

DOES RADIATION THERAPY (RT) INCREASE THE RISK OF HYPOTHYROIDISM IN BREAST CANCER SURVIVORS?

A systematic review and meta-analysis



METHODS

451 papers found in Pubmed and Embase screened by title and abstract

19 studies included

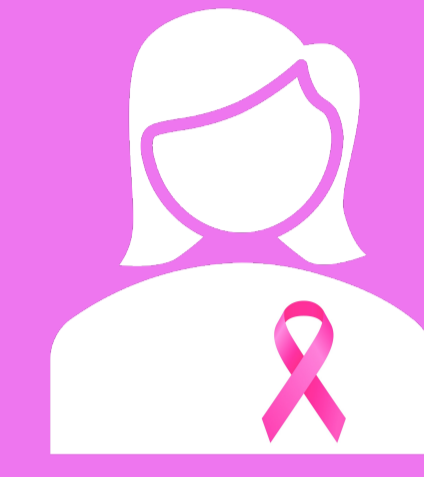
Studies were published between 1985 and 2021, and included 115,967 breast cancer cases

Data extraction was performed using a data extraction sheet

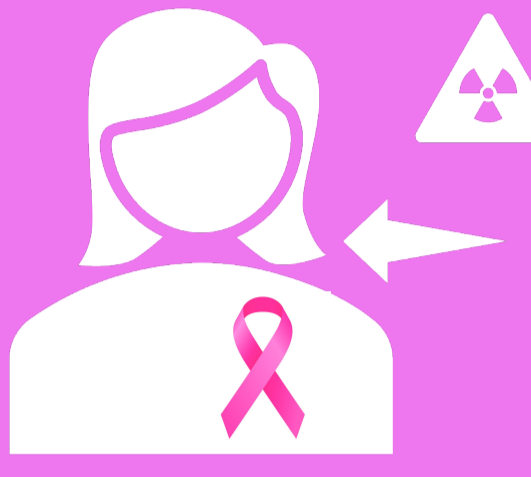
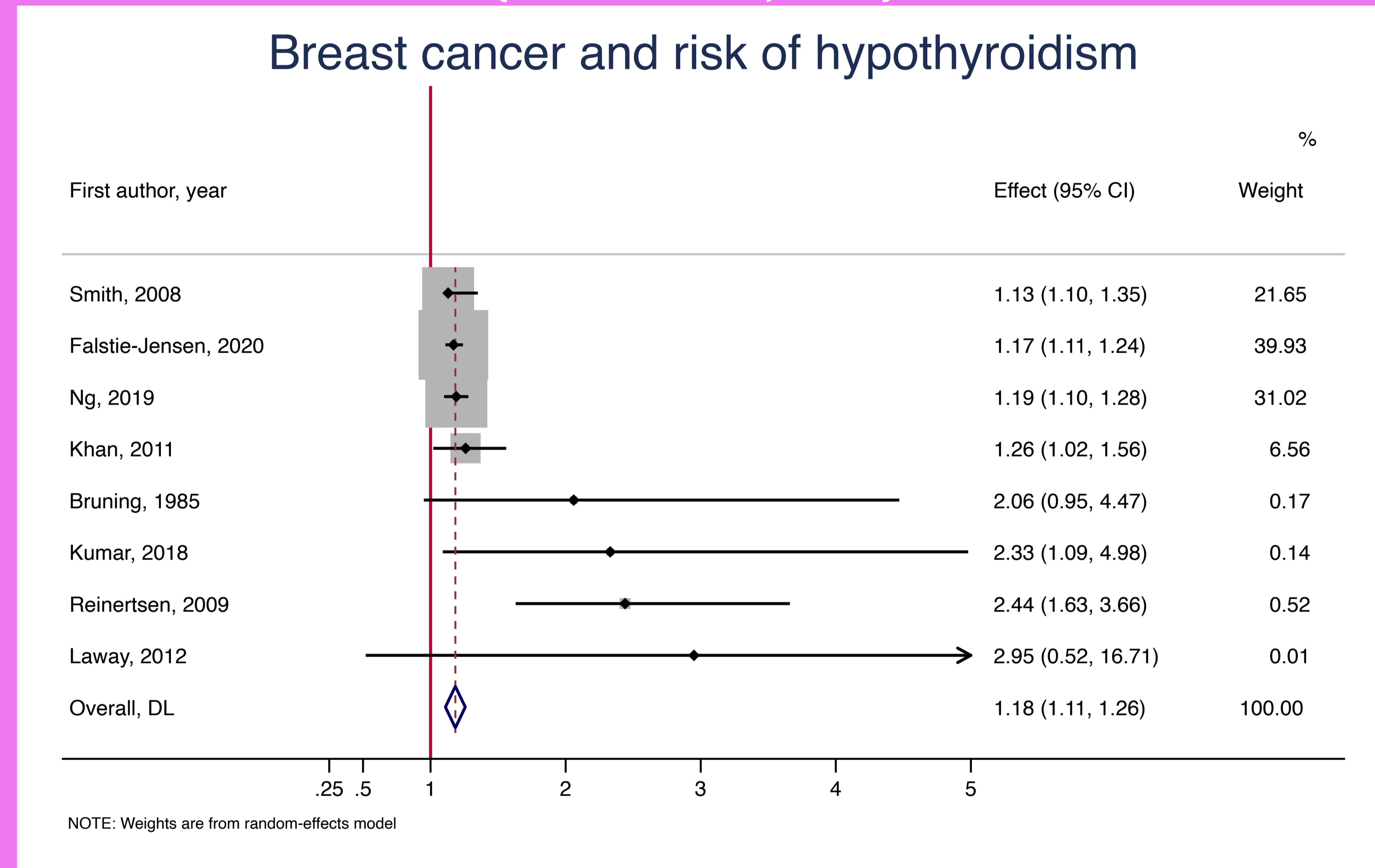
Risk of bias was assessed using STROBE and COSMOS-E guidelines

Pooled RRs were estimated in Stata

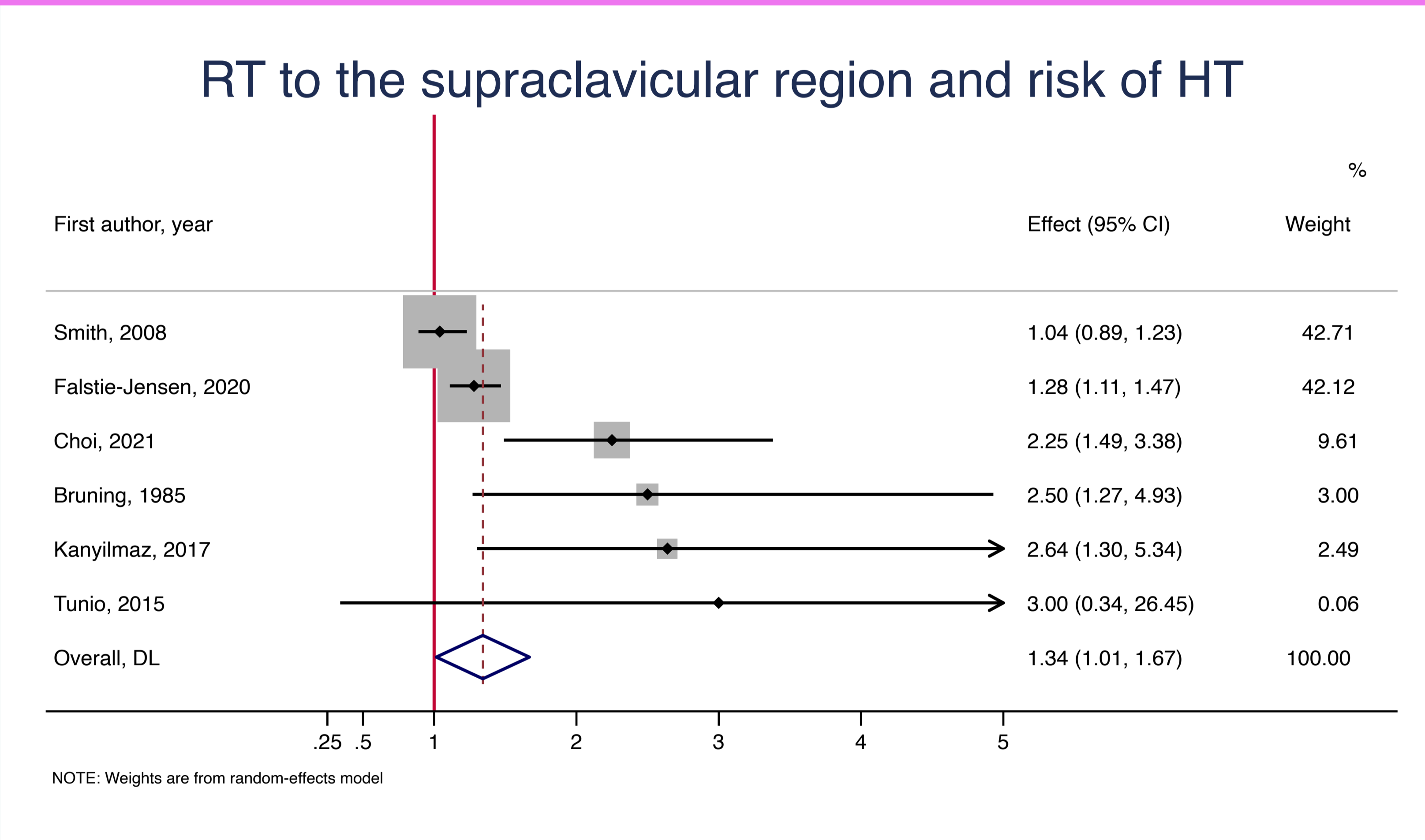
RESULTS



Breast cancer patients have an increased risk of hypothyroidism compared with women without breast cancer.
RR=1.18 (95%CI: 1.11, 1.26)



Highest risk of hypothyroidism was observed in patients irradiated at the supraclavicular field.
RR=1.34 (95%CI: 1.01, 1.67)



YES! Radiation therapy increases the risk of hypothyroidism in breast cancer survivors, especially when directed at the supraclavicular field

Elisabeth Solmunde^{1,*}, Anne Mette Falstie-Jensen¹, Ebbe Laugaard Lorenzen², Jeanette Dupont Jensen², Marianne Ewertz², Kristin Valborg Reinertsen³, Olaf M Dekkers⁴ and Deirdre P. Cronin-Fenton¹.
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*Presenting author: Elisabeth Solmunde, medical student
Corresponding author: Deirdre Cronin Fenton, Associate Professor, Ph.D. E-mail: dc@clin.au.dk
¹Department of Clinical Epidemiology, Aarhus University, Denmark
²Department of Oncology, Odense University Hospital, Denmark; Institute of Clinical Research, University of Southern Denmark, Denmark
³National advisory Unit on Late Effects after Cancer Treatment, Department of Oncology, Oslo University Hospital, Norway
⁴Department of Epidemiology, Leiden University Medical Center, Leiden, The Netherlands



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