

# Artificial Intelligence-Assisted Colonoscopy for Polyp Detection

## A Systematic Review and Meta-analysis

Saeed Soleymanjahi, MD, MPH; Jack Huebner, MD; Lina Elmansy, MD; Niroop Rajashekar, BS; Nando Lüdtke, BS; Rumzah Paracha, MD; Rachel Thompson, MD; Alyssa A. Grimshaw, MBA, MSLIS, MPH; Farid Foroutan, PhD; Shahnaz Sultan, MD, MHSc; and Dennis L. Shung, MD, MHS, PhD

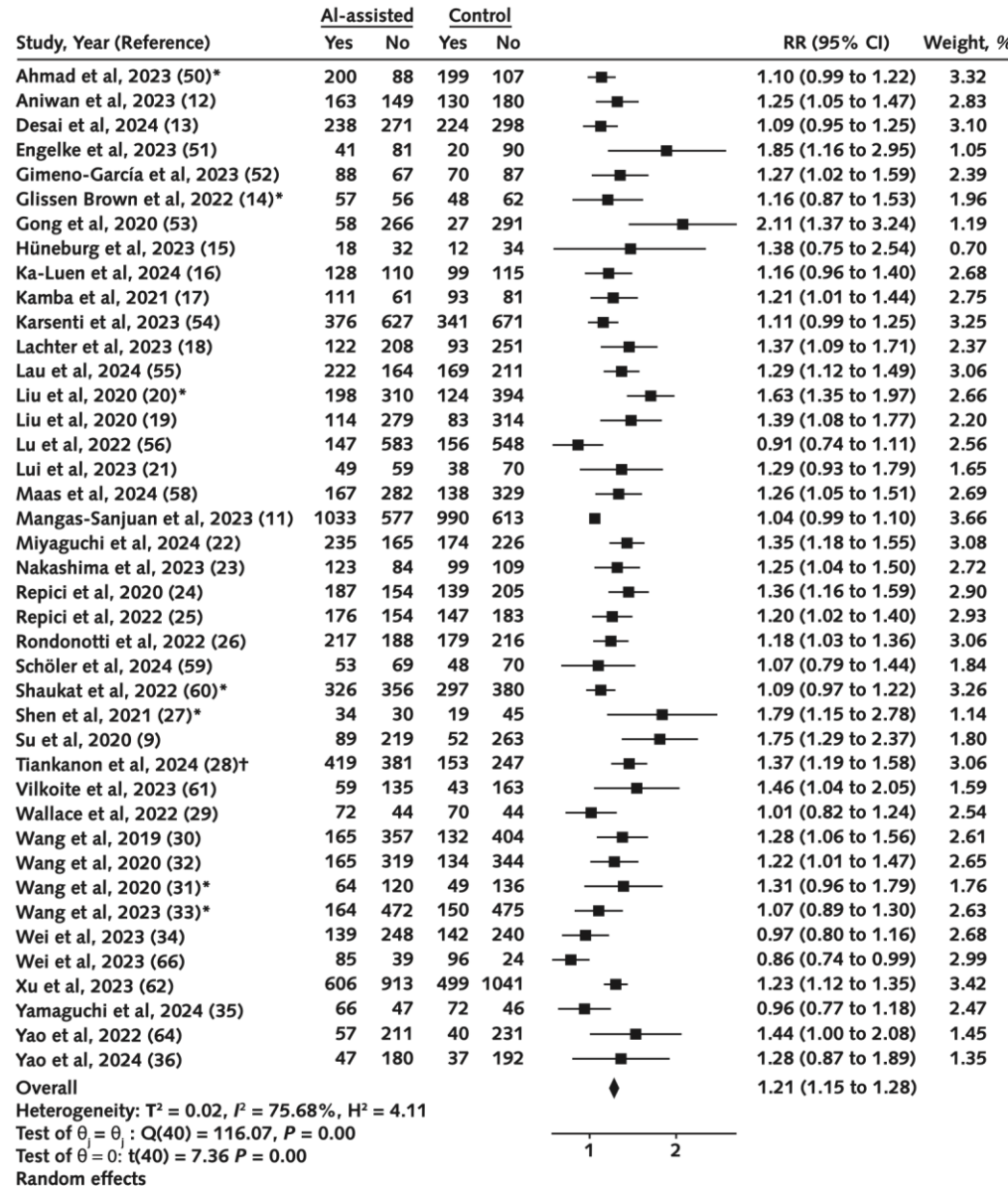
## Adenoma Detection Rate (ADR)

5825/ 15 855 vs. 7098/16 253

36.74%

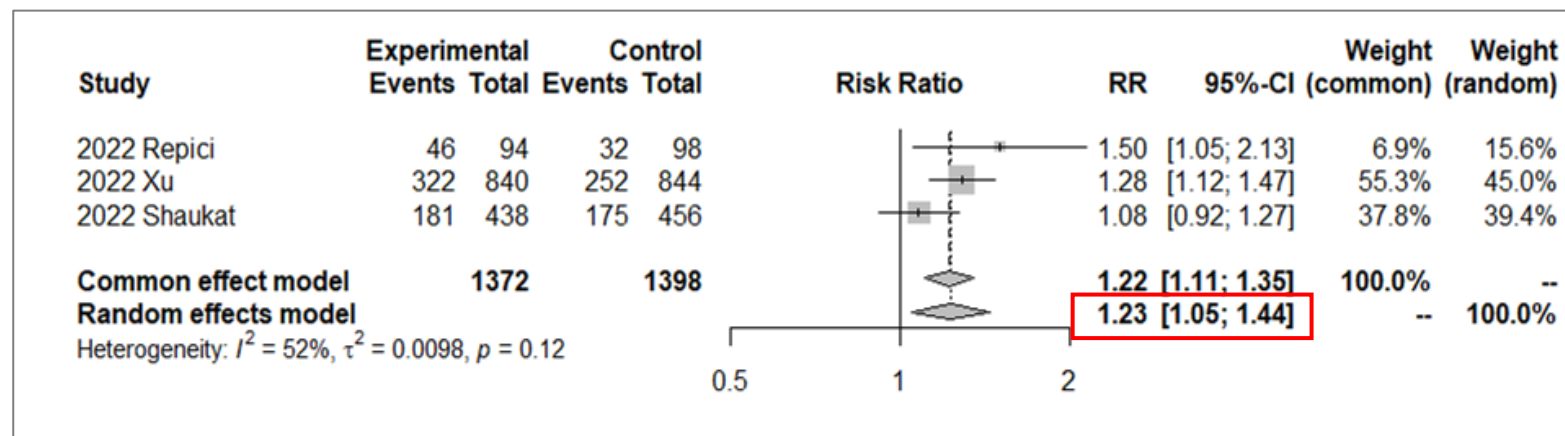
44.67%

RR= 1.21 [1.15, 1.28]



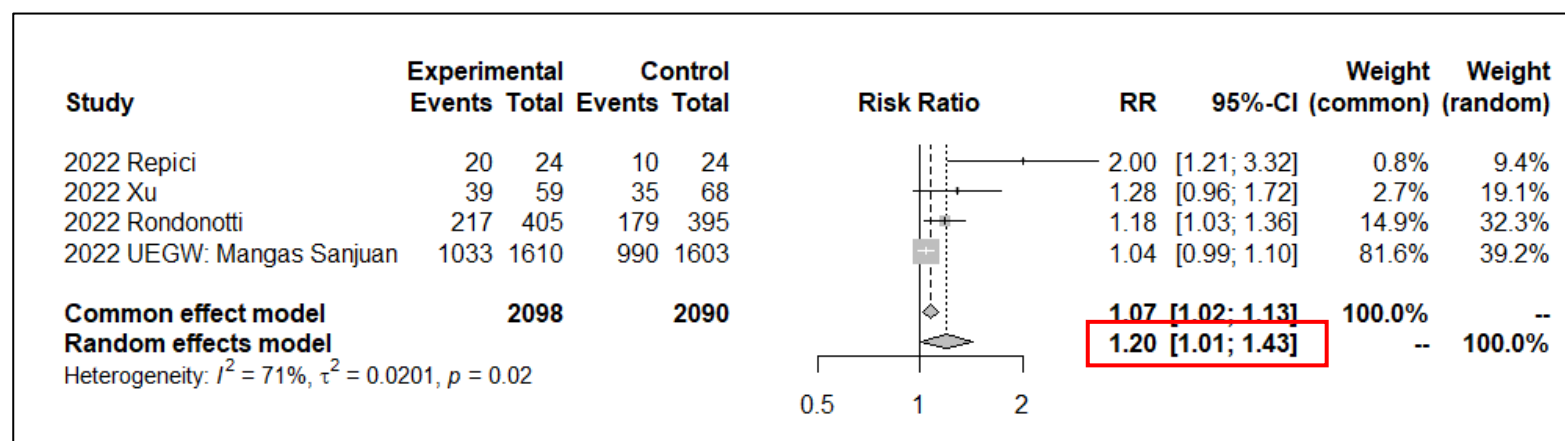
# CADe in colonoscopy screening

## Screening colonoscopy



## FIT-positive colonoscopy

\*FIT, fecal immunochemical test

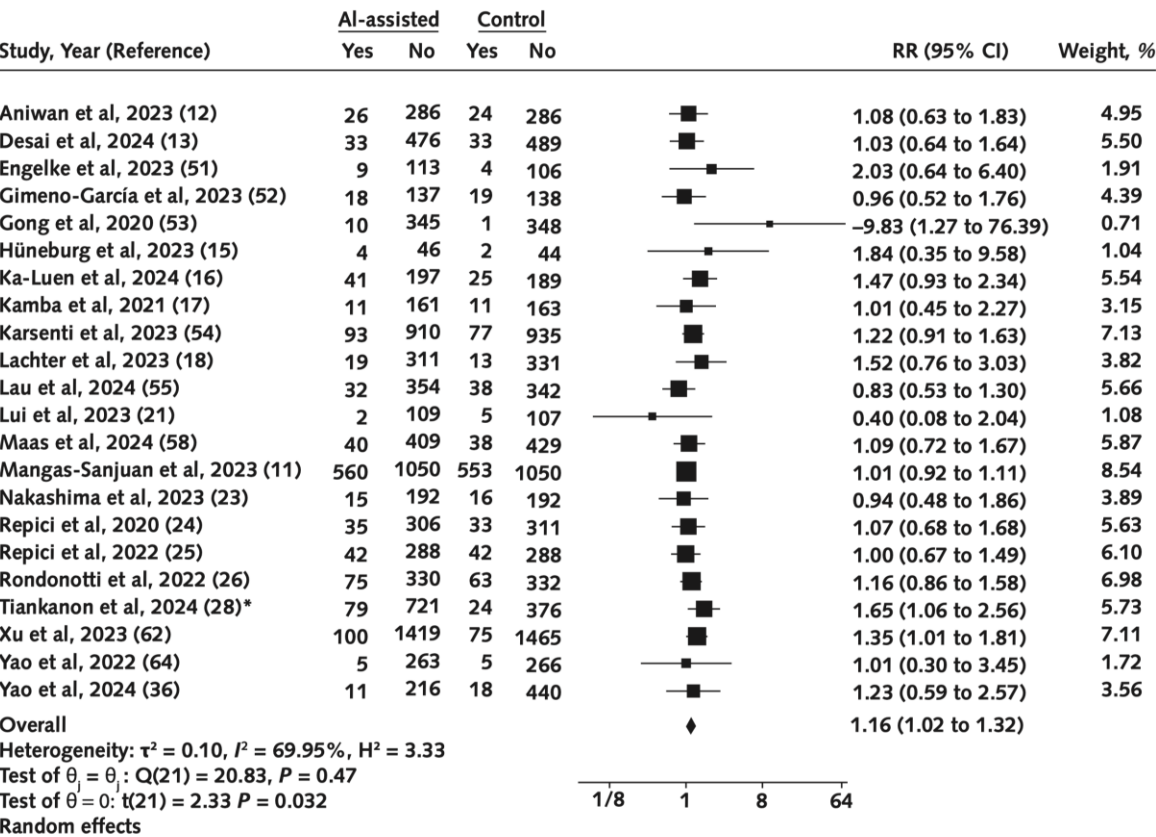


Unpublished data

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Advanced colorectal neoplasia detection

RR= 1.16 [1.02, 1.32]

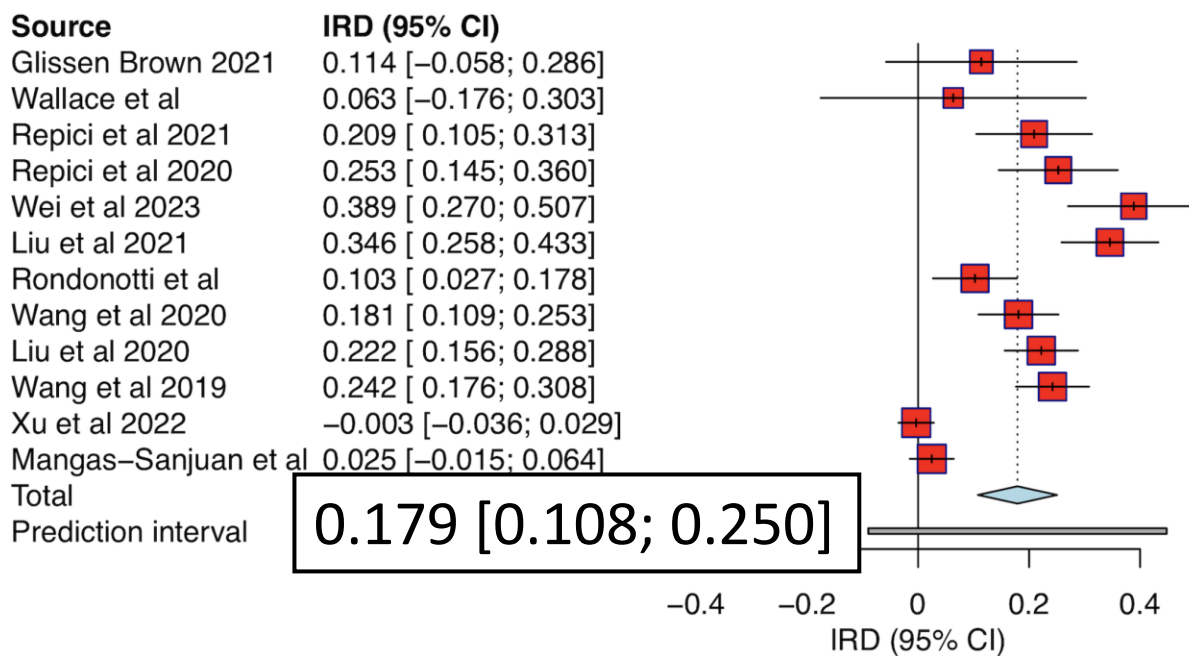
# Real-Time Computer-Aided Detection of Colorectal Neoplasia During Colonoscopy

## A Systematic Review and Meta-analysis

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### Polypectomies of non-neoplastic polyps per colonoscopy:

CADe group: 0.508 vs Control group: 0.329



+51%

Heterogeneity:  $\chi^2_{11} = 154.79$  ( $P < .001$ ),  $I^2 = 93\%$