

## A: Datasheet

Algorithm: allgovision\_001

Developer: AllGoVision

Submission Date: 2020\_07\_14

Template size: 2048 bytes

Template time (2.5 percentile): 772 msec

Template time (median): 778 msec

Template time (97.5 percentile): 851 msec

Investigation:

Frontal mugshot ranking 118 (out of 265) — FNIR(1600000, 0, 1) = 0.0090 vs. lowest 0.0009 from sensetime\_005

Mugshot webcam ranking 130 (out of 227) — FNIR(1600000, 0, 1) = 0.0383 vs. lowest 0.0062 from sensetime\_005

Mugshot profile ranking 70 (out of 196) — FNIR(1600000, 0, 1) = 0.6609 vs. lowest 0.0591 from sensetime\_005

Immigration visa–border ranking 75 (out of 148) — FNIR(1600000, 0, 1) = 0.0206 vs. lowest 0.0013 from visionlabs\_010

Immigration visa–kiosk ranking 89 (out of 145) — FNIR(1600000, 0, 1) = 0.2411 vs. lowest 0.0568 from hr\_000

Identification:

Frontal mugshot ranking 135 (out of 265) — FNIR(1600000, T, L+1) = 0.1016, FPIR=0.001000 vs. lowest 0.0018 from sensetime\_004

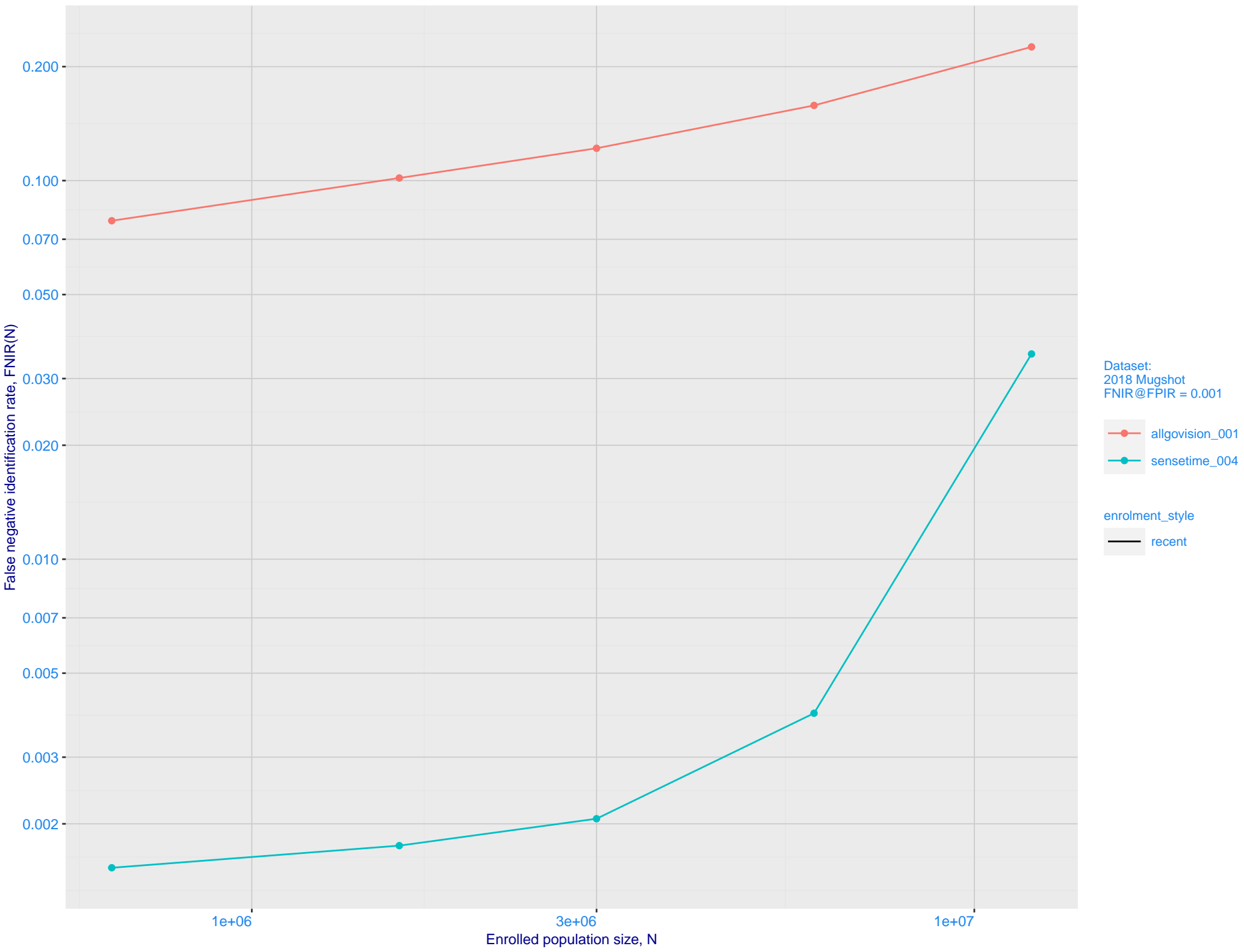
Mugshot webcam ranking 133 (out of 225) — FNIR(1600000, T, L+1) = 0.2204, FPIR=0.001000 vs. lowest 0.0122 from sensetime\_003

Mugshot profile ranking 70 (out of 195) — FNIR(1600000, T, L+1) = 0.9857, FPIR=0.001000 vs. lowest 0.1331 from hr\_000

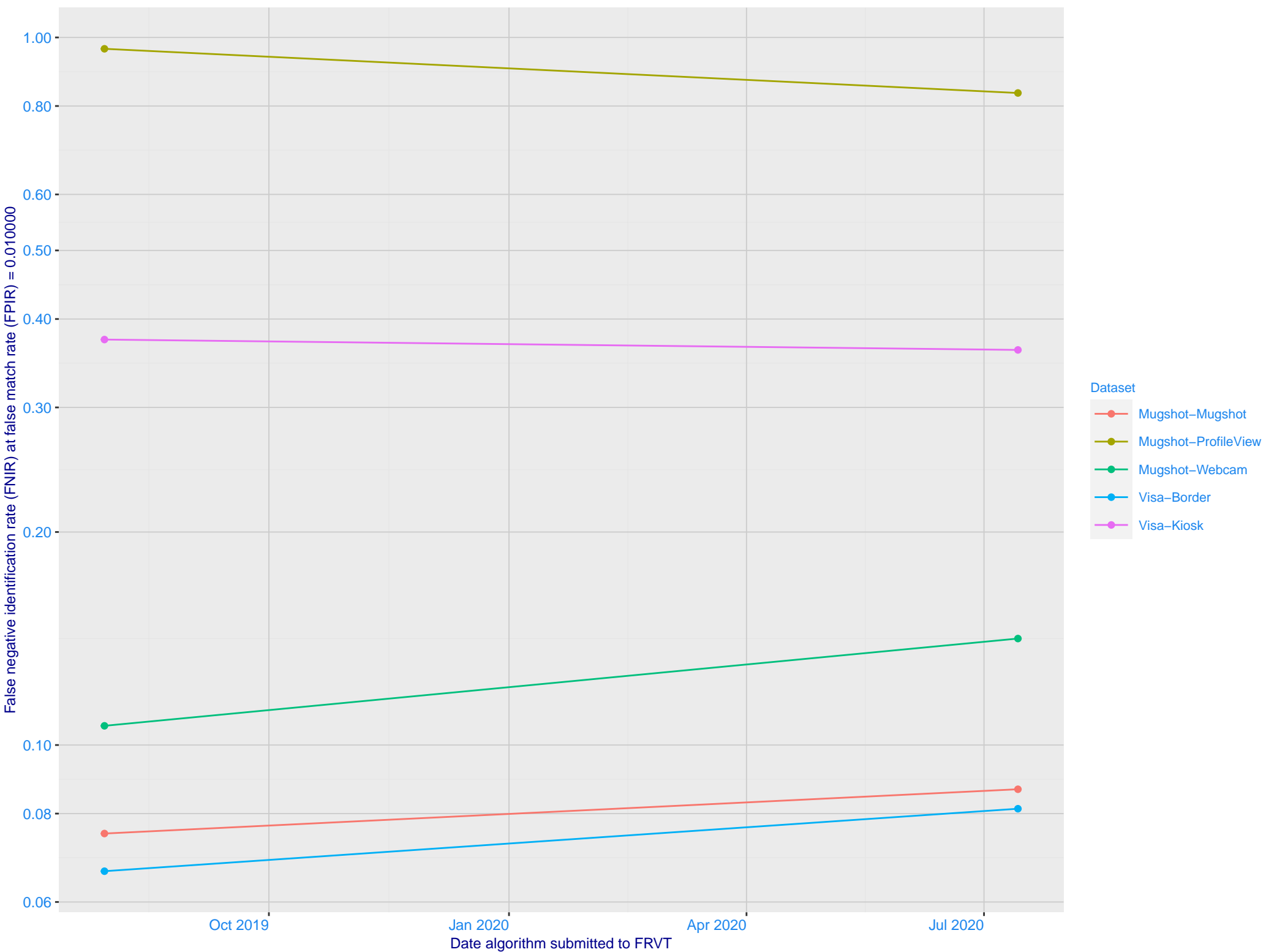
Immigration visa–border ranking 78 (out of 146) — FNIR(1600000, T, L+1) = 0.1503, FPIR=0.001000 vs. lowest 0.0049 from hr\_000

Immigration visa–kiosk ranking 62 (out of 141) — FNIR(1600000, T, L+1) = 0.4926, FPIR=0.001000 vs. lowest 0.0996 from hr\_000

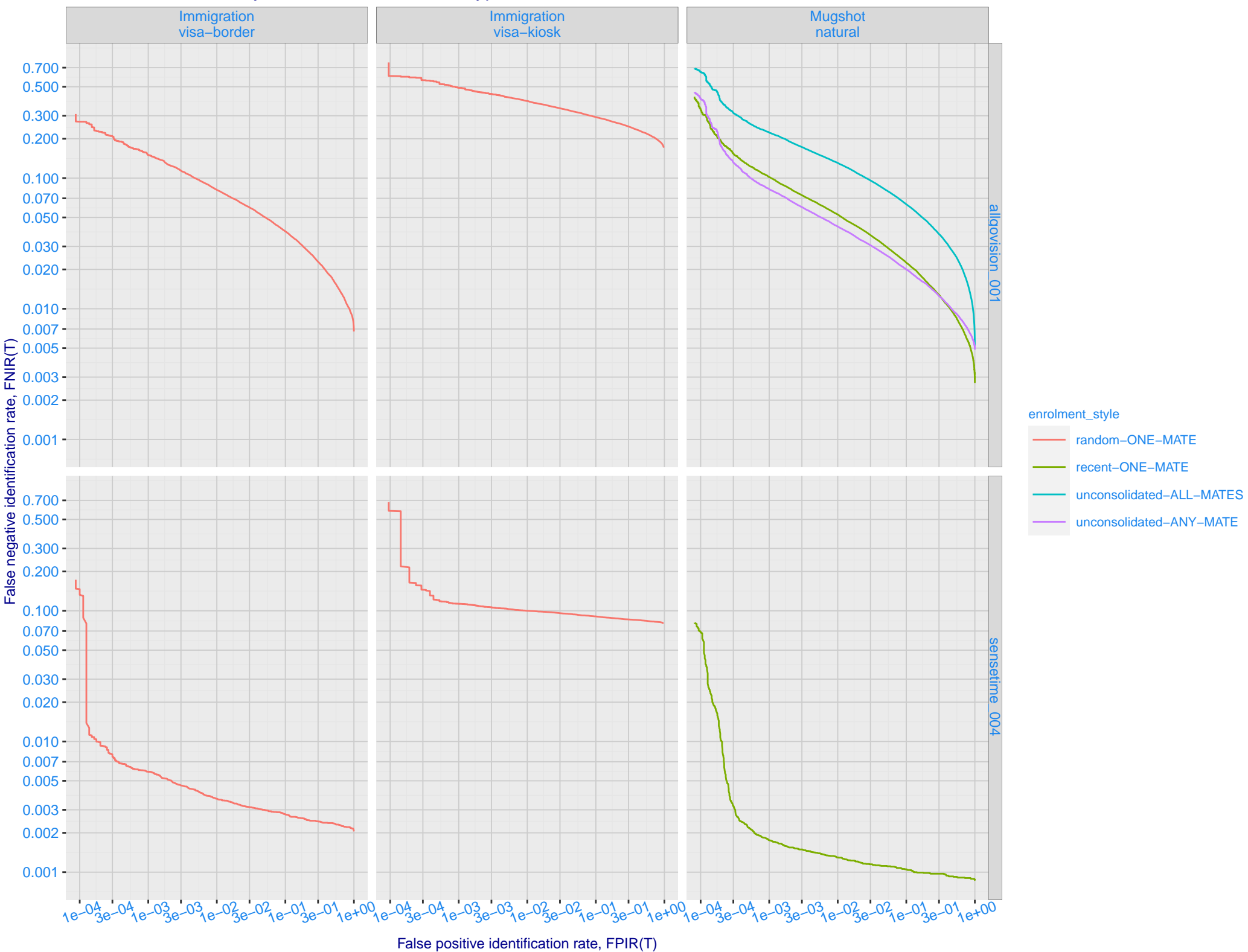
B: Mugshot natural images, identification mode: FNIR(N, L+1, T) vs. most accurate (sensetime\_004)



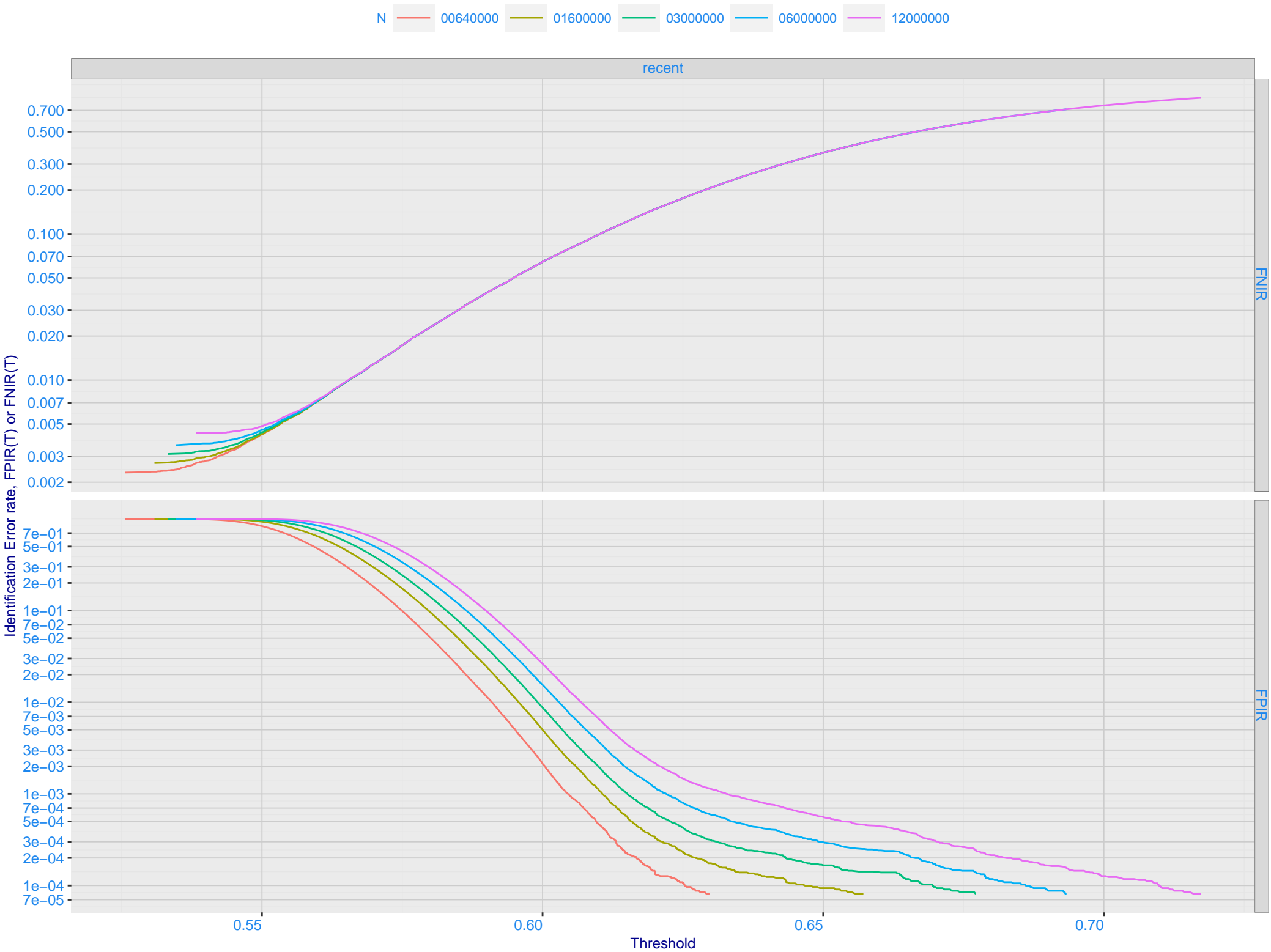
C: Evolution of accuracy for ALLGOVISION algorithms on three datasets 2018 – present



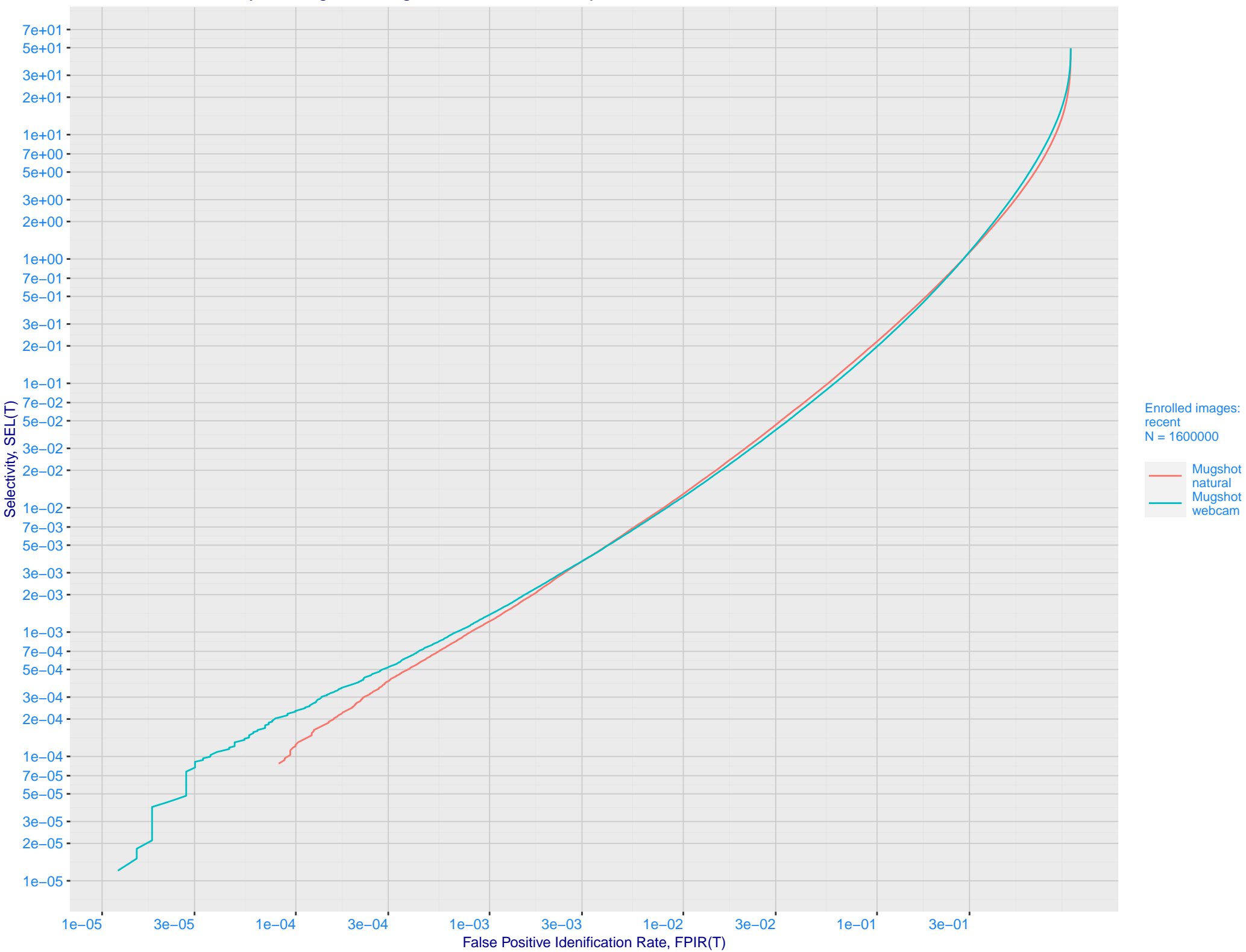
D: 1:N error tradeoff by dataset and enrollment type. N = 1600000 individuals



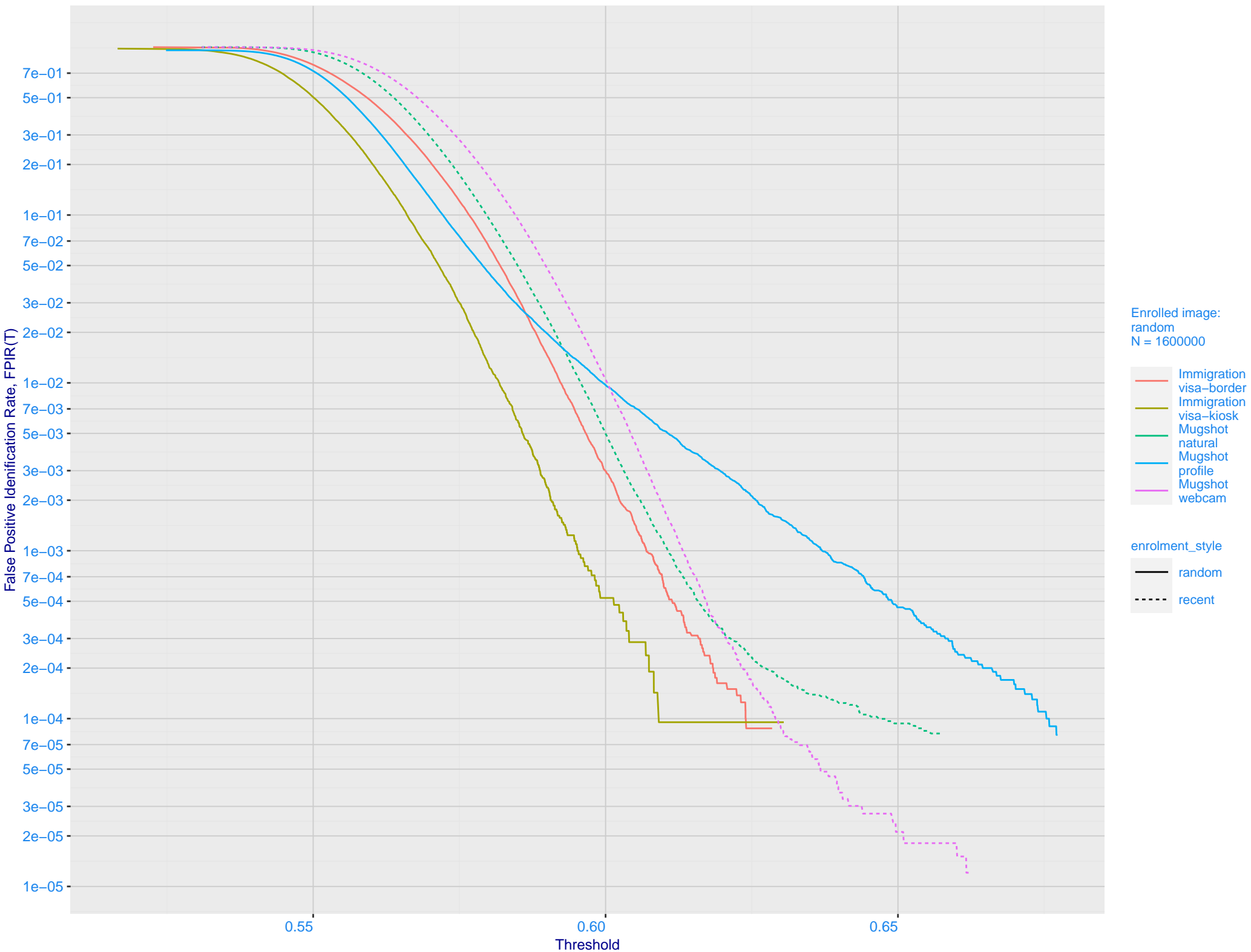
E: Dependence of error rates on T by number enrolled identities, N, for Mugshot natural images



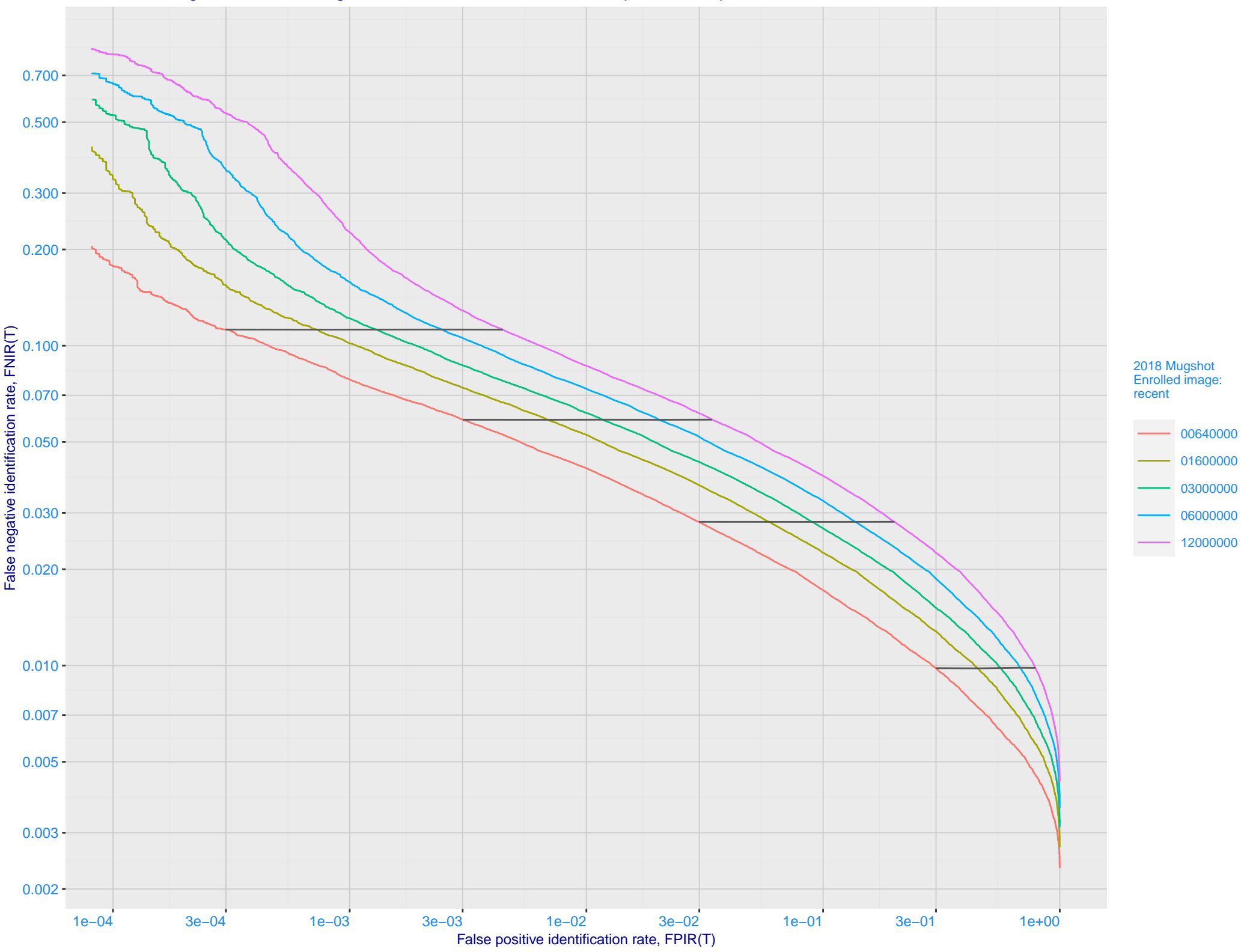
F: FPIR vs. Selectivity for mugshot images, N = 1600000 subjects enrolled with one recent mate



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

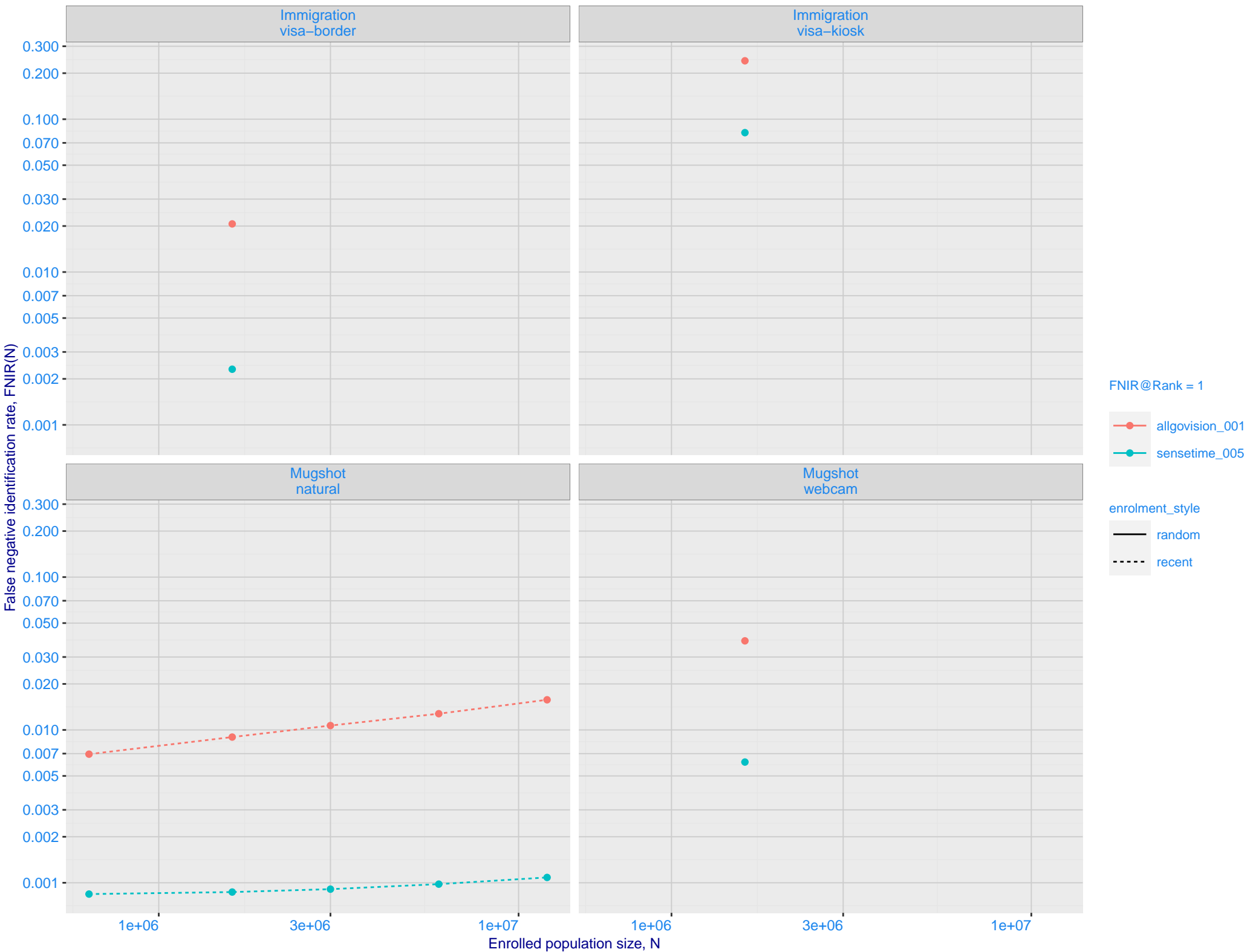


H: DET for Mugshot natural images and various N. Links connect points of equal threshold.

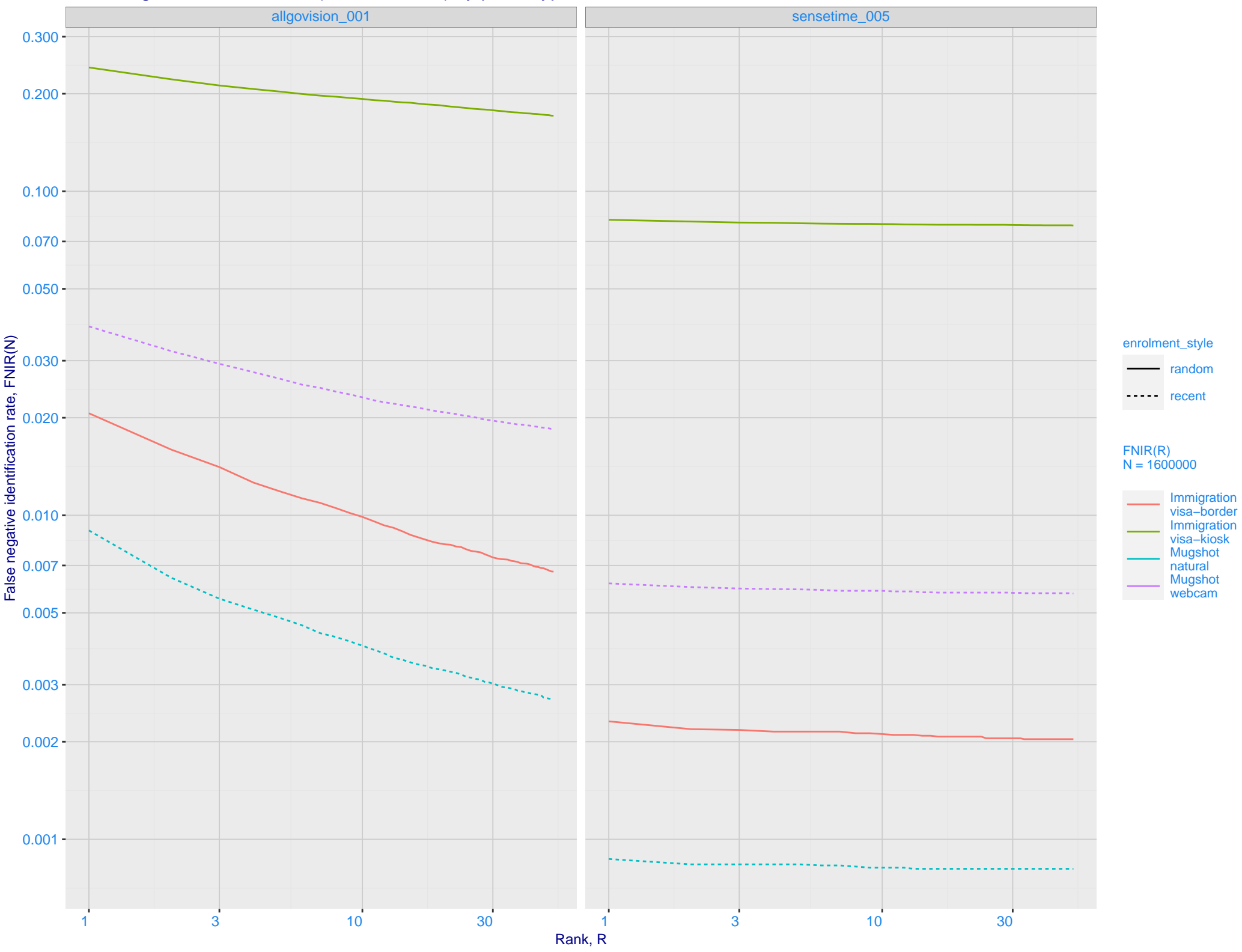




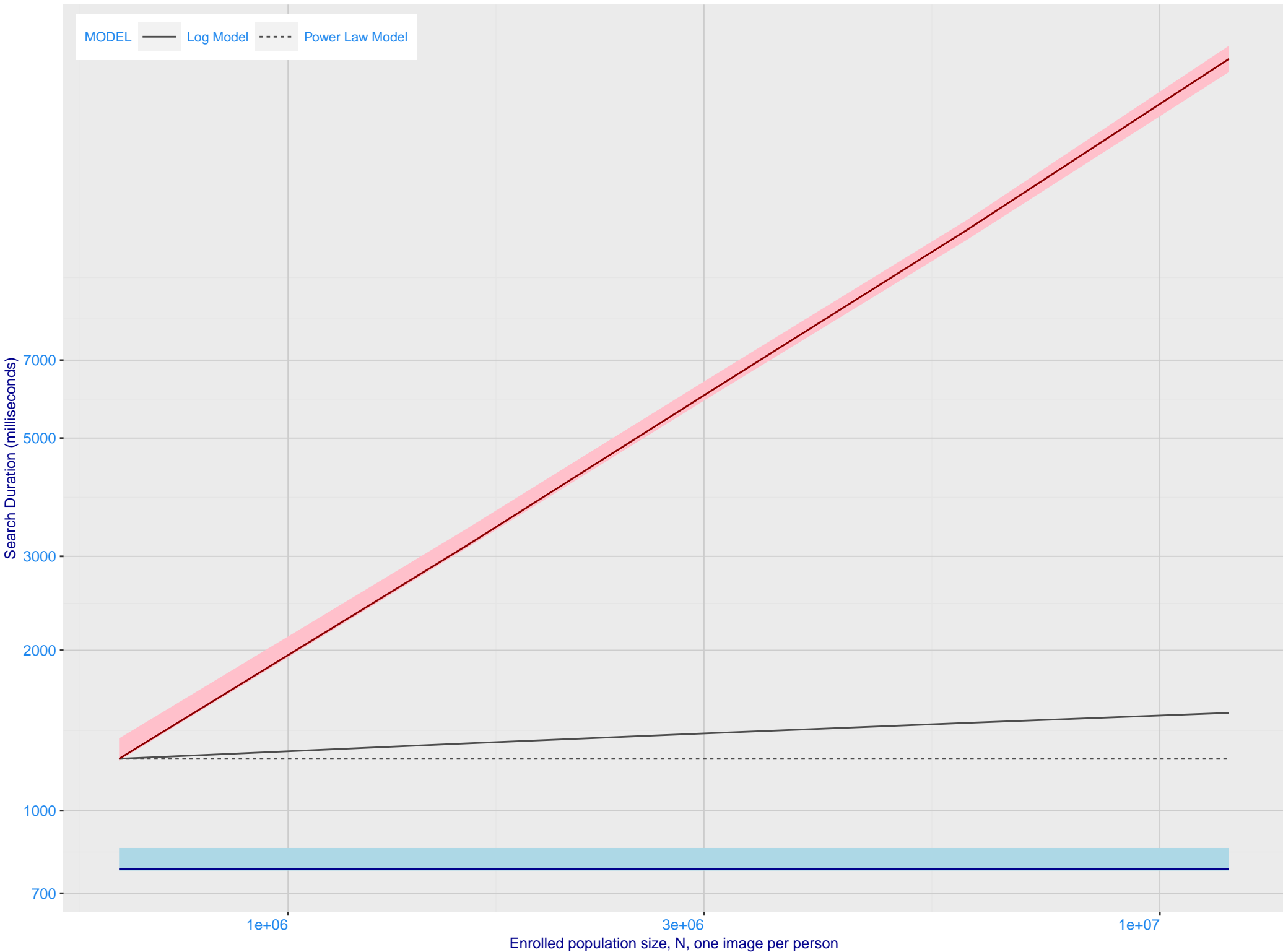
I: Investigational mode: FNIR(N, 1, 0) vs. most accurate (sensetime\_005)



# J: 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

