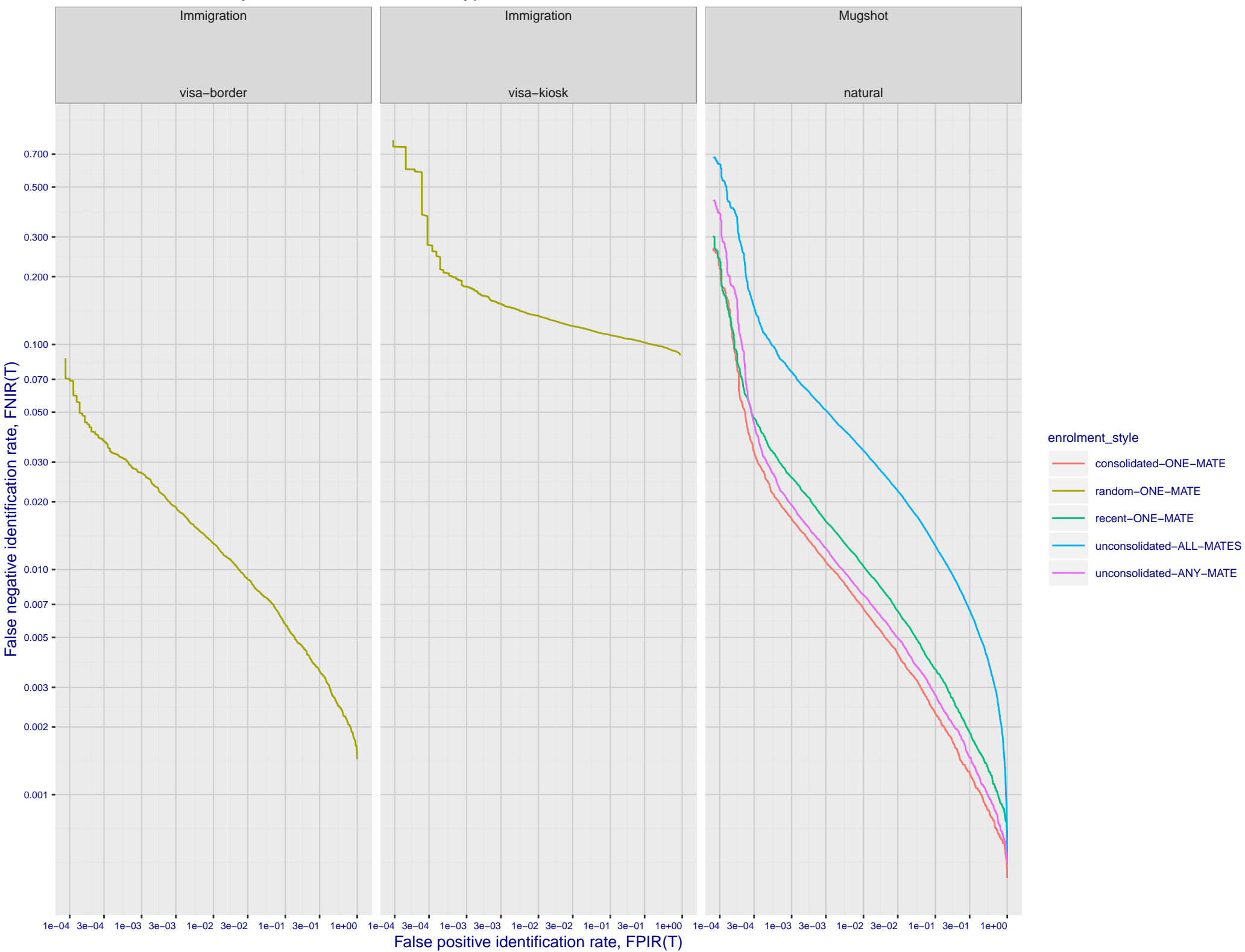
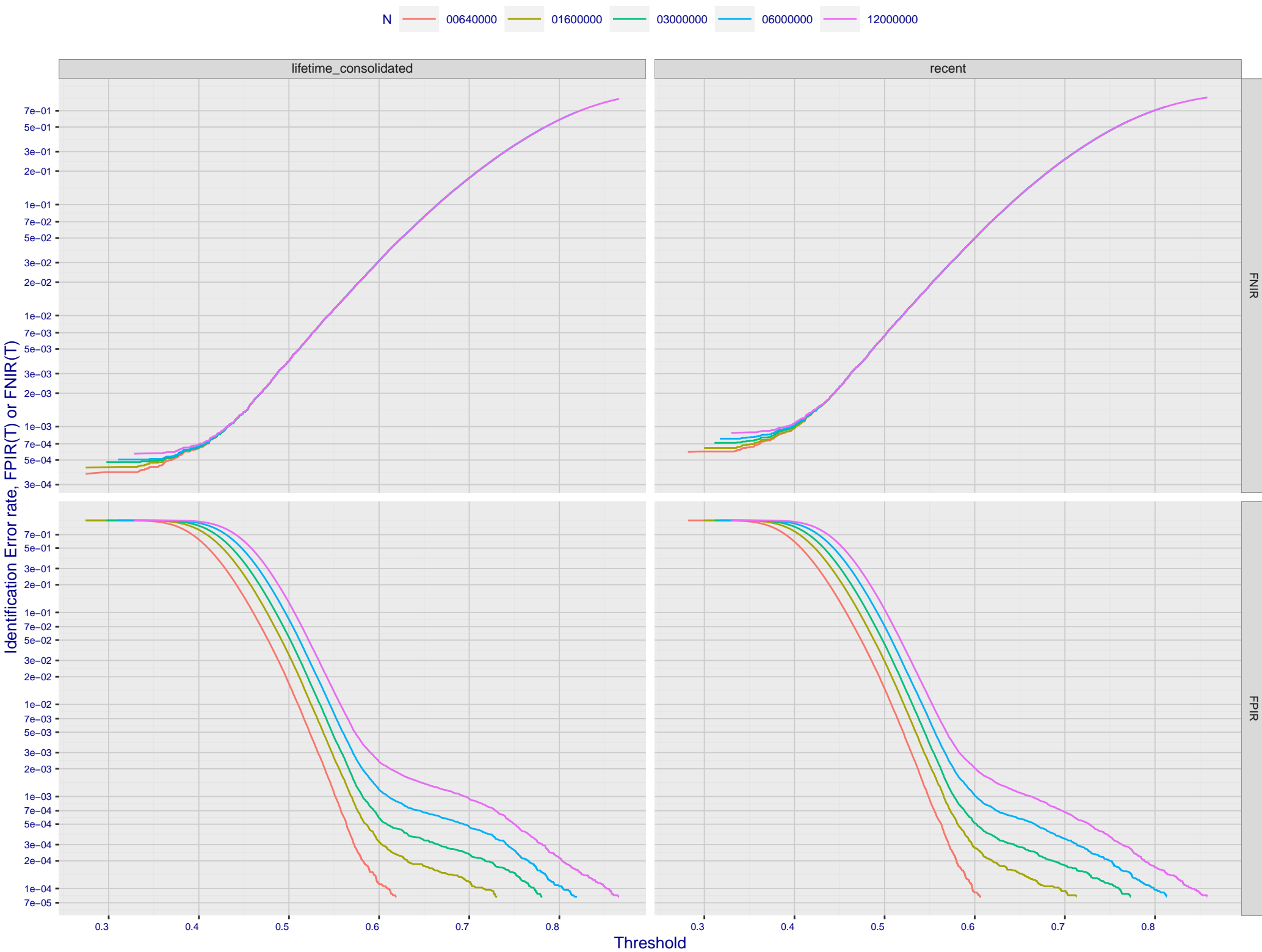


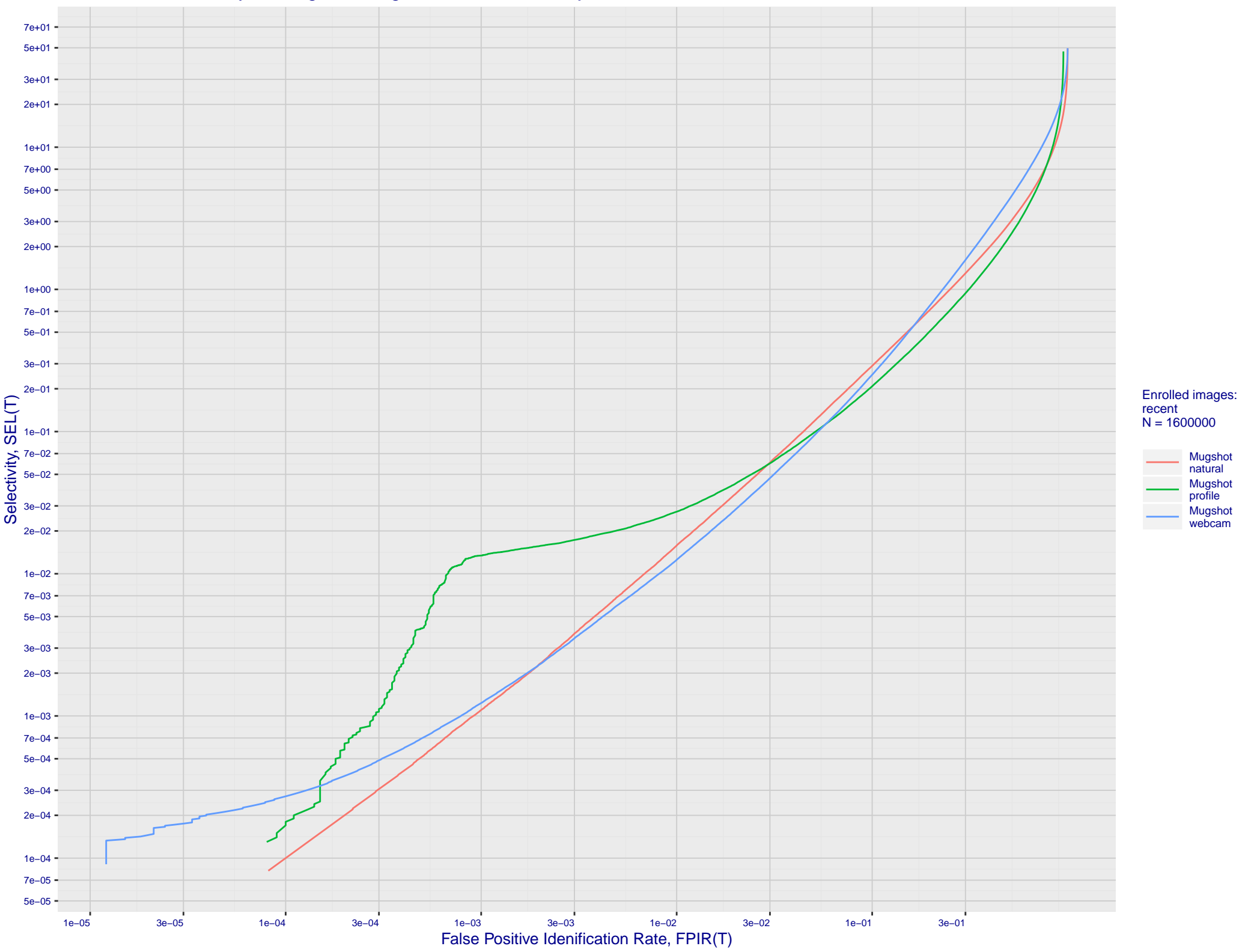
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



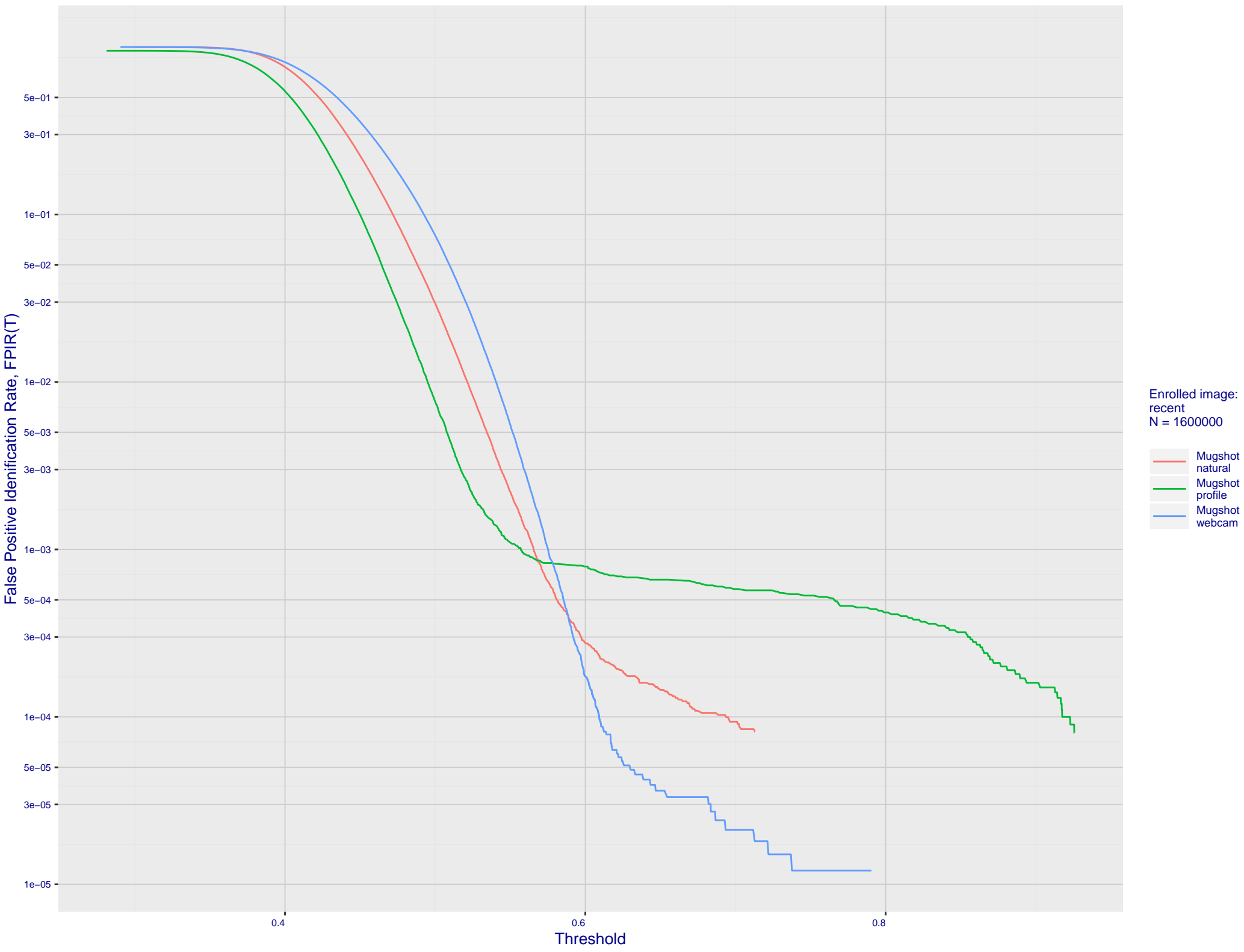
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



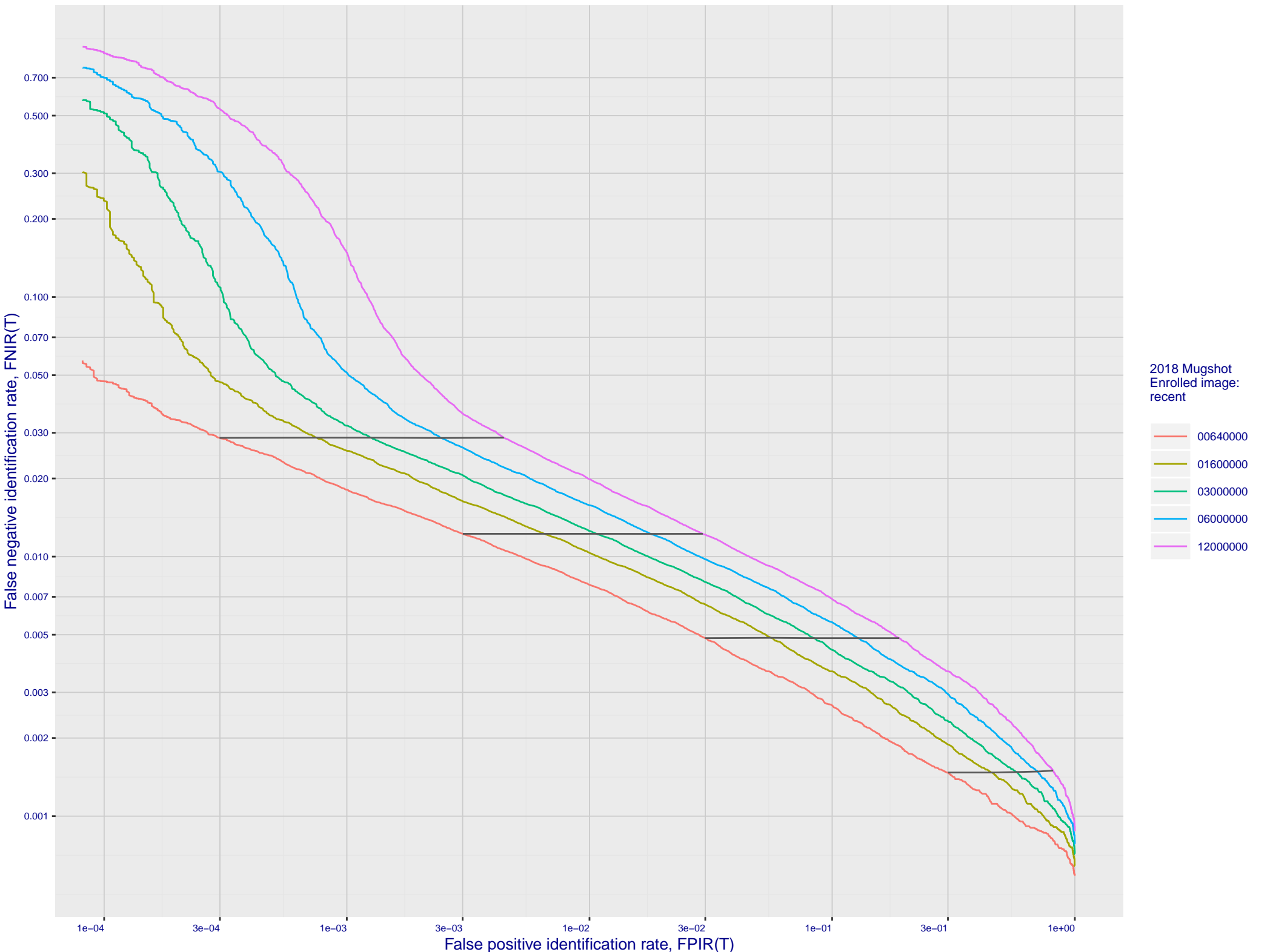
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



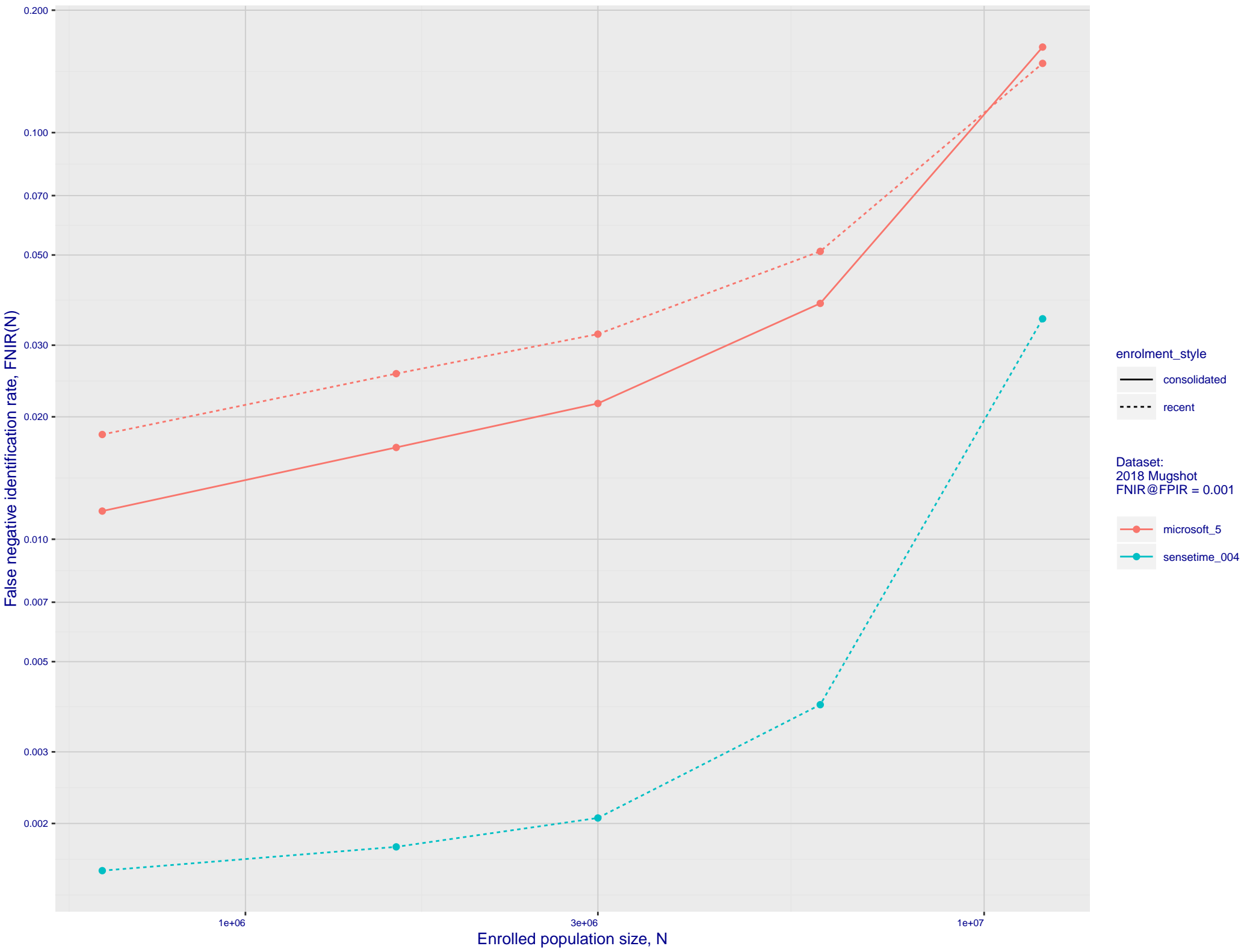
D: FPIR dependence on T by probe type for N = 1600000 subjects



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: microsoft_5

Developer: Microsoft

Submission Date: 2018_10_29

Template size: 1024 bytes

Template time (2.5 percentile): 637 msec

Template time (median): 659 msec

Template time (97.5 percentile): 900 msec

Frontal mugshot investigation rank 21 --- FNIR(1600000, 0, 1) = 0.0019 vs. lowest 0.0010 from sensetime_004

natural investigation rank 15 --- FNIR(1600000, 0, 1) = 0.0109 vs. lowest 0.0067 from sensetime_003

natural investigation rank 6 --- FNIR(1600000, 0, 1) = 0.0665 vs. lowest 0.0492 from paravision_005

natural investigation rank 6 --- FNIR(1600000, 0, 1) = 0.0665 vs. lowest 0.0492 from paravision_005

natural investigation rank 9 --- FNIR(1600000, 0, 1) = 0.0030 vs. lowest 0.0014 from visionlabs_009

natural investigation rank 16 --- FNIR(1600000, 0, 1) = 0.0987 vs. lowest 0.0694 from cib_000

Frontal mugshot identification rank 37 --- FNIR(1600000, T, L+1) = 0.0255 vs. lowest 0.0018 from sensetime_004

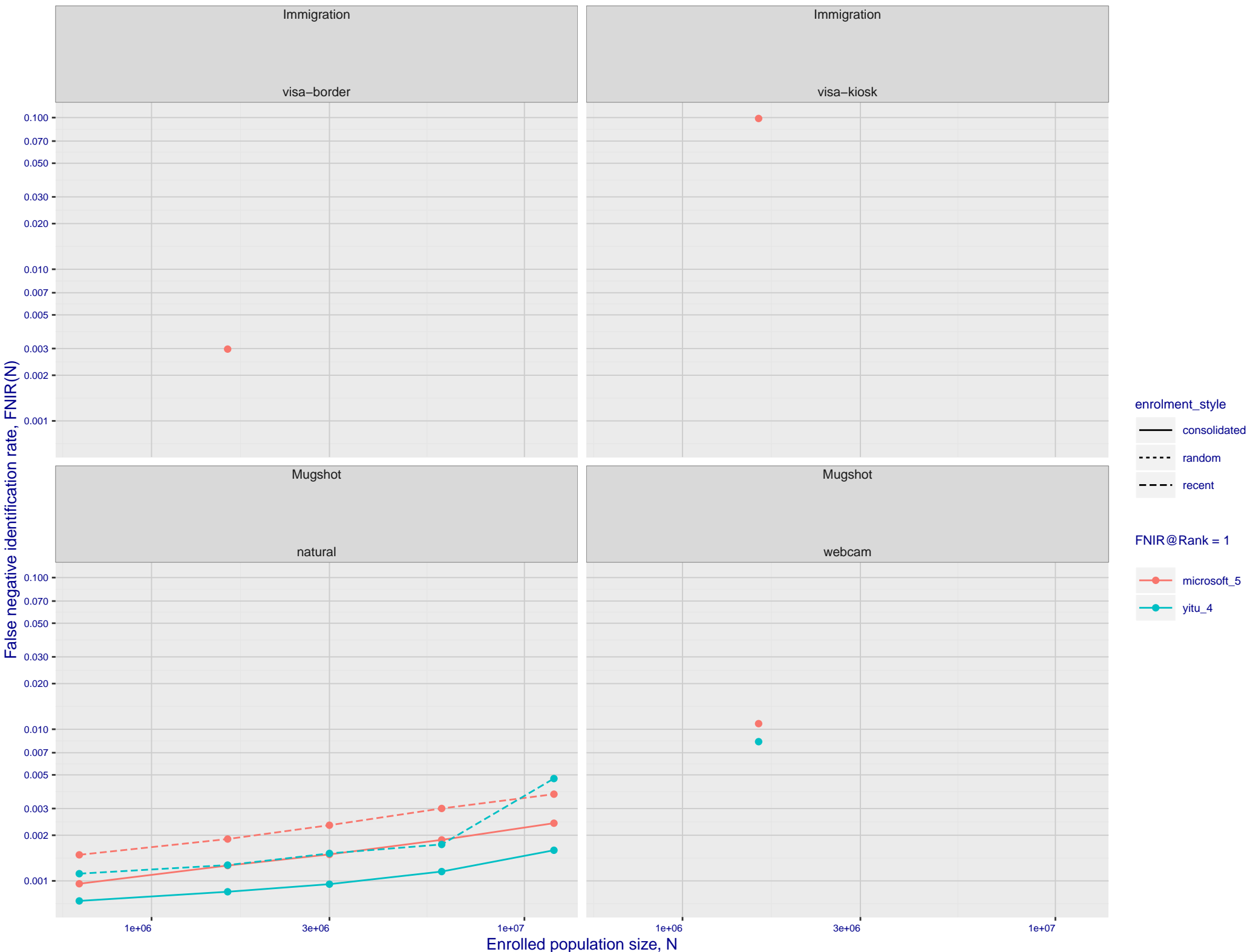
natural identification rank 28 --- FNIR(1600000, T, L+1) = 0.0704 vs. lowest 0.0122 from sensetime_003

natural identification rank 6 --- FNIR(1600000, T, L+1) = 0.2486 vs. lowest 0.1020 from sensetime_004

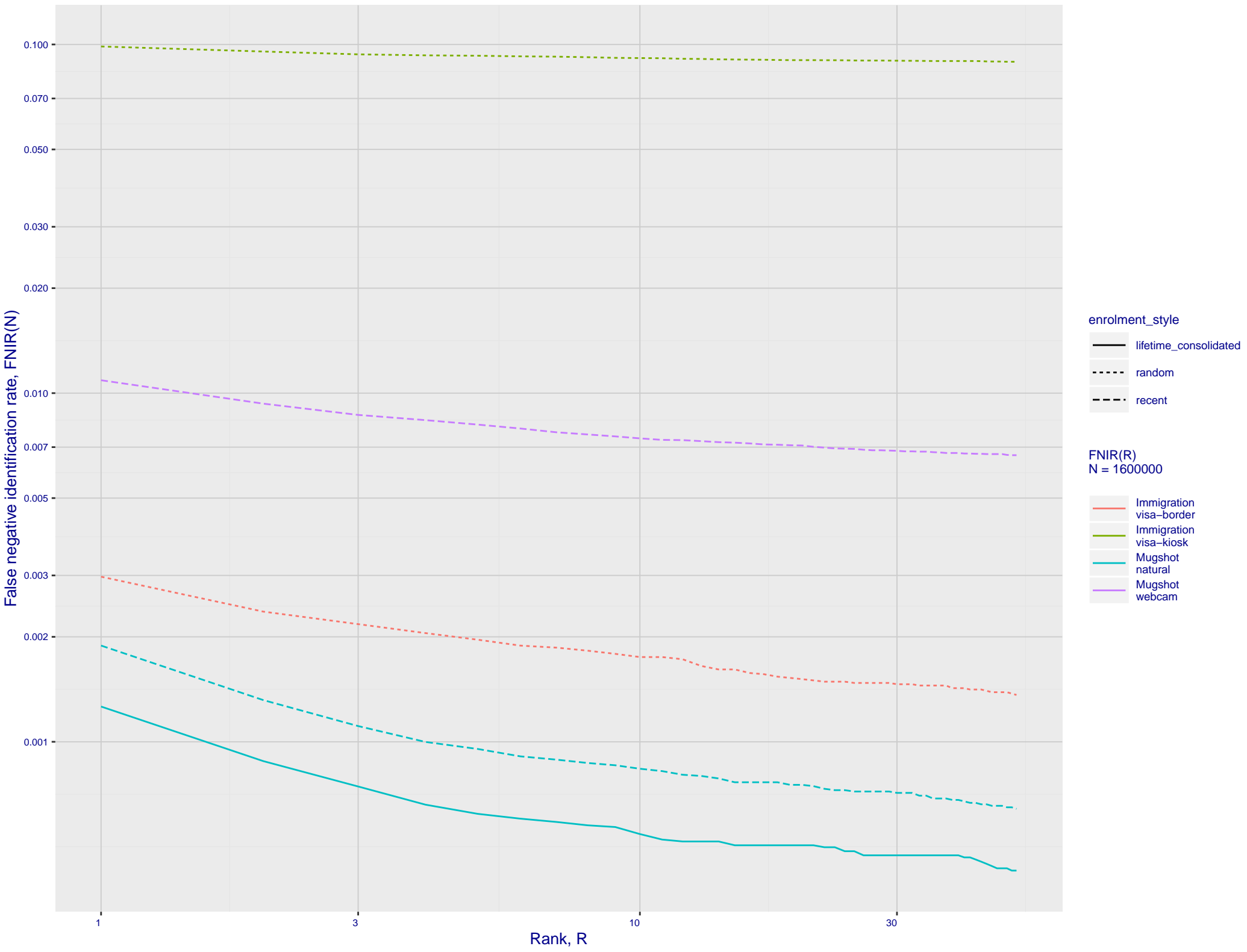
natural identification rank 15 --- FNIR(1600000, T, L+1) = 0.0268 vs. lowest 0.0059 from sensetime_004

natural identification rank 10 --- FNIR(1600000, T, L+1) = 0.1809 vs. lowest 0.1129 from visionlabs_009

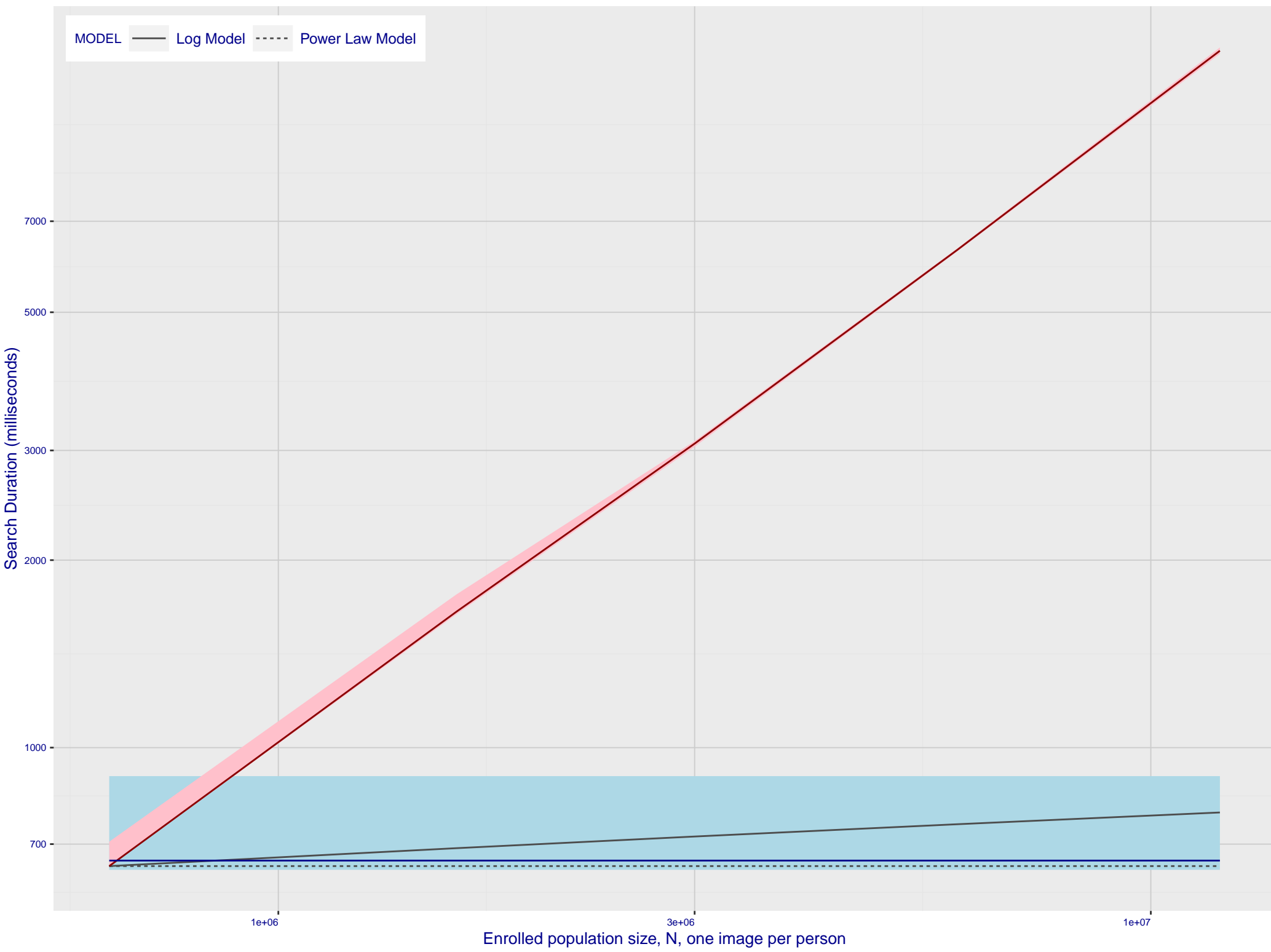
H: Investigational mode: FNIR(N, 1, 0) vs. most accurate (yitu_4)



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

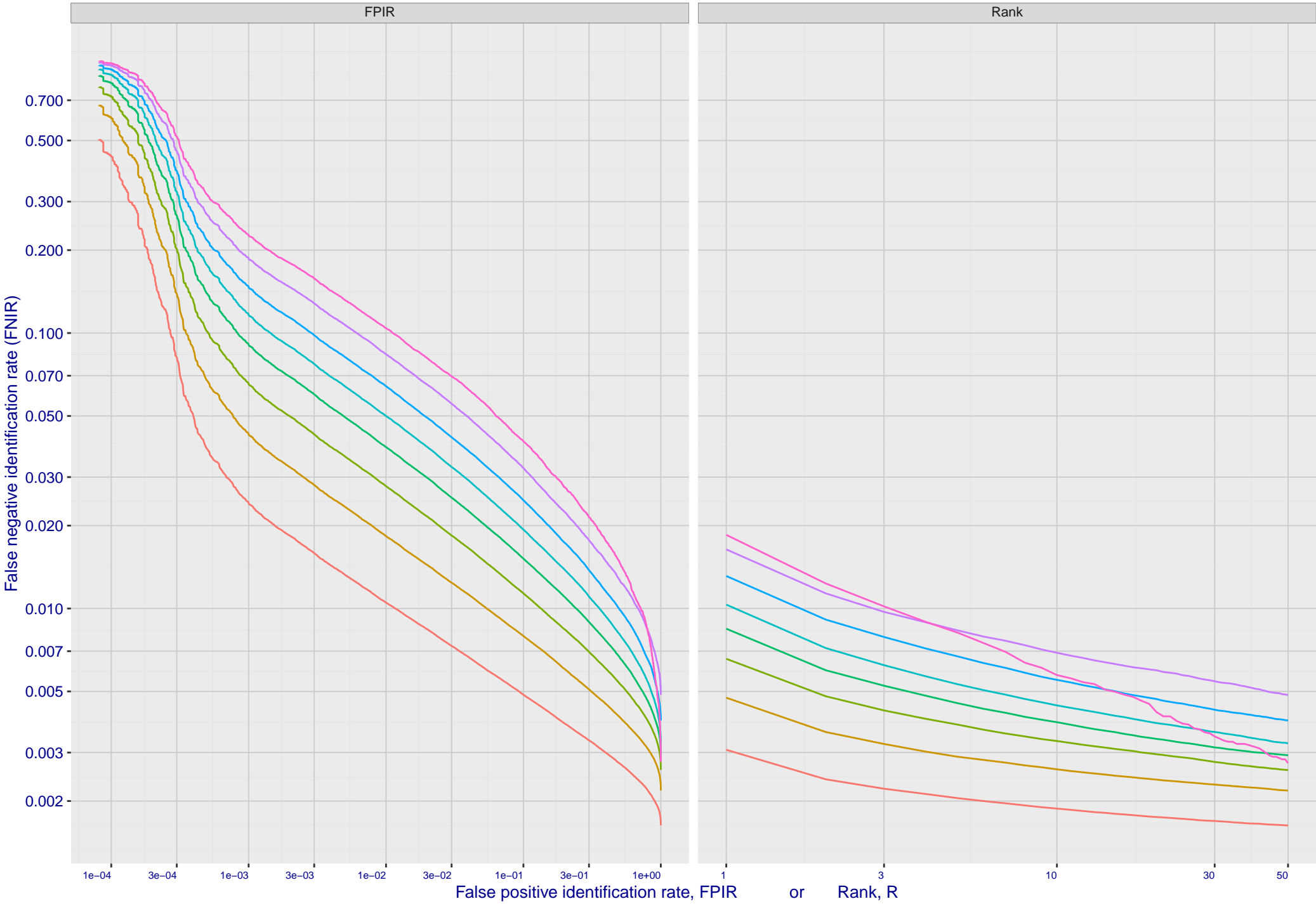


Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements. The template generation time is independent of N. The log and power-law models are fit to the first two (N,T) observations



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

