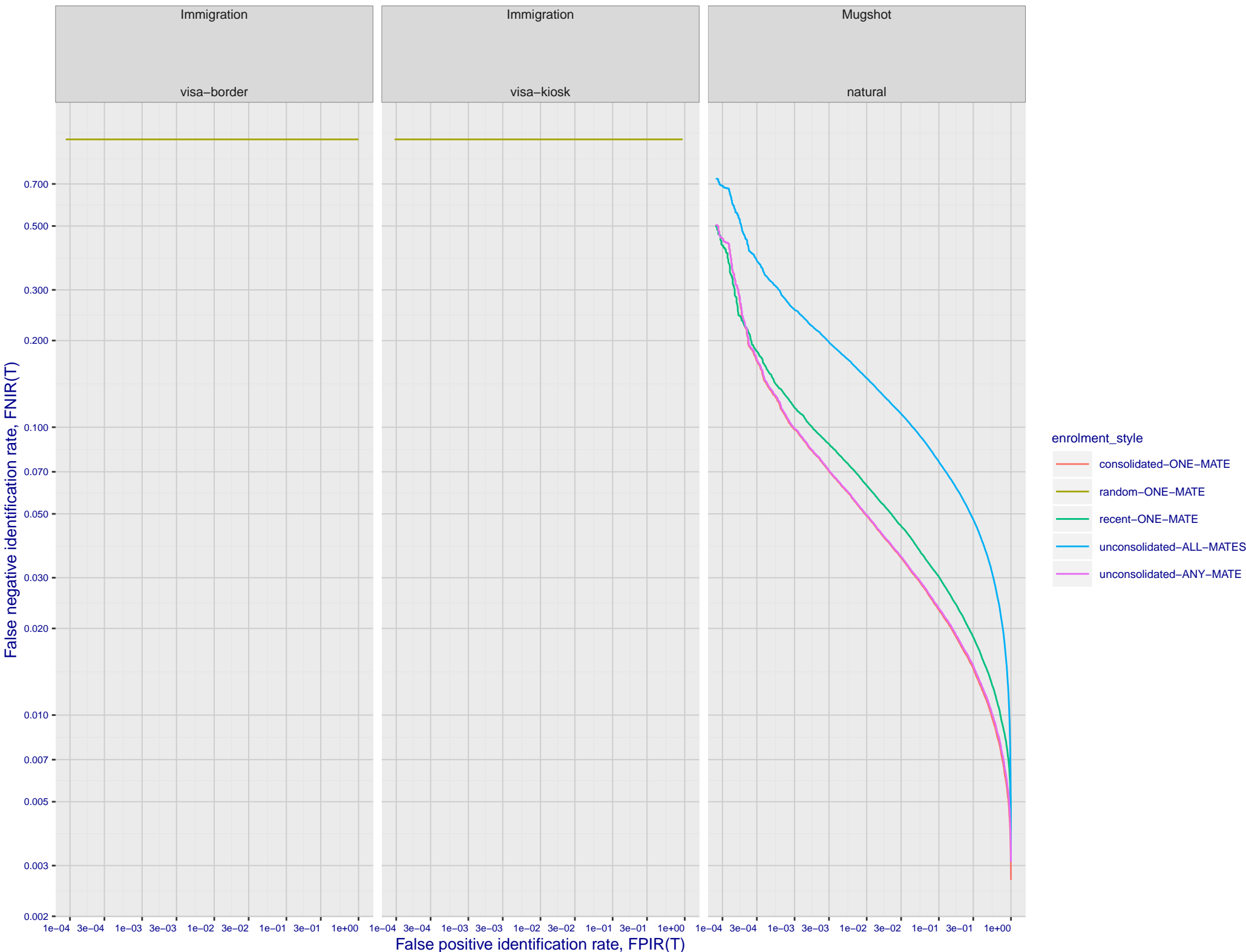
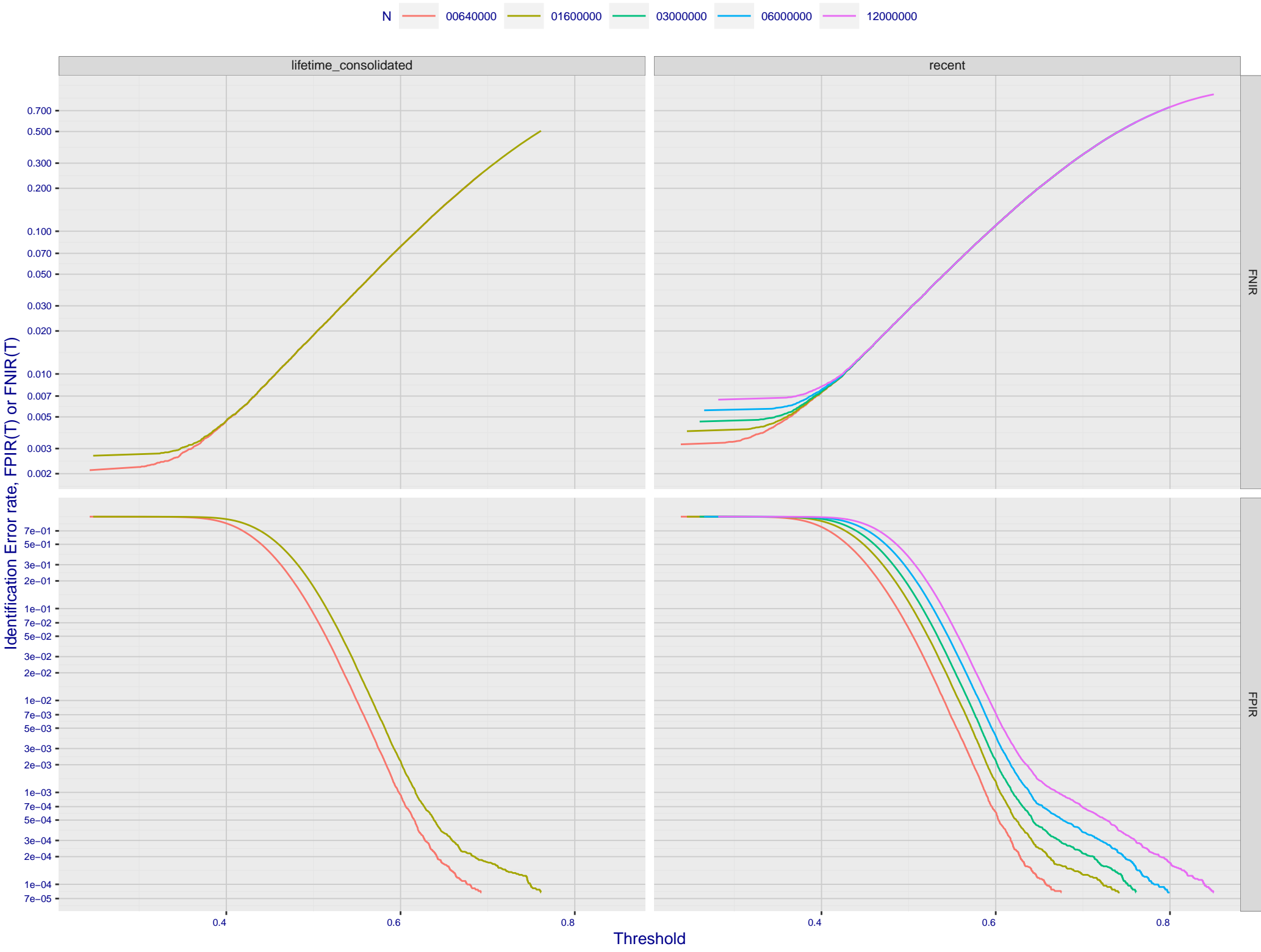


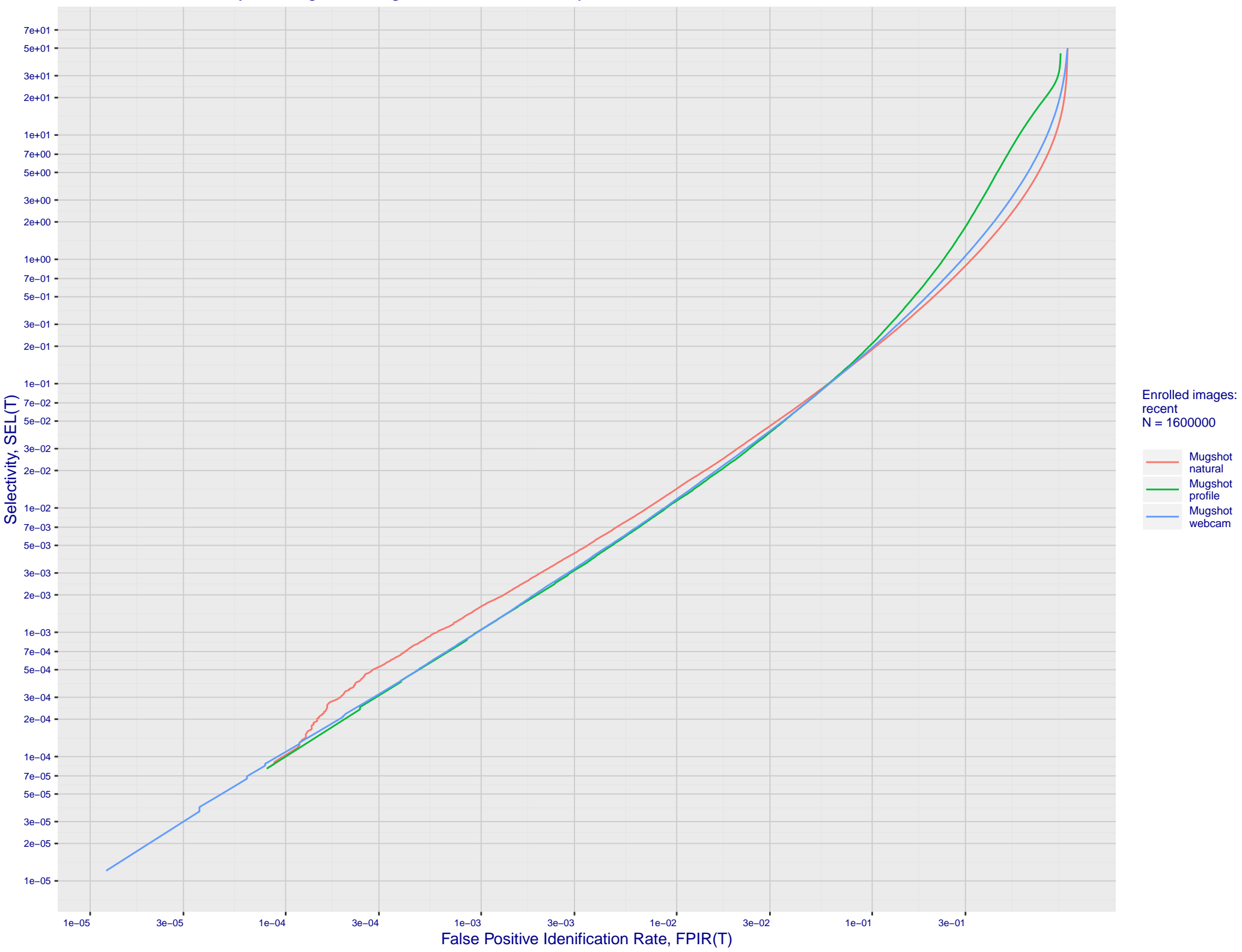
A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



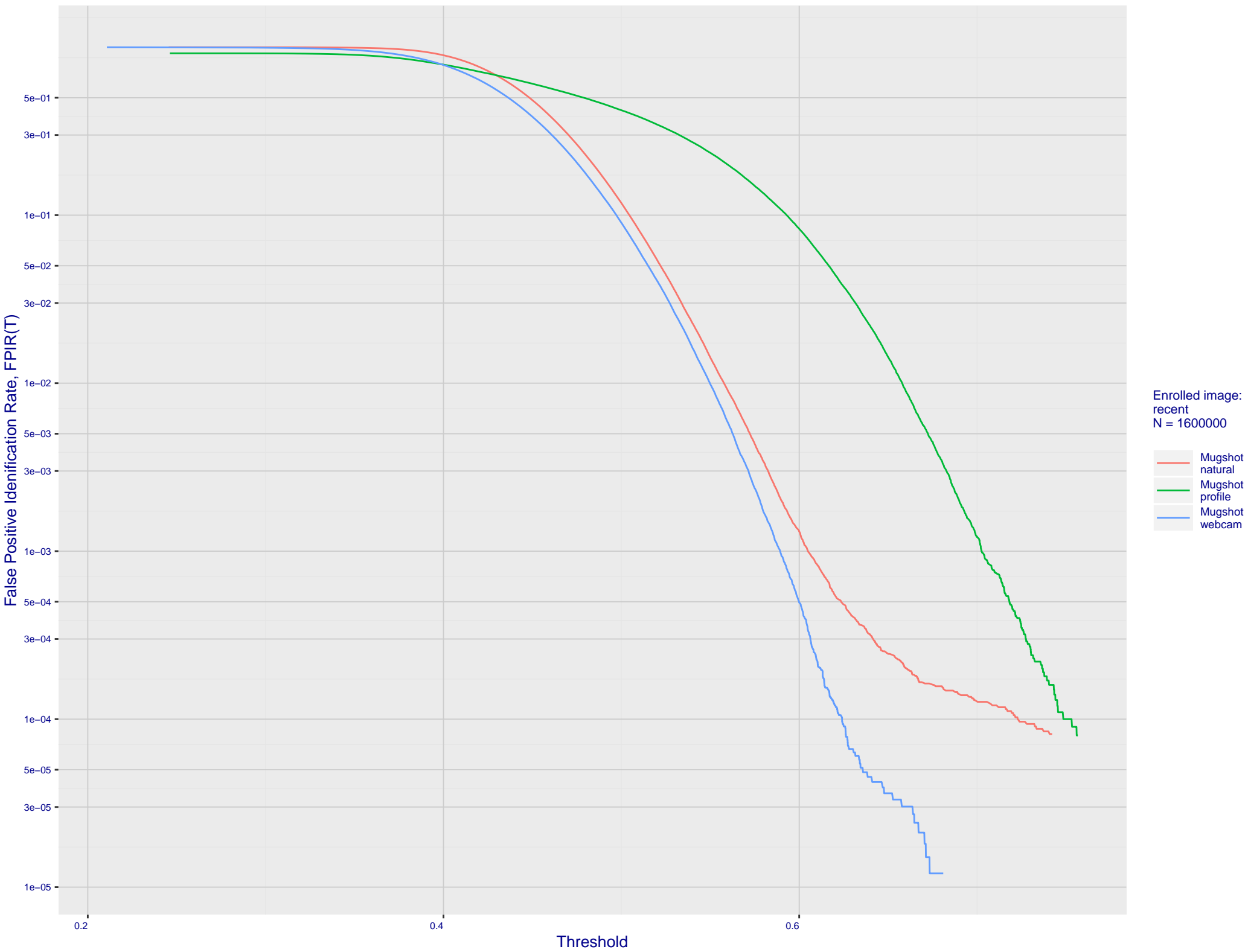
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



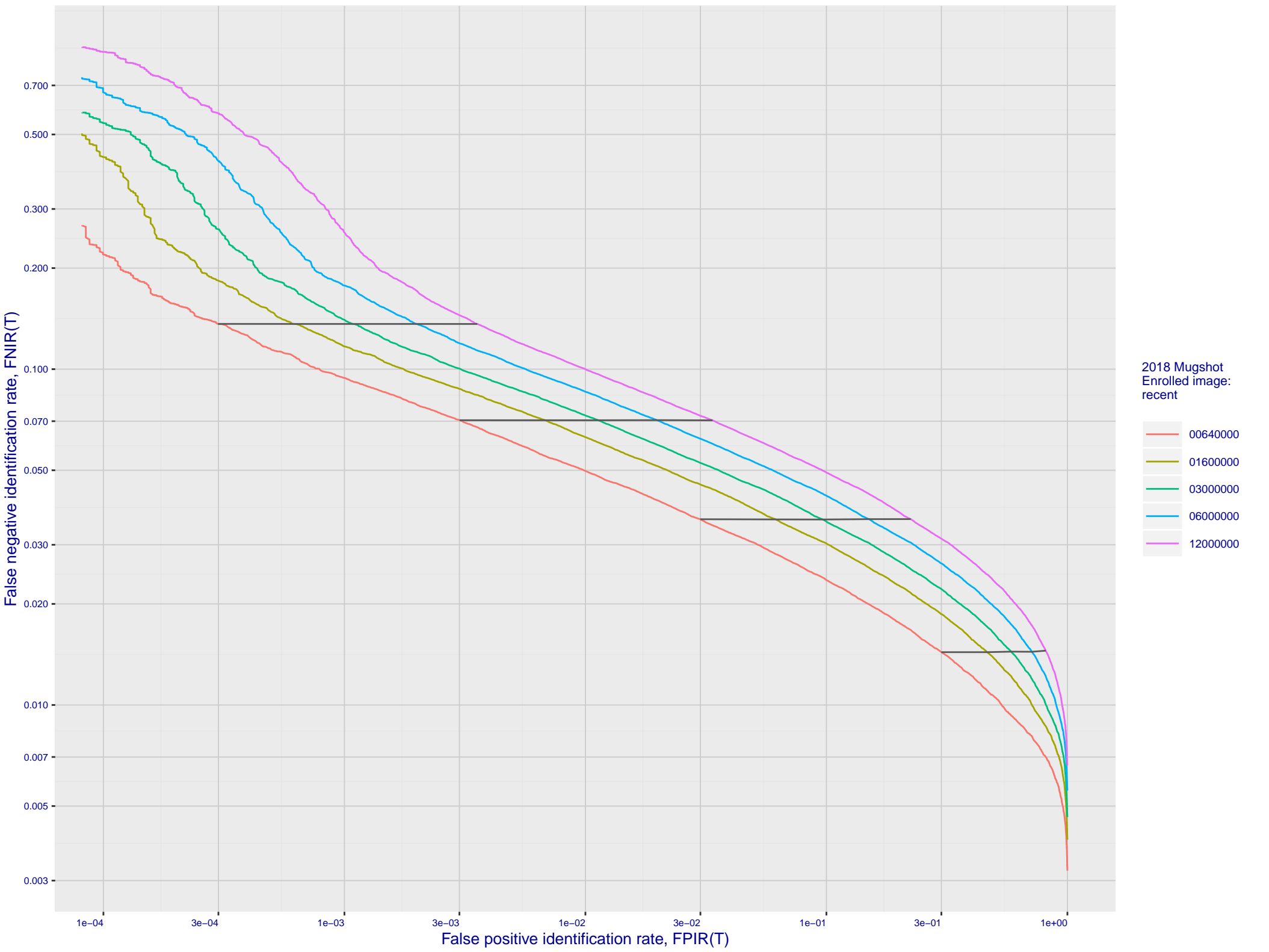
C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



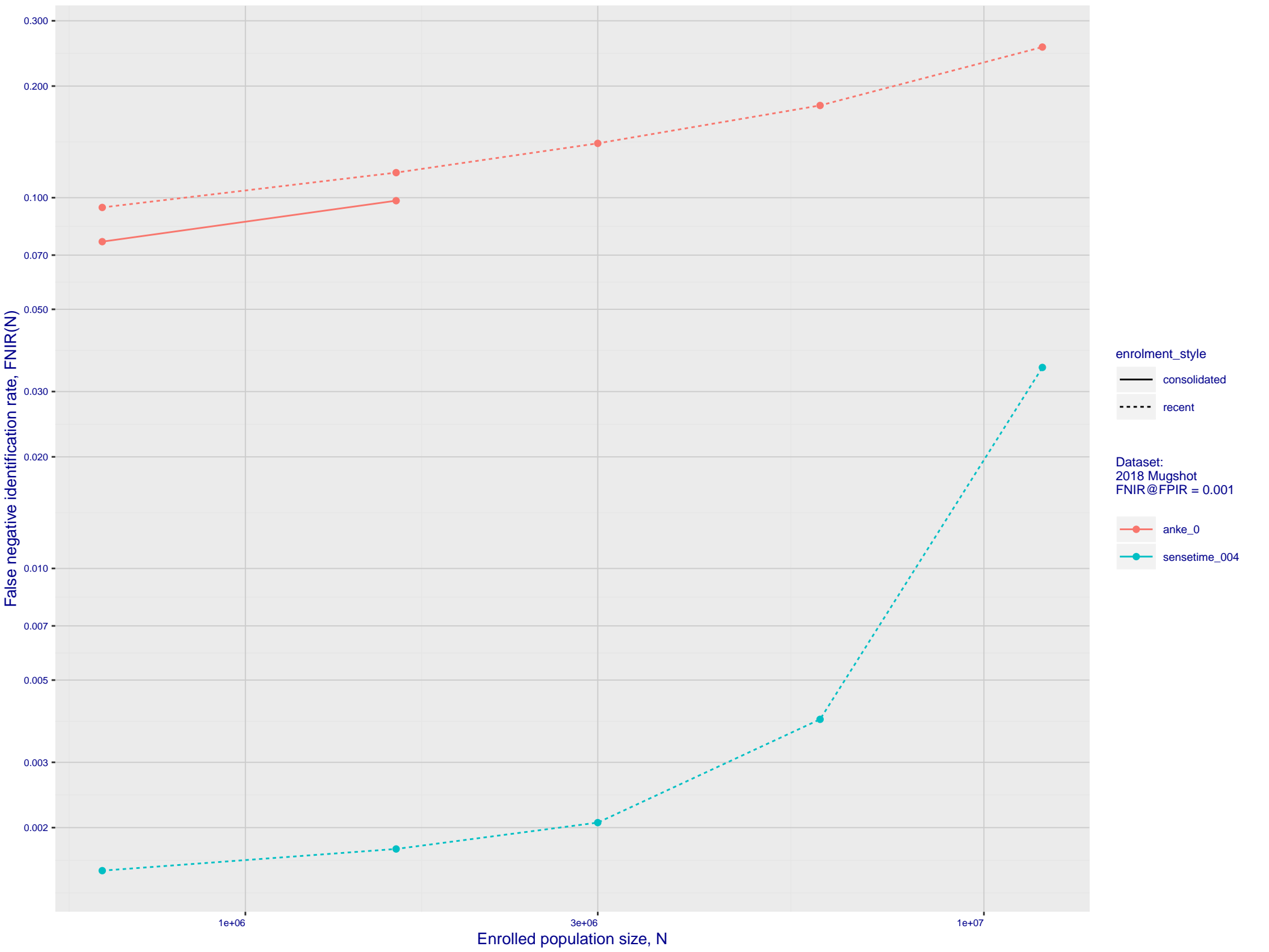
D: FPIR dependence on T by probe type for N = 1600000 subjects



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: anke\_0

Developer: Anke Investments

Submission Date: 2018\_10\_30

Template size: 2072 bytes

Template time (2.5 percentile): 367 msec

Template time (median): 430 msec

Template time (97.5 percentile): 508 msec

Frontal mugshot investigation rank 133 -- FNIR(1600000, 0, 1) = 0.0132 vs. lowest 0.0010 from sensetime\_004

natural investigation rank 110 -- FNIR(1600000, 0, 1) = 0.0378 vs. lowest 0.0067 from sensetime\_003

natural investigation rank 215 -- FNIR(1600000, 0, 1) = 0.8844 vs. lowest 0.0492 from paravision\_005

natural investigation rank 215 -- FNIR(1600000, 0, 1) = 0.8844 vs. lowest 0.0492 from paravision\_005

natural investigation rank 104 -- FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0014 from visionlabs\_009

natural investigation rank 102 -- FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0694 from cib\_000

Frontal mugshot identification rank 130 -- FNIR(1600000, T, L+1) = 0.1169 vs. lowest 0.0018 from sensetime\_004

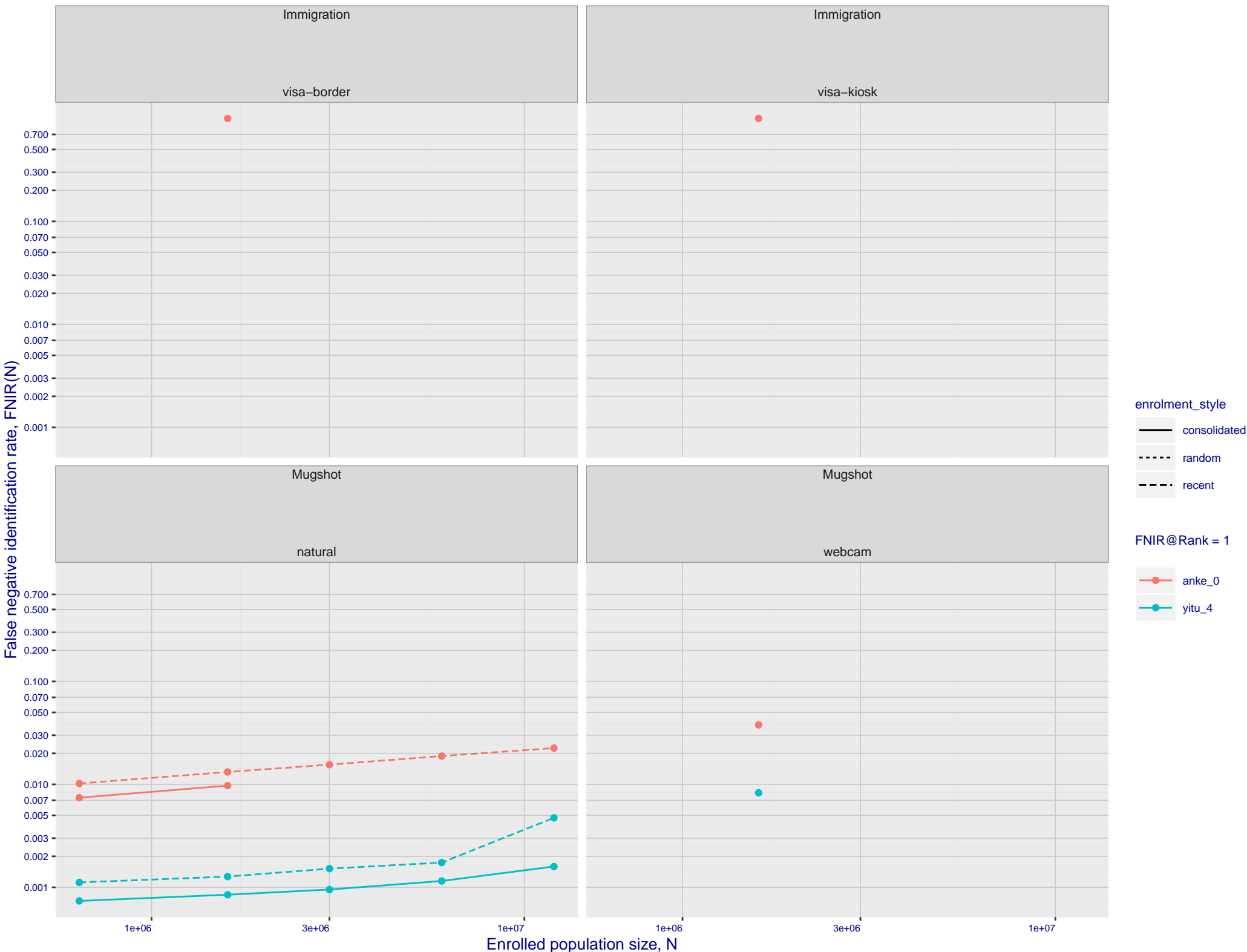
natural identification rank 118 -- FNIR(1600000, T, L+1) = 0.2195 vs. lowest 0.0122 from sensetime\_003

natural identification rank 88 -- FNIR(1600000, T, L+1) = 0.9907 vs. lowest 0.1020 from sensetime\_004

natural identification rank 99 -- FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.0059 from sensetime\_004

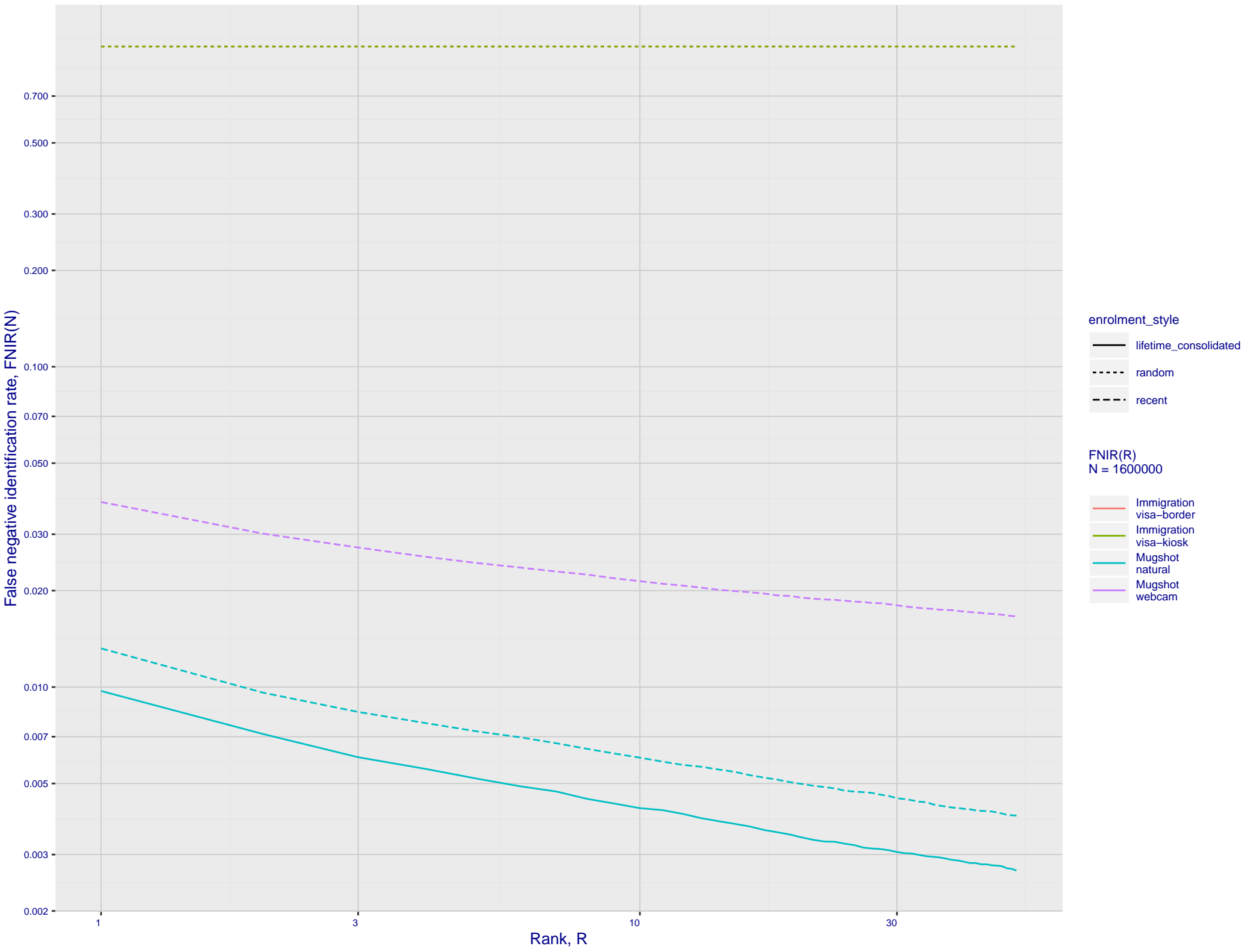
natural identification rank 95 -- FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.1129 from visionlabs\_009

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

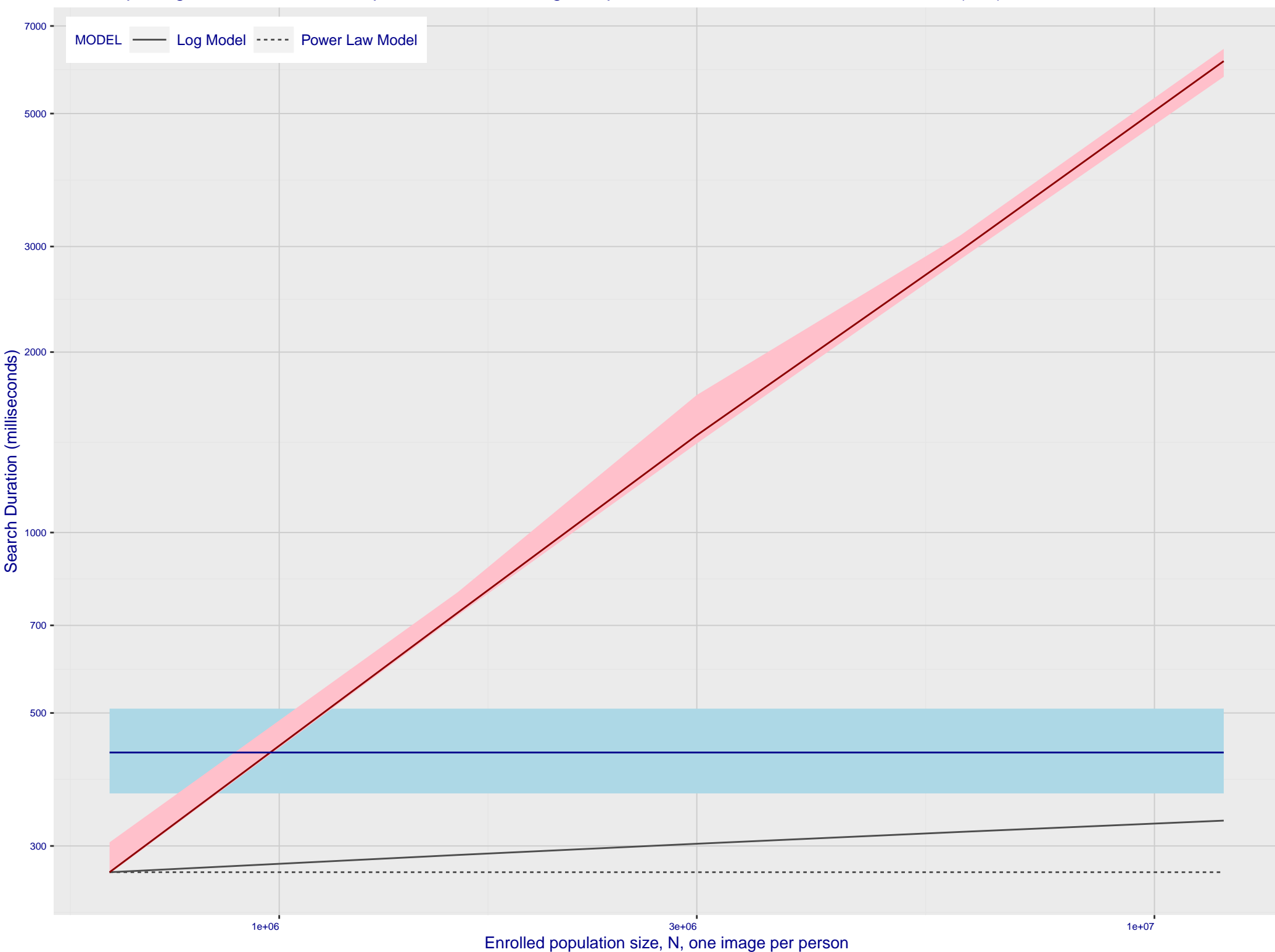




I: Investigational mode: FNIR(1600000, R, 0) by probe type

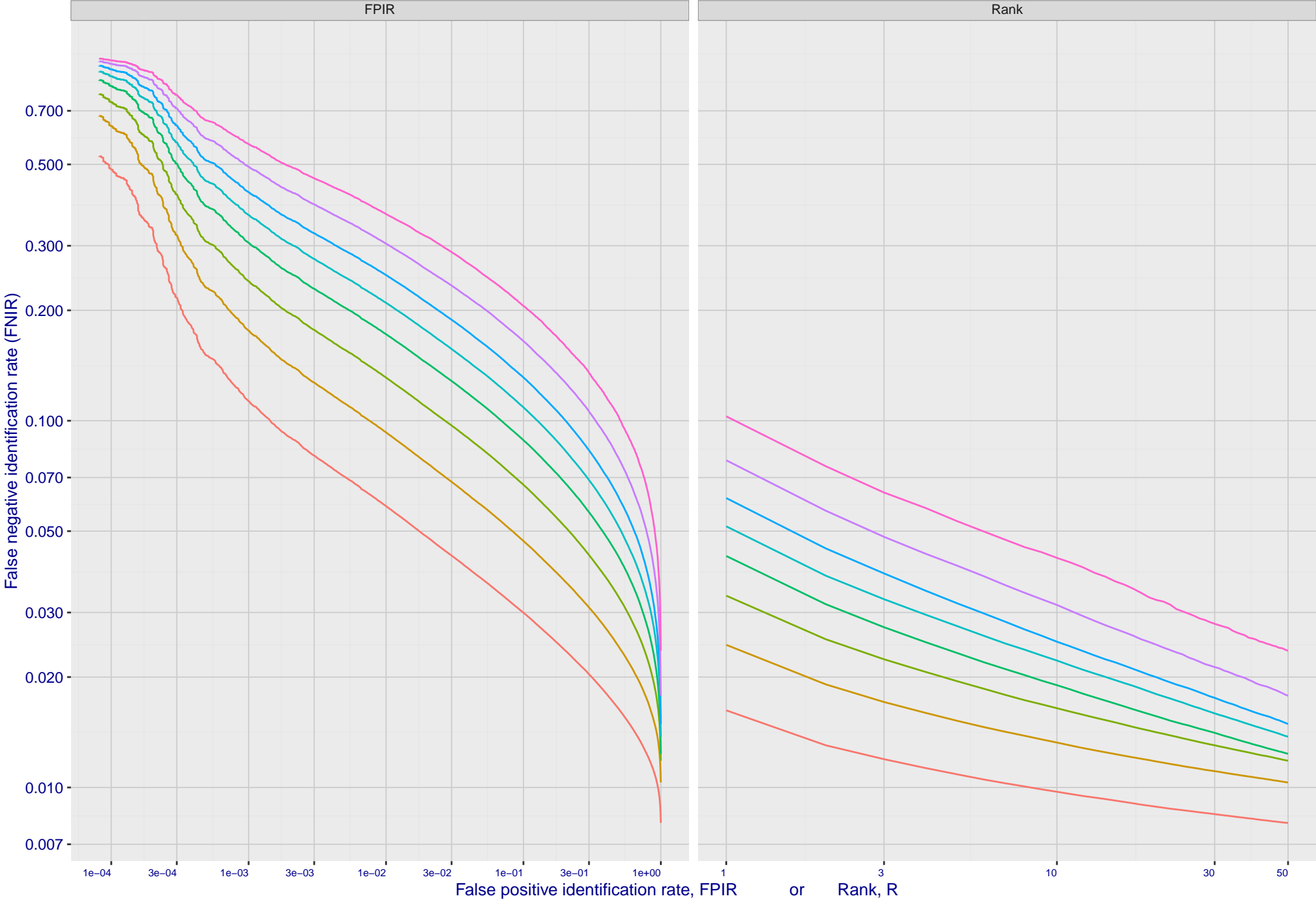


Template duration; search duration vs. N. The blue and pink ribbon covers 95 percent of observed measurements.  
The template generation time is independent of N. The log and power-law models are fit to the first two (N,T) observations



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

