

# Cadmium exposure and breast cancer risk: a systematic review and dose-response meta-analysis of cohort studies

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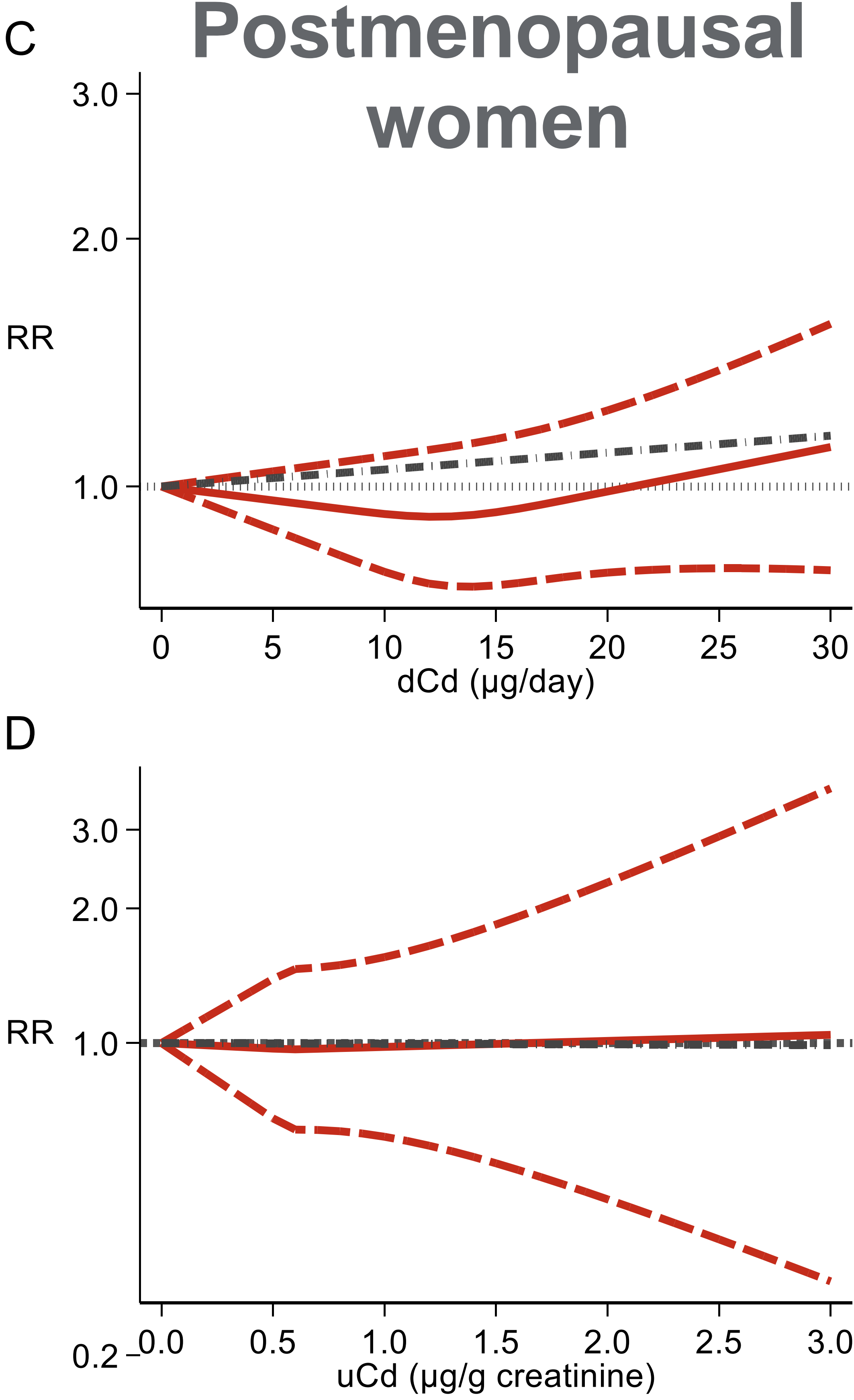
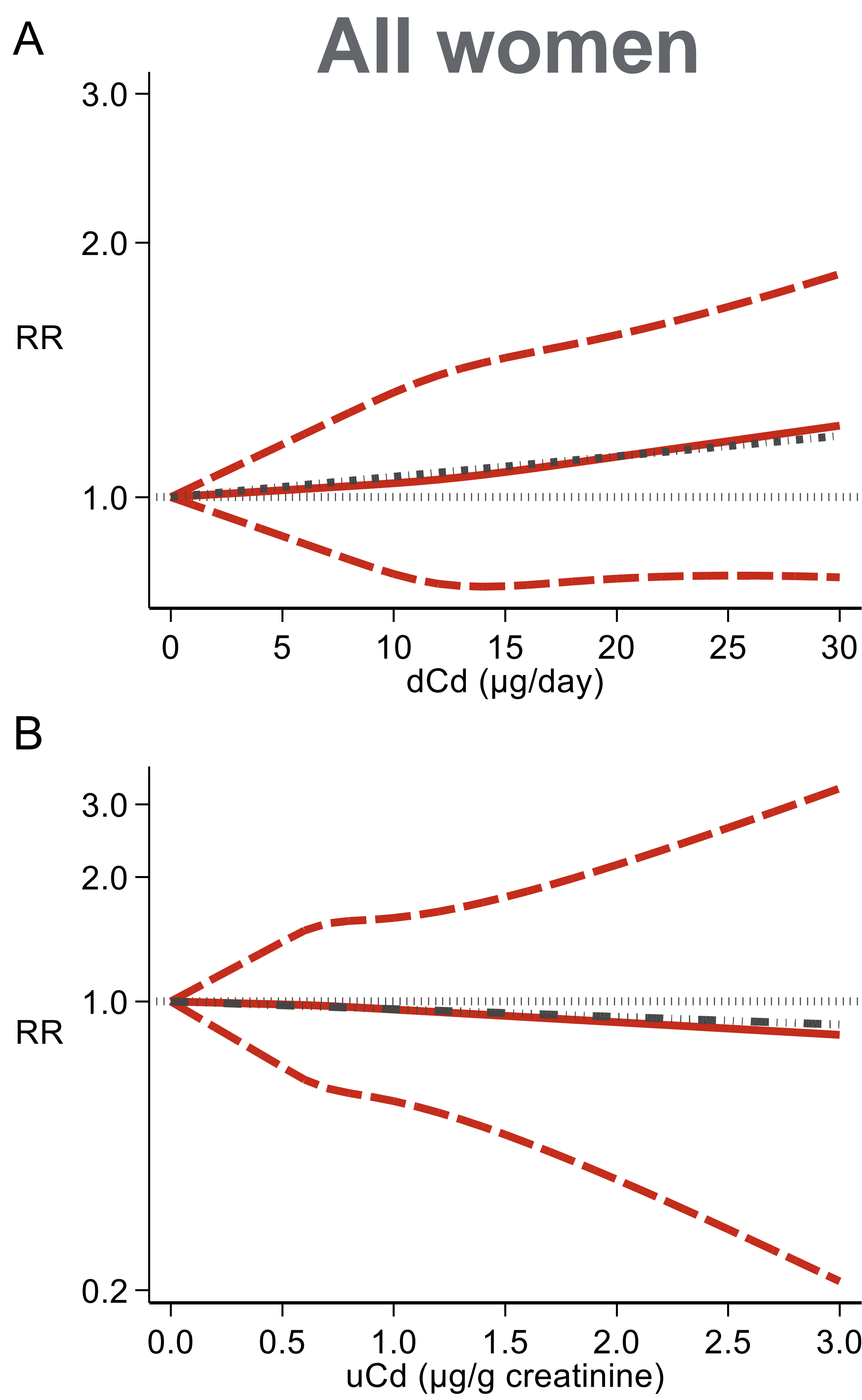
## NO POSITIVE ASSOCIATION BETWEEN CADMIUM EXPOSURE AND BREAST CANCER

### Background

- Cadmium has been implicated in breast cancer etiology
- No dose-response meta-analysis has been performed and new routine available including studies with at least two exposure categories only ('one stage')

### Methods

- Online database search up to July 26, 2019
- Dose-response meta-analysis using restricted cubic spline model
- Main confounders in risk of bias: age, smoking habits, body mass index, hormone replacement therapy (+ energy intake or creatinine adjustment)



### Results

- | Dietary cadmium intake (six studies):       | Urinary excretion (five studies):                   |
|---|---|
| • RR = 1.04 (95% CI 0.81-1.33) at 10 µg/day | • RR = 0.96 (95% CI 0.57-1.59) at 1 µg/g creatinine |
| • RR = 1.12 (95% CI 0.80-1.56) at 20 µg/day | • RR = 0.89 (95% CI 0.37-2.14) at 2 µg/g creatinine |