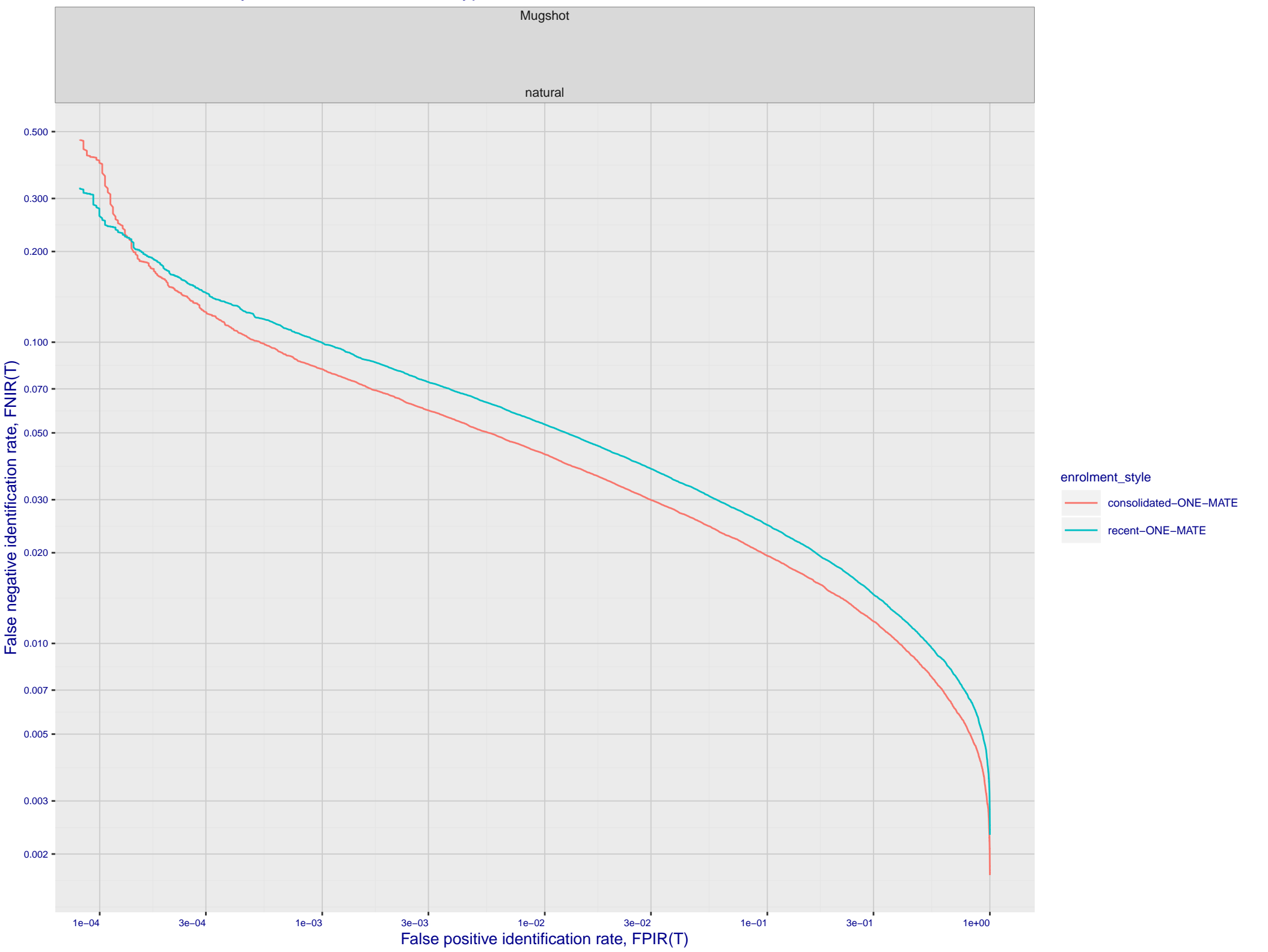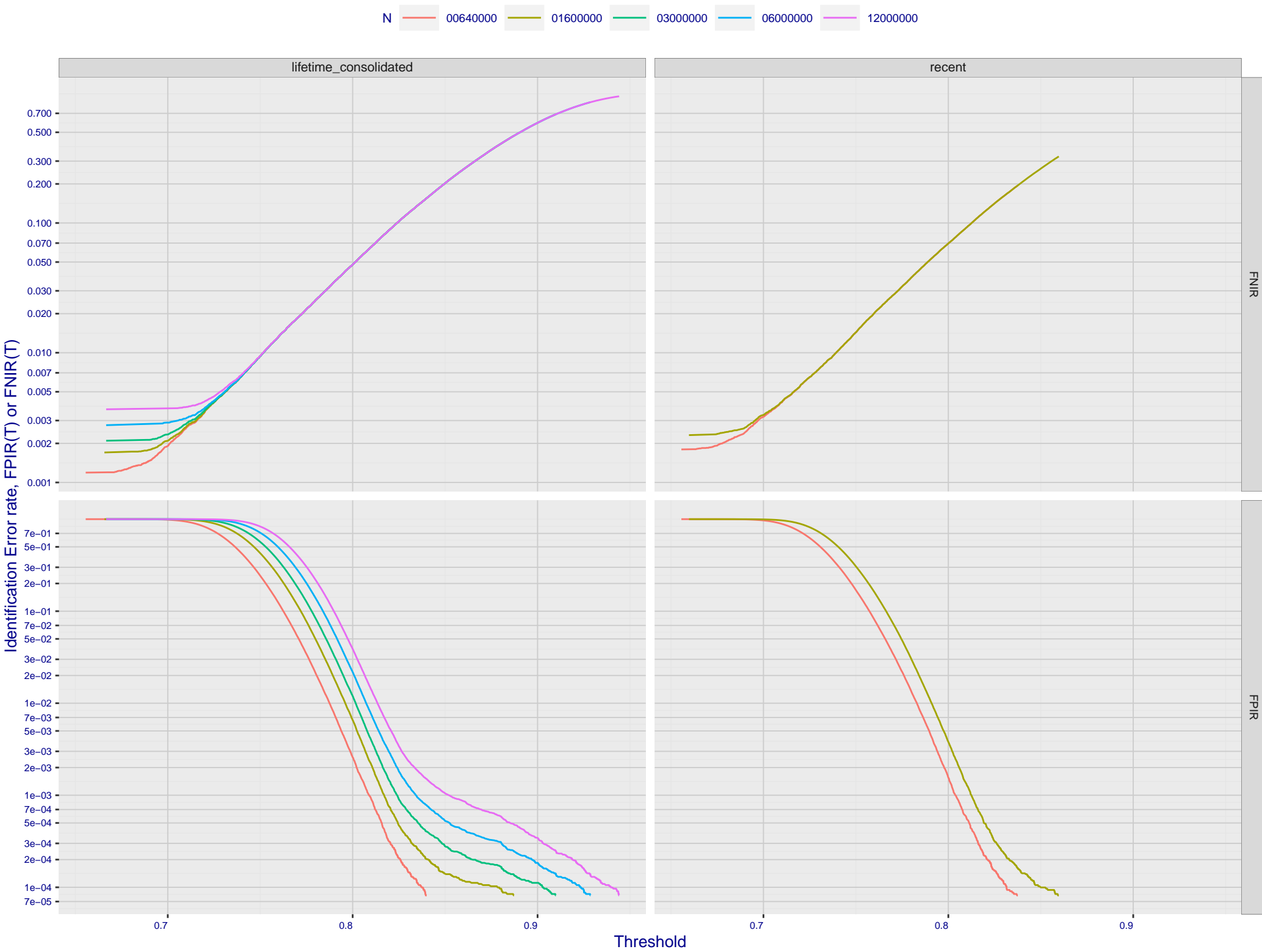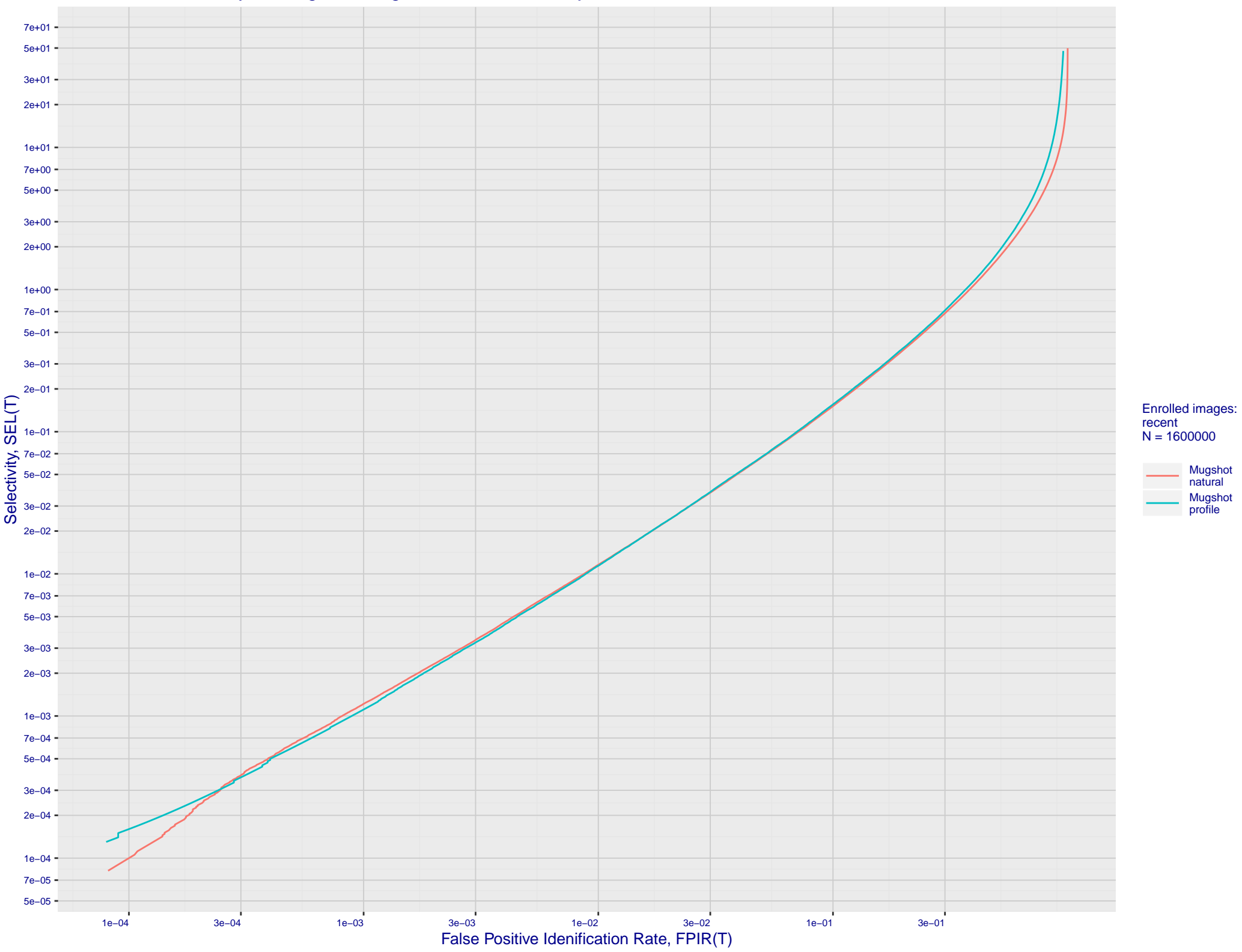# A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals
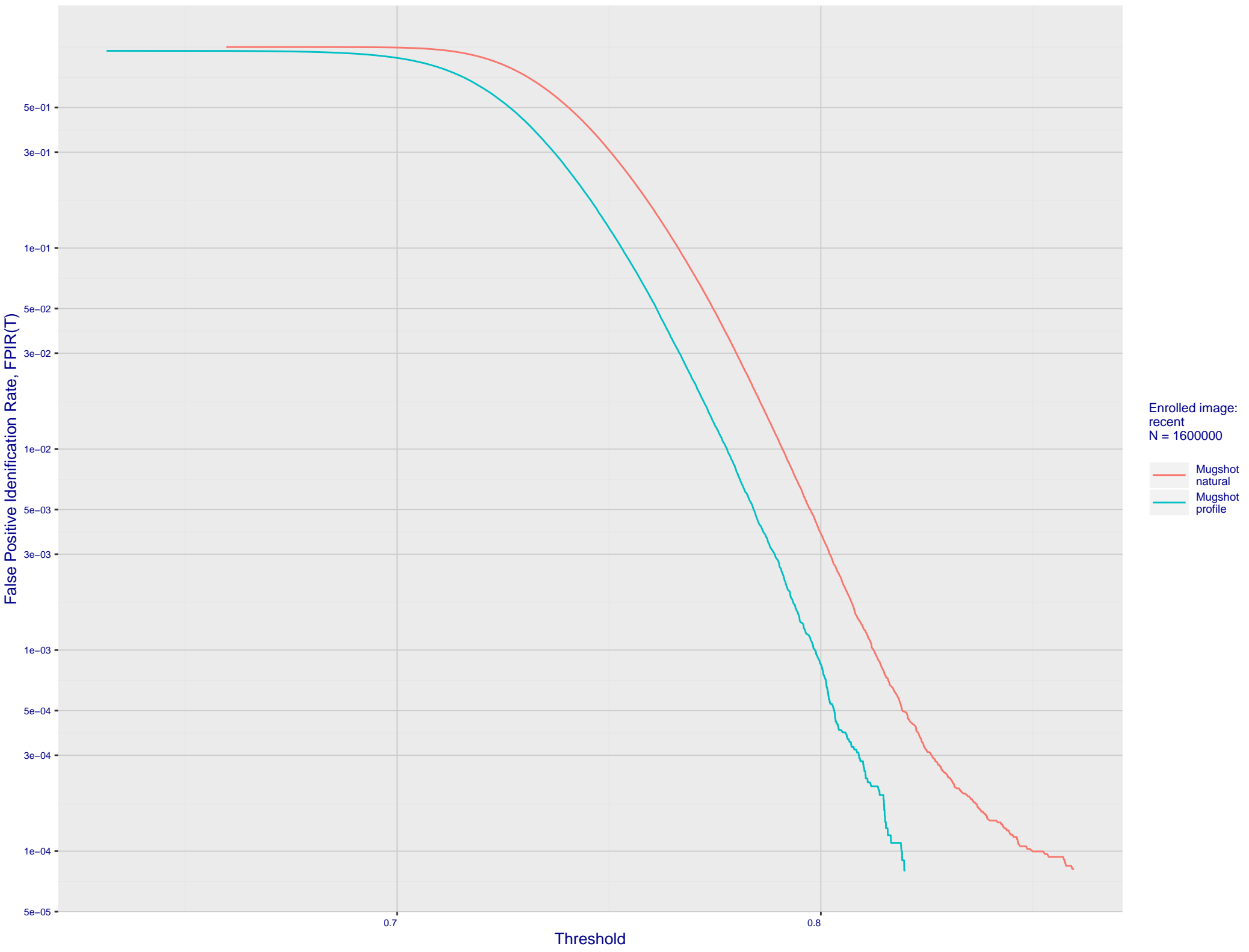
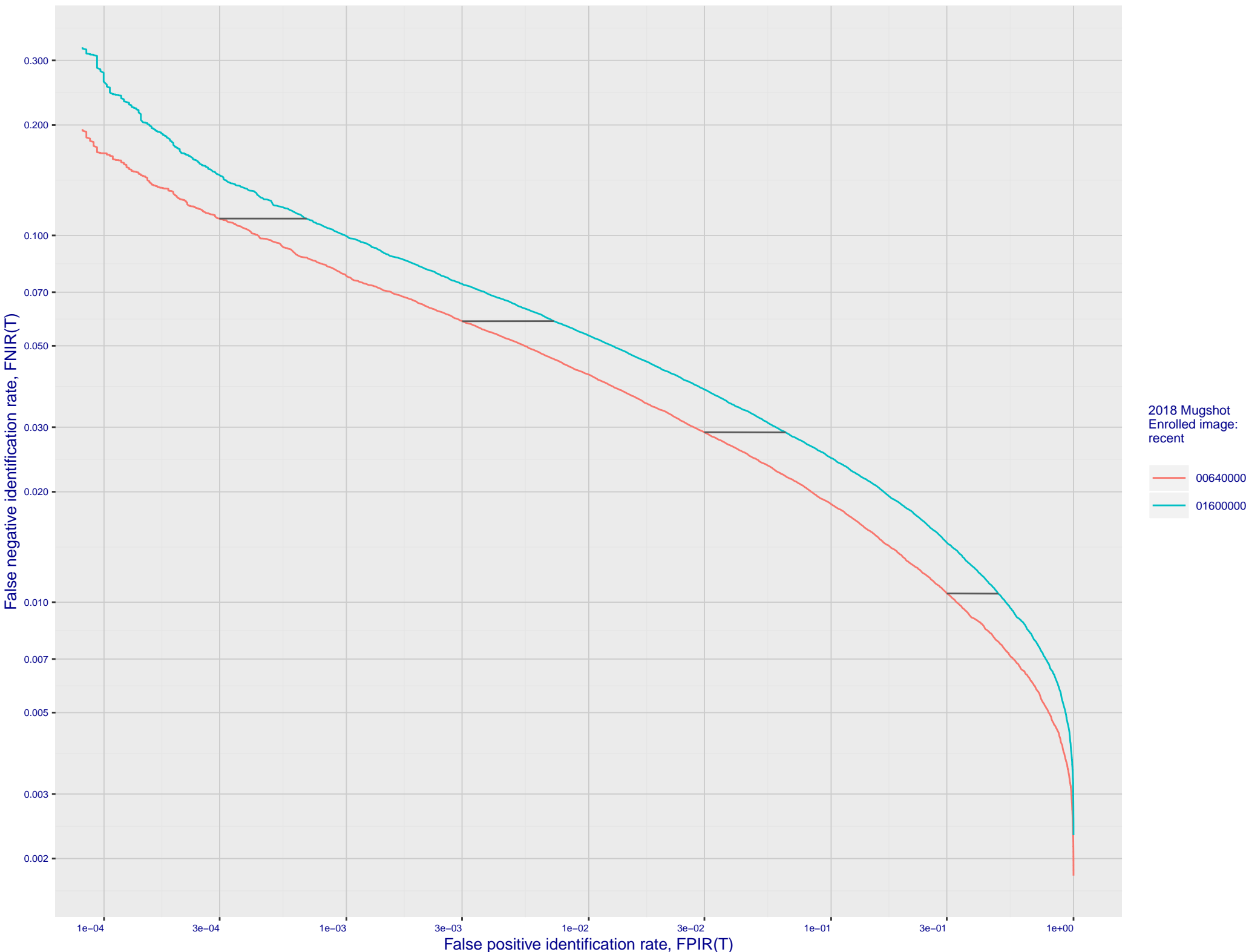B: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images

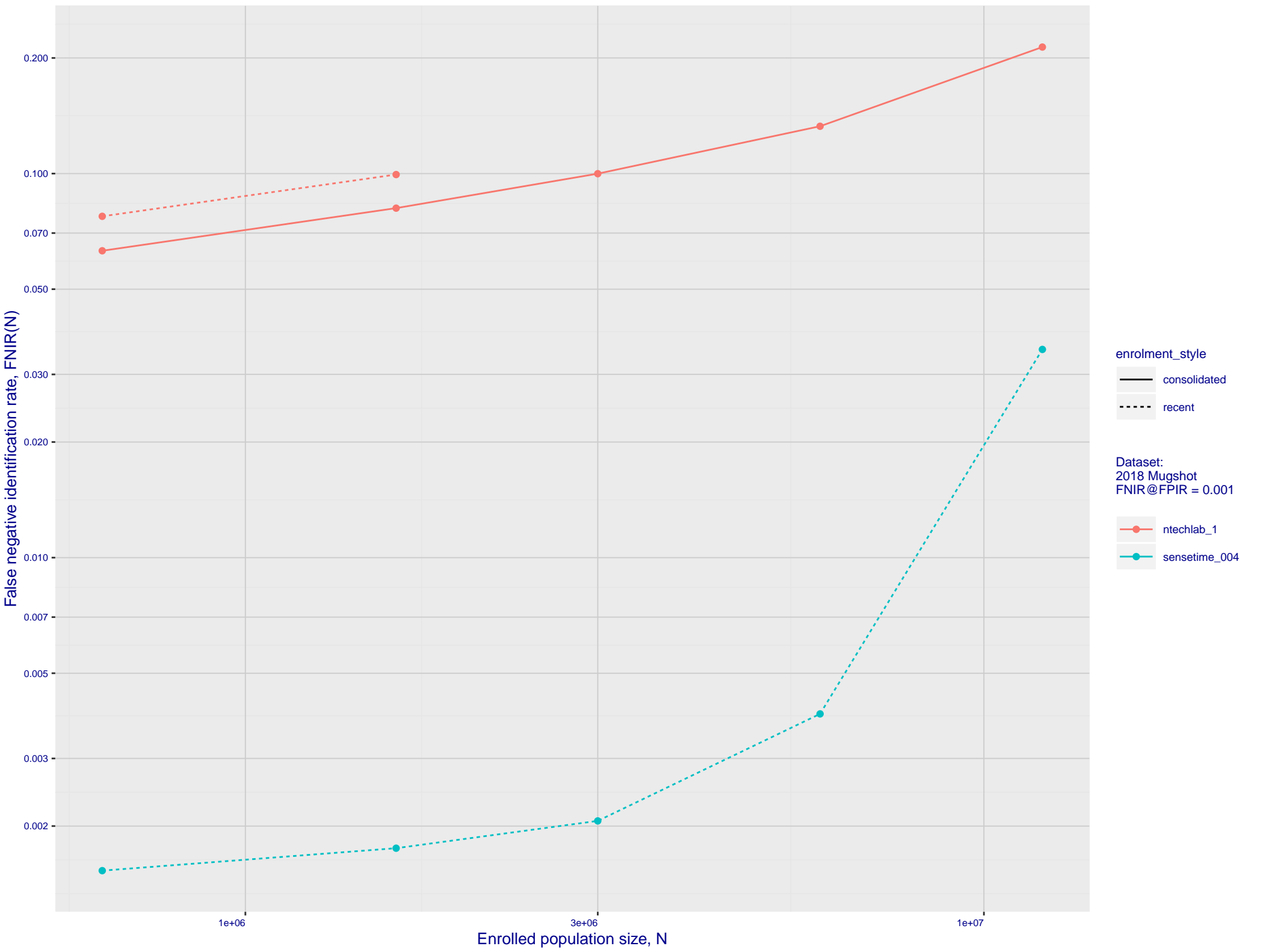C: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate

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: ntechlab_1

Developer: N–Tech Lab

Submission Date: 2018_02_16

Template size: 1736 bytes

Template time (2.5 percentile): 387 msec

Template time (median): 404 msec

Template time (97.5 percentile): 430 msec

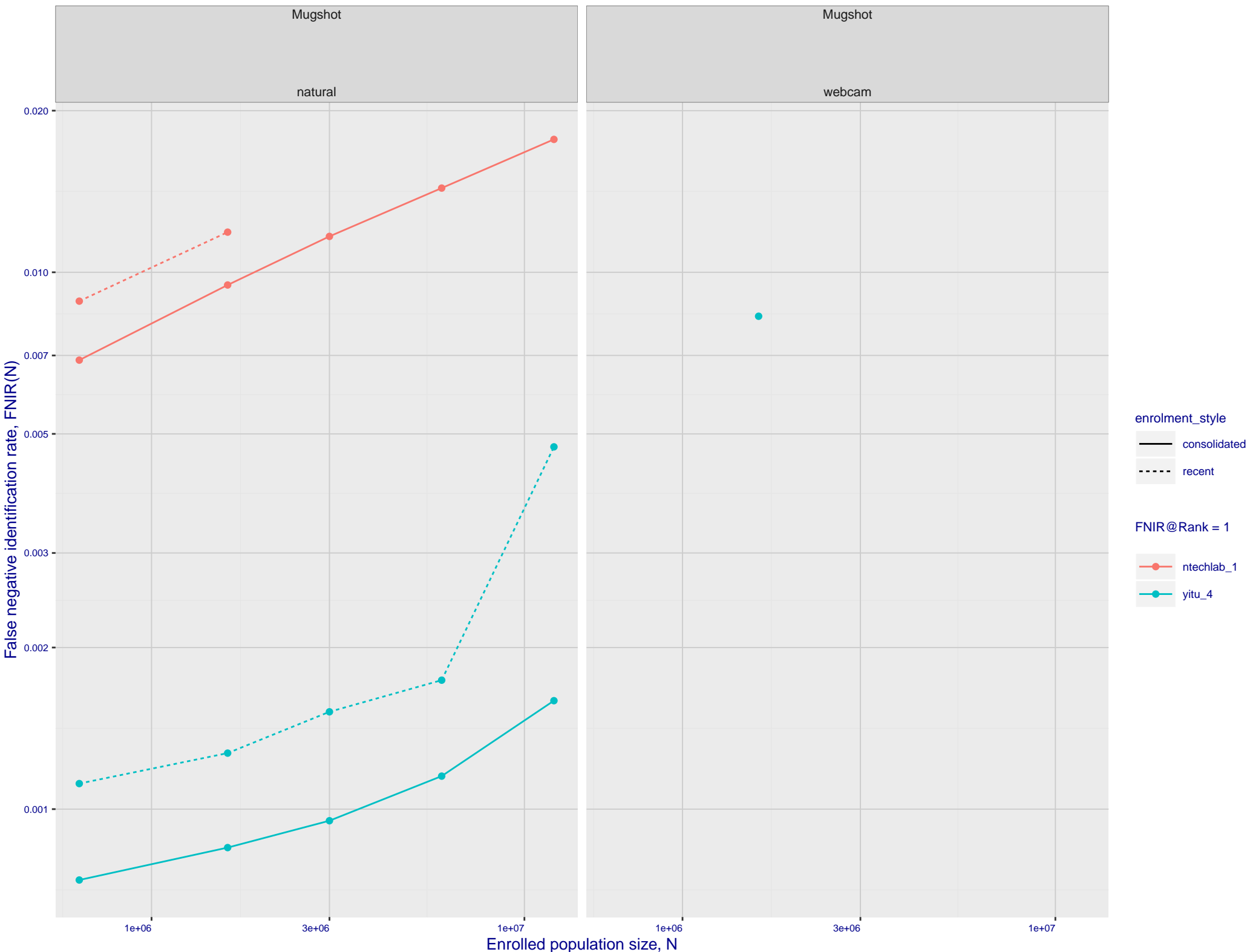Frontal mugshot investigation rank 129 –– FNIR(1600000, 0, 1) = 0.0119 vs. lowest 0.0010 from sensetime_004

natural investigation rank 84 –– FNIR(1600000, 0, 1) = 0.4183 vs. lowest 0.0492 from paravision_005

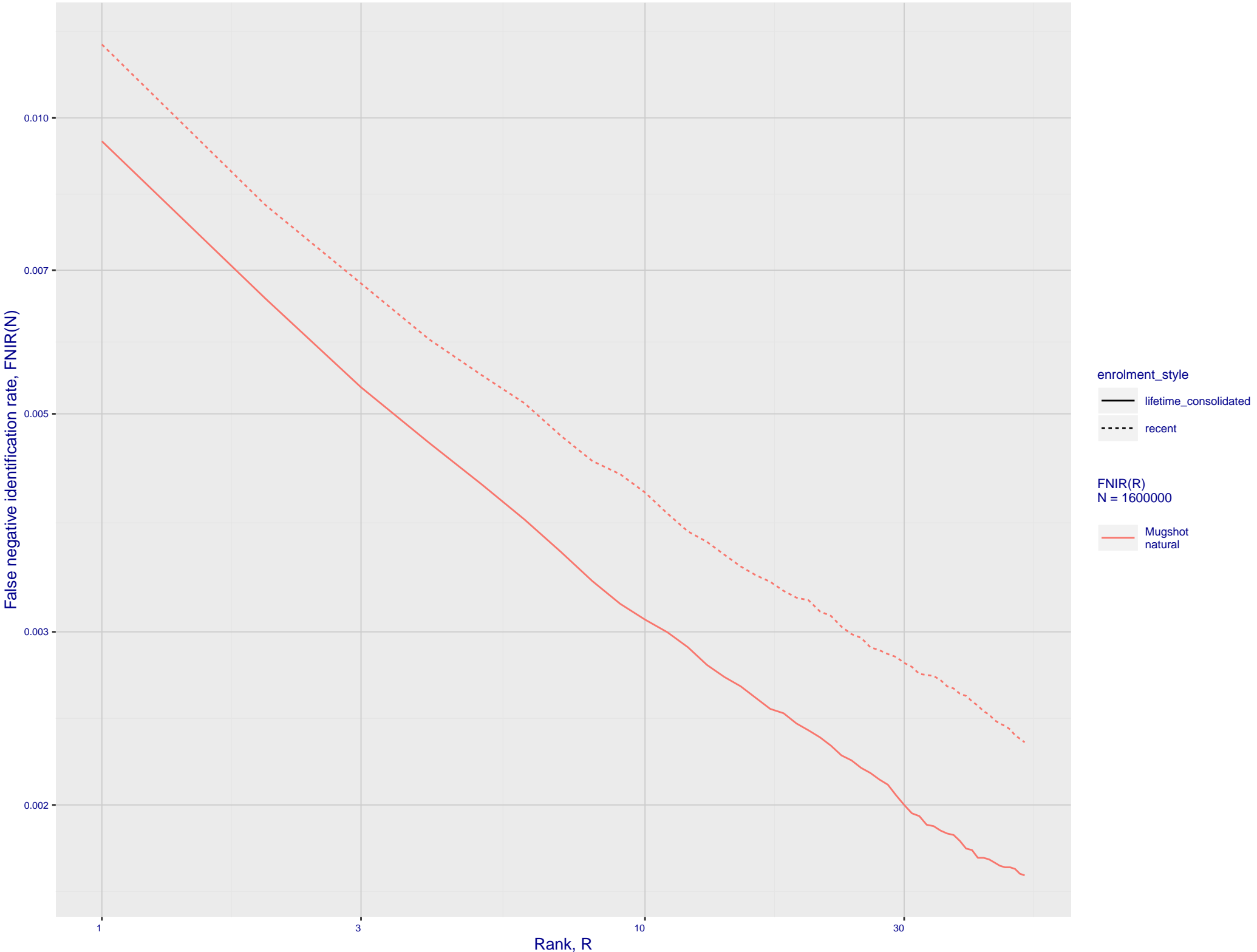natural investigation rank 84 –– FNIR(1600000, 0, 1) = 0.4183 vs. lowest 0.0492 from paravision_005

Frontal mugshot identification rank 119 –– FNIR(1600000, T, L+1) = 0.0994 vs. lowest 0.0018 from sensetime_004

natural identification rank 25 –– FNIR(1600000, T, L+1) = 0.7632 vs. lowest 0.1020 from sensetime_004

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

MODEL —— Log Model ····· Power Law Model

Search Duration (milliseconds)

300

200

100

70

7e+05   8e+05   1e+06

Enrolled population size, N, one image per person