



**WEO**

The voice of world  
endoscopy

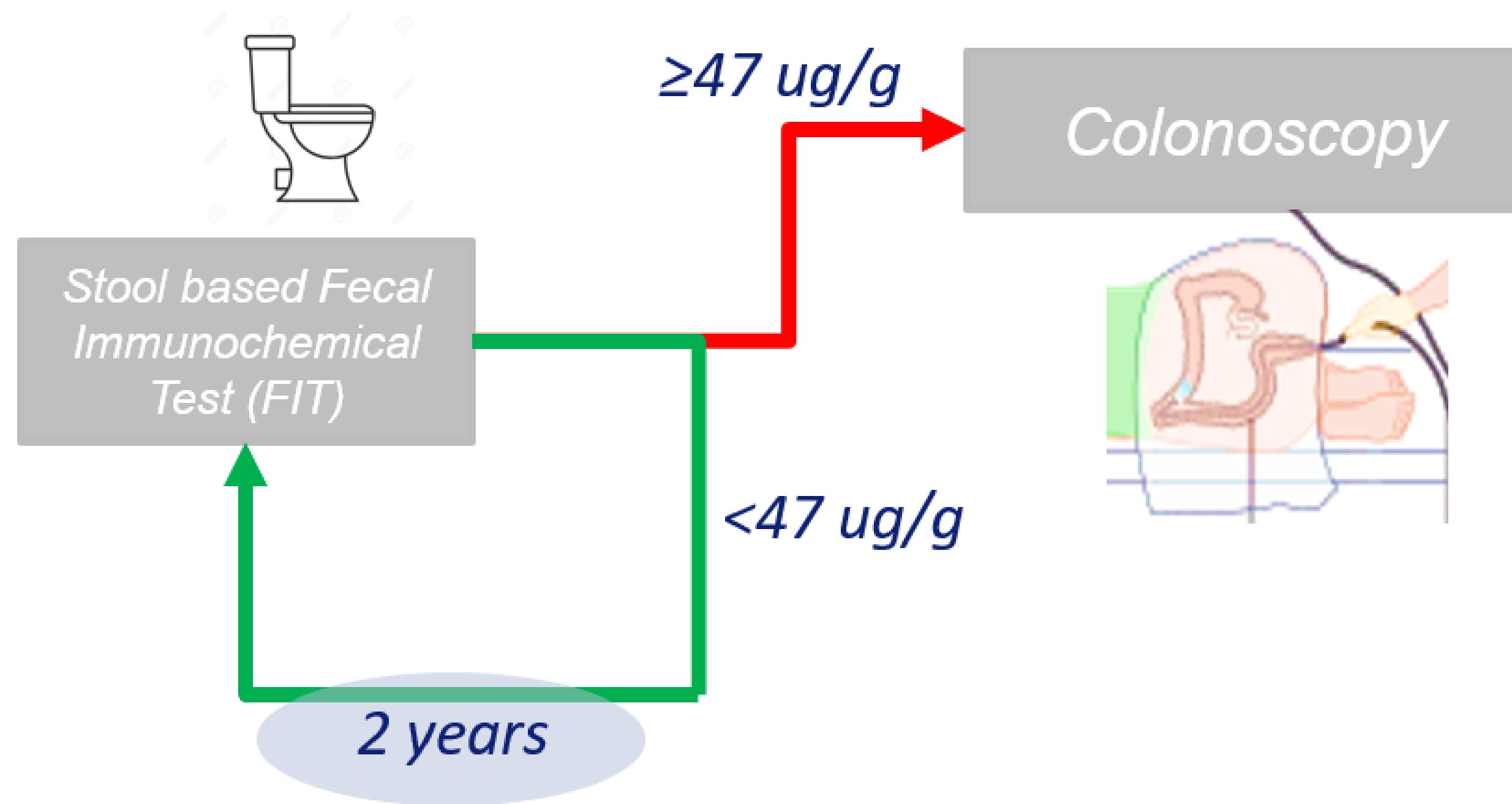
## **Dose-response association between fecal hemoglobin concentration in previous screening round and detection of colorectal neoplasia: a systematic review and meta-analysis**

Danica M. N. van den Berg, Rosita van den Puttelaar, Lucie de Jonge, Iris Lansdorp-Vogelaar, Esther Toes-Zoutendijk



# Background

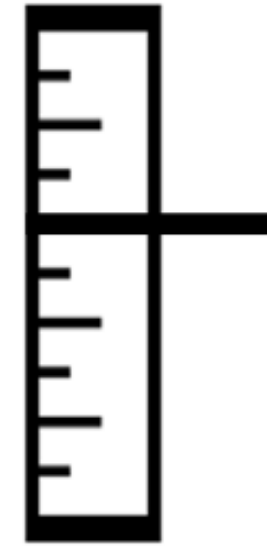
- FIT used as **binary** test



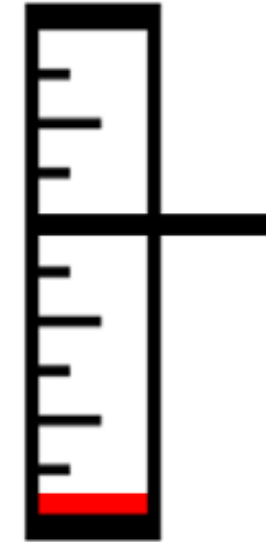
# Risk-stratified screening



FIT 1



FIT 2



# Aim

Evaluate the quantitative, dose-response association between **prior f-Hb concentrations** and the **detection of colorectal neoplasia**.



# Methods

## Systematic review

- Literature search in Embase, Medline, Cochrane, Web of Science and Google Scholar
- Inclusion criteria:
  - association between f-Hb concentration in **prior** screening round and detection of colorectal neoplasia as an outcome
  - outcomes for the **average-risk** population
  - relative risk (RR) or absolute numbers from which RRs could be calculated, are reported.



# Methods

## Meta-analysis

**Two-stage procedure** to obtain pooled dose-response association:

### *Stage 1*

**Study-specific** dose-response association obtained via logarithmic regression.

### *Stage 2*

Study-specific dose-response associations **pooled** using random effects model.



# Thank you

email: [d.m.n.vandenberg@erasmusmc.nl](mailto:d.m.n.vandenberg@erasmusmc.nl)

