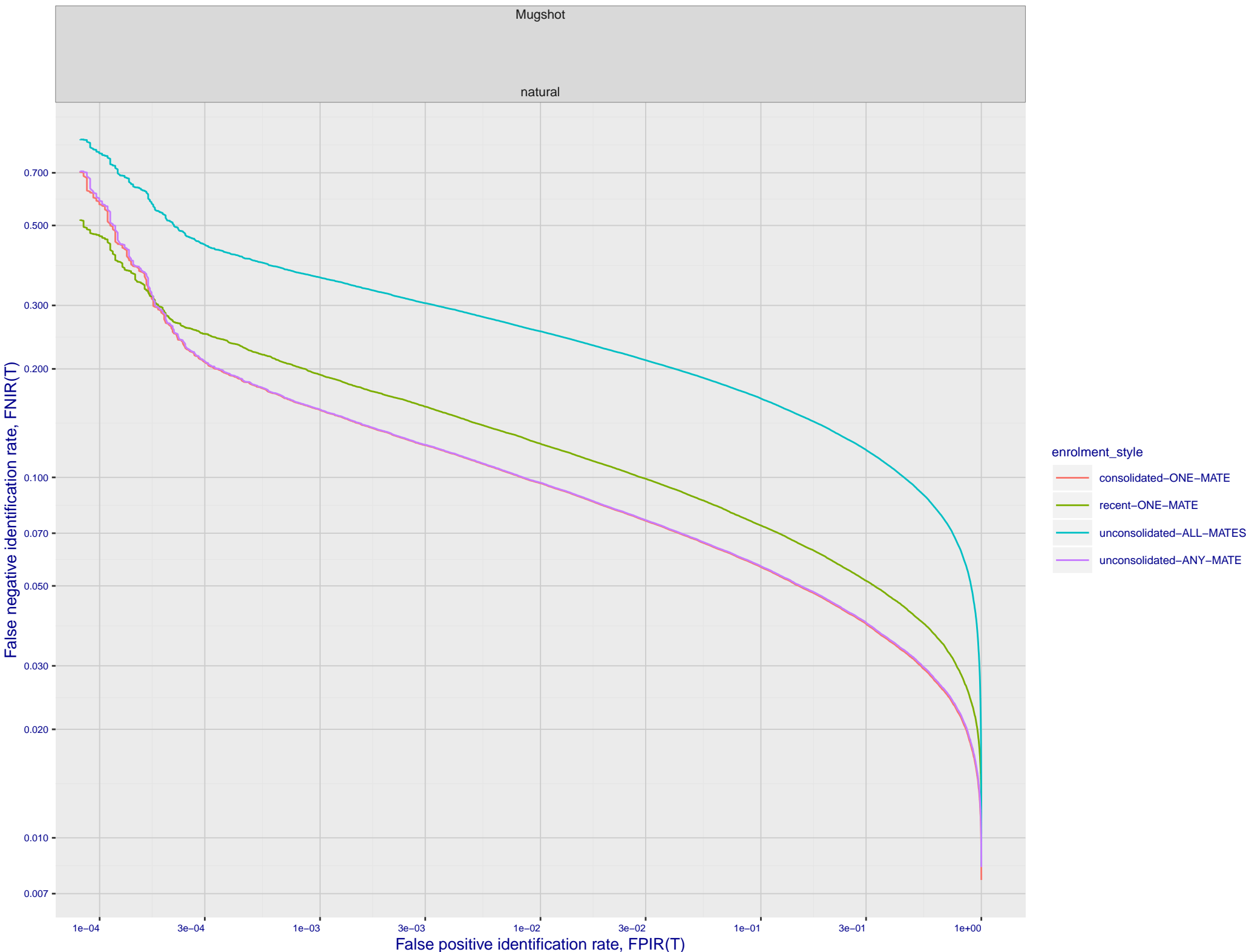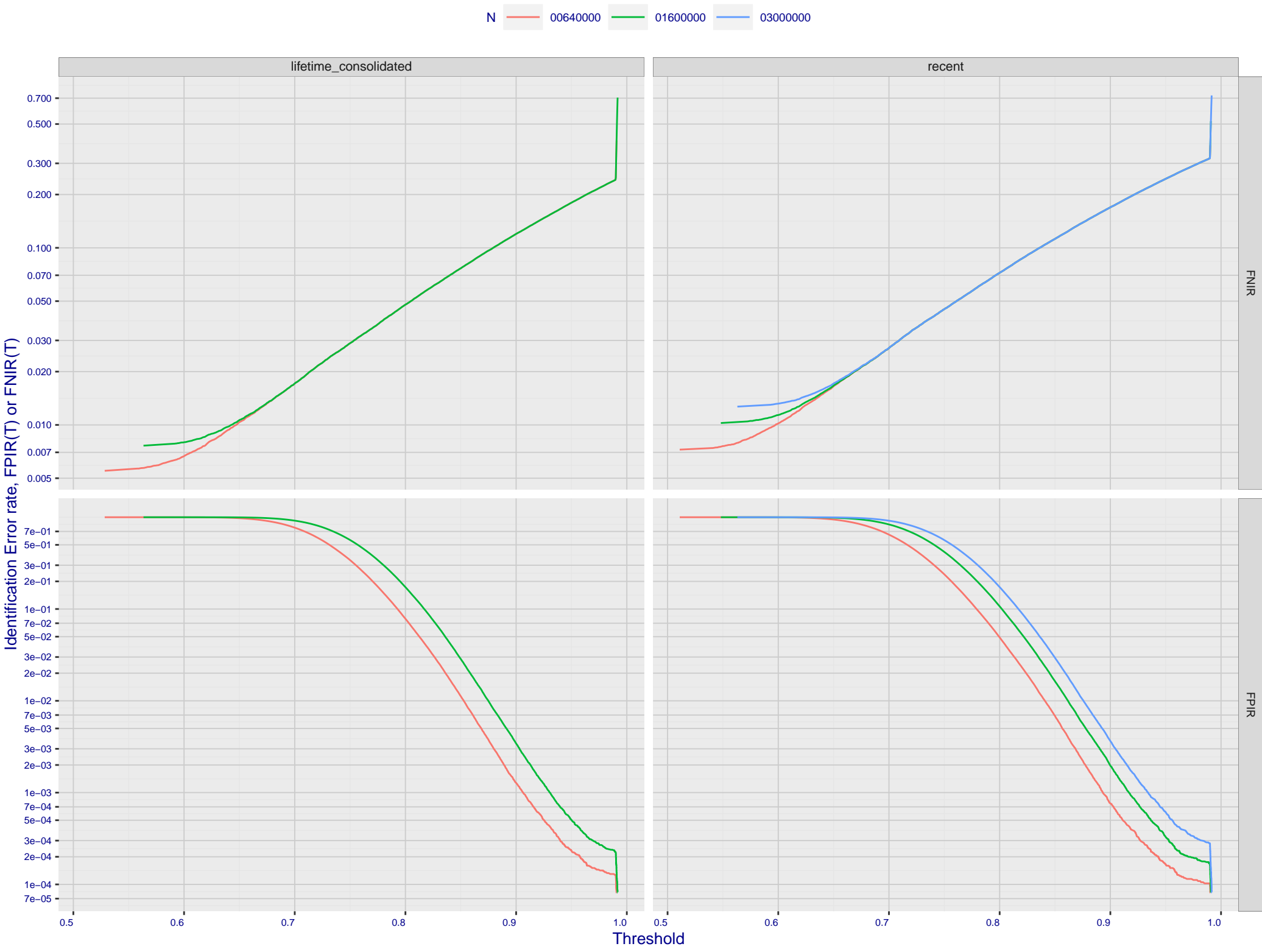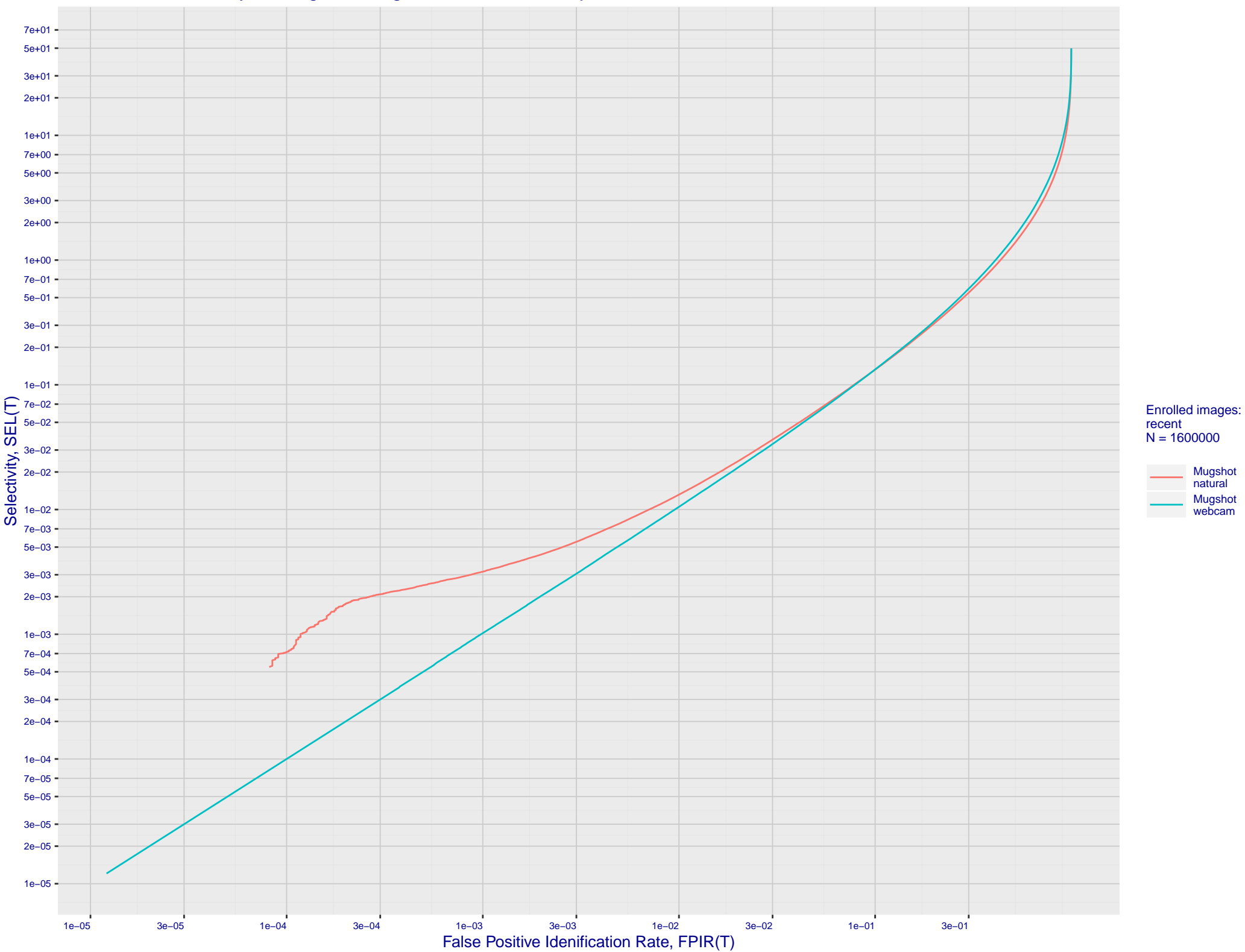A: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals

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

N —— 00640000 —— 01600000 —— 03000000

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

Enrolled image:
recent
N = 1600000

Mugshot natural

Mugshot webcam

False Positive Idenification Rate, FPIR(T)
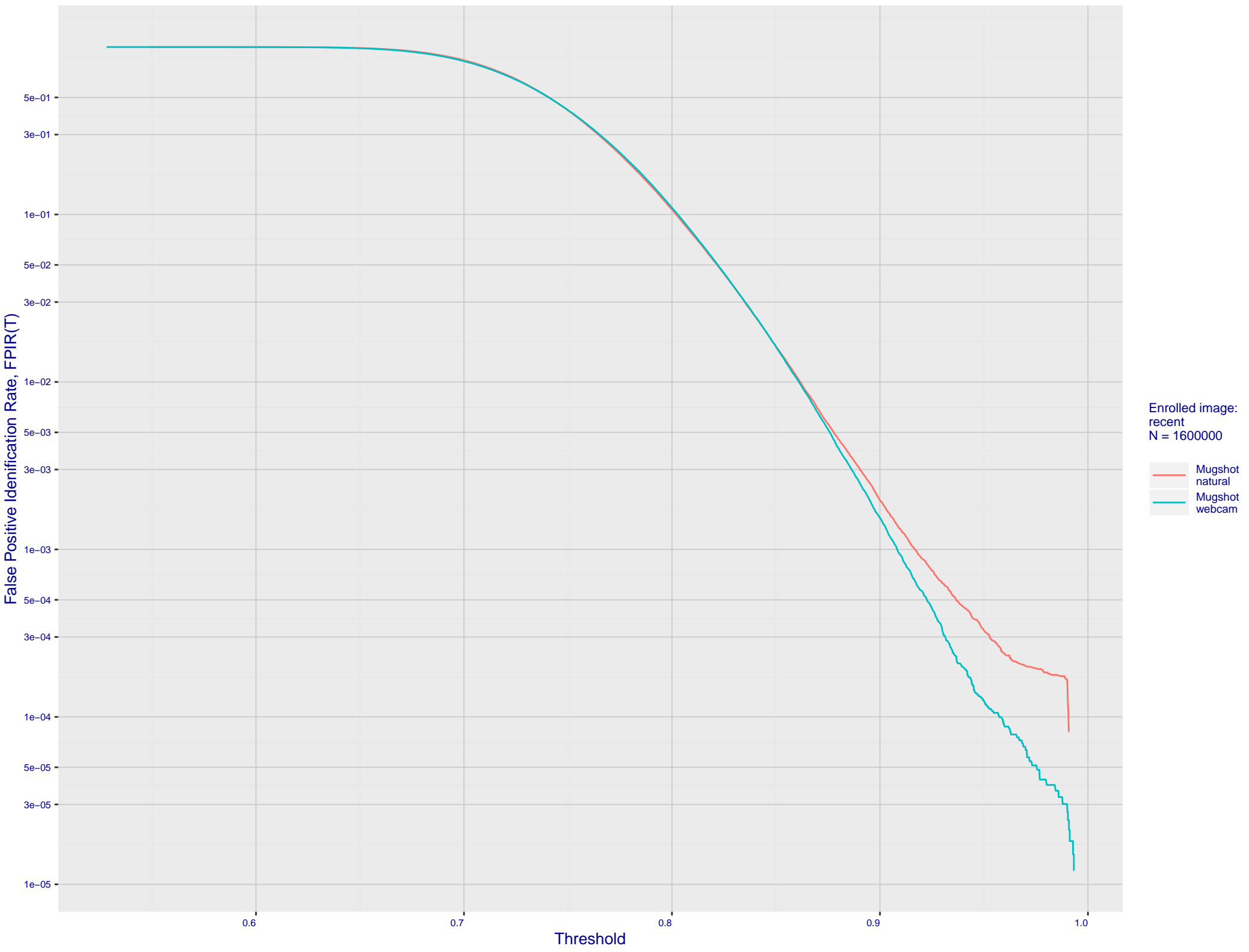
Threshold

E: DET for Mugshot natural images and various N. Links connect points of equal threshold.
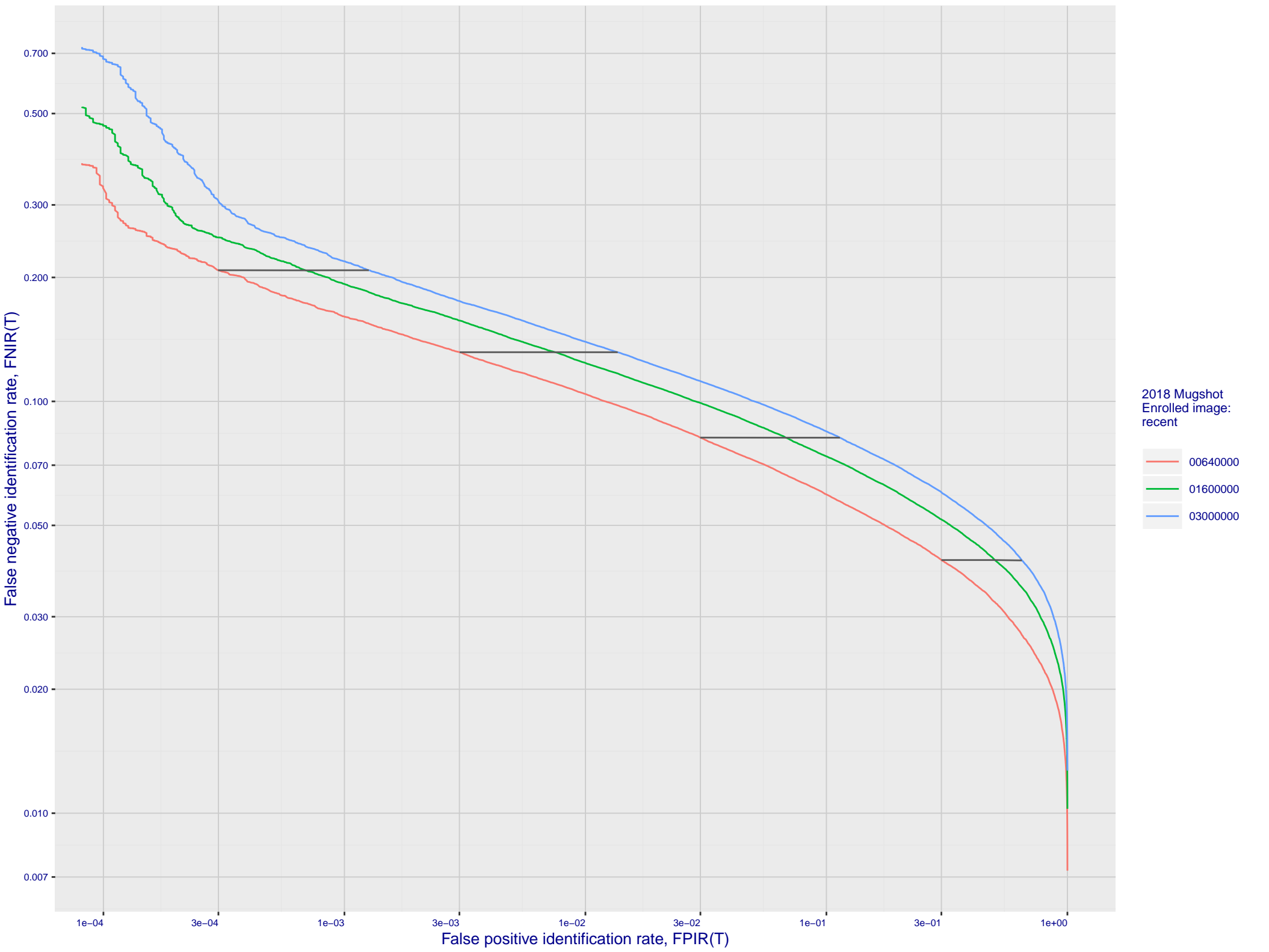
F: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime_004)
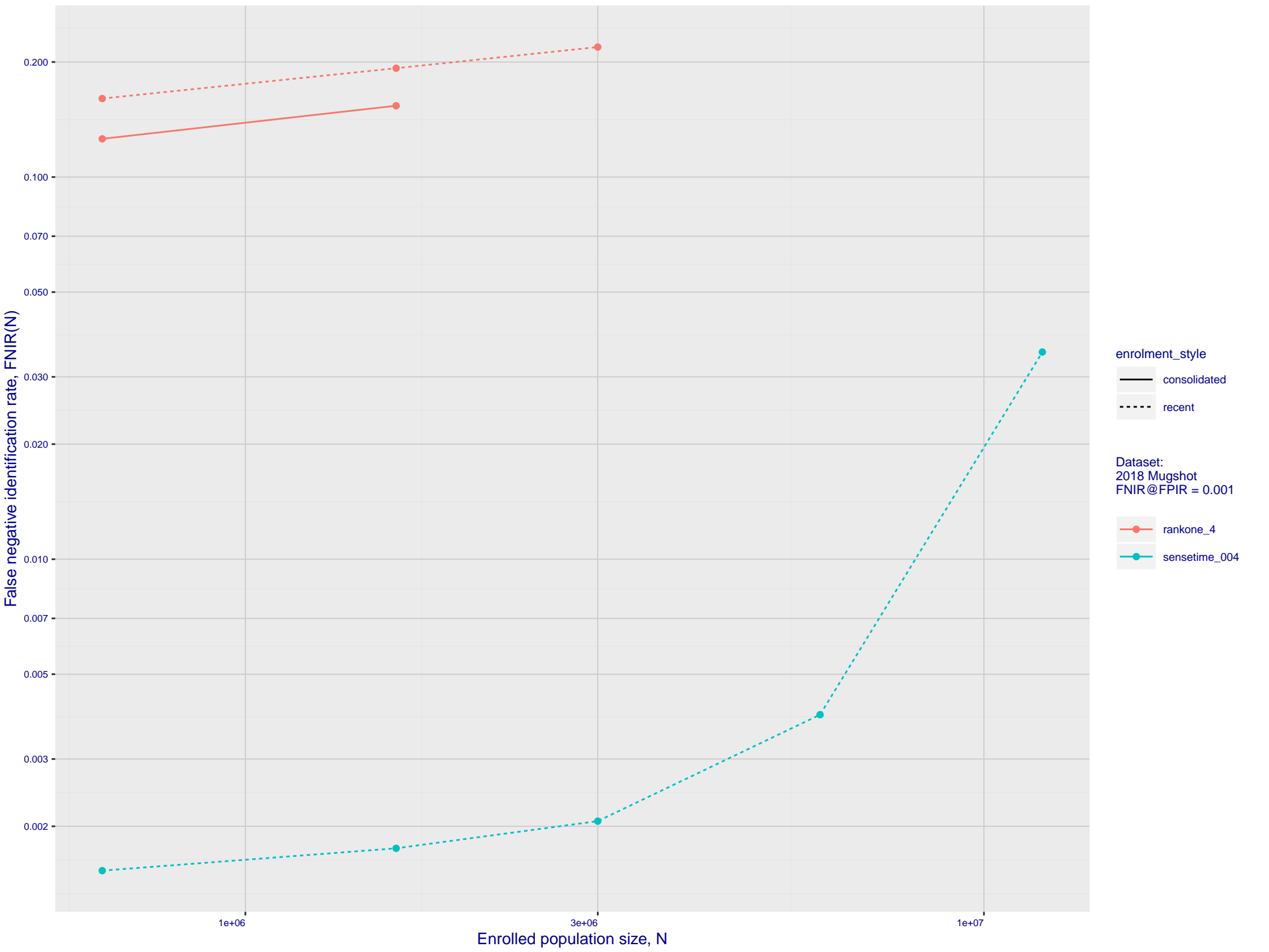
G: Datasheet

Algorithm: rankone_4

Developer: Rank One Computing

Submission Date: 2018_10_09

Template size: 85 bytes

Template time (2.5 percentile): 34 msec

Template time (median): 36 msec

Template time (97.5 percentile): 41 msec

Frontal mugshot investigation rank 183 –– FNIR(1600000, 0, 1) = 0.0415 vs. lowest 0.0010 from sensetime_004

natural investigation rank 172 –– FNIR(1600000, 0, 1) = 0.1406 vs. lowest 0.0067 from sensetime_003

Frontal mugshot identification rank 159 –– FNIR(1600000, T, L+1) = 0.1927 vs. lowest 0.0018 from sensetime_004
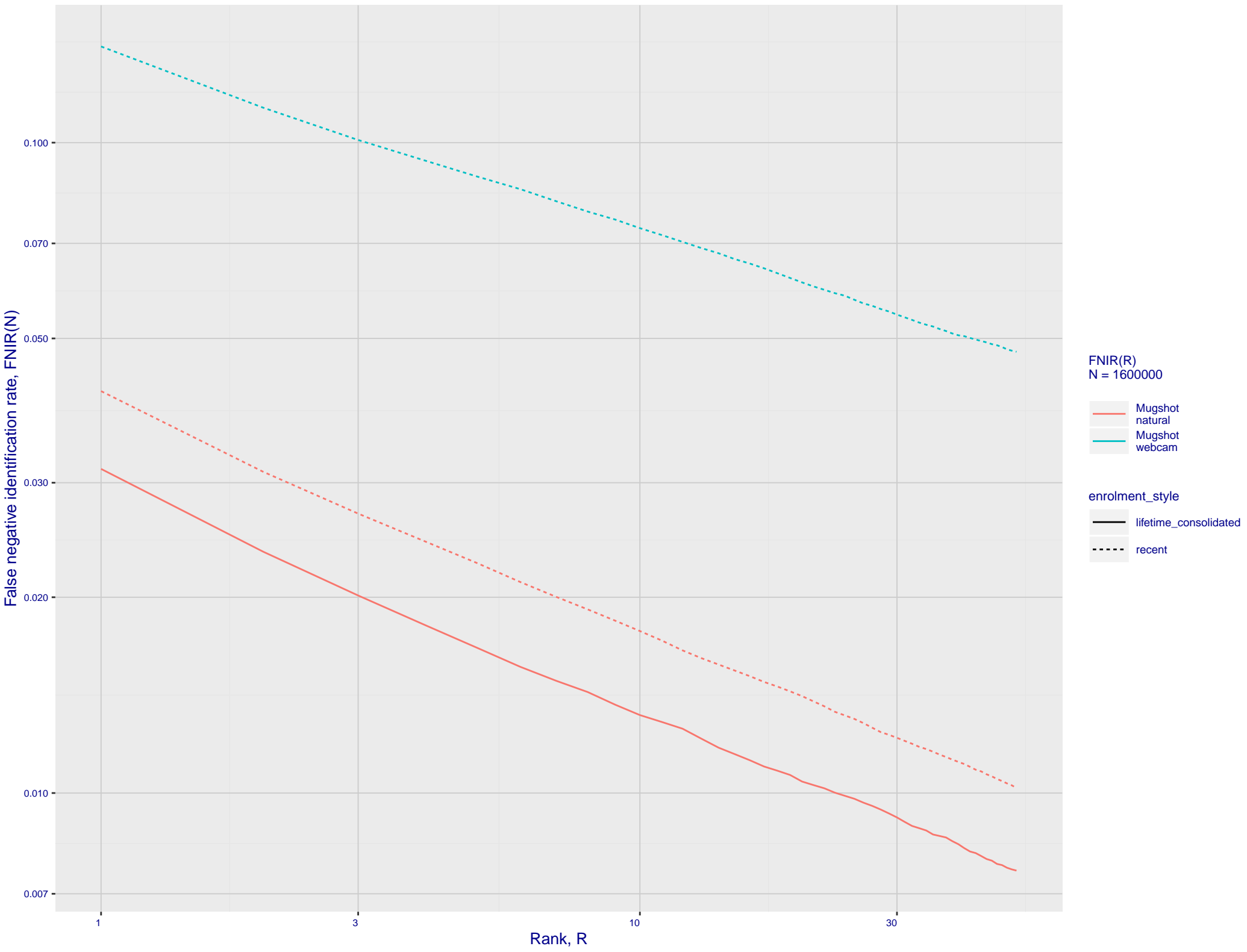
natural identification rank 163 –– FNIR(1600000, T, L+1) = 0.4261 vs. lowest 0.0122 from sensetime_003

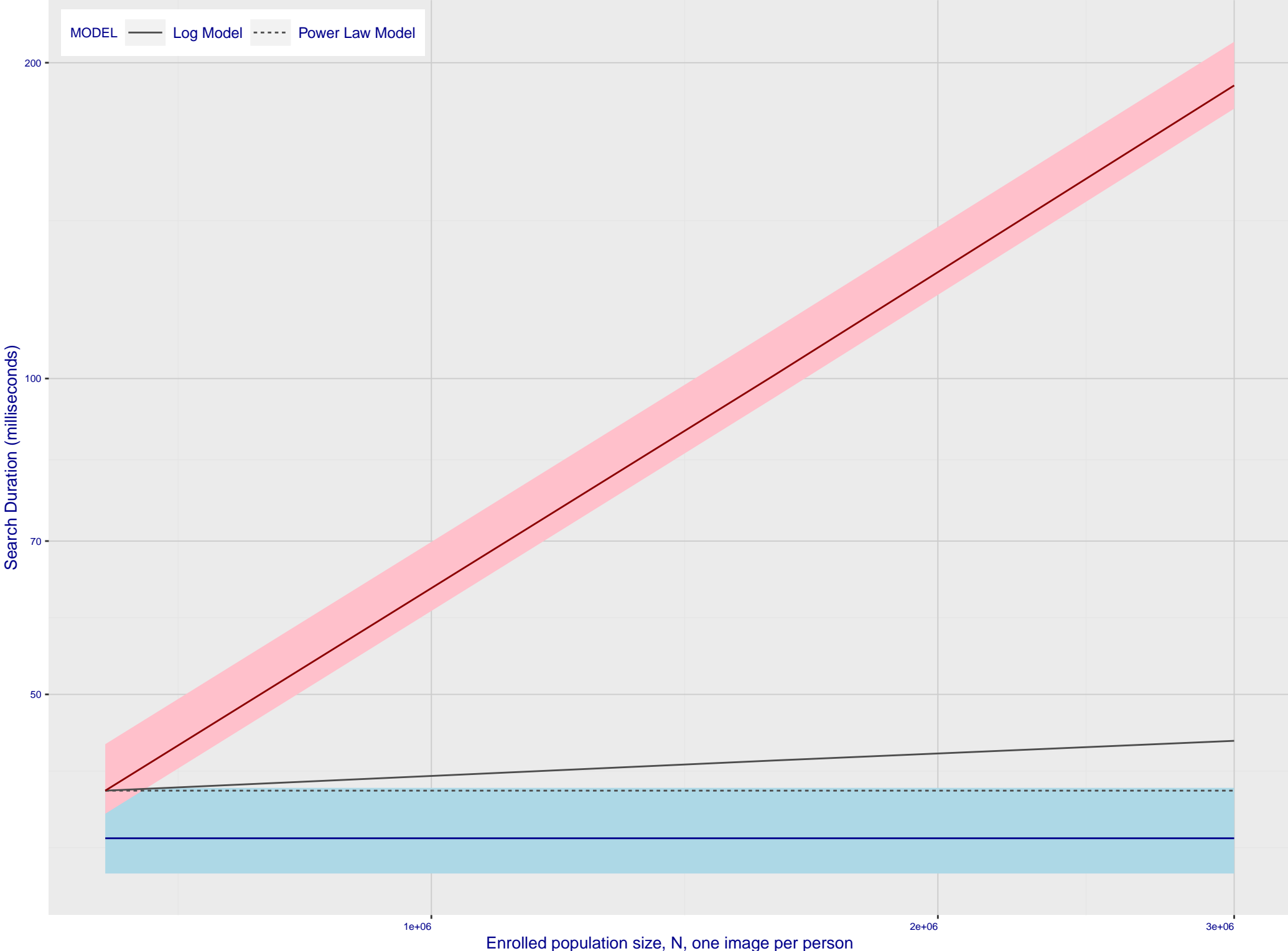H: Investigational mode: FNIR(N, 1, 0) vs. most accurate (yitu_4)
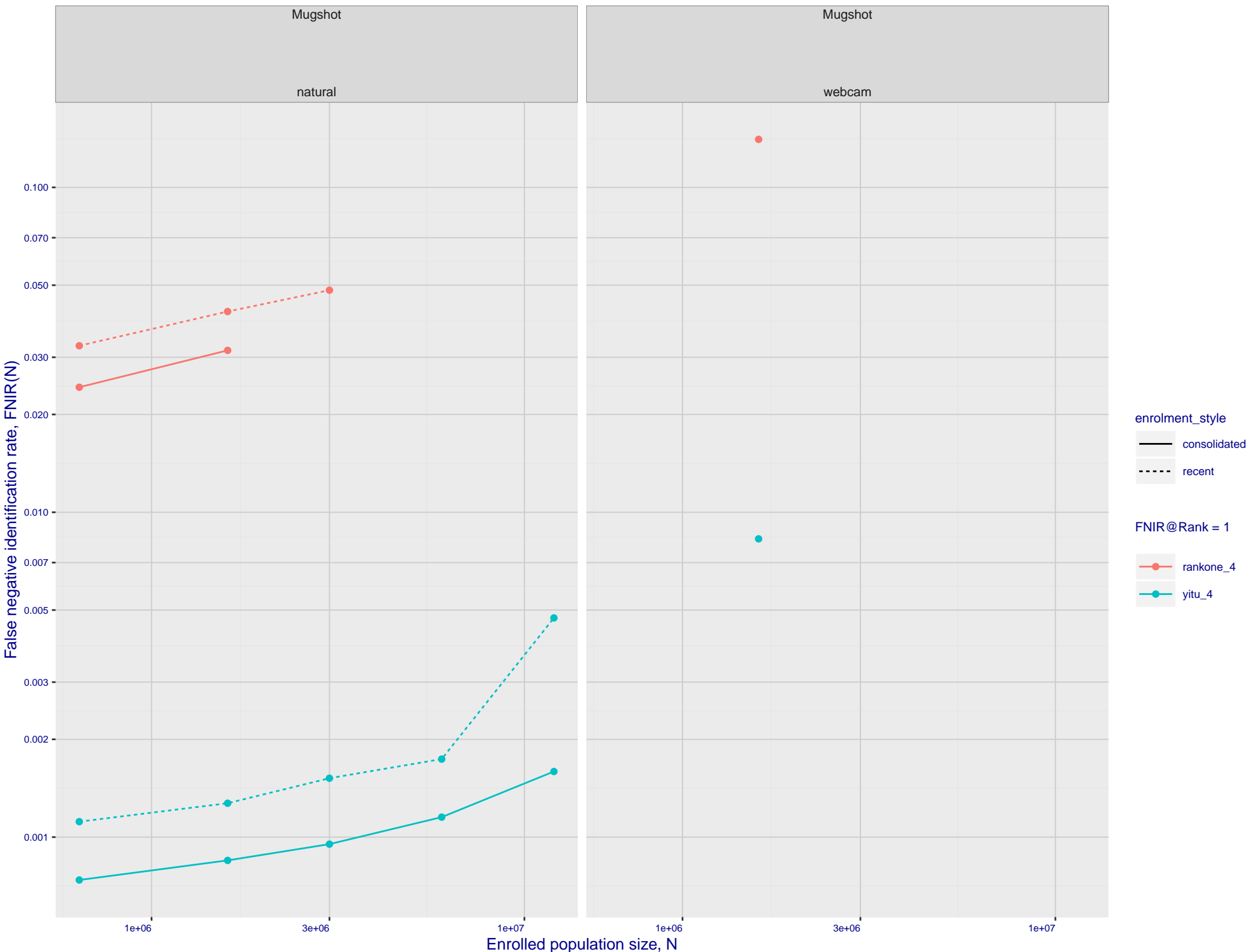
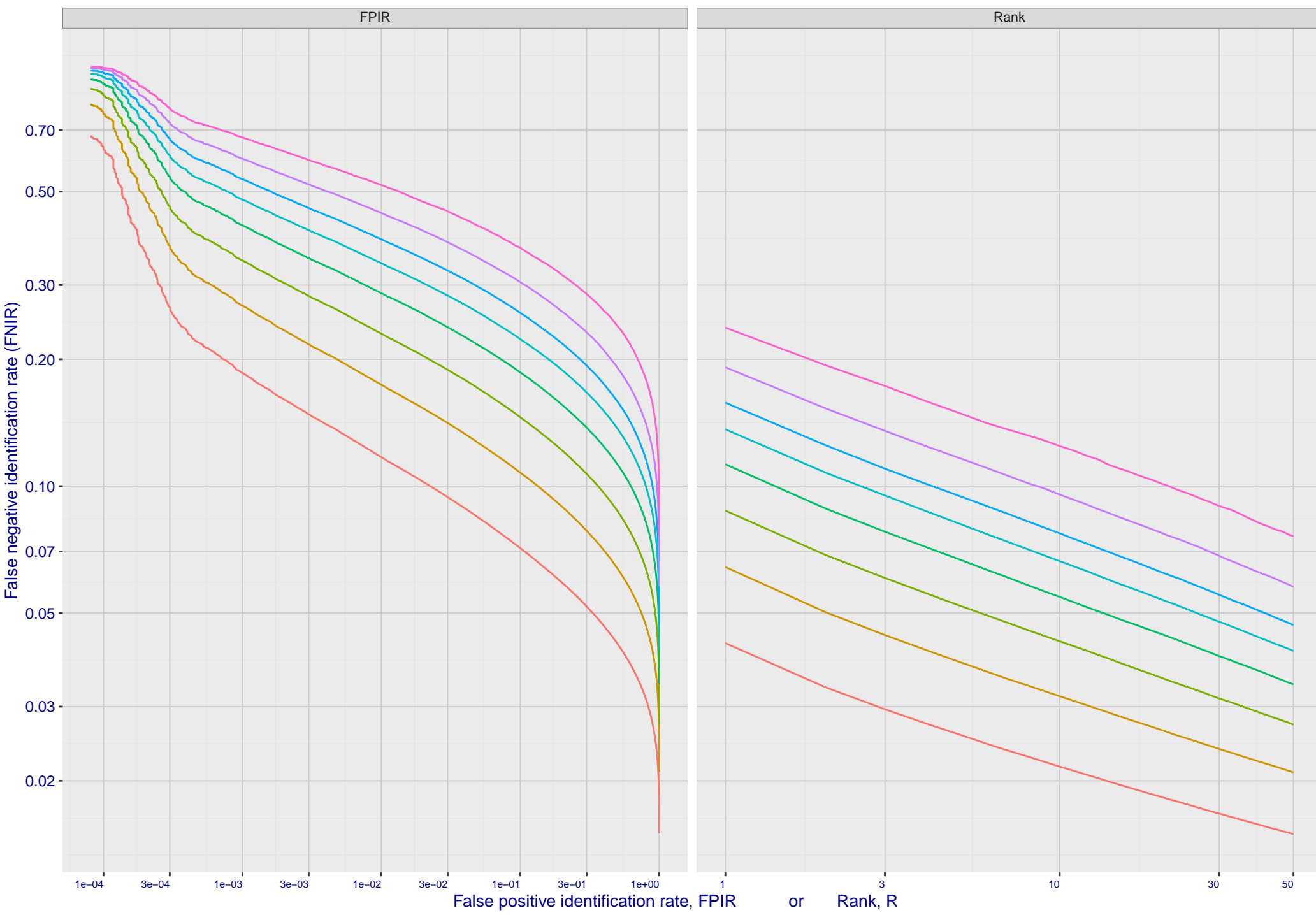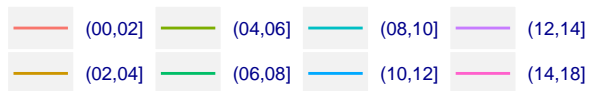I: Investigational mode: FNIR(1600000, R, 0) by probe type

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

N: Decline of genuine scores with ageing