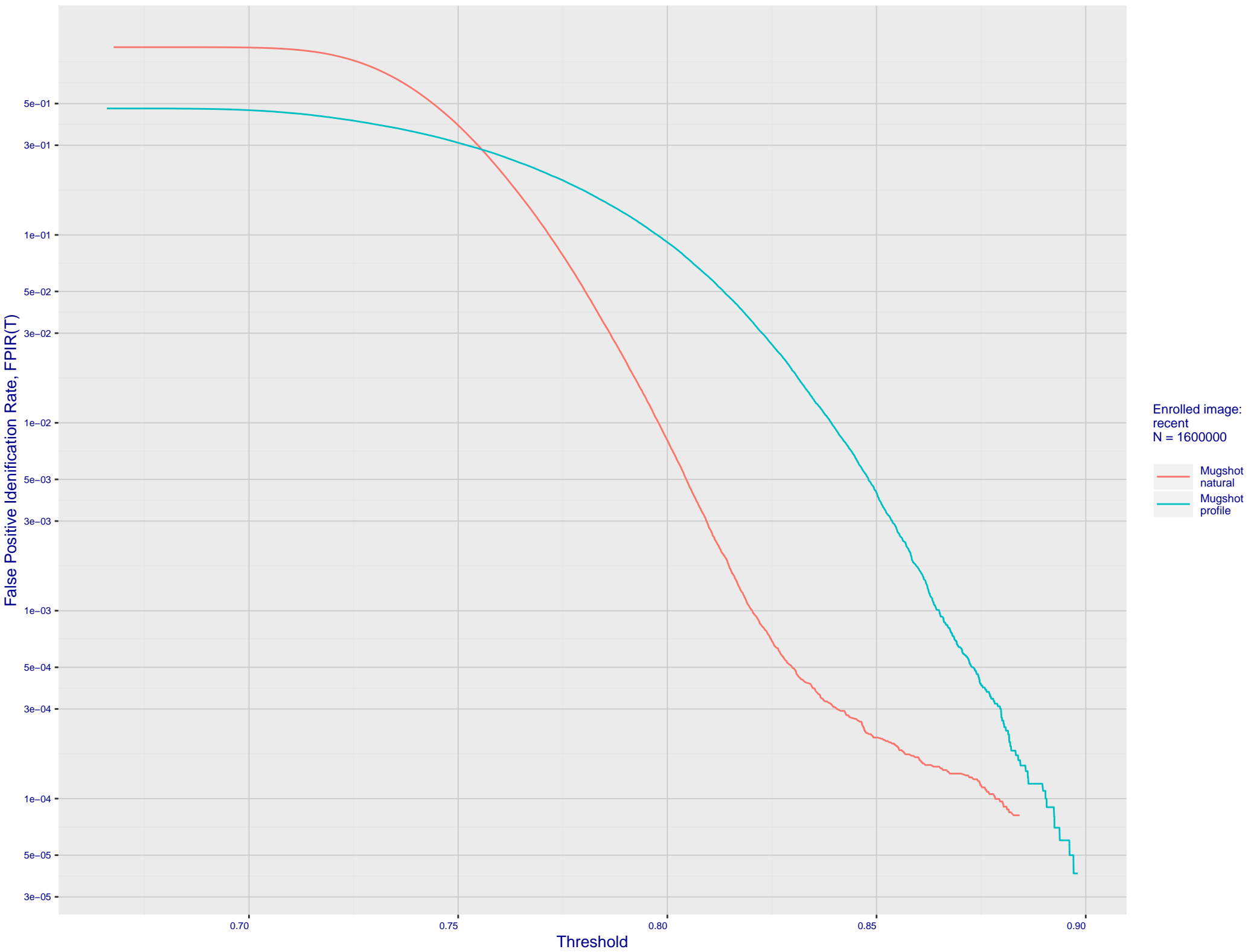
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



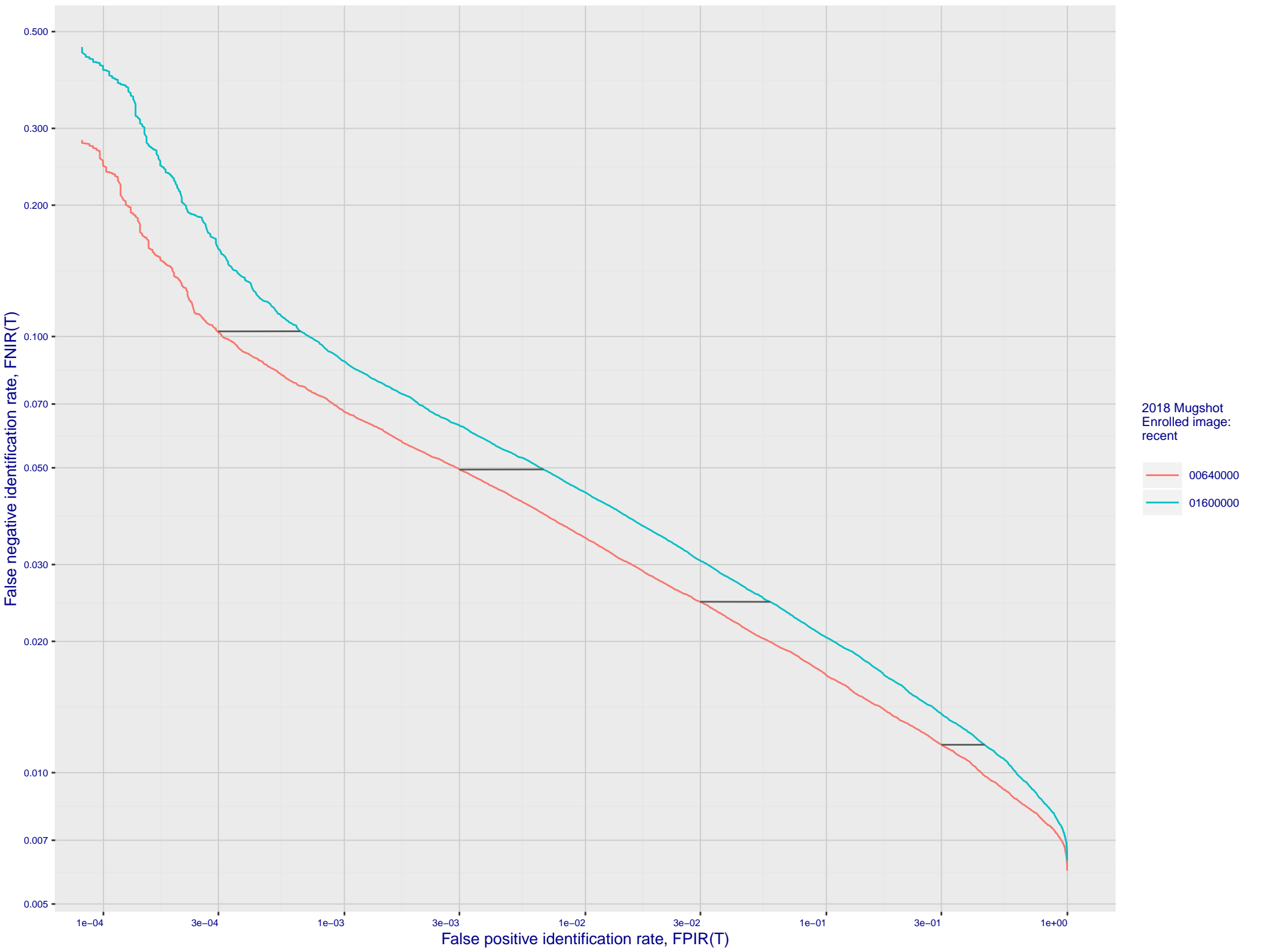
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



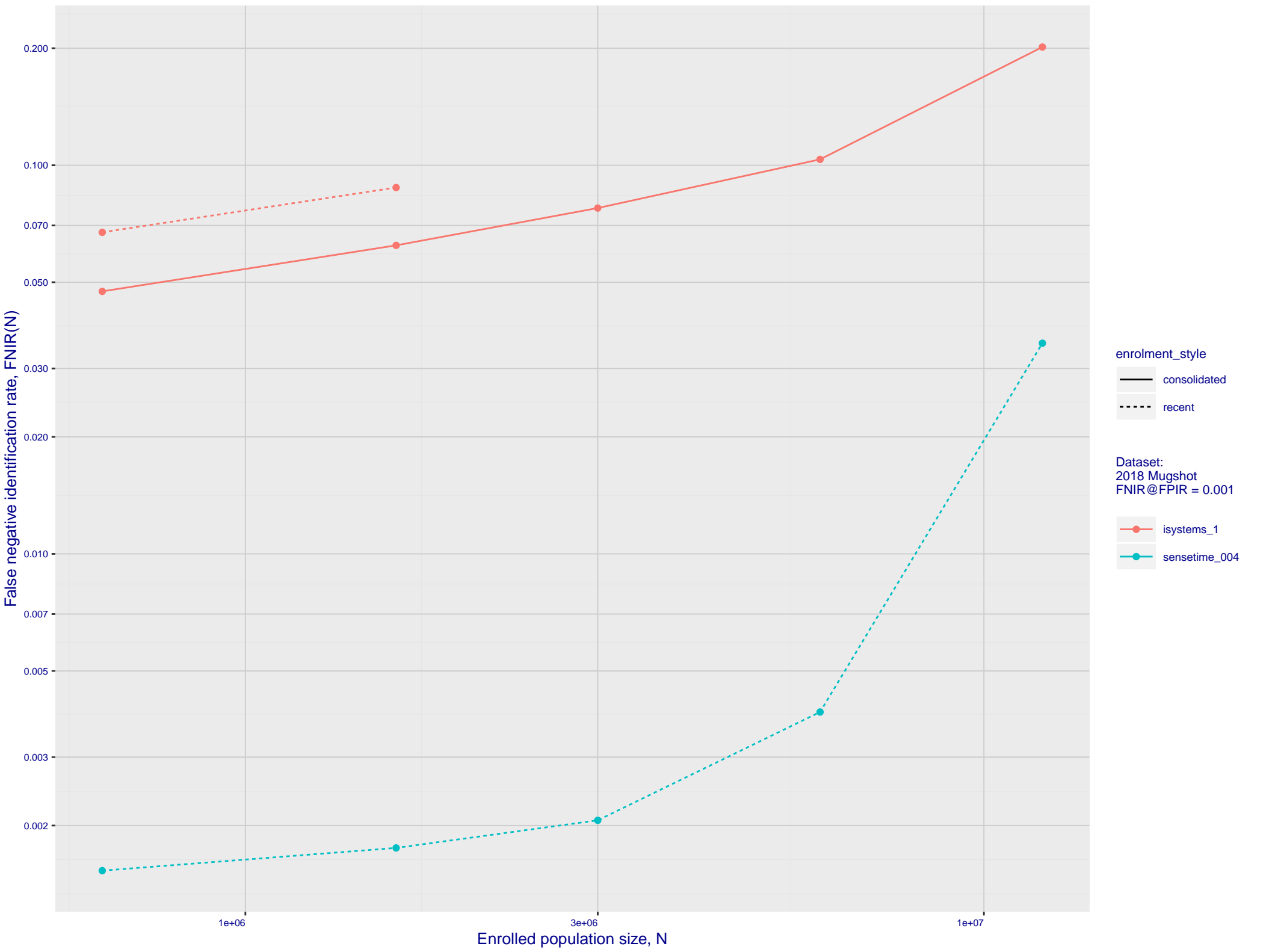
D: FPIR dependence on T by probe type for N = 1600000 subjects



E: DET for Mugshot natural images and various N. Links connect points of equal threshold.



F: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime\_004)



## G: Datasheet

Algorithm: isystems\_1

Developer: Alivia / Innovation Sys

Submission Date: 2018\_02\_14

Template size: 1024 bytes

Template time (2.5 percentile): 214 msec

Template time (median): 222 msec

Template time (97.5 percentile): 234 msec

Frontal mugshot investigation rank 120 --  $\text{FNIR}(1600000, 0, 1) = 0.0110$  vs. lowest 0.0010 from sensetime\_004

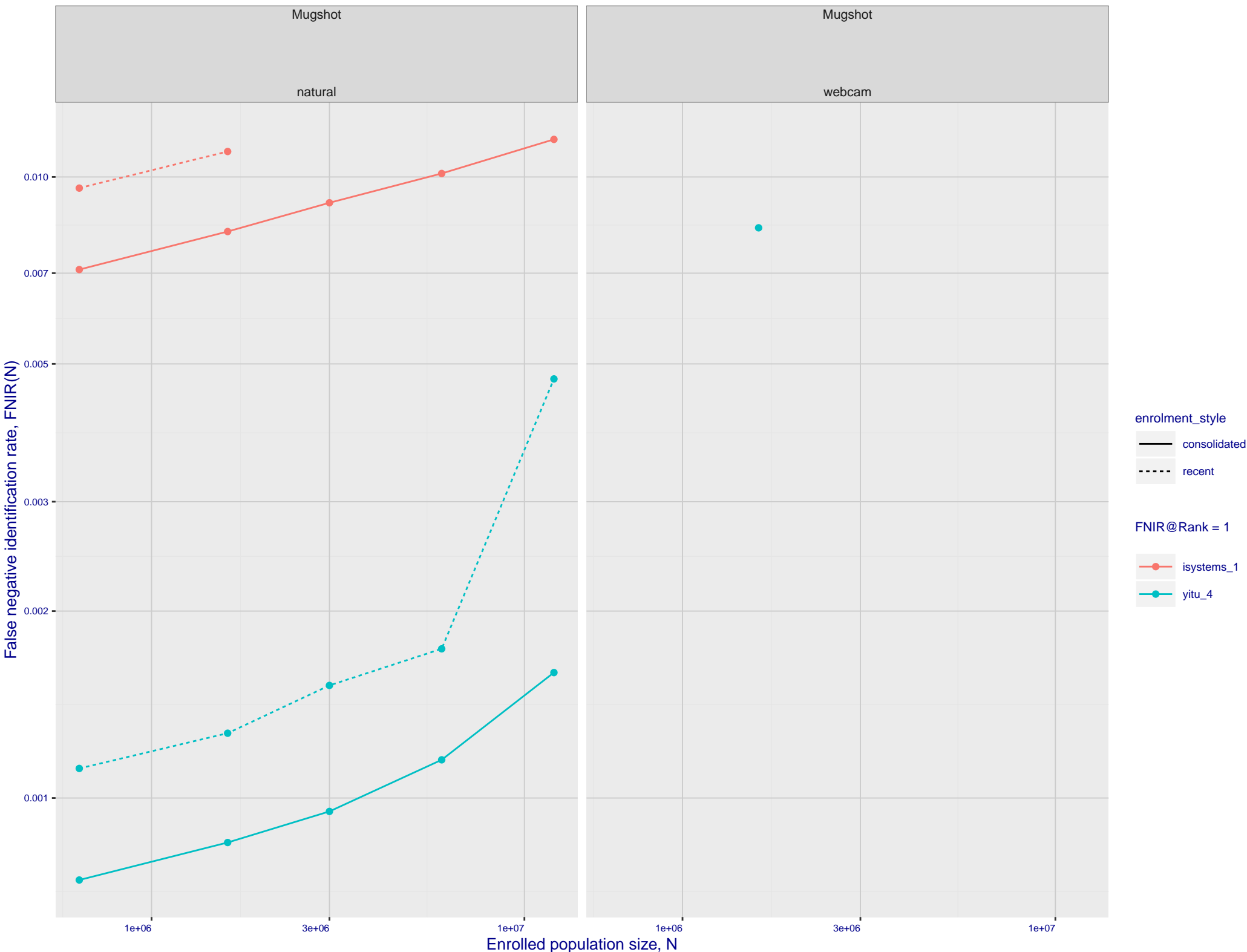
natural investigation rank 298 --  $\text{FNIR}(1600000, 0, 1) = 0.9643$  vs. lowest 0.0492 from paravision\_005

natural investigation rank 298 --  $\text{FNIR}(1600000, 0, 1) = 0.9643$  vs. lowest 0.0492 from paravision\_005

Frontal mugshot identification rank 111 --  $\text{FNIR}(1600000, T, L+1) = 0.0876$  vs. lowest 0.0018 from sensetime\_004

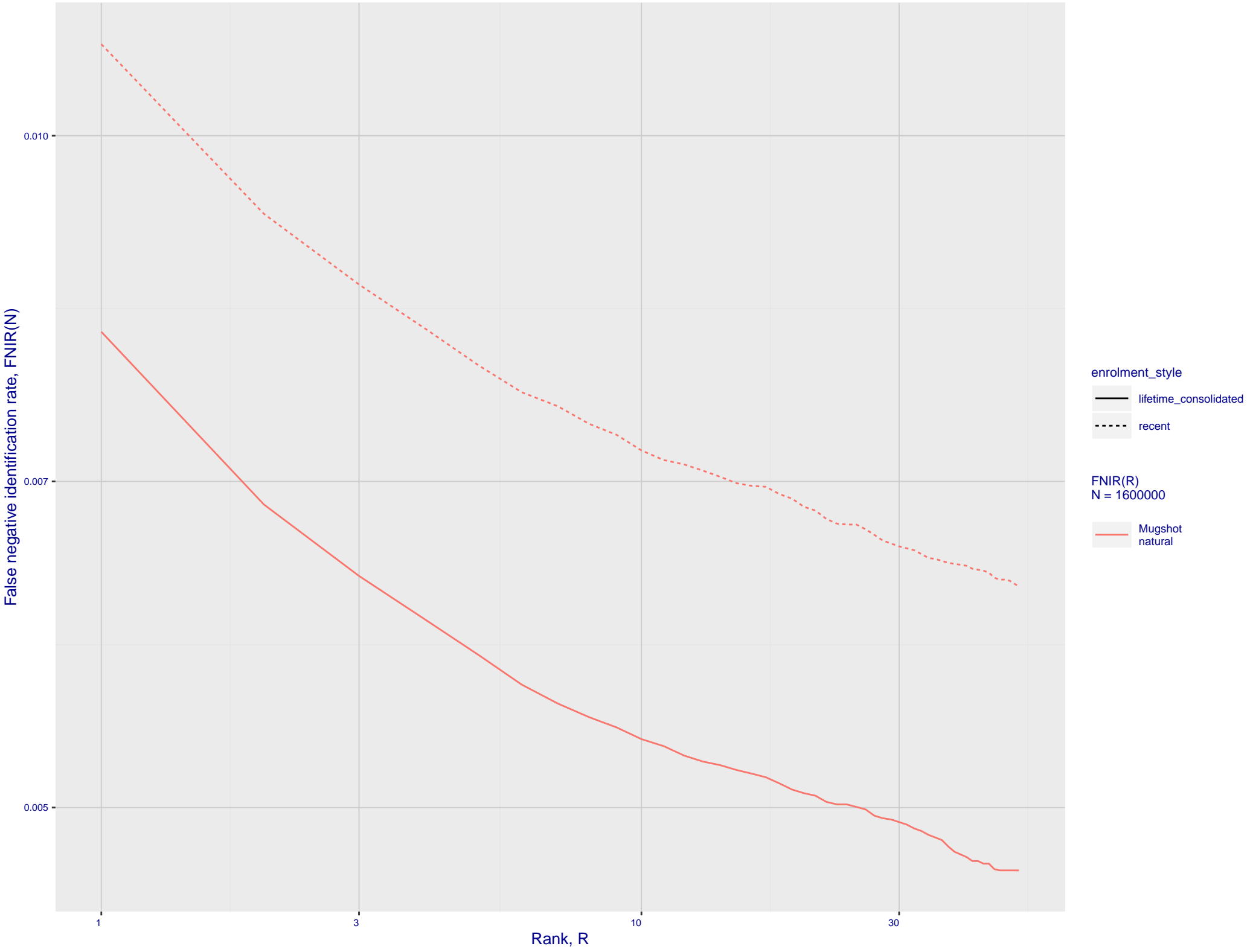
natural identification rank 90 --  $\text{FNIR}(1600000, T, L+1) = 0.9922$  vs. lowest 0.1020 from sensetime\_004

H: Investigational mode: FNIR(N, 1, 0) vs. most accurate (yitu\_4)





I: Investigational mode: FNIR(1600000, R, 0) by probe type



Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power-law models are fit to the first two (N,T) observations

