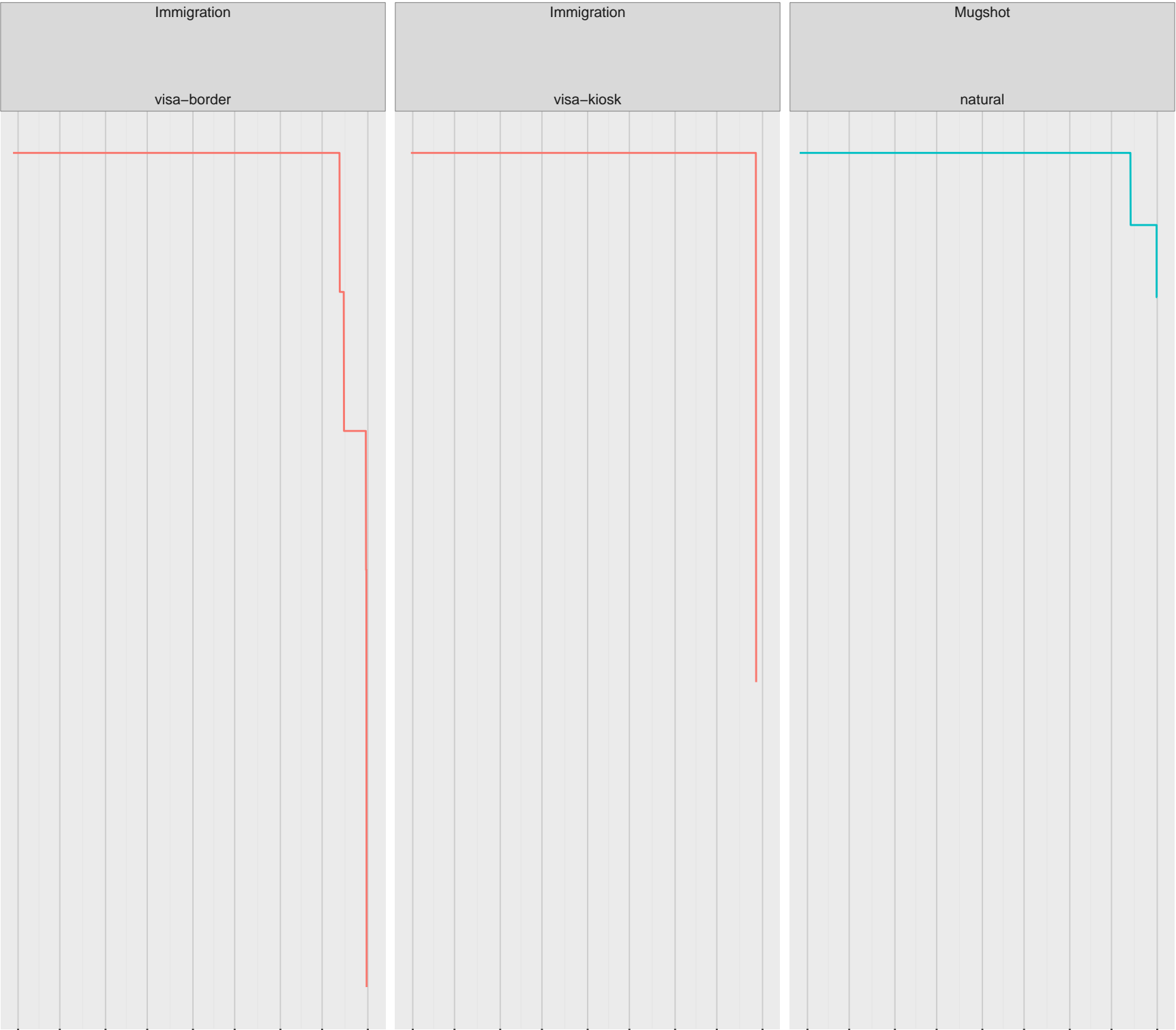


A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

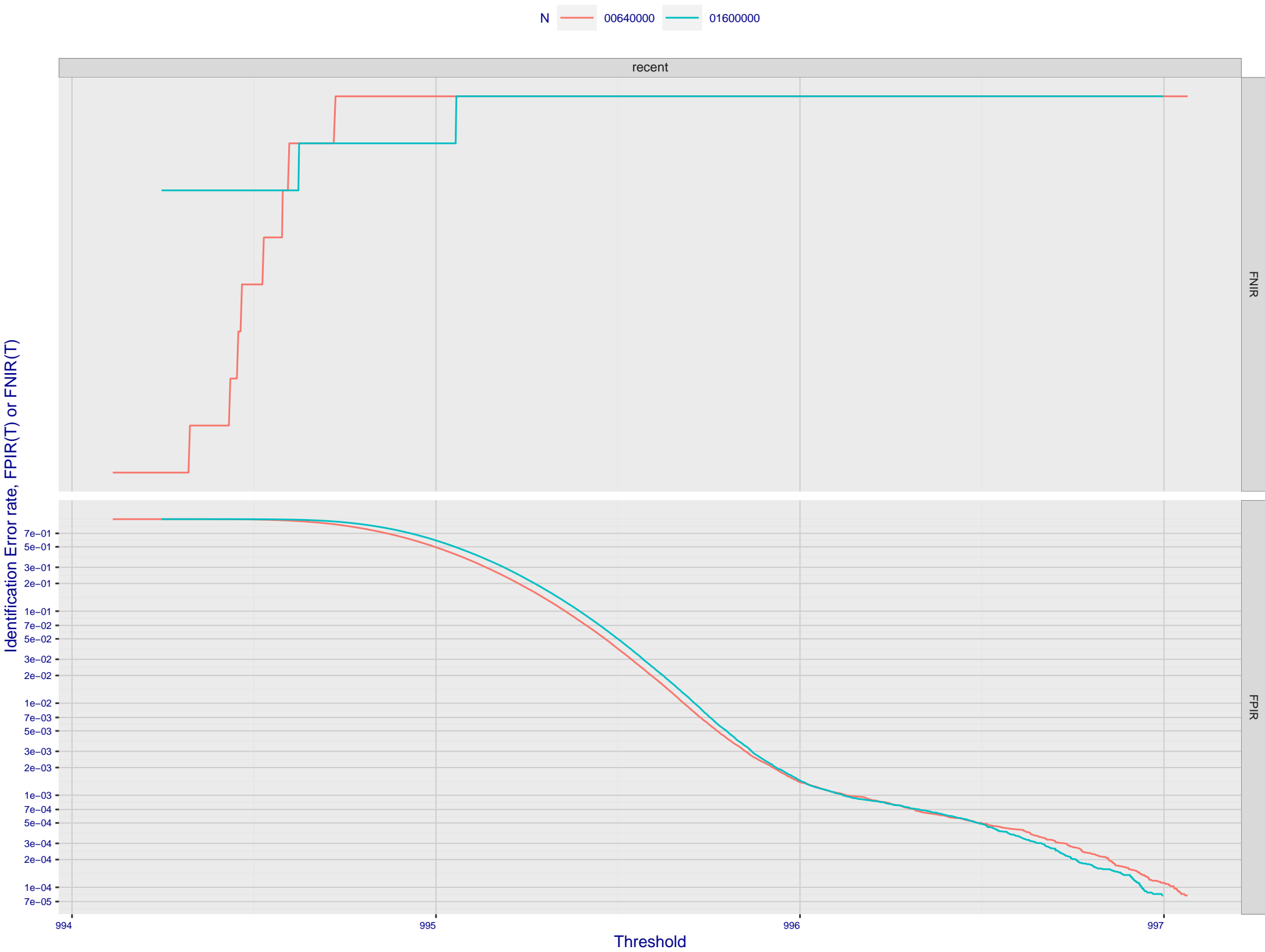
False negative identification rate, FNIR(T)



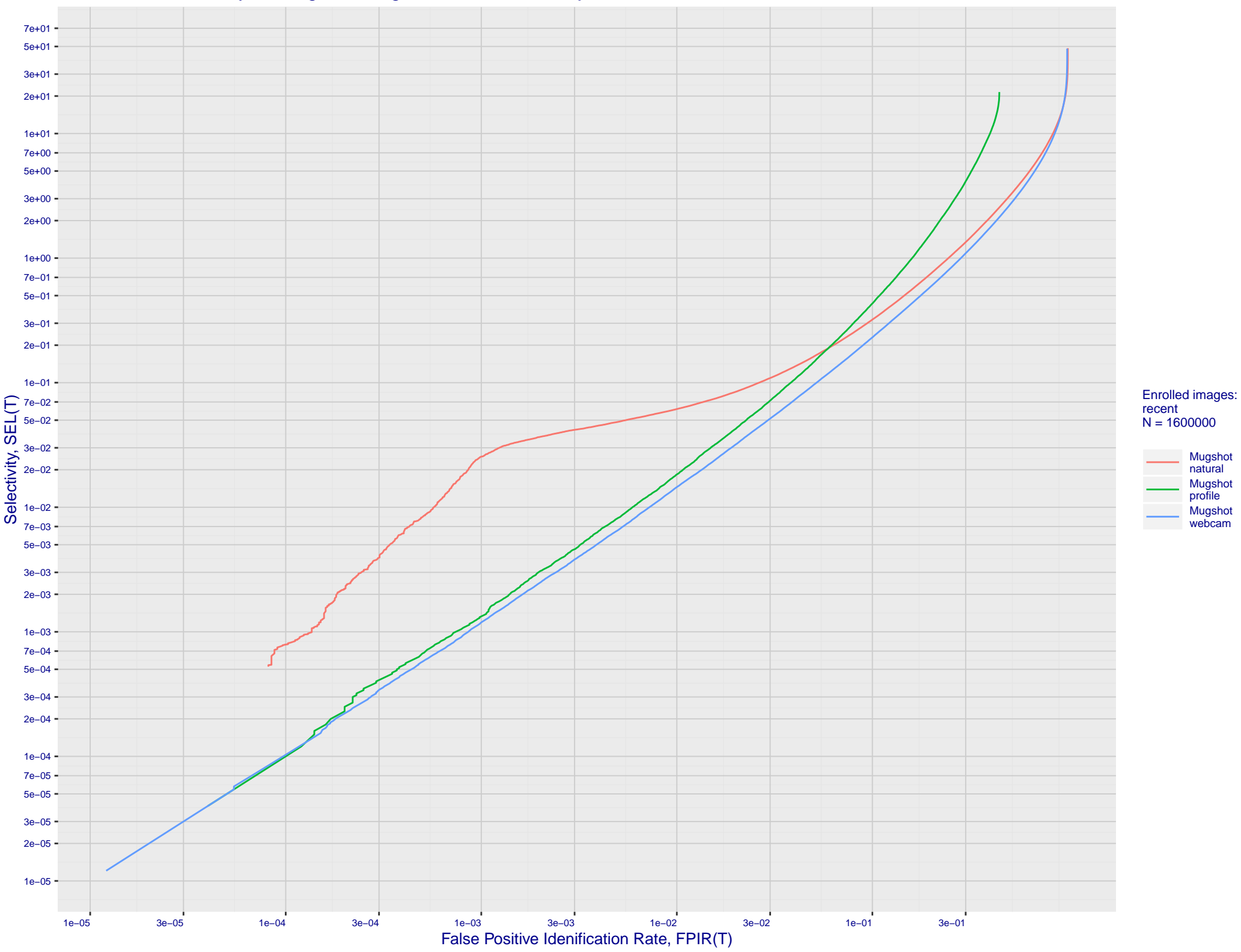
enrolment_style

- random-ONE-MATE
- recent-ONE-MATE

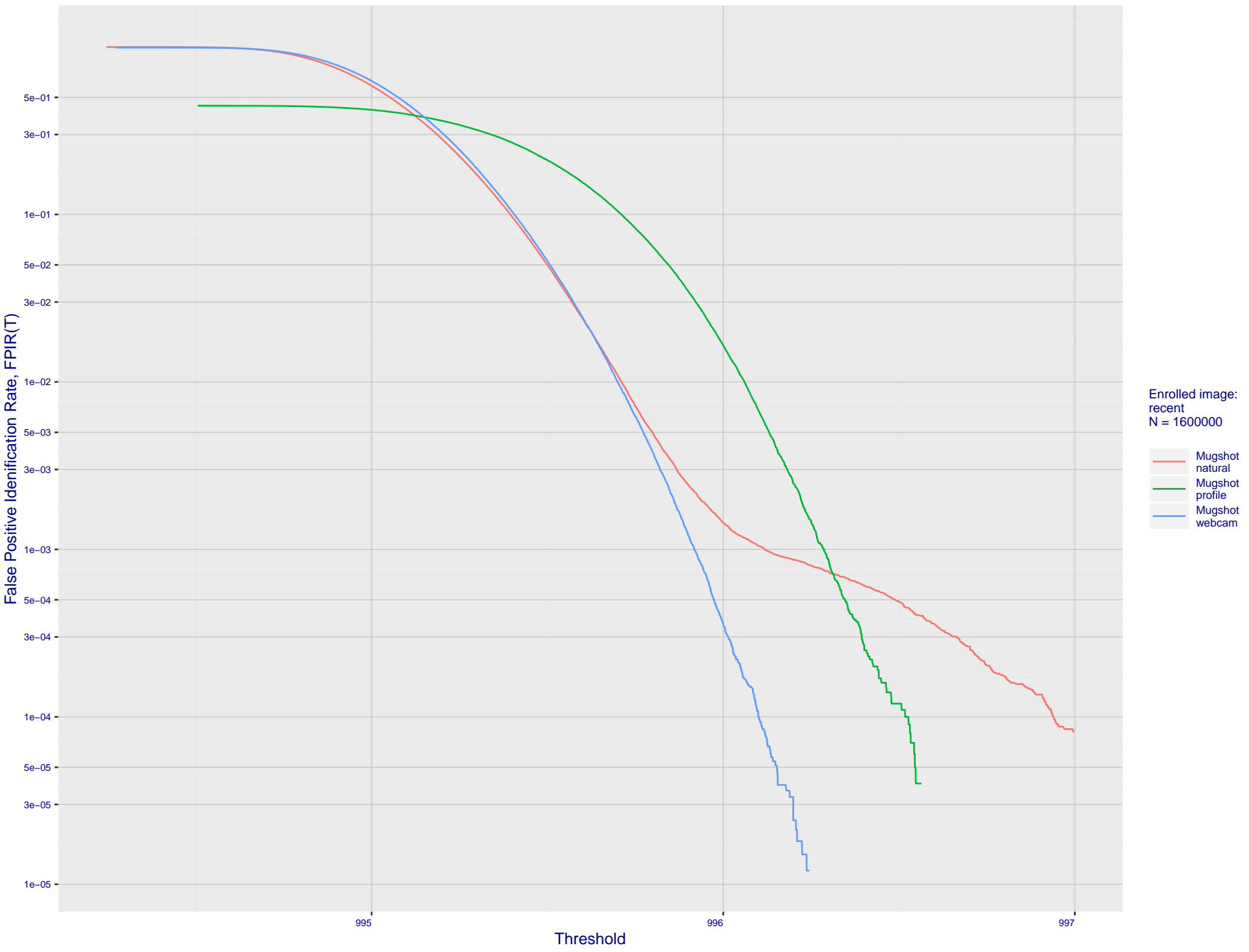
B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



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

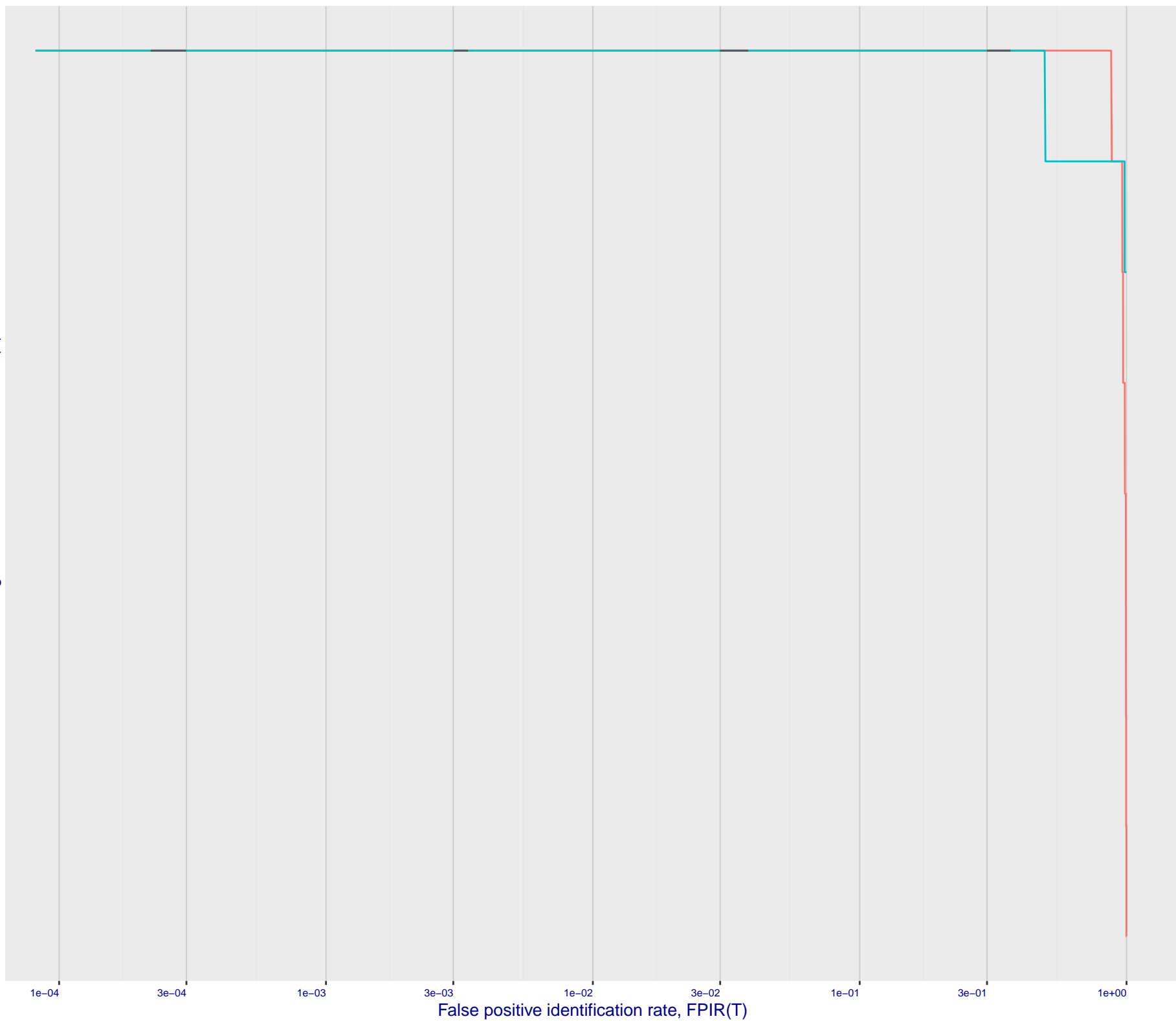


D: FPIR dependence on T by probe type for N = 1600000 subjects



E: DET for Mugshot natural images and various N. Links connect points of equal threshold.

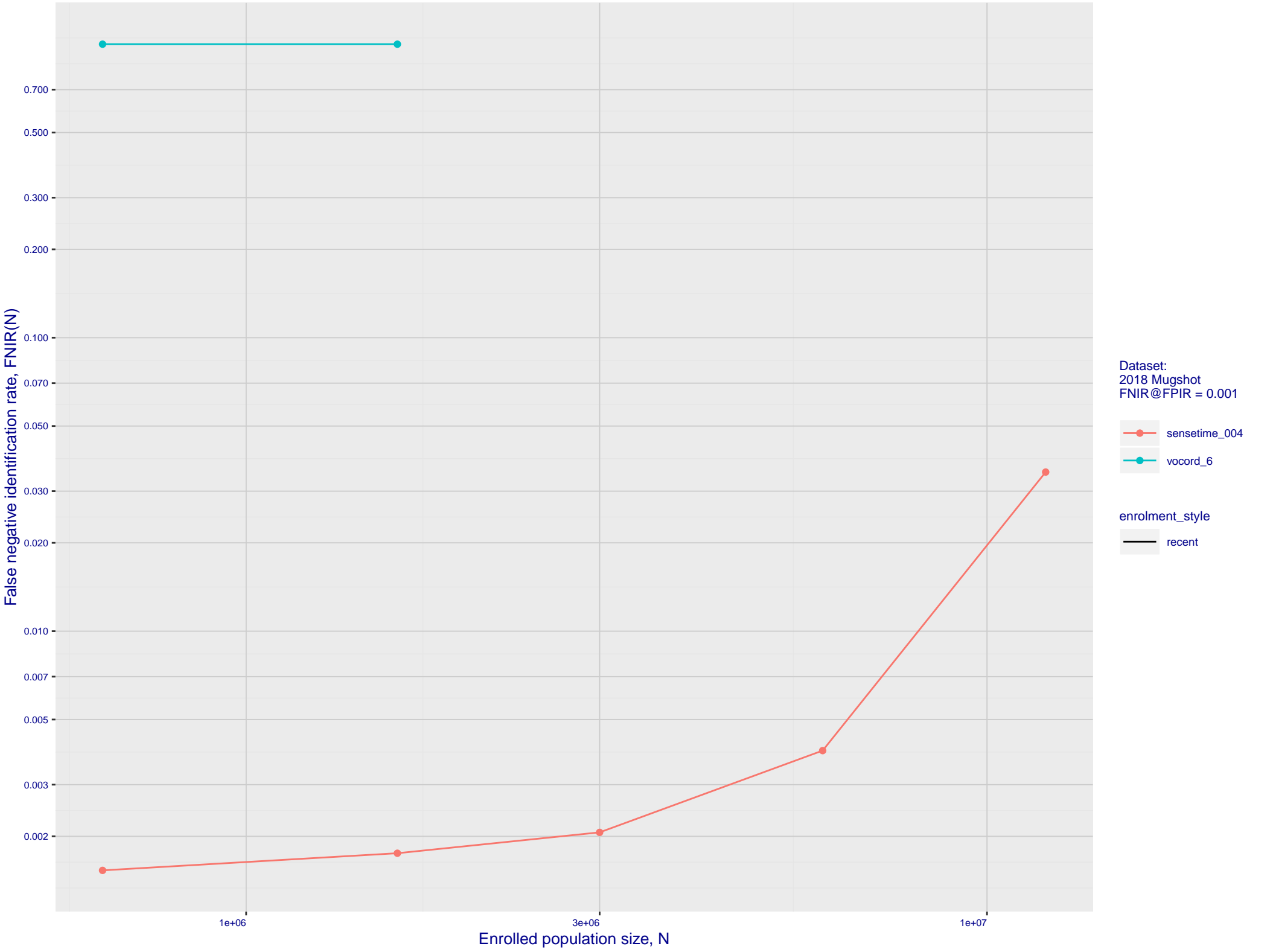
False negative identification rate, FNIR(T)



2018 Mugshot
Enrolled image:
recent

00640000
01600000

F: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)



G: Datasheet

Algorithm: vocord_6

Developer: Vocord

Submission Date: 2018_10_30

Template size: 10240 bytes

Template time (2.5 percentile): 783 msec

Template time (median): 785 msec

Template time (97.5 percentile): 1212 msec

Frontal mugshot investigation rank 252 -- FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0010 from sensetime_004

natural investigation rank 214 -- FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0067 from sensetime_003

natural investigation rank 364 -- FNIR(1600000, 0, 1) = 1.0000 vs. lowest 0.0492 from paravision_005

natural investigation rank 364 -- FNIR(1600000, 0, 1) = 1.0000 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 252 -- FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.0018 from sensetime_004

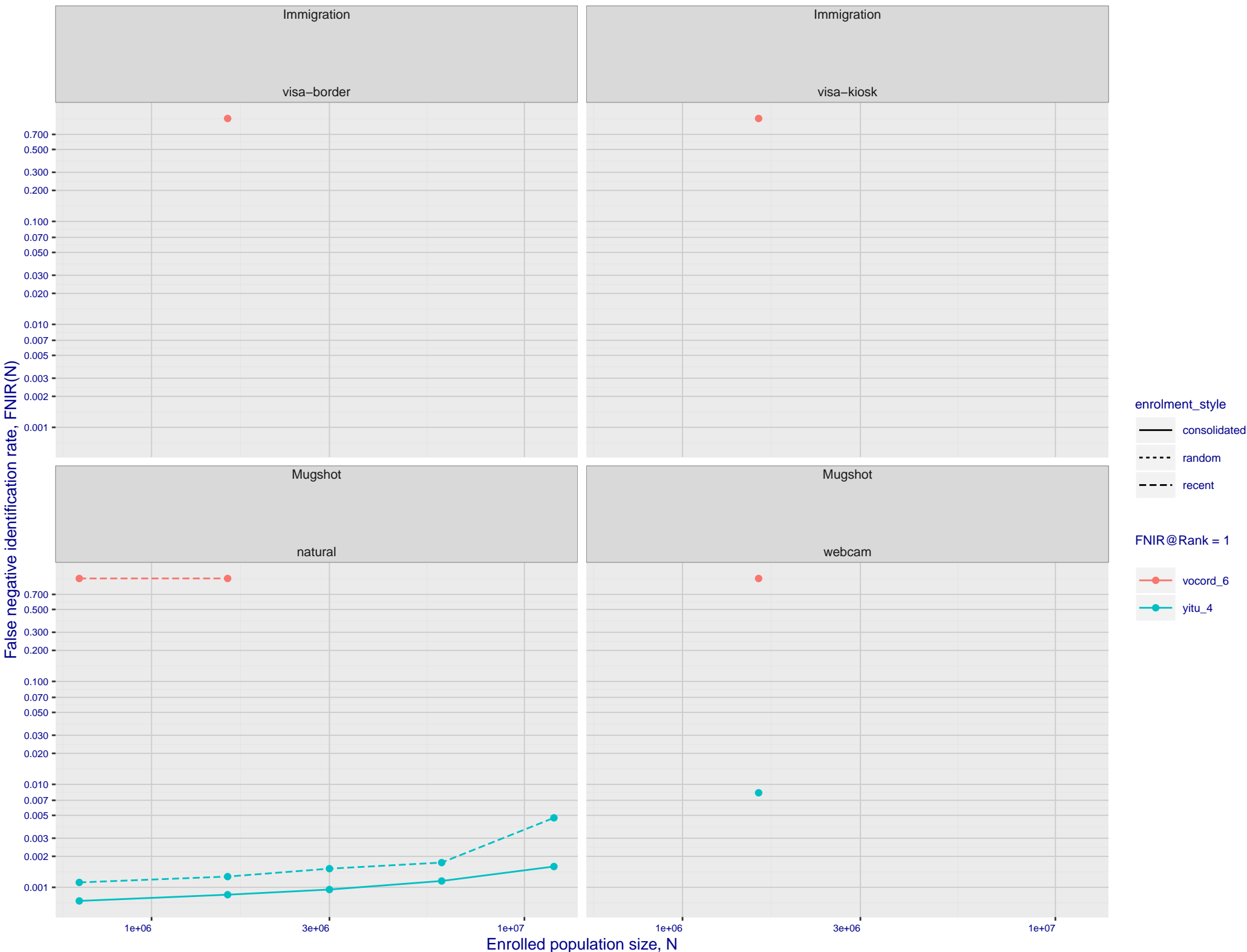
natural identification rank 210 -- FNIR(1600000, T, L+1) = 1.0000 vs. lowest 0.0122 from sensetime_003

natural identification rank 180 -- FNIR(1600000, T, L+1) = 1.0000 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

False negative identification rate, FNIR(N)

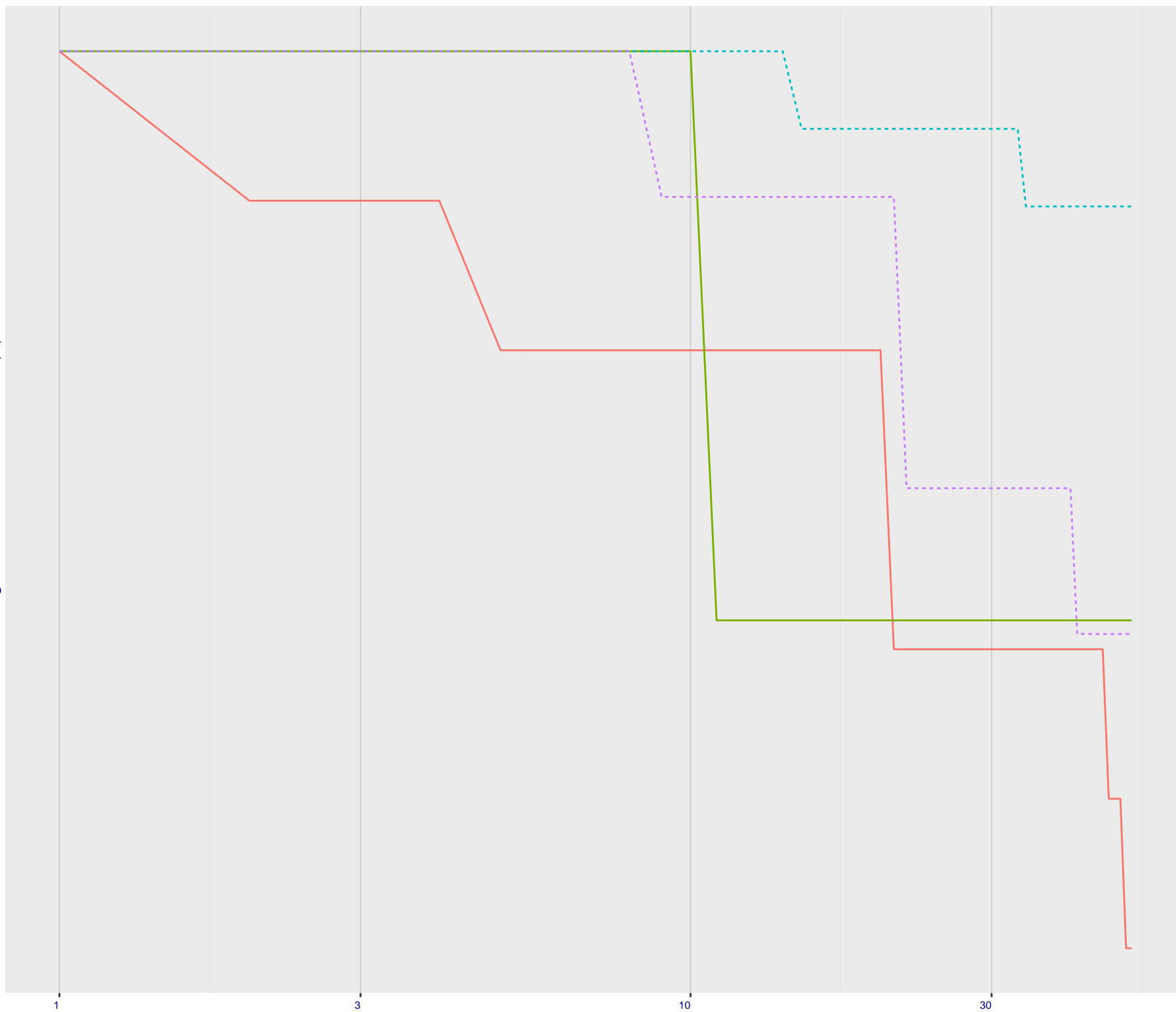
Rank, R

enrolment_style

— random
- - - recent

FNIR(R)
N = 1600000

Immigration
visa-border
Immigration
visa-kiosk
Mugshot
natural
Mugshot
webcam



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

