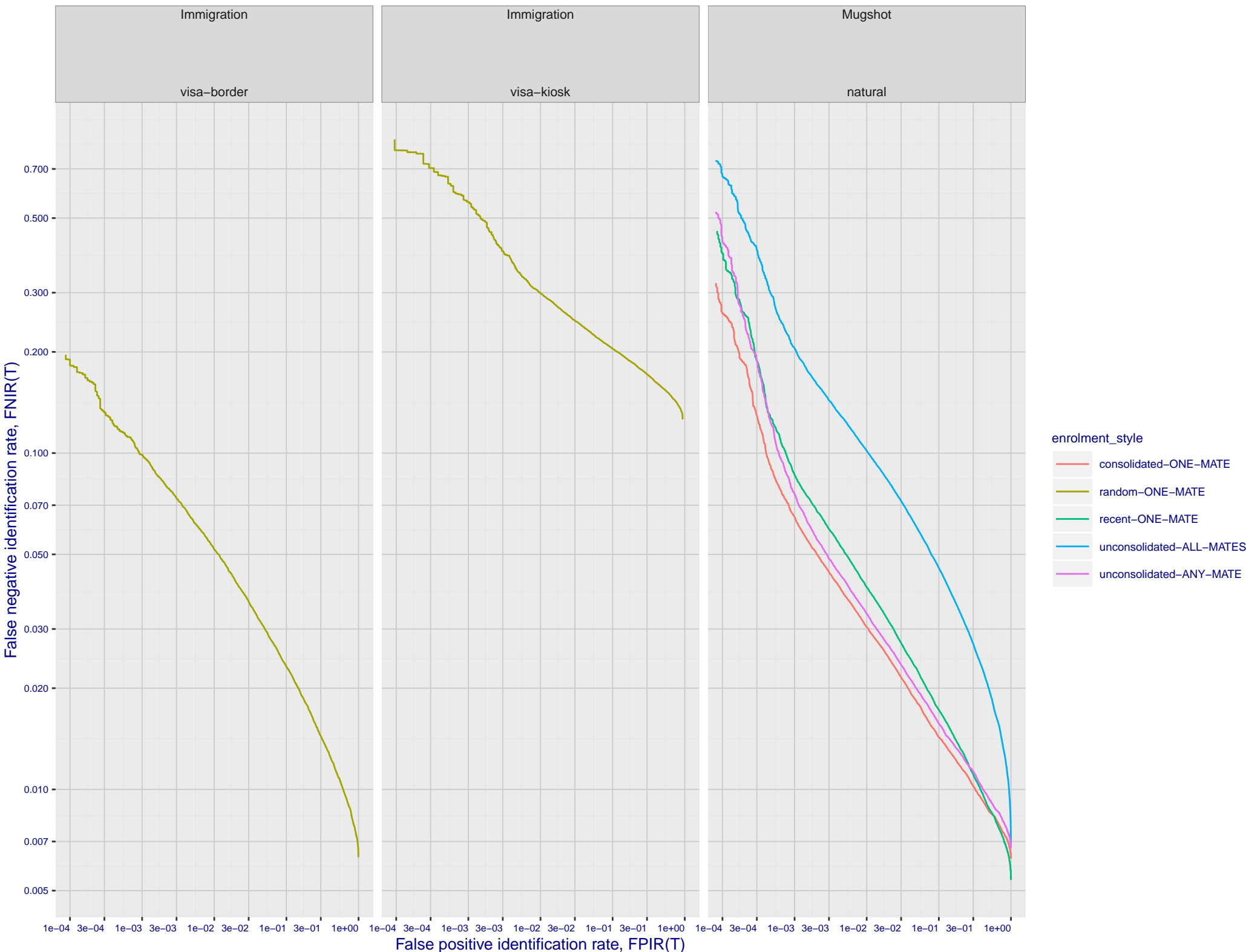
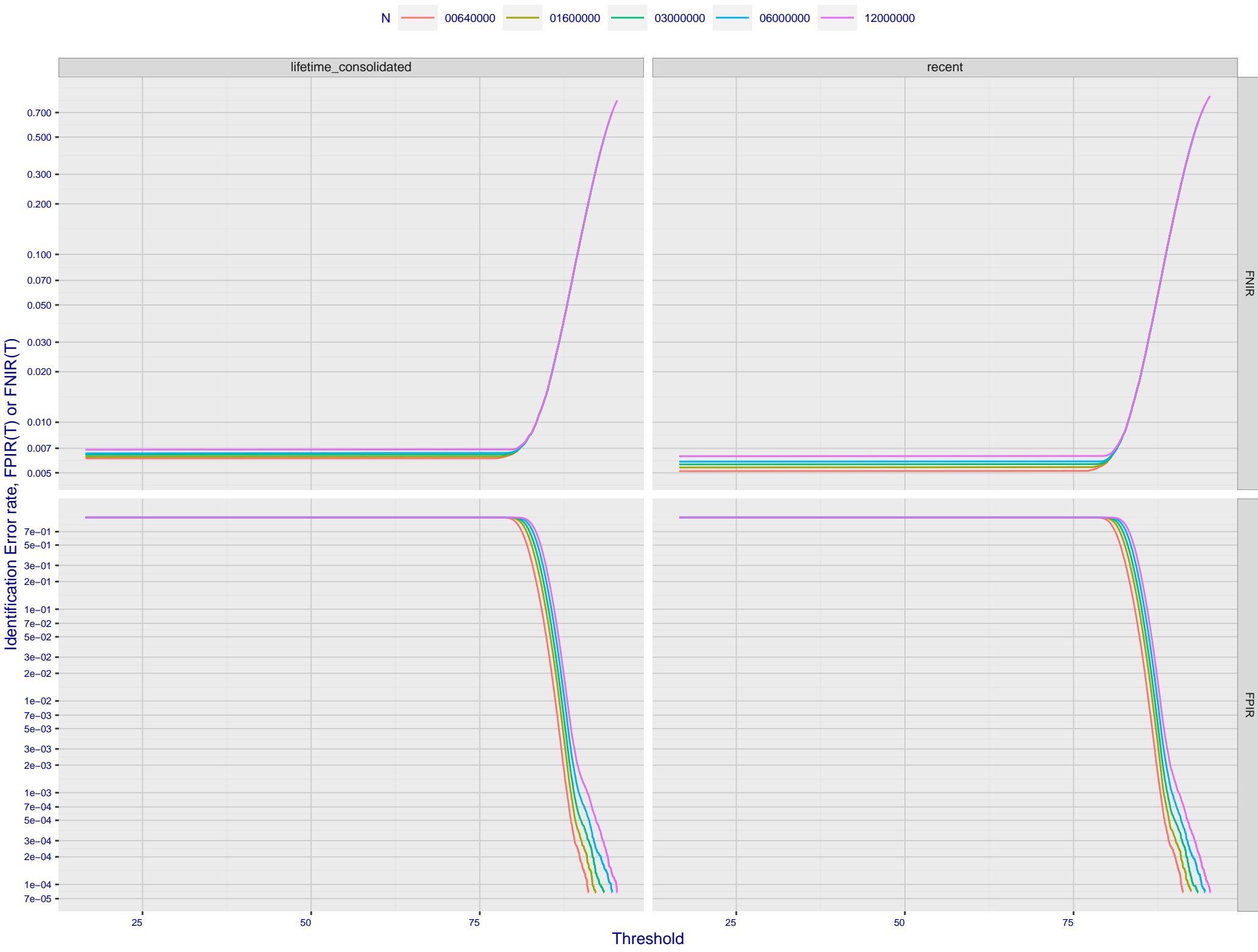


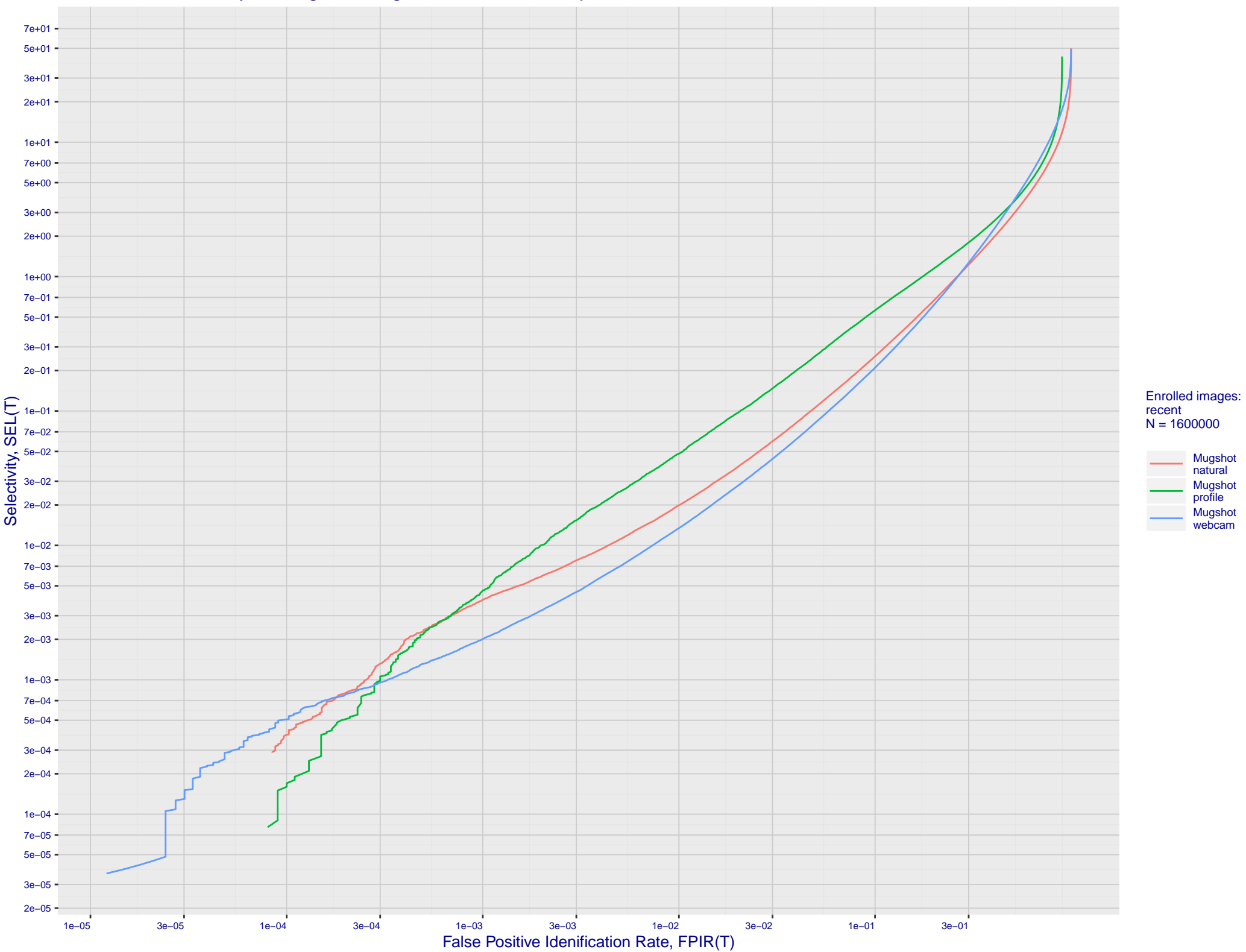
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



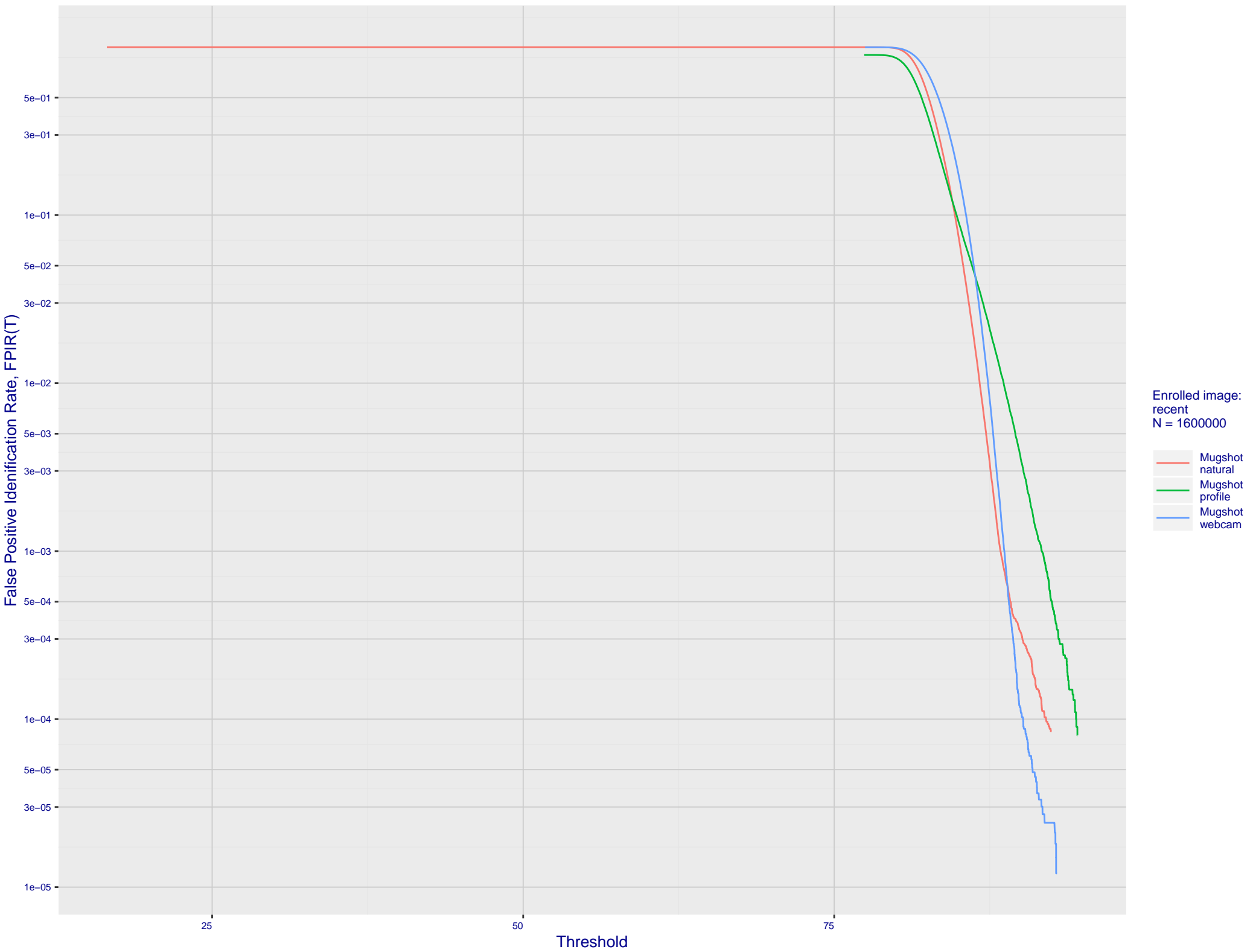
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



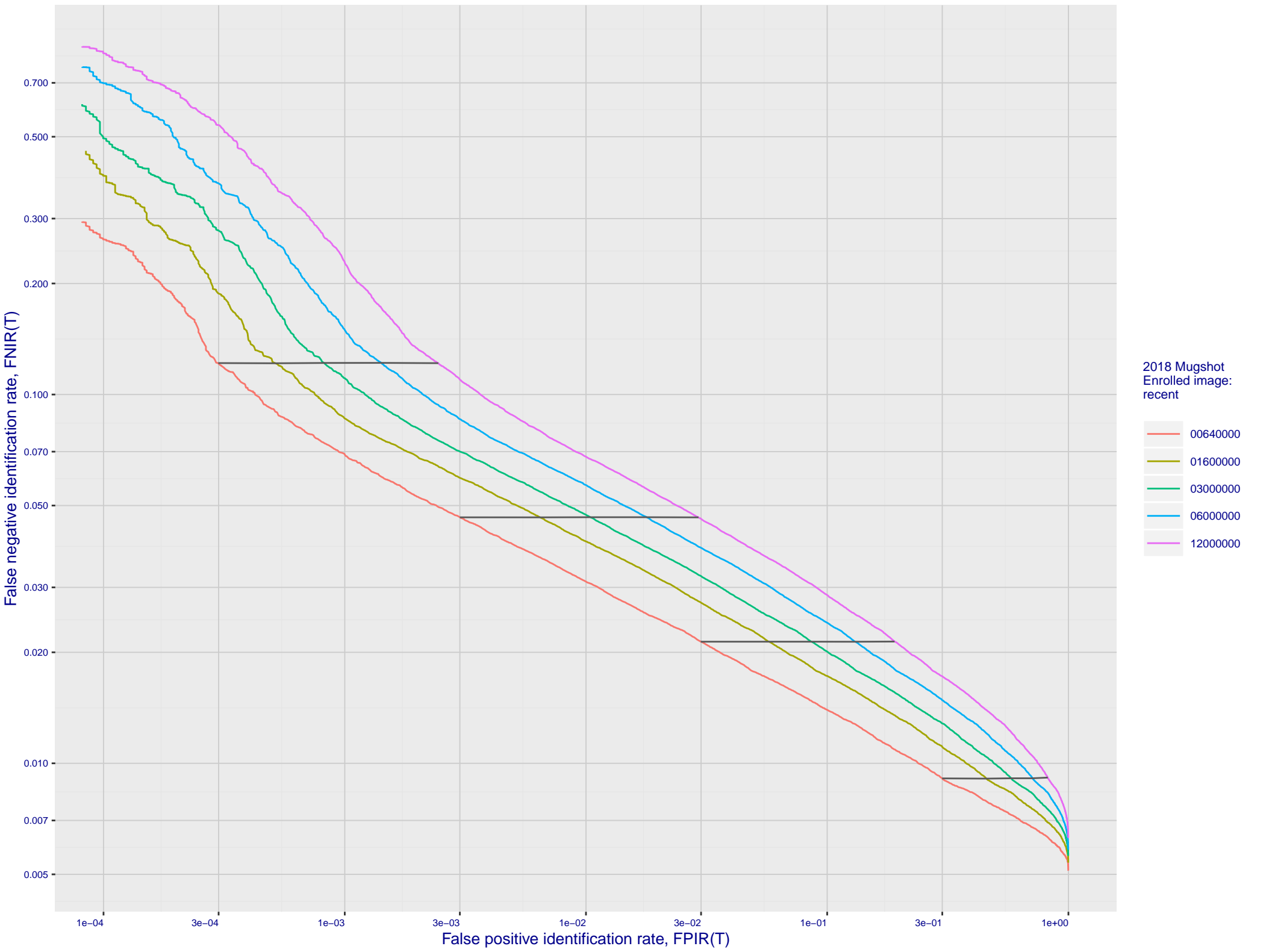
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



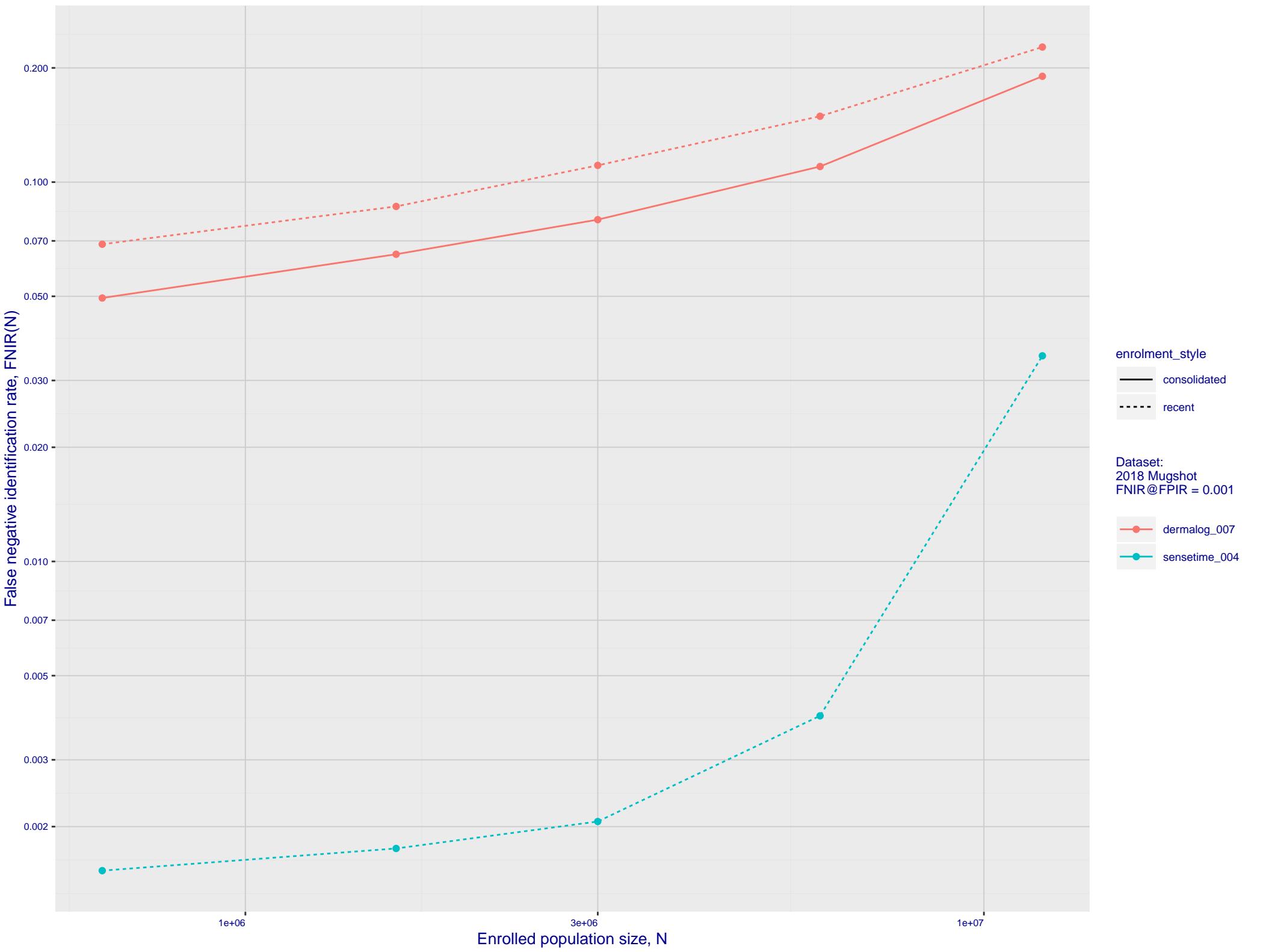
D: FPIR dependence on T by probe type for N = 1600000 subjects



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: dermalog_007

Developer: Dermalog

Submission Date: 2020_02_12

Template size: 128 bytes

Template time (2.5 percentile): 386 msec

Template time (median): 411 msec

Template time (97.5 percentile): 456 msec

Frontal mugshot investigation rank 109 --- FNIR(1600000, 0, 1) = 0.0092 vs. lowest 0.0010 from sensetime_004

natural investigation rank 90 --- FNIR(1600000, 0, 1) = 0.0267 vs. lowest 0.0067 from sensetime_003

natural investigation rank 104 --- FNIR(1600000, 0, 1) = 0.5282 vs. lowest 0.0492 from paravision_005

natural investigation rank 104 --- FNIR(1600000, 0, 1) = 0.5282 vs. lowest 0.0492 from paravision_005

natural investigation rank 53 --- FNIR(1600000, 0, 1) = 0.0143 vs. lowest 0.0014 from visionlabs_009

natural investigation rank 54 --- FNIR(1600000, 0, 1) = 0.1696 vs. lowest 0.0694 from cib_000

Frontal mugshot identification rank 109 --- FNIR(1600000, T, L+1) = 0.0863 vs. lowest 0.0018 from sensetime_004

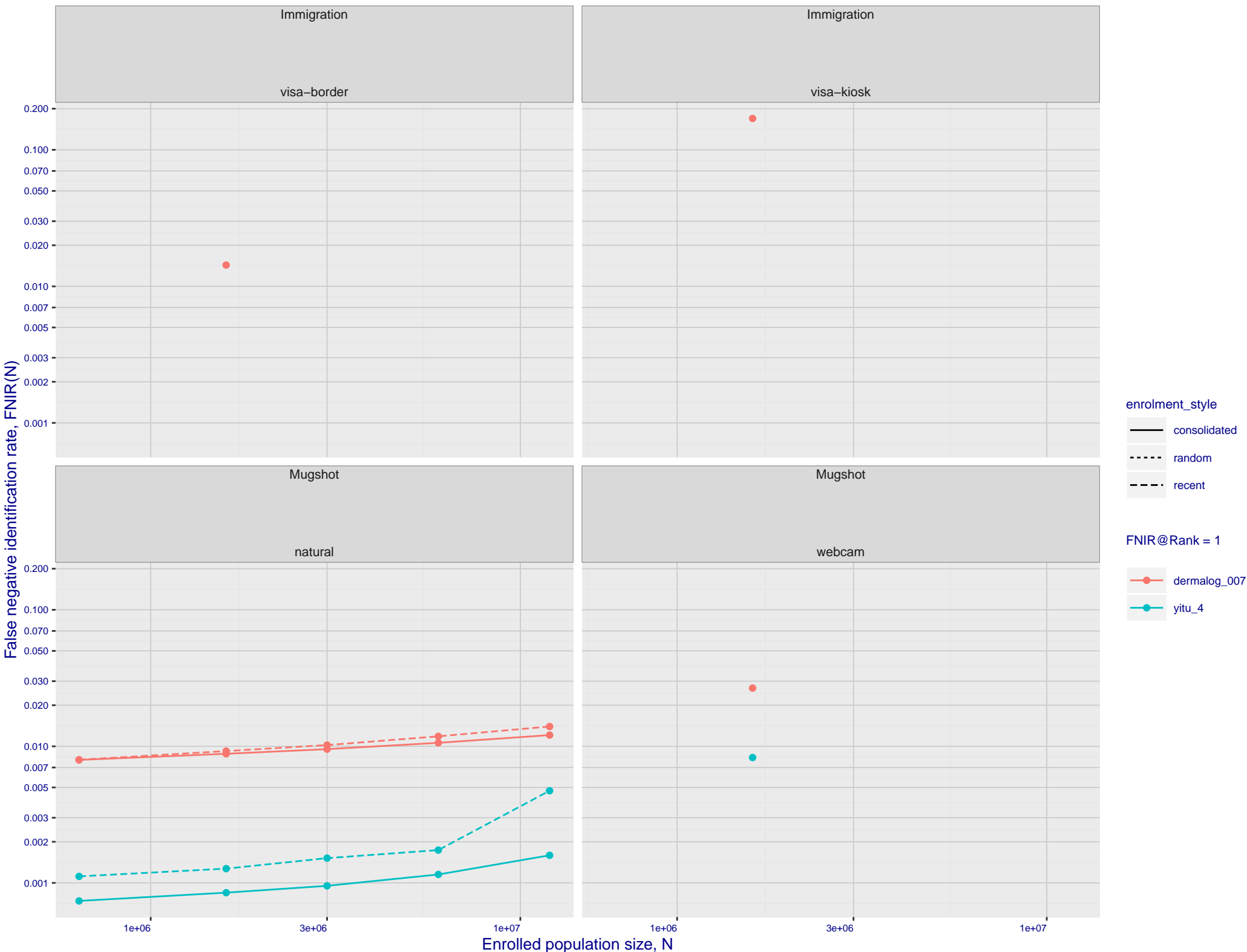
natural identification rank 92 --- FNIR(1600000, T, L+1) = 0.1524 vs. lowest 0.0122 from sensetime_003

natural identification rank 58 --- FNIR(1600000, T, L+1) = 0.9695 vs. lowest 0.1020 from sensetime_004

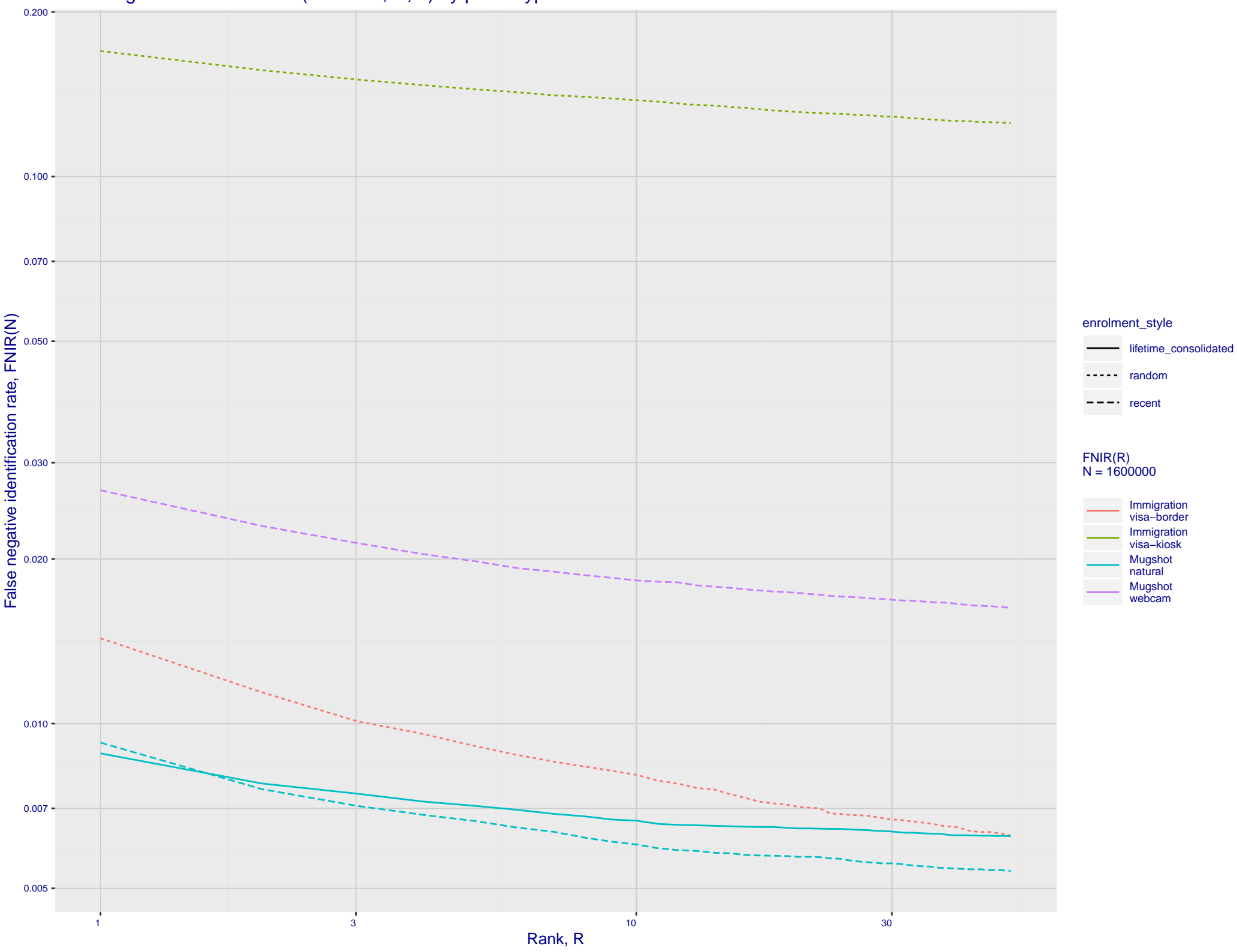
natural identification rank 51 --- FNIR(1600000, T, L+1) = 0.0989 vs. lowest 0.0059 from sensetime_004

natural identification rank 55 --- FNIR(1600000, T, L+1) = 0.5590 vs. lowest 0.1129 from visionlabs_009

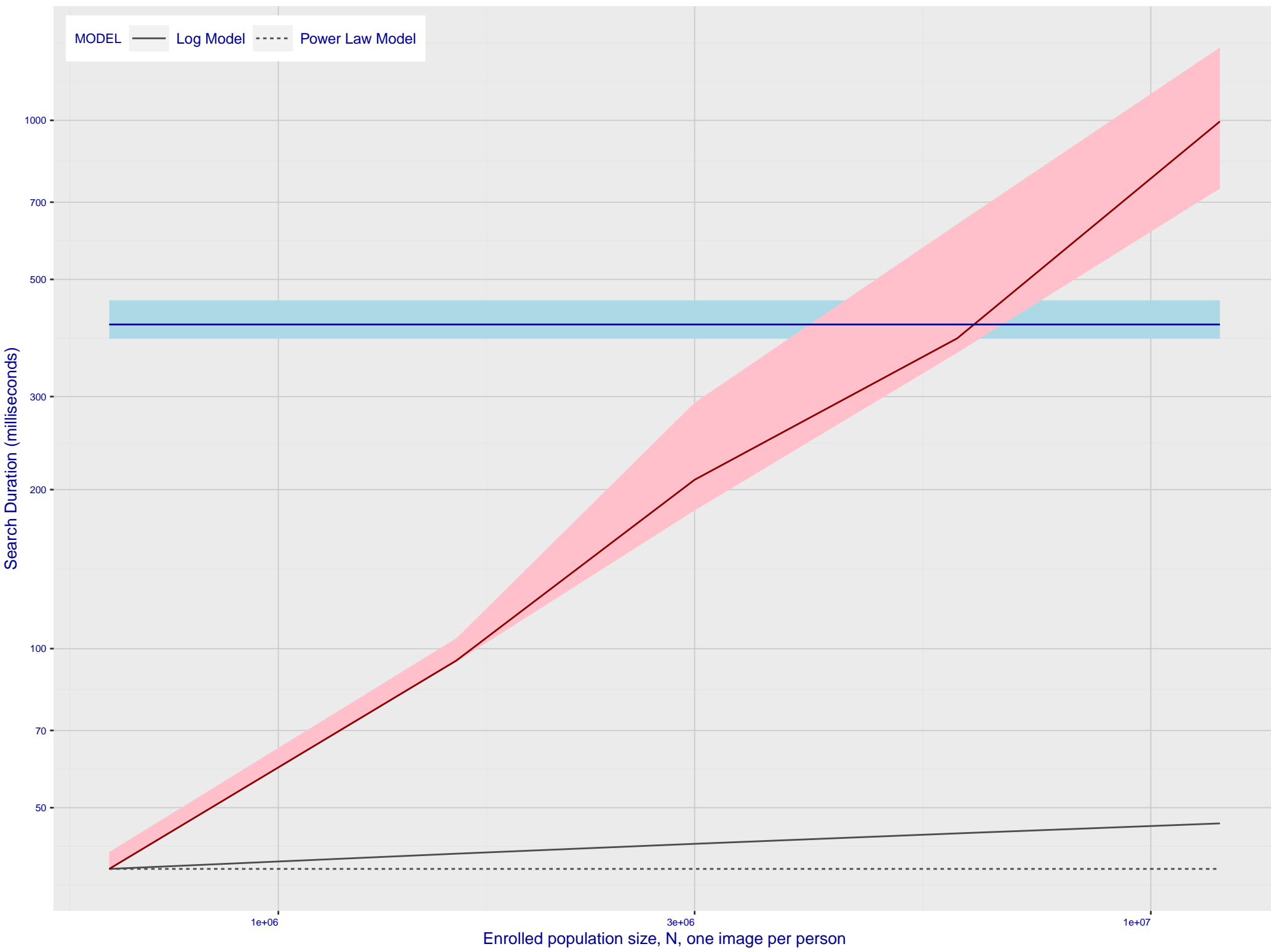
H: Investigational mode: FNIR(N, 1, 0) vs. most accurate (yitu_4)



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

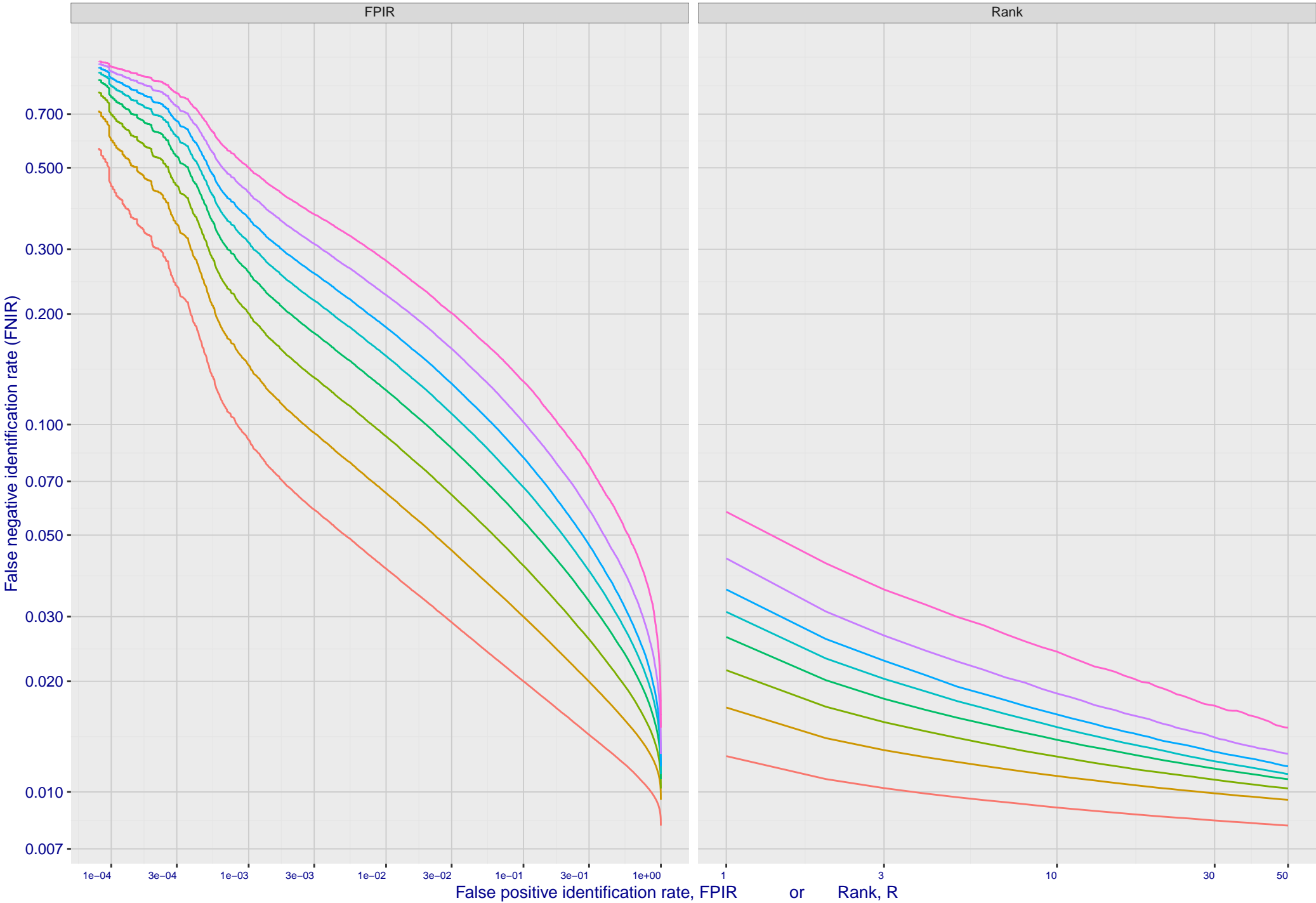


Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power-law models are fit to the first two (N,T) observations



M: Identification FNIR(N, T, L+1) and Investigational FNIR(N, 0, R) under ageing

Dataset: 2018 Mugshot N = 3068801



N: Decline of genuine scores with ageing

