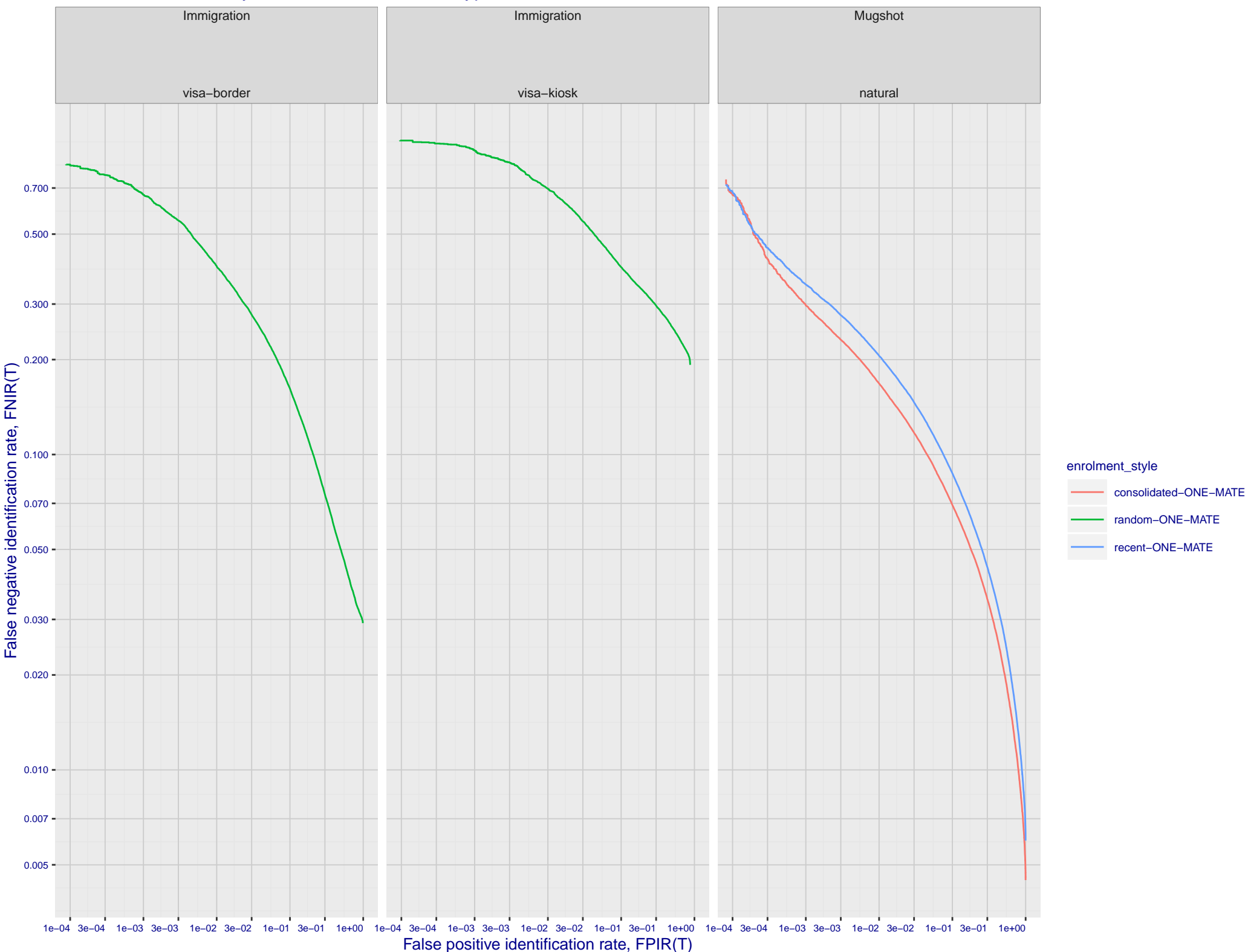
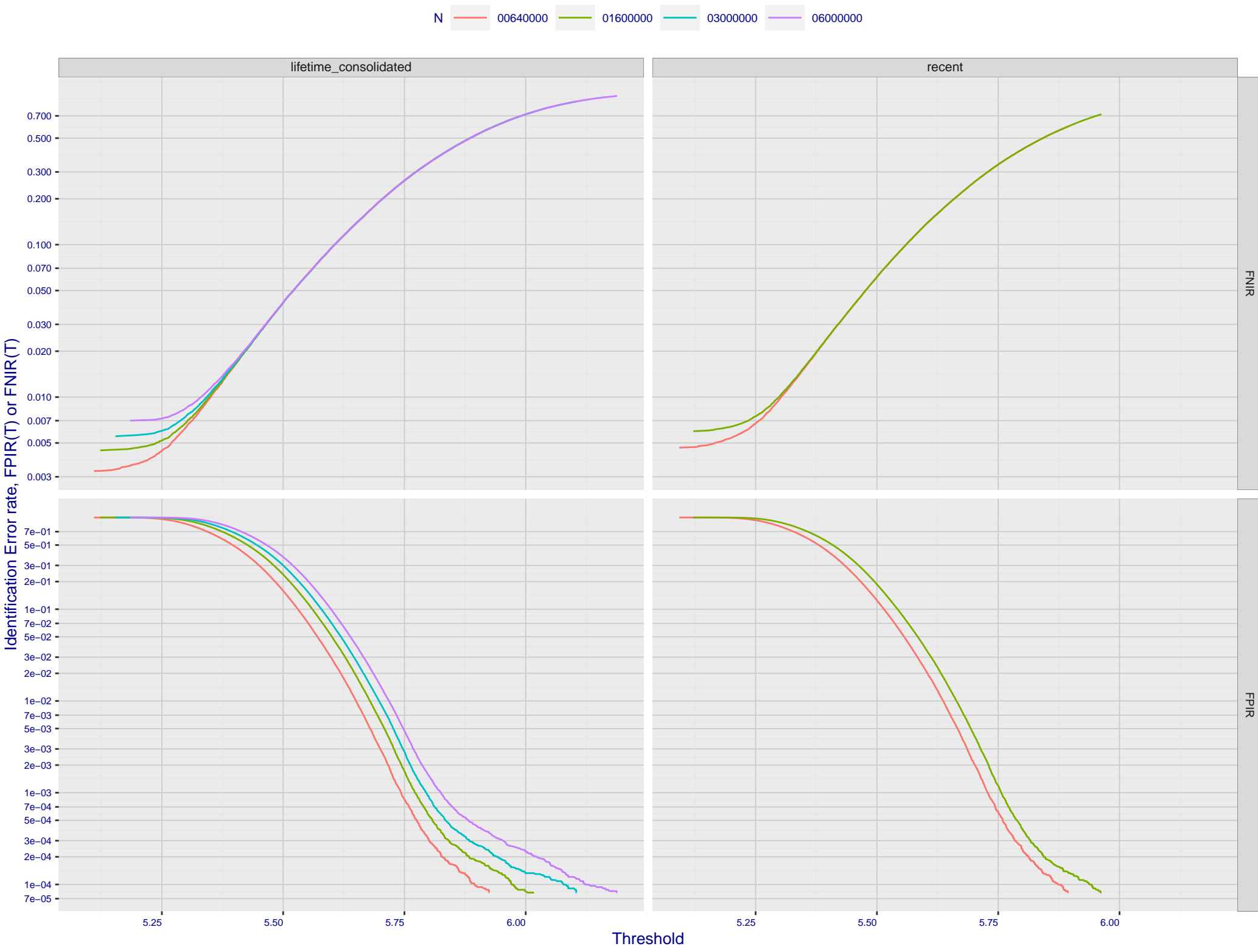


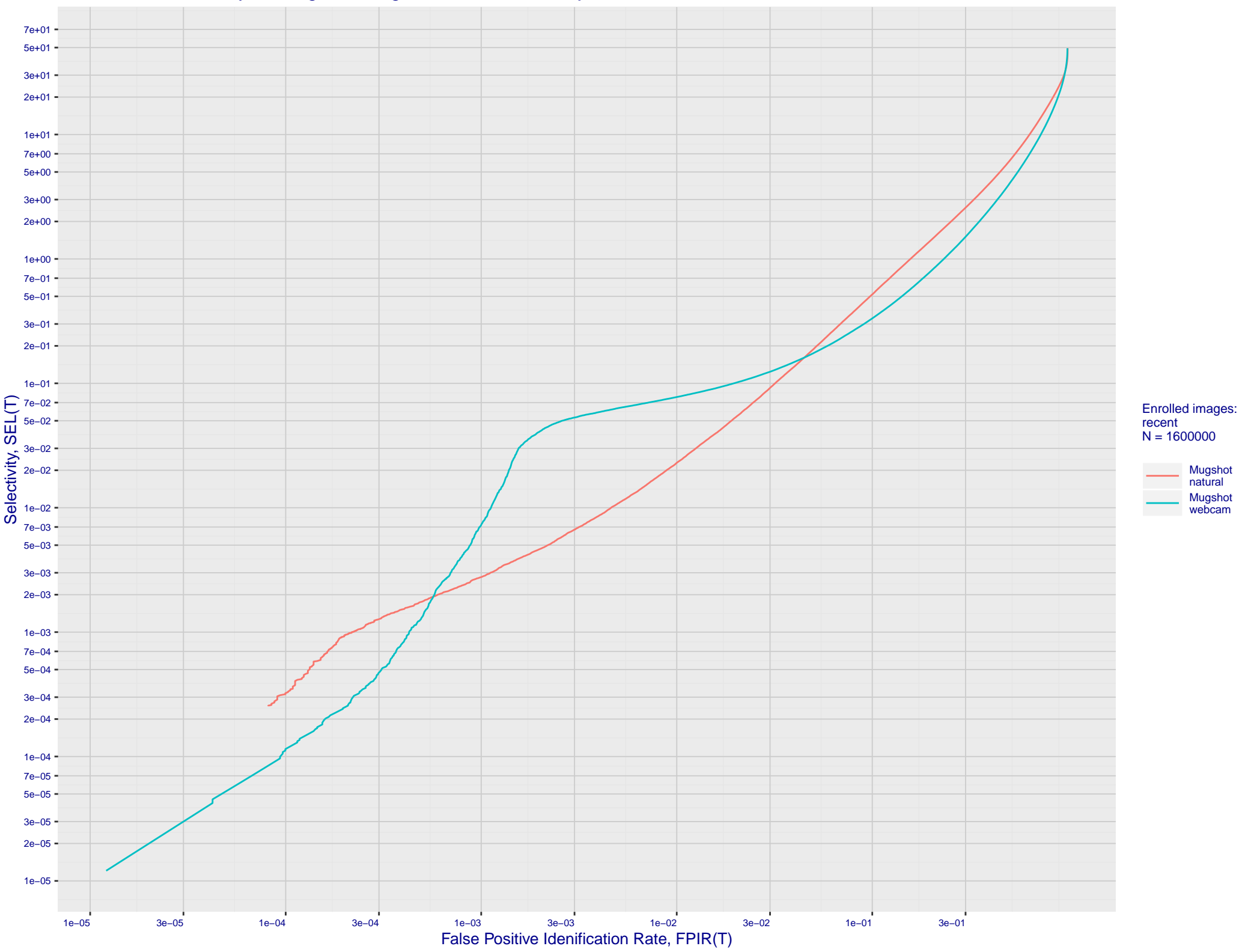
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



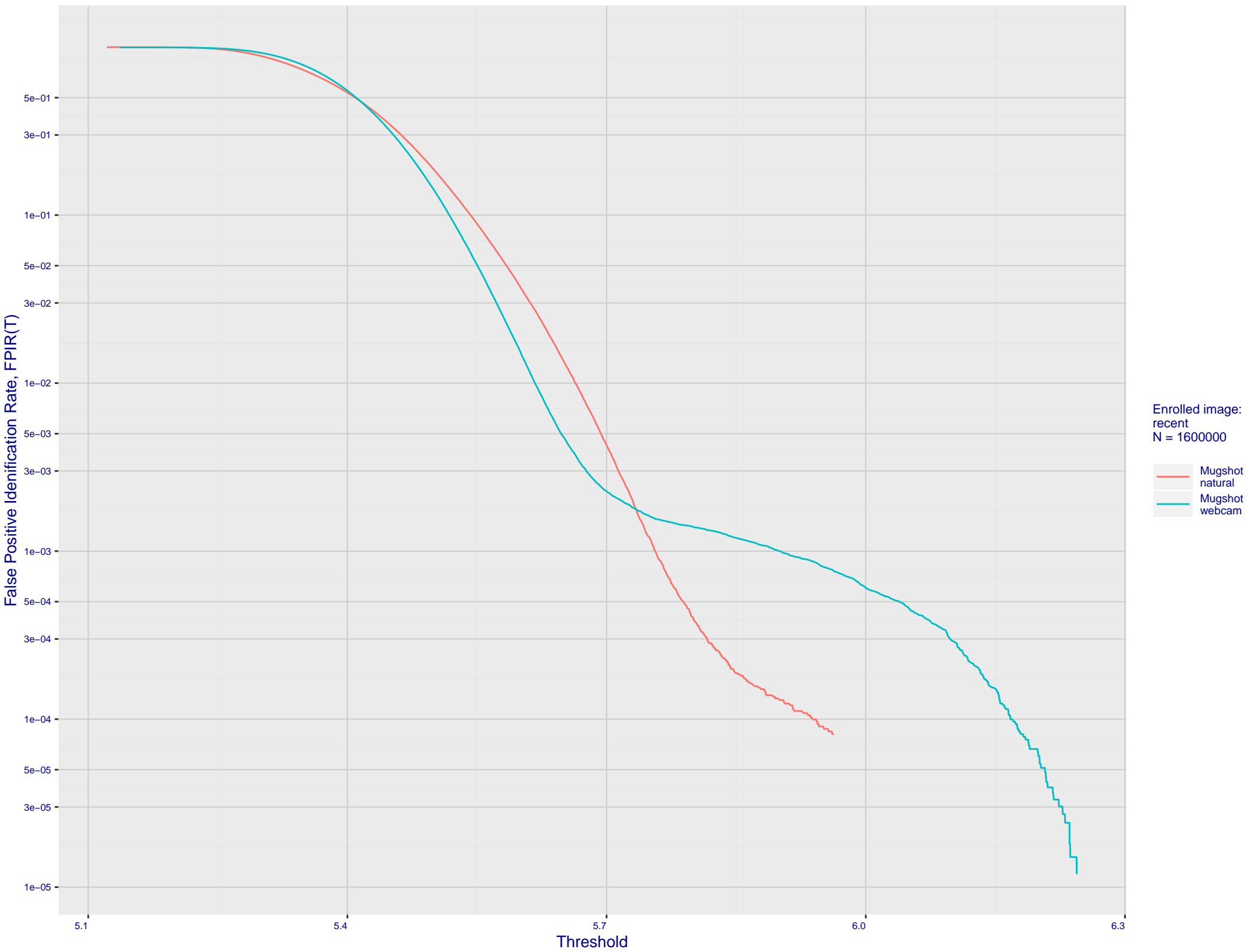
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



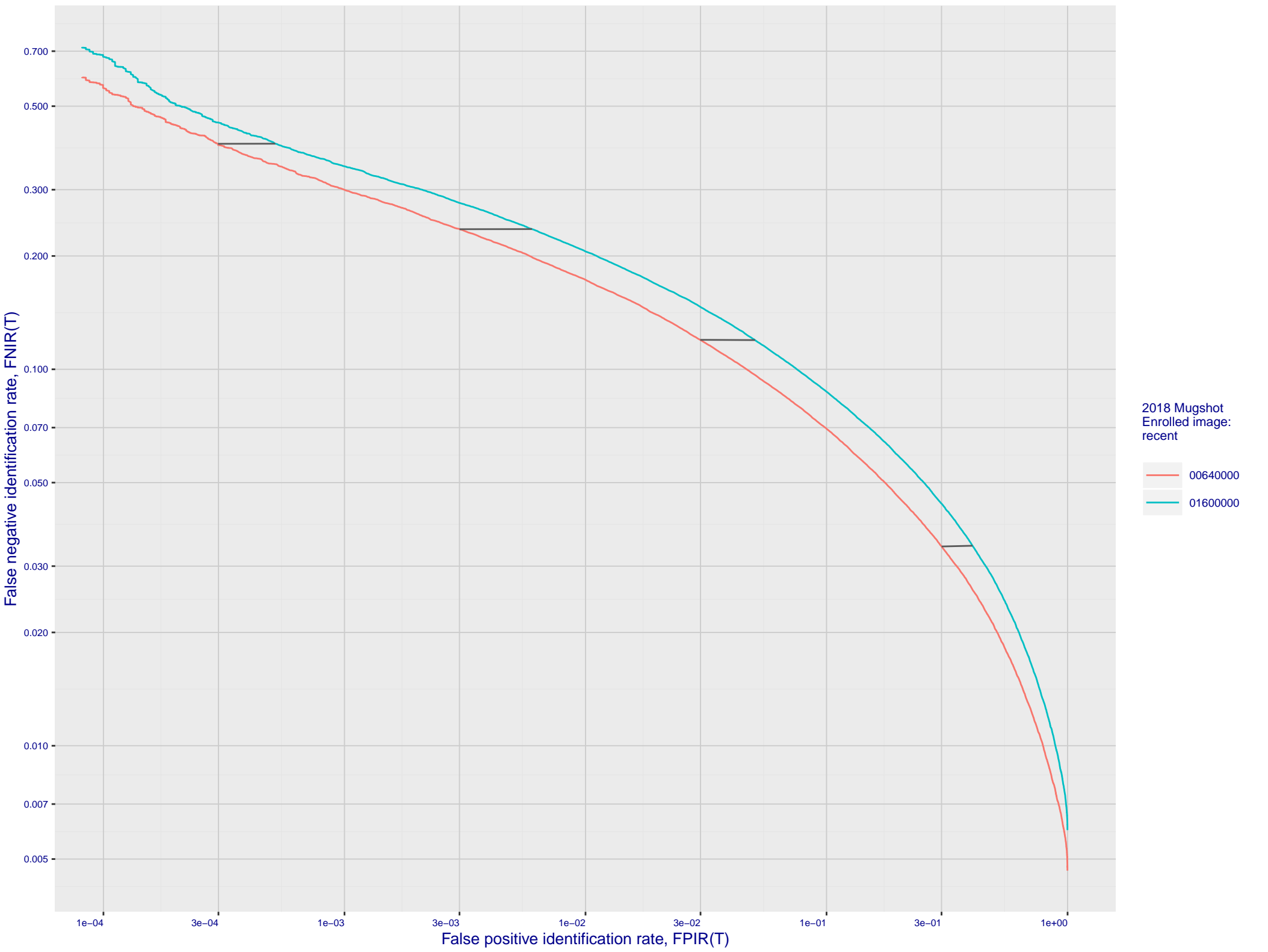
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



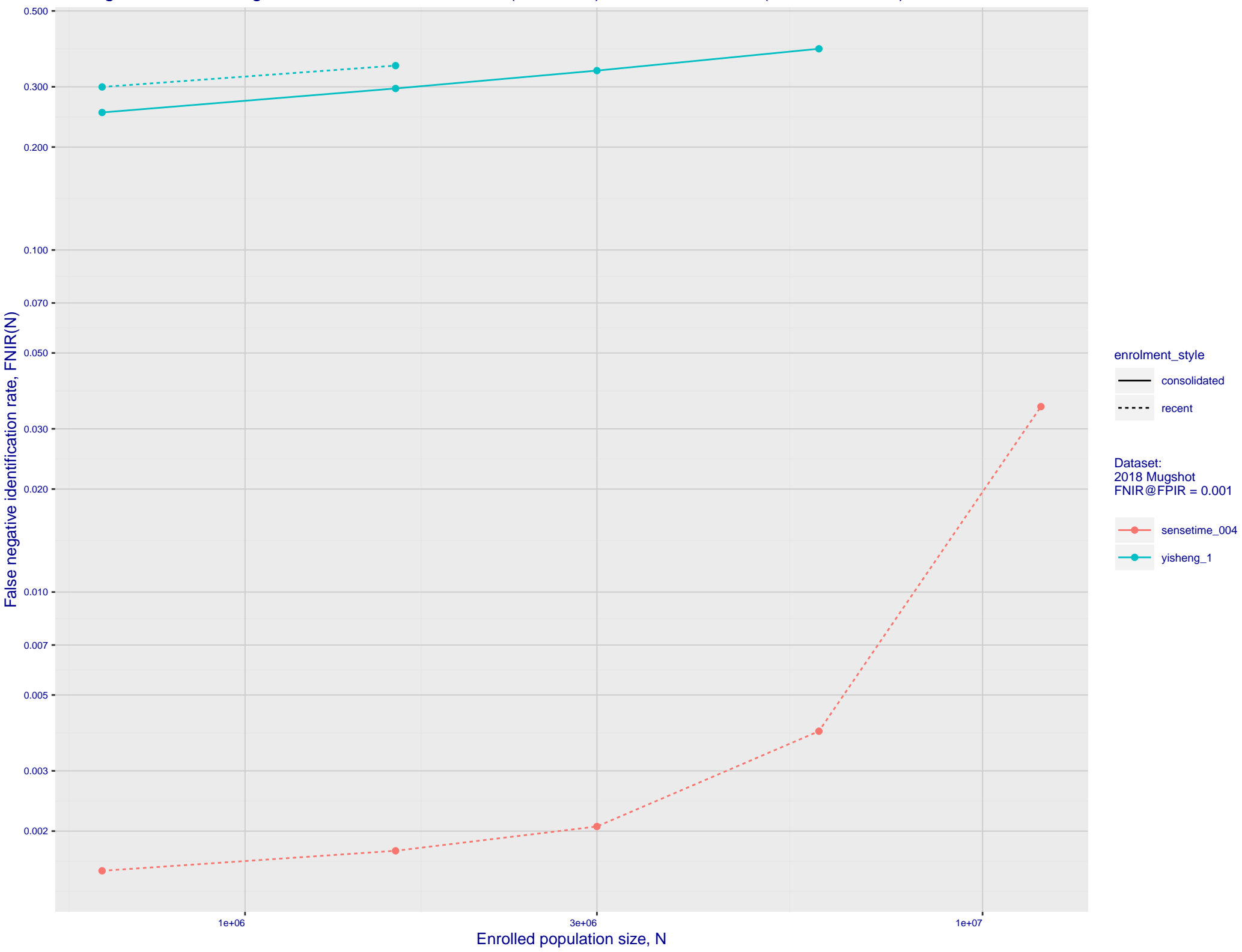
D: FPIR dependence on T by probe type for N = 1600000 subjects



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: yisheng_1

Developer: Zhuhai Yisheng Electronics Technology

Submission Date: 2018_06_19

Template size: 3704 bytes

Template time (2.5 percentile): 363 msec

Template time (median): 384 msec

Template time (97.5 percentile): 423 msec

Frontal mugshot investigation rank 165 --- $\text{FNIR}(1600000, 0, 1) = 0.0265$ vs. lowest 0.0010 from sensetime_004

natural investigation rank 142 --- $\text{FNIR}(1600000, 0, 1) = 0.0601$ vs. lowest 0.0067 from sensetime_003

natural investigation rank 80 --- $\text{FNIR}(1600000, 0, 1) = 0.0583$ vs. lowest 0.0014 from visionlabs_009

natural investigation rank 79 --- $\text{FNIR}(1600000, 0, 1) = 0.2874$ vs. lowest 0.0694 from cib_000

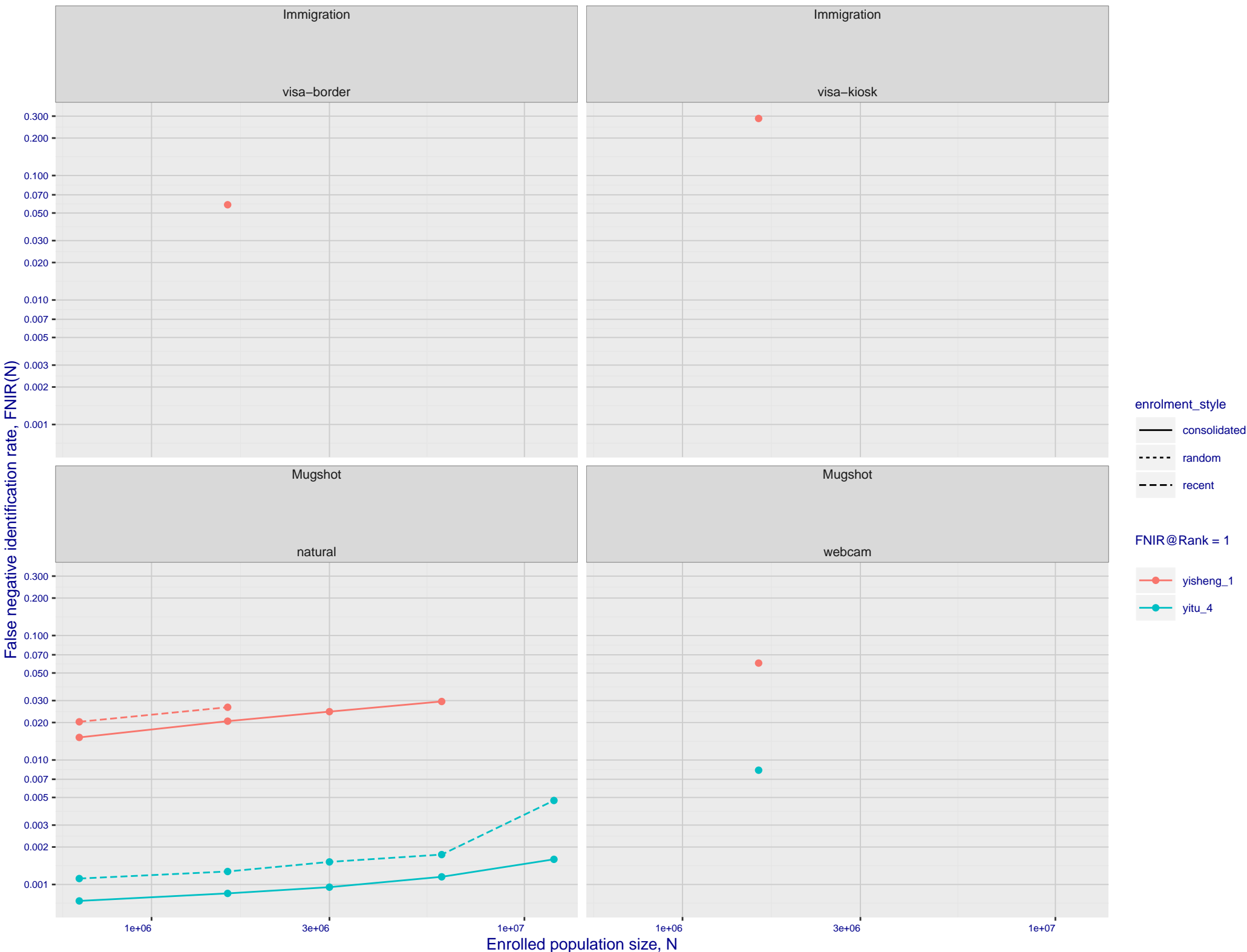
Frontal mugshot identification rank 188 --- $\text{FNIR}(1600000, T, L+1) = 0.3460$ vs. lowest 0.0018 from sensetime_004

natural identification rank 188 --- $\text{FNIR}(1600000, T, L+1) = 0.8078$ vs. lowest 0.0122 from sensetime_003

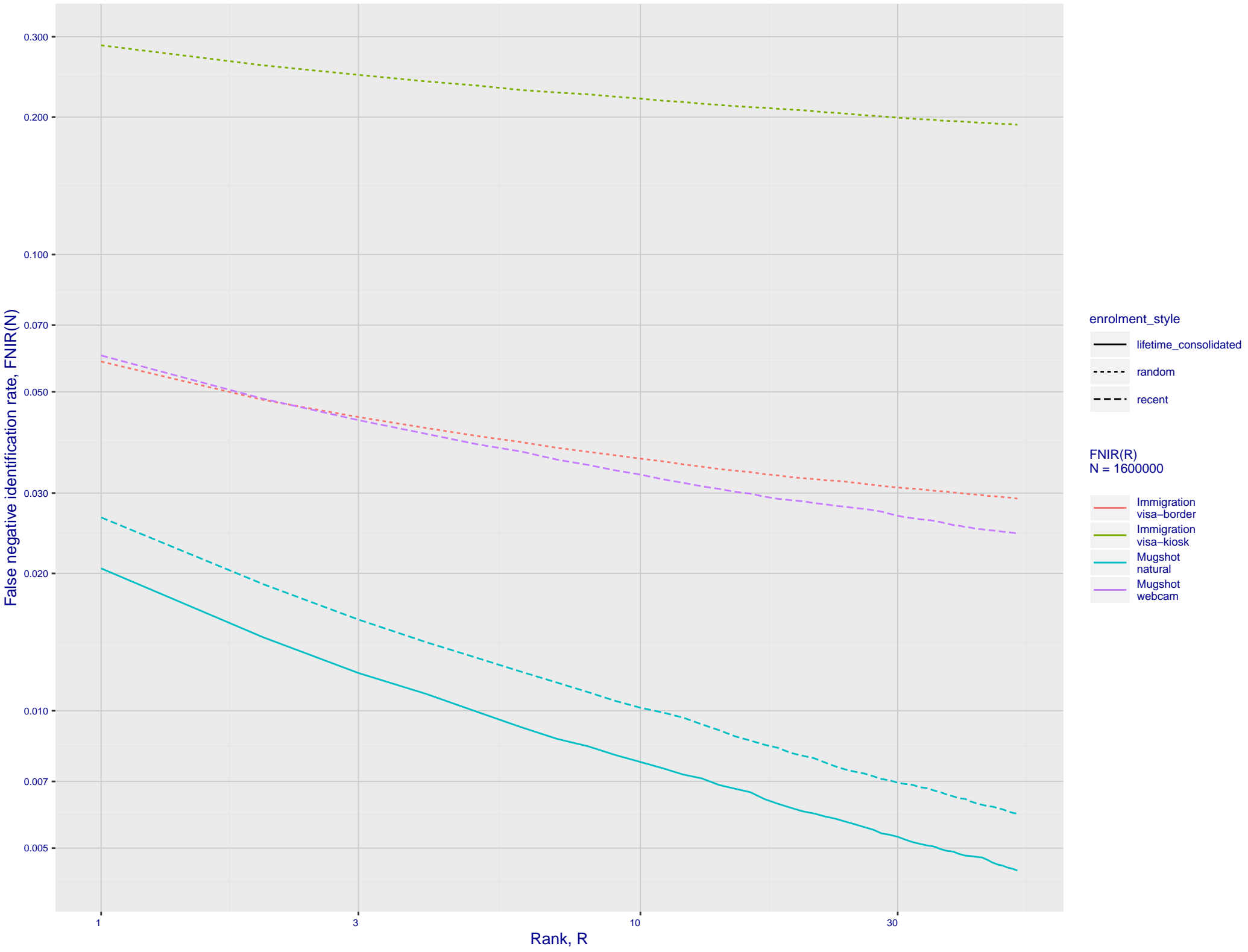
natural identification rank 81 --- $\text{FNIR}(1600000, T, L+1) = 0.6664$ vs. lowest 0.0059 from sensetime_004

natural identification rank 76 --- $\text{FNIR}(1600000, T, L+1) = 0.9236$ 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

