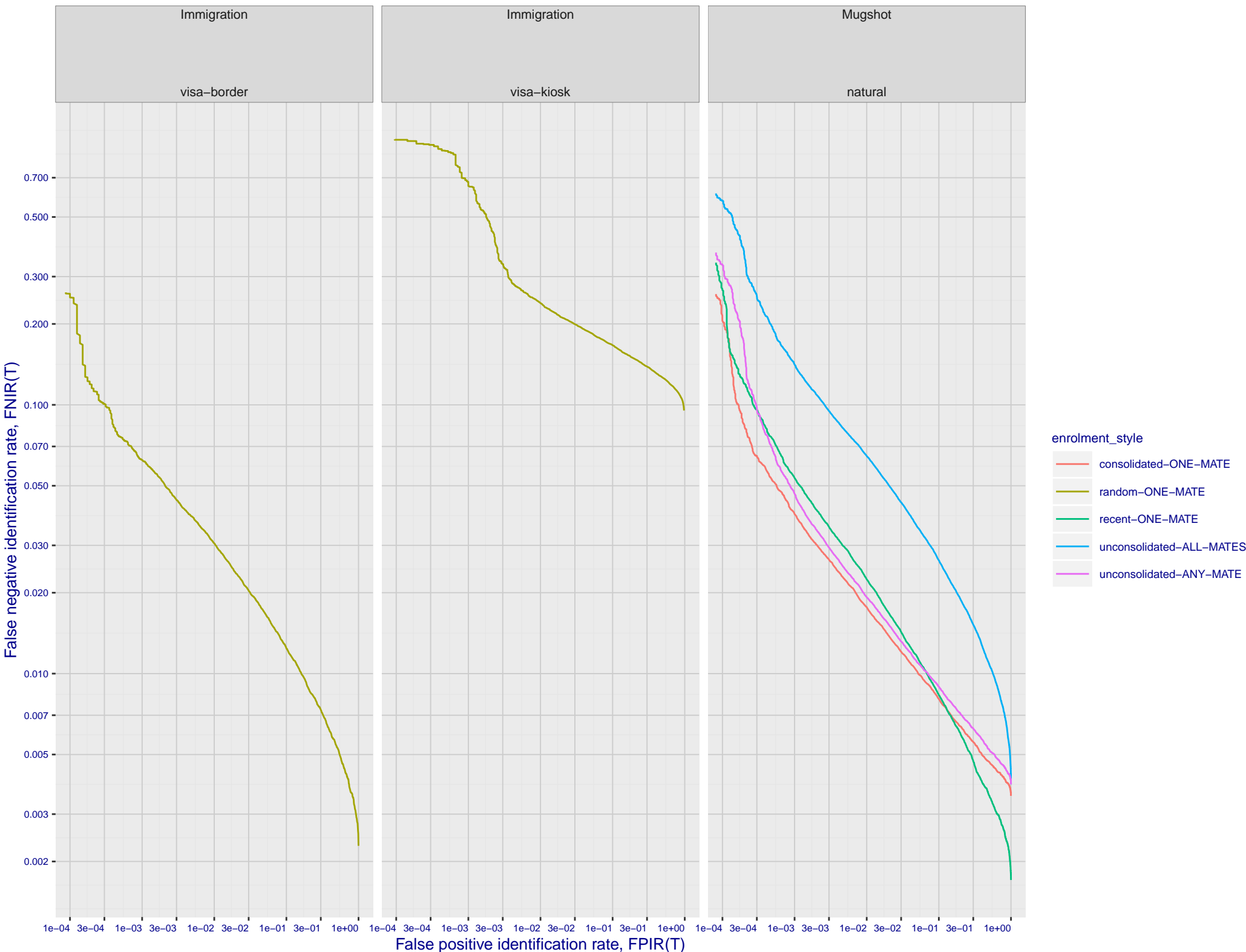
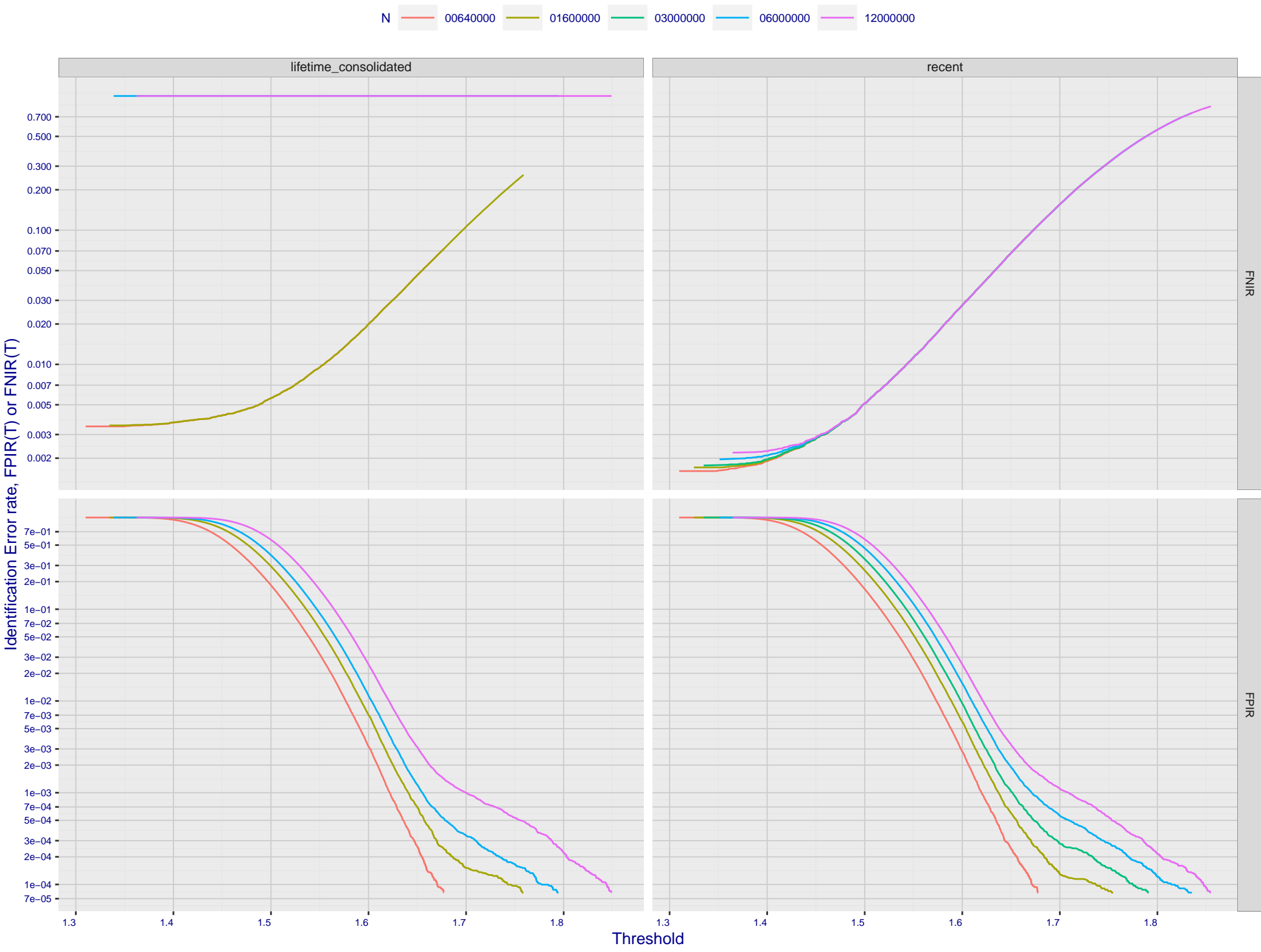


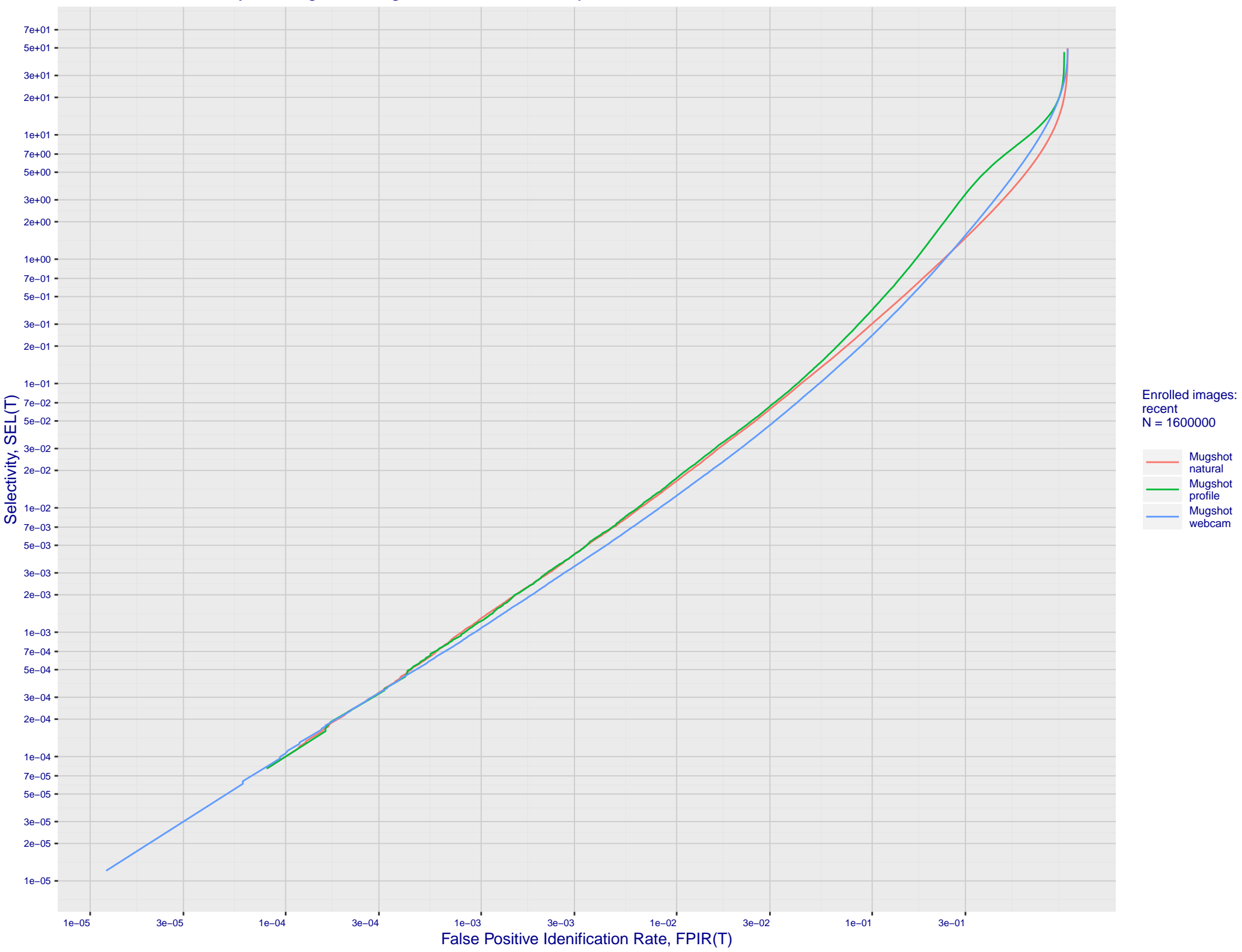
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



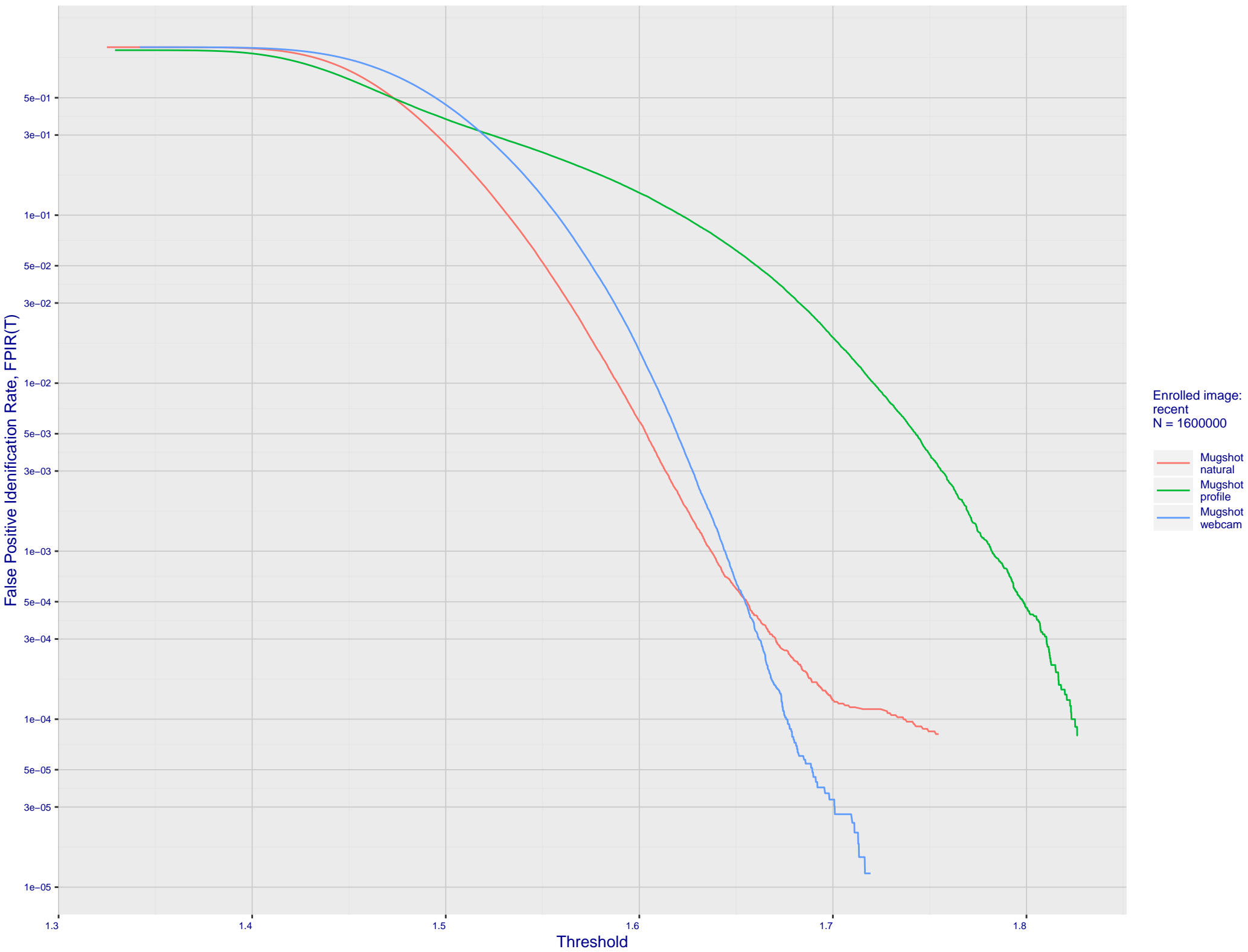
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



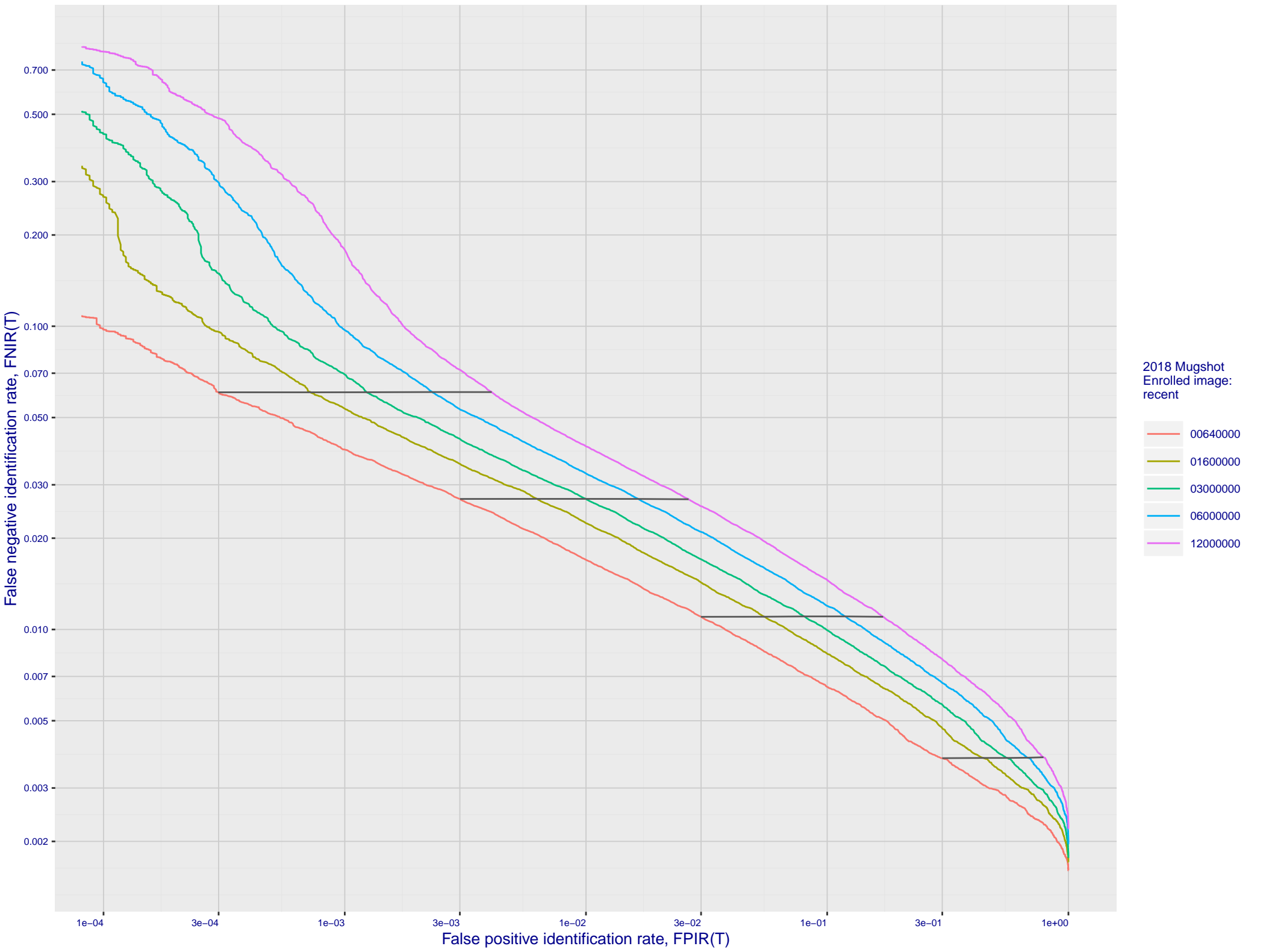
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



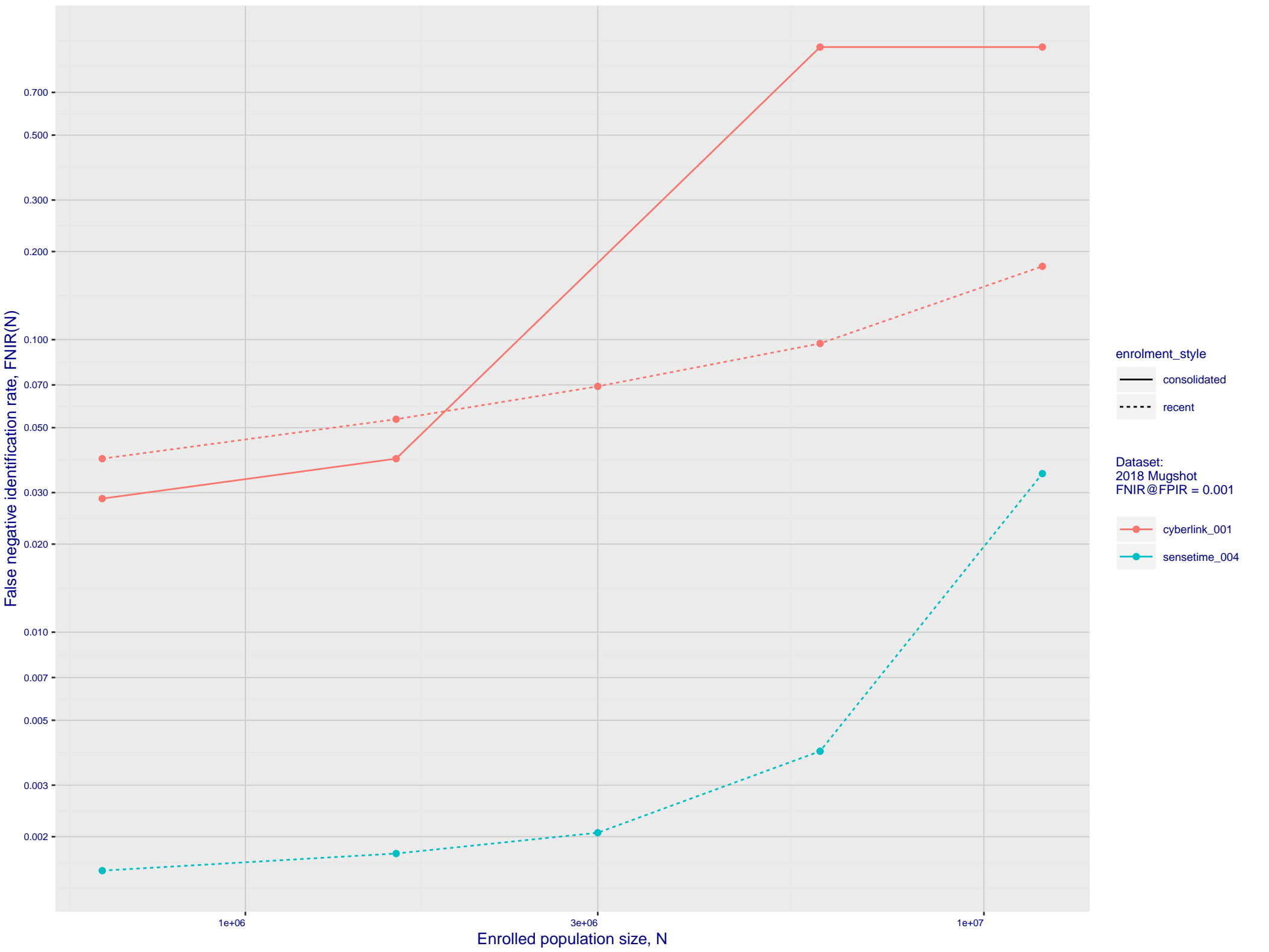
D: FPIR dependence on T by probe type for N = 1600000 subjects



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: cyberlink\_001

Developer: Cyberlink Corp

Submission Date: 2019\_10\_07

Template size: 2052 bytes

Template time (2.5 percentile): 423 msec

Template time (median): 424 msec

Template time (97.5 percentile): 464 msec

Frontal mugshot investigation rank 47 --- FNIR(1600000, 0, 1) = 0.0035 vs. lowest 0.0010 from sensetime\_004

natural investigation rank 49 --- FNIR(1600000, 0, 1) = 0.0175 vs. lowest 0.0067 from sensetime\_003

natural investigation rank 131 --- FNIR(1600000, 0, 1) = 0.6055 vs. lowest 0.0492 from paravision\_005

natural investigation rank 131 --- FNIR(1600000, 0, 1) = 0.6055 vs. lowest 0.0492 from paravision\_005

natural investigation rank 35 --- FNIR(1600000, 0, 1) = 0.0066 vs. lowest 0.0014 from visionlabs\_009

natural investigation rank 40 --- FNIR(1600000, 0, 1) = 0.1330 vs. lowest 0.0694 from cib\_000

Frontal mugshot identification rank 79 --- FNIR(1600000, T, L+1) = 0.0534 vs. lowest 0.0018 from sensetime\_004

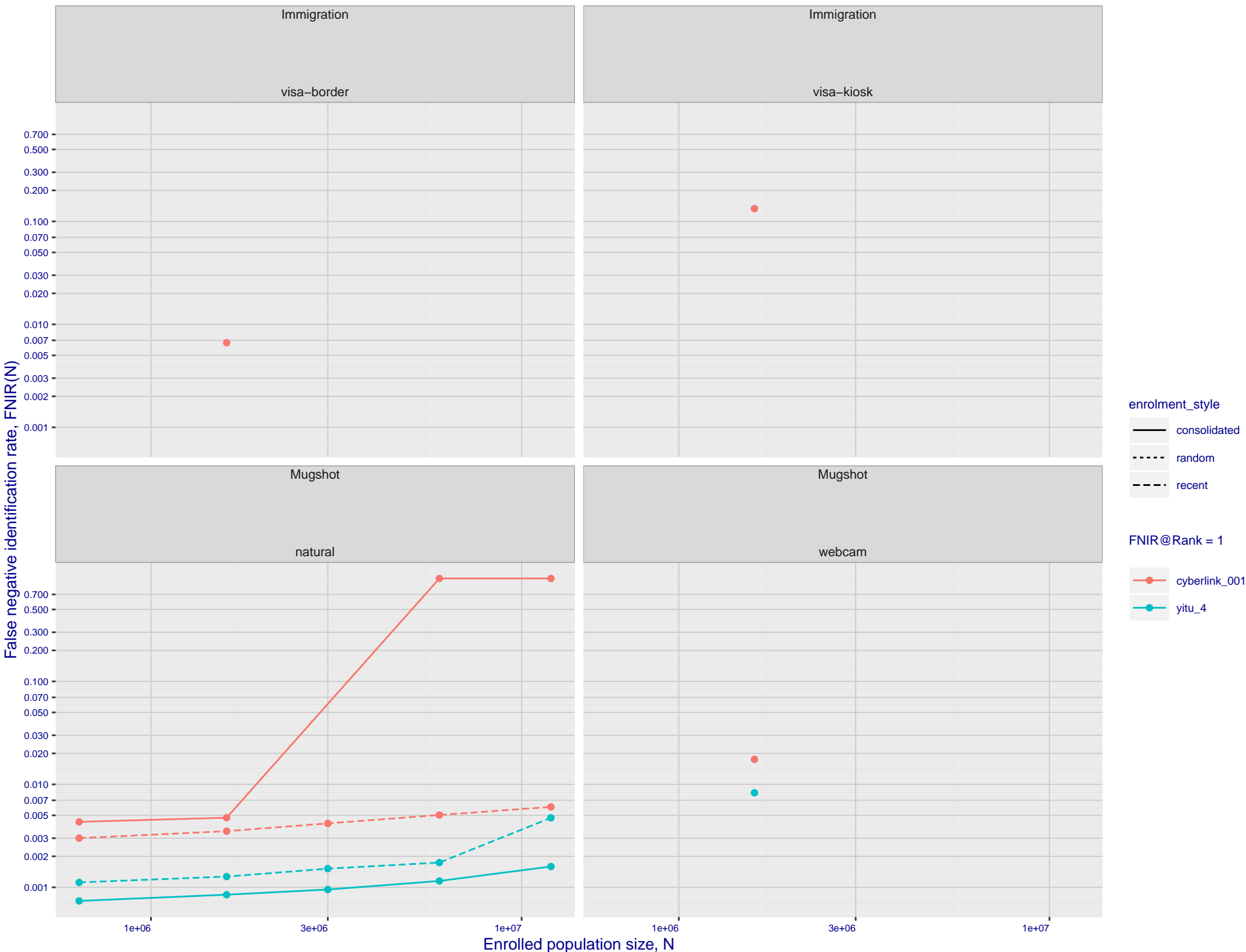
natural identification rank 61 --- FNIR(1600000, T, L+1) = 0.1087 vs. lowest 0.0122 from sensetime\_003

natural identification rank 81 --- FNIR(1600000, T, L+1) = 0.9840 vs. lowest 0.1020 from sensetime\_004

natural identification rank 39 --- FNIR(1600000, T, L+1) = 0.0624 vs. lowest 0.0059 from sensetime\_004

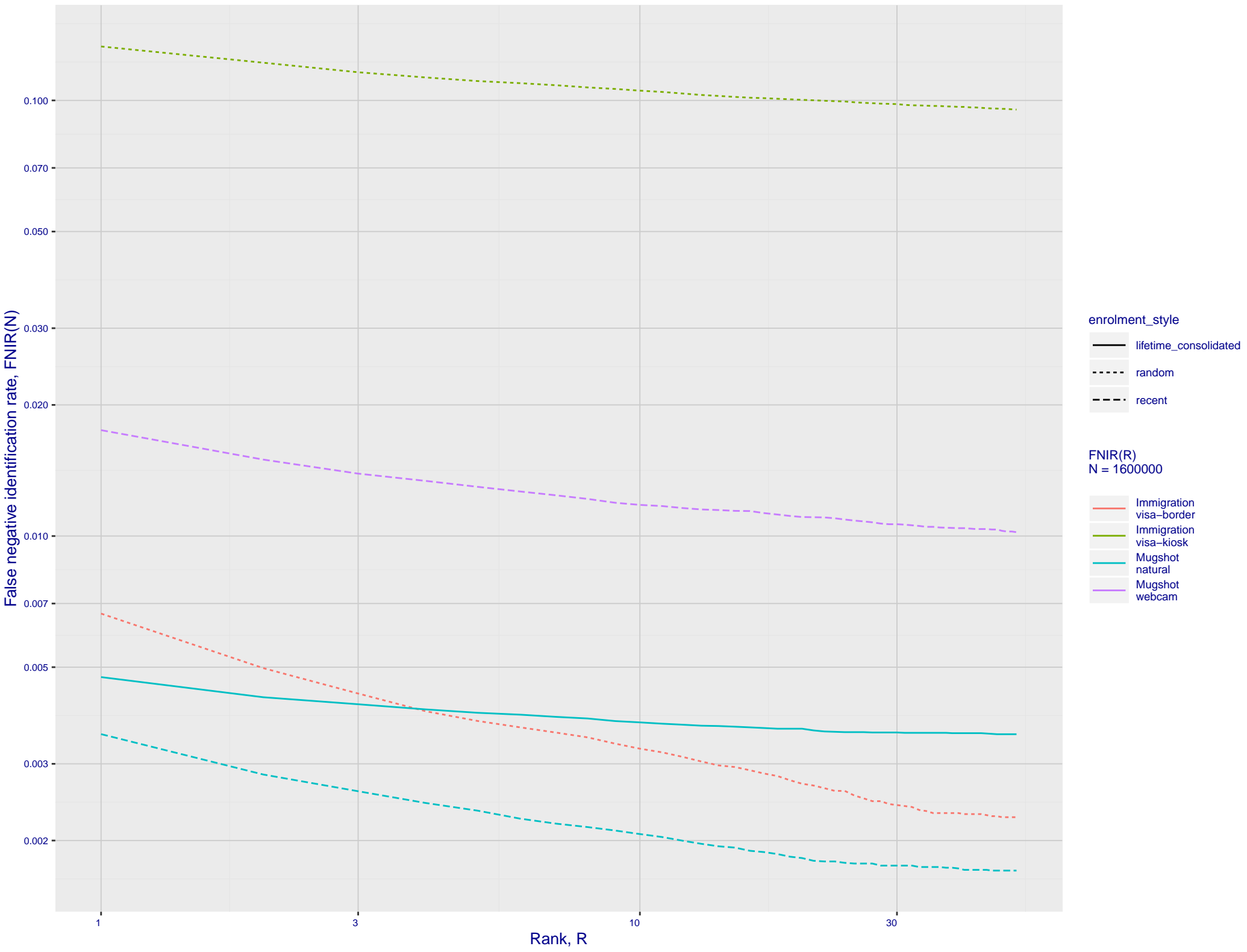
natural identification rank 61 --- FNIR(1600000, T, L+1) = 0.6756 vs. lowest 0.1129 from visionlabs\_009

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

