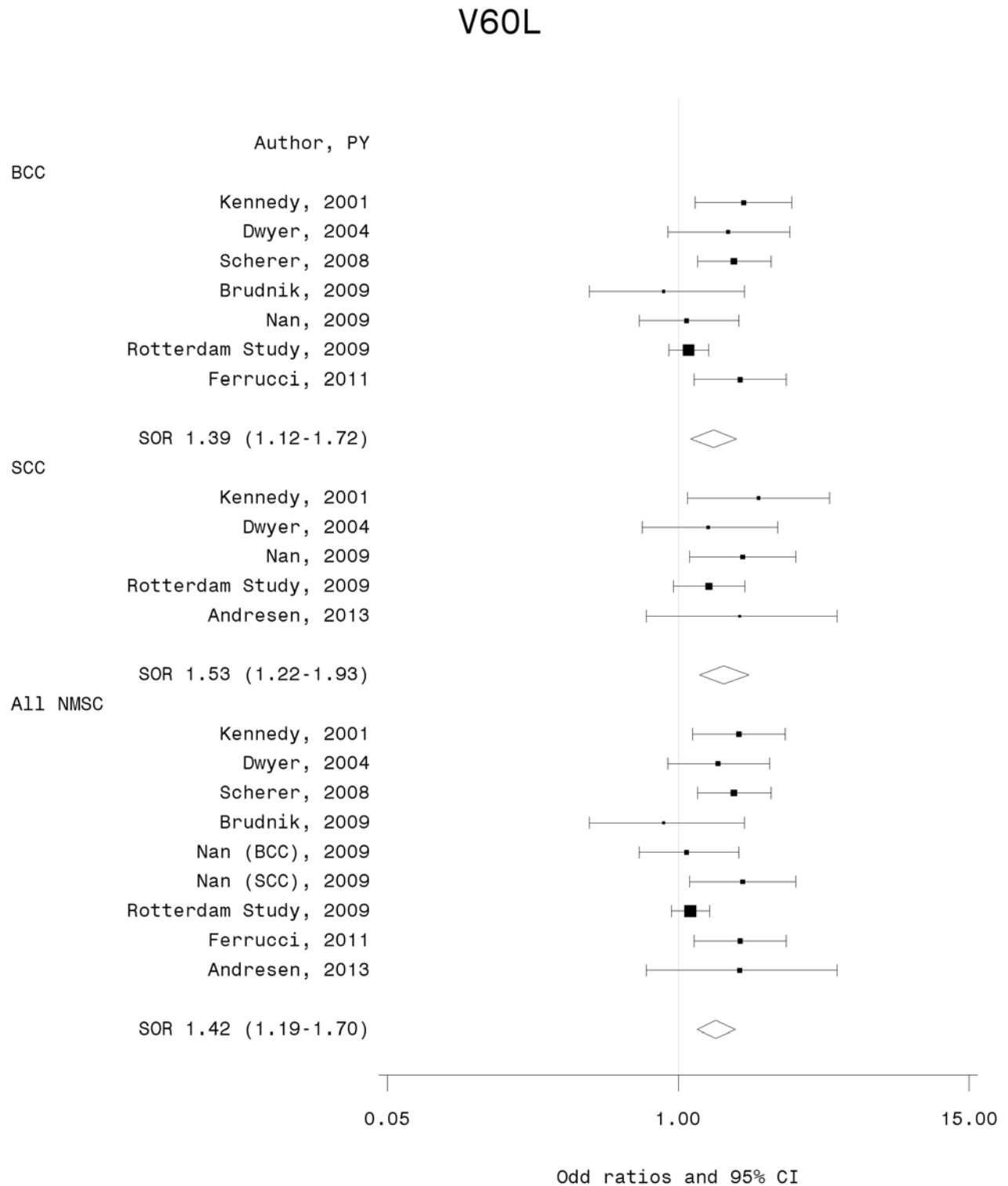


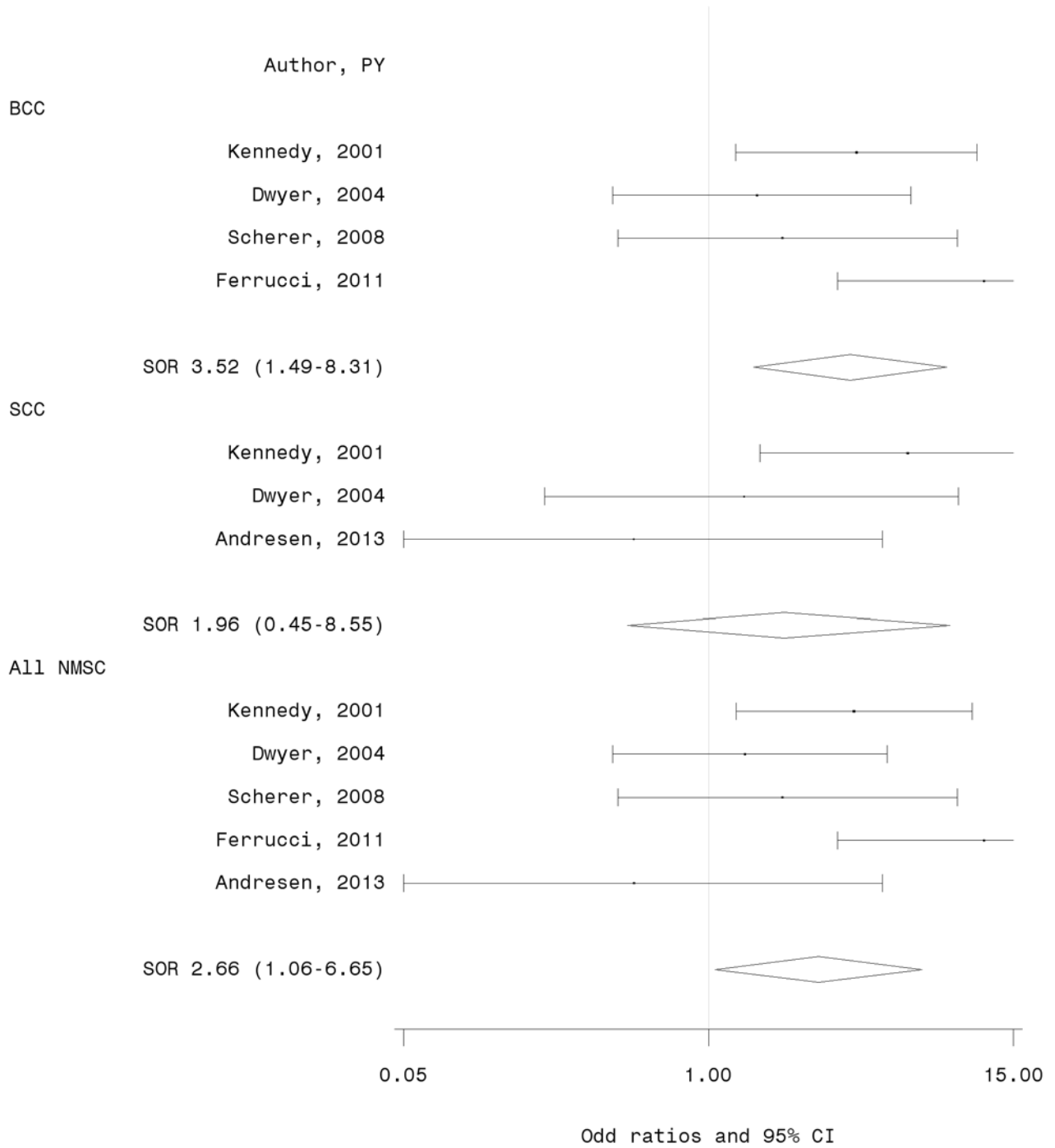
**Figure S1. Study-specific and Summary Odds Ratio with 95% Confidence Intervals for the association between NMSC and *MC1R* variants (a) V60L, (b) D84E, (c) V92M, (d) R142H, (e) R151C, (f) I155T, (g) R160W, (h) R163Q, (i) D294H.**

a)



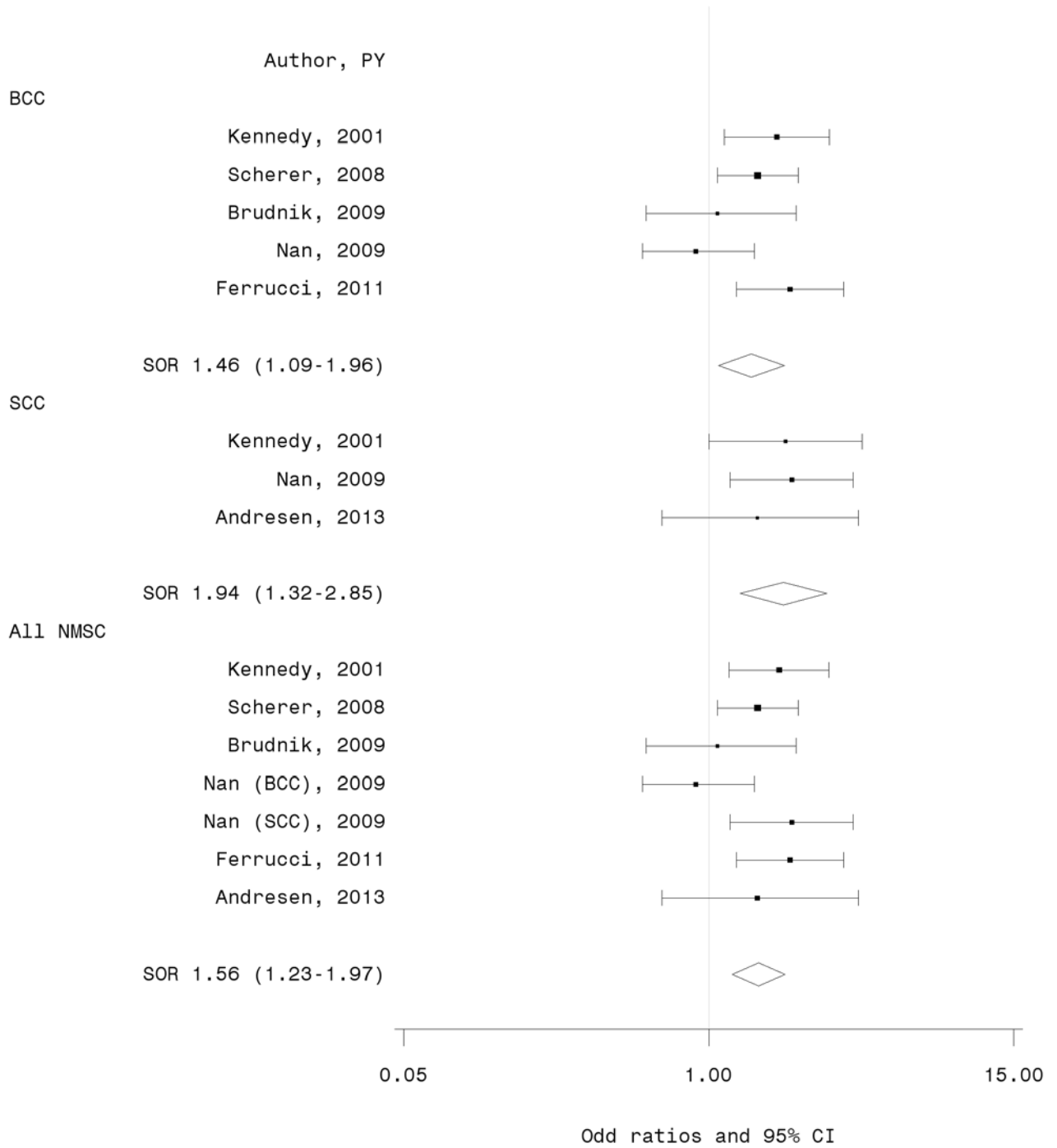
b)

# D84E



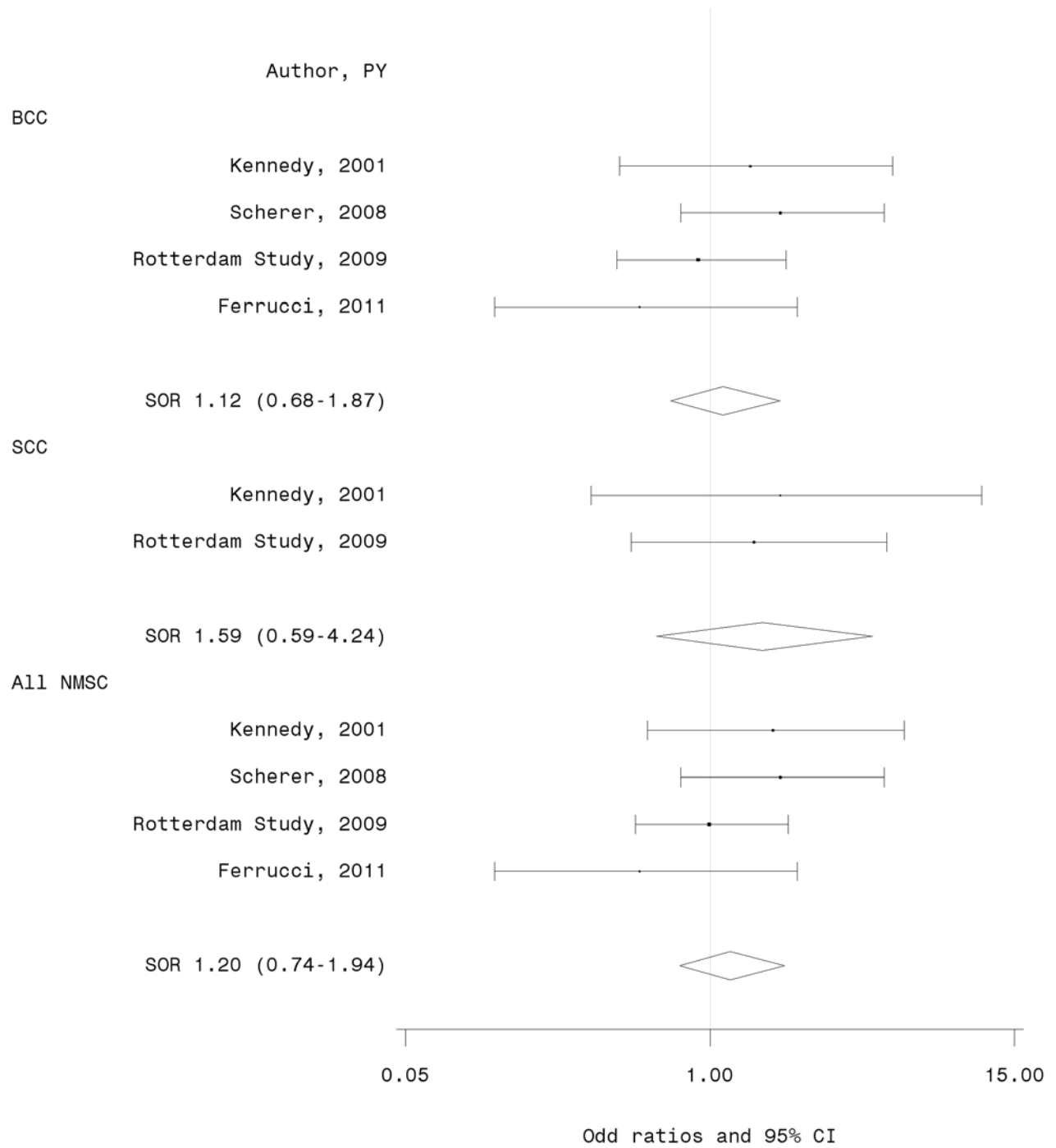
c)

# V92M



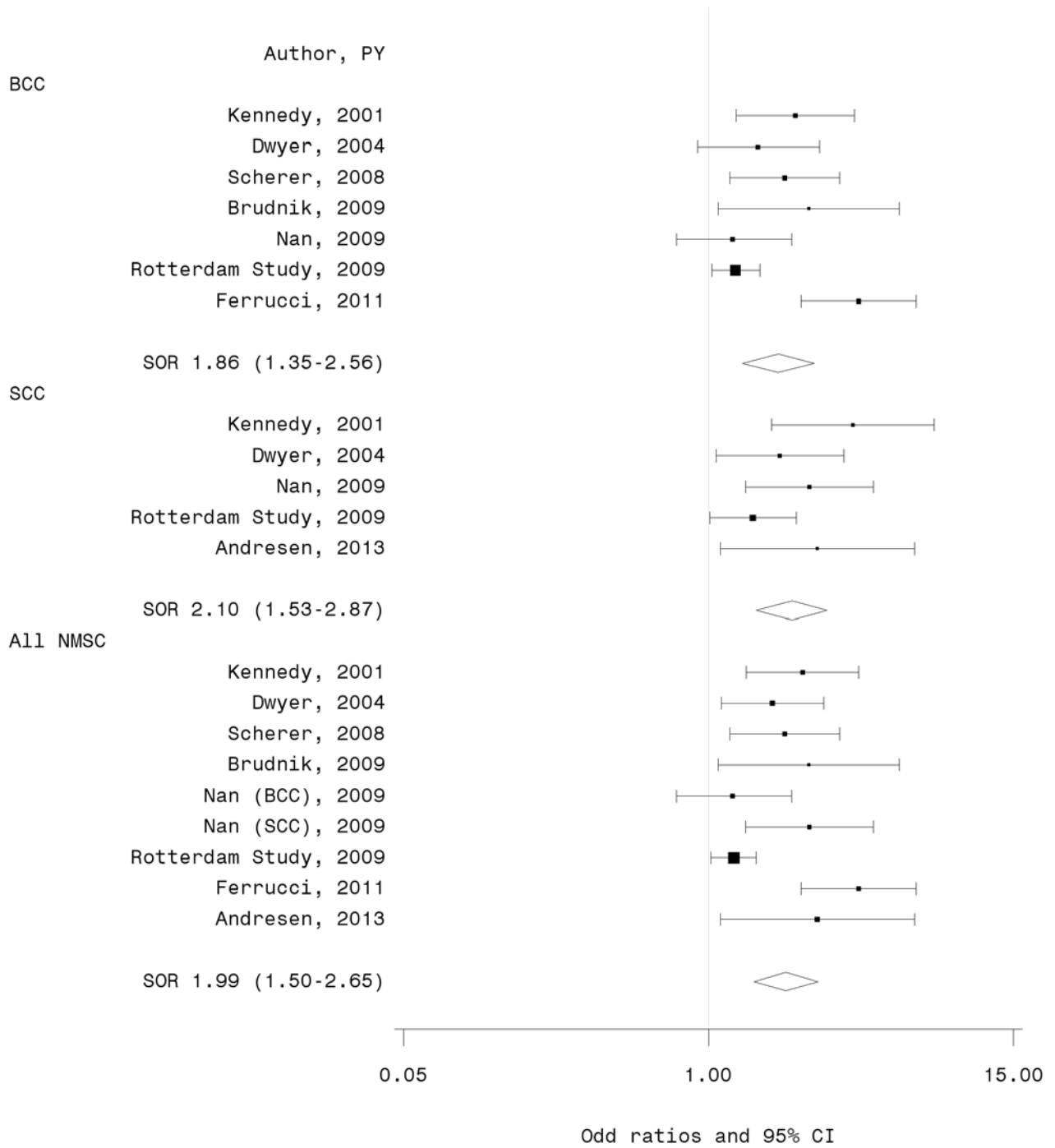
d)

# R142H



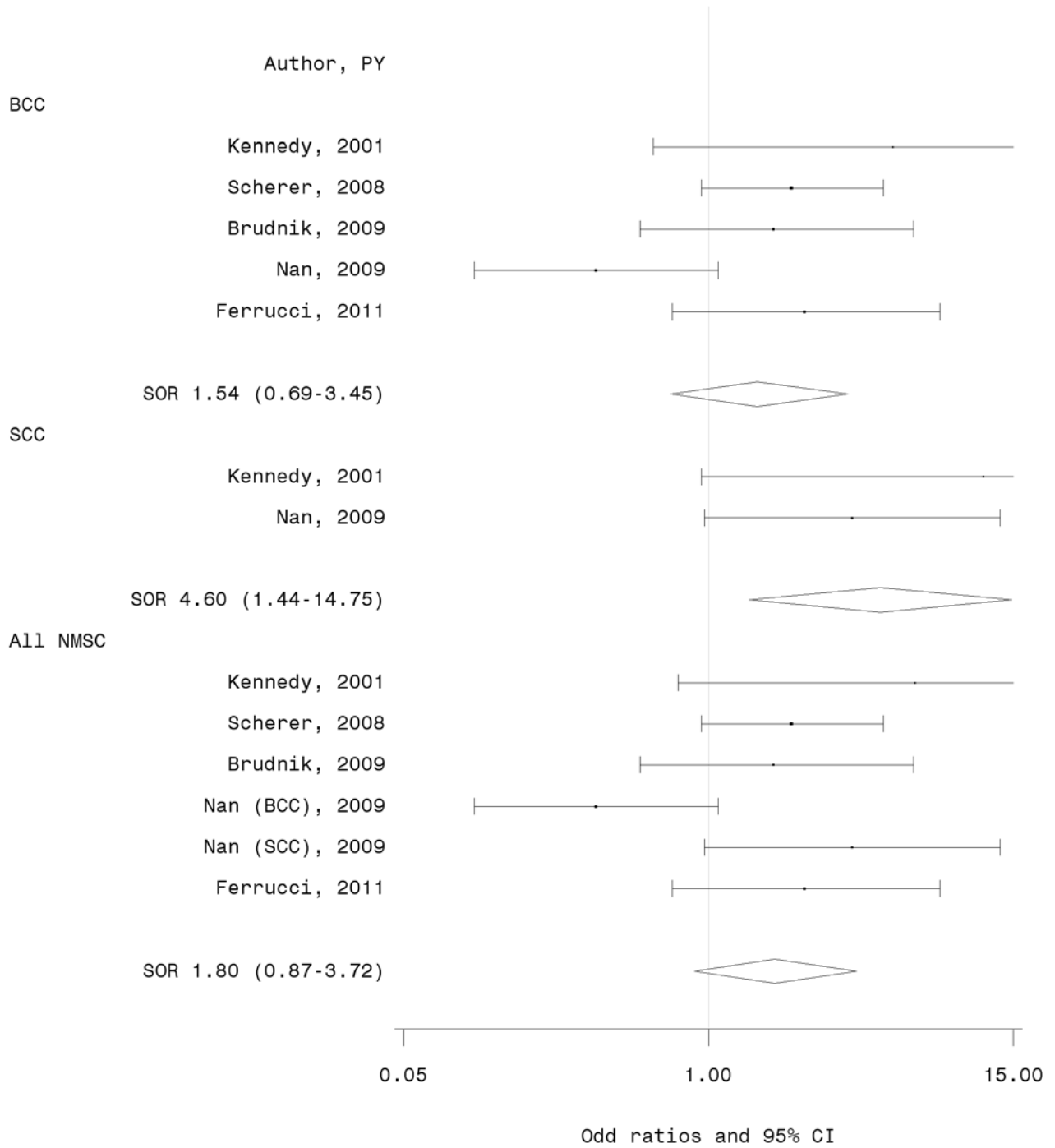
e)

# R151C



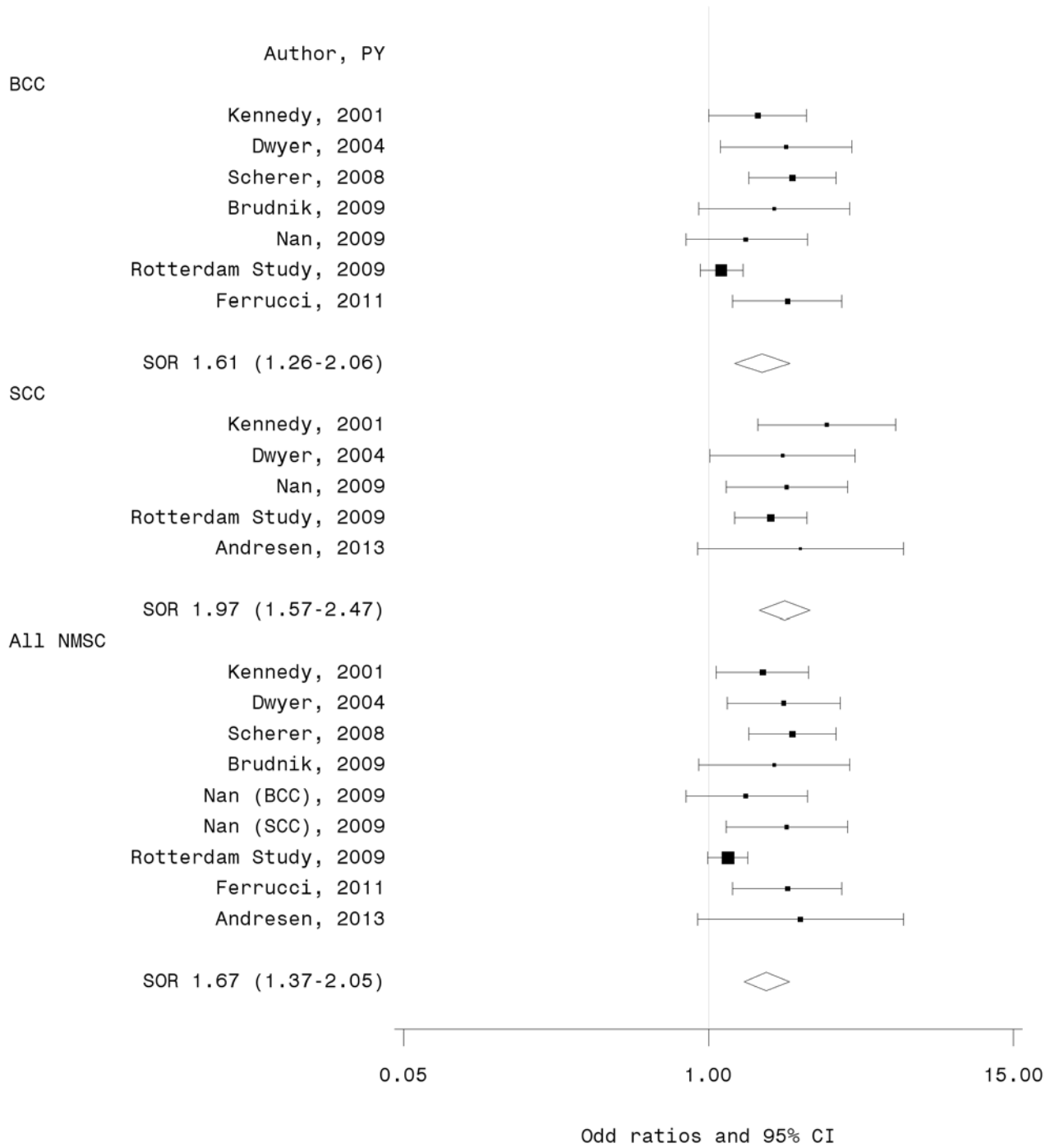
f)

# I155T



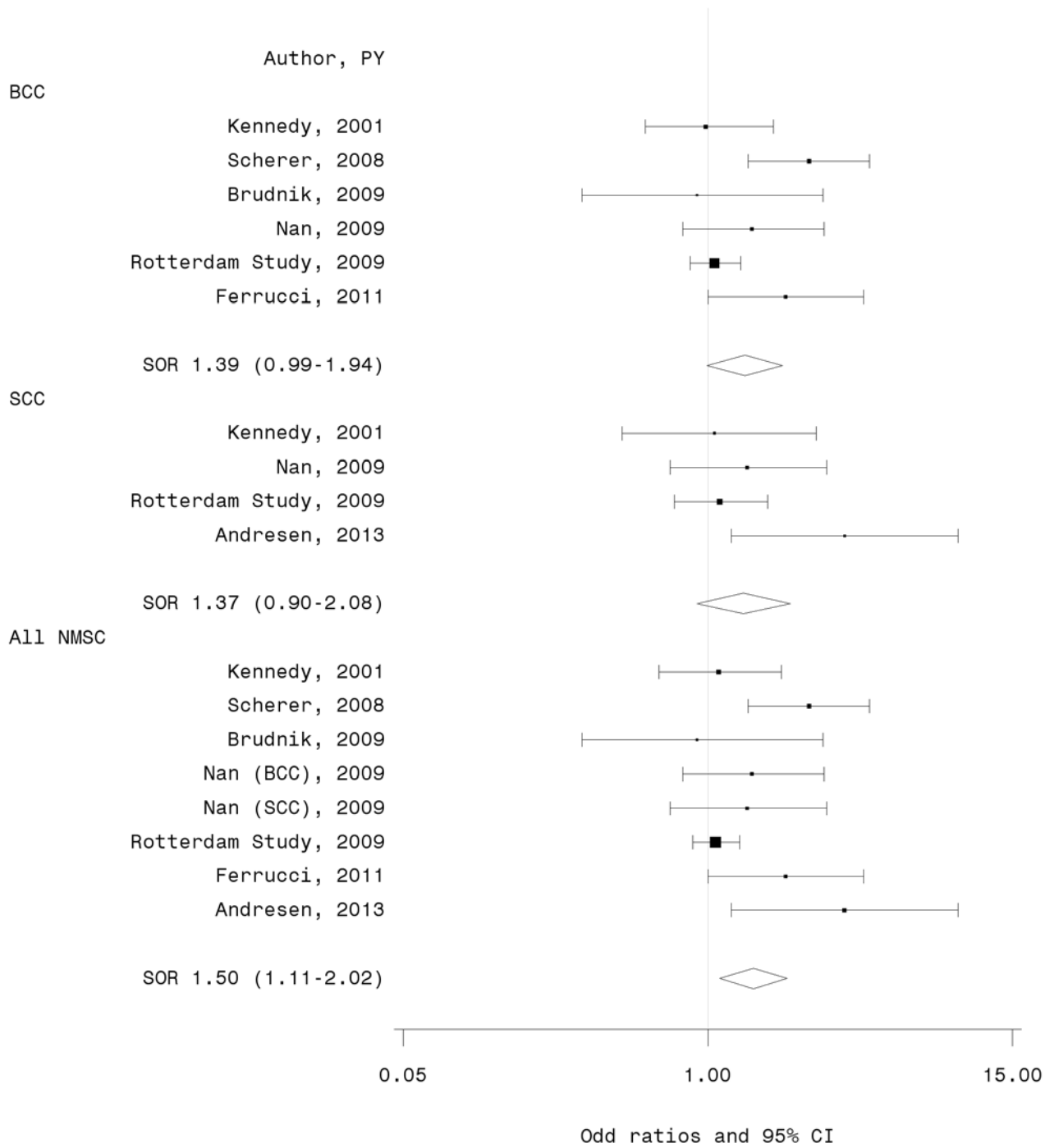
g)

# R160W



h)

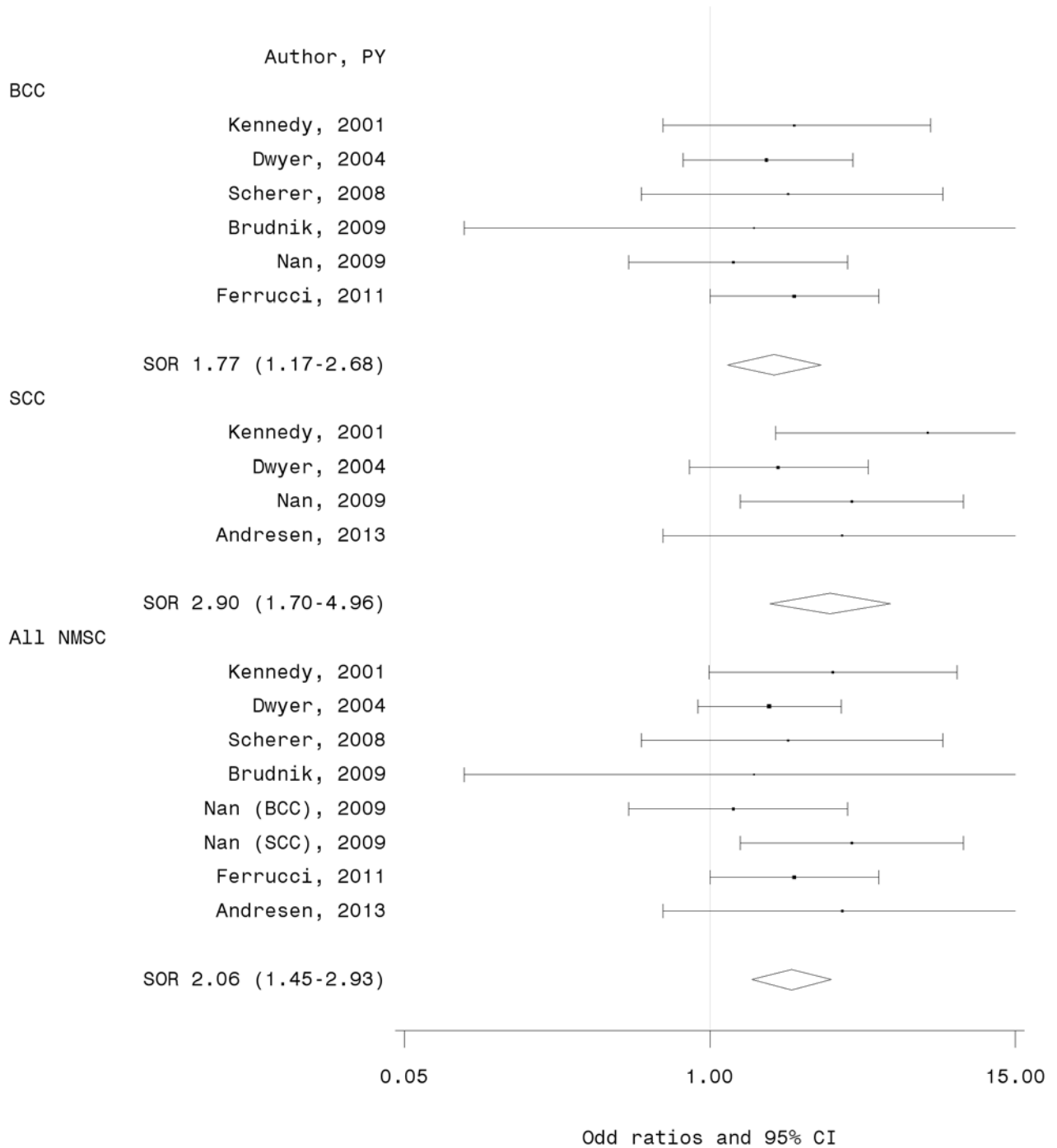
# R163Q





i)

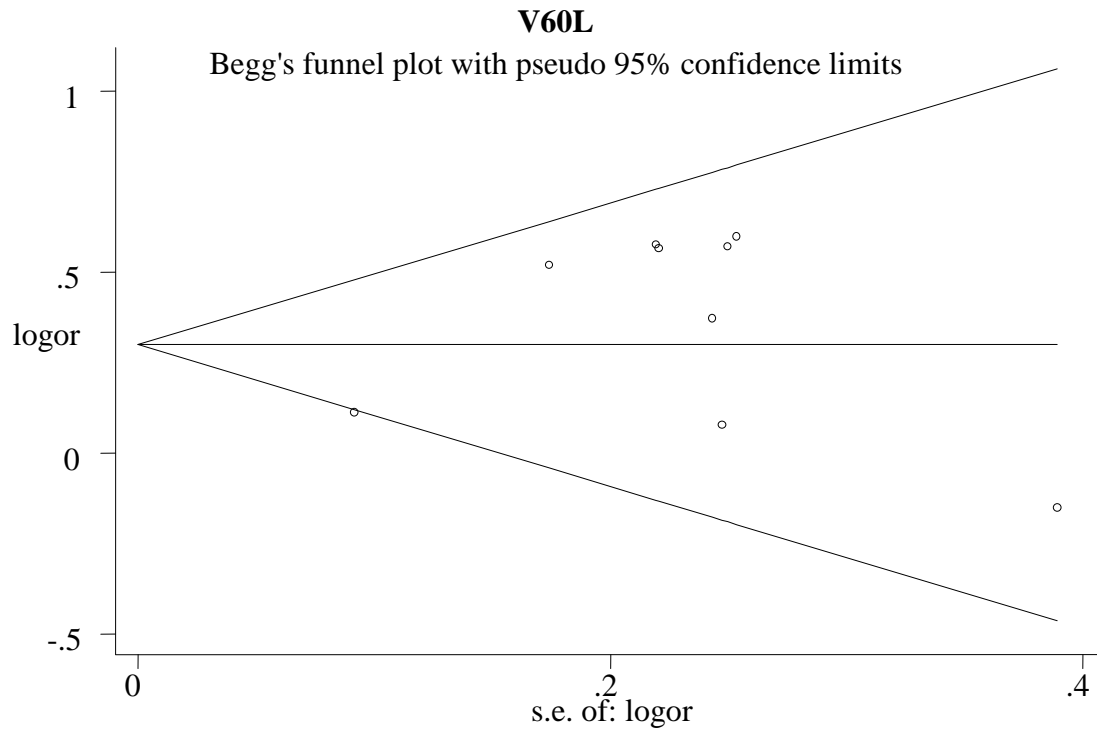
## D294H



NMSC=Non Melanoma Skin Cancer, BCC=Basal Cell Carcinoma, SCC=Squamous Cell Carcinoma, SOR=Summary Odds Ratio, PY=Publication Year

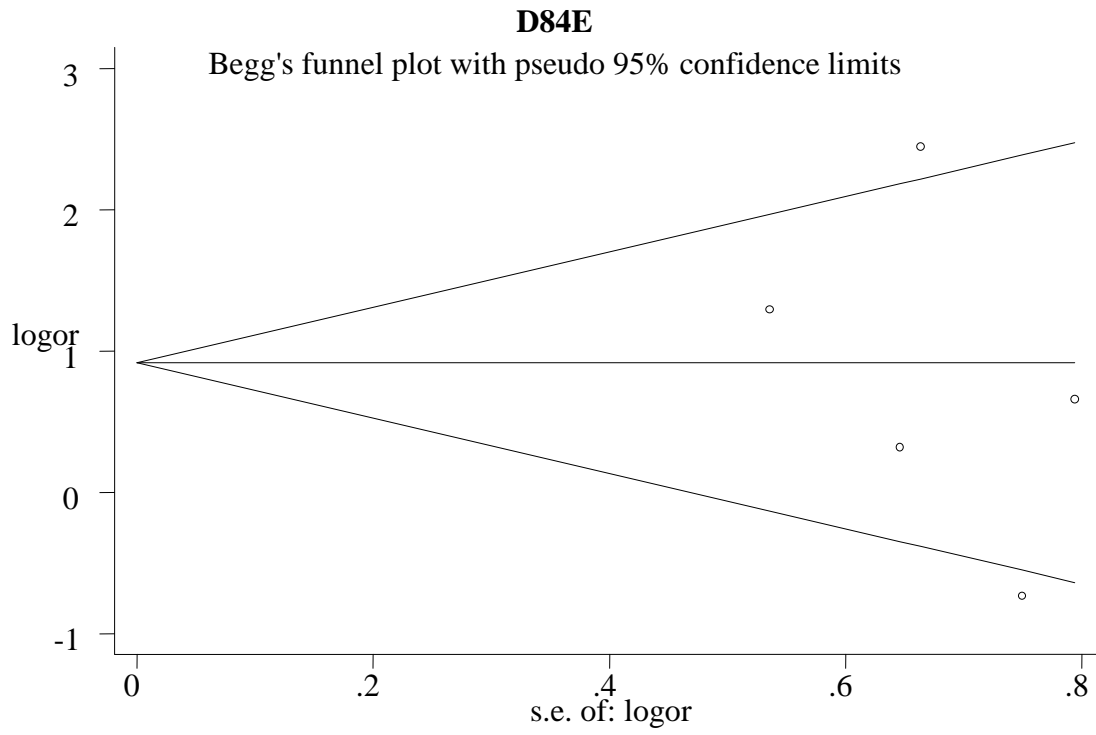
**Figure S2. Funnel plot for *MC1R* variants (a) V60L, (b) D84E, (c) V92M, (d) R142H, (e) R151C, (f) I155T, (g) R160W, (h) R163Q, (i) D294H.**

(a)



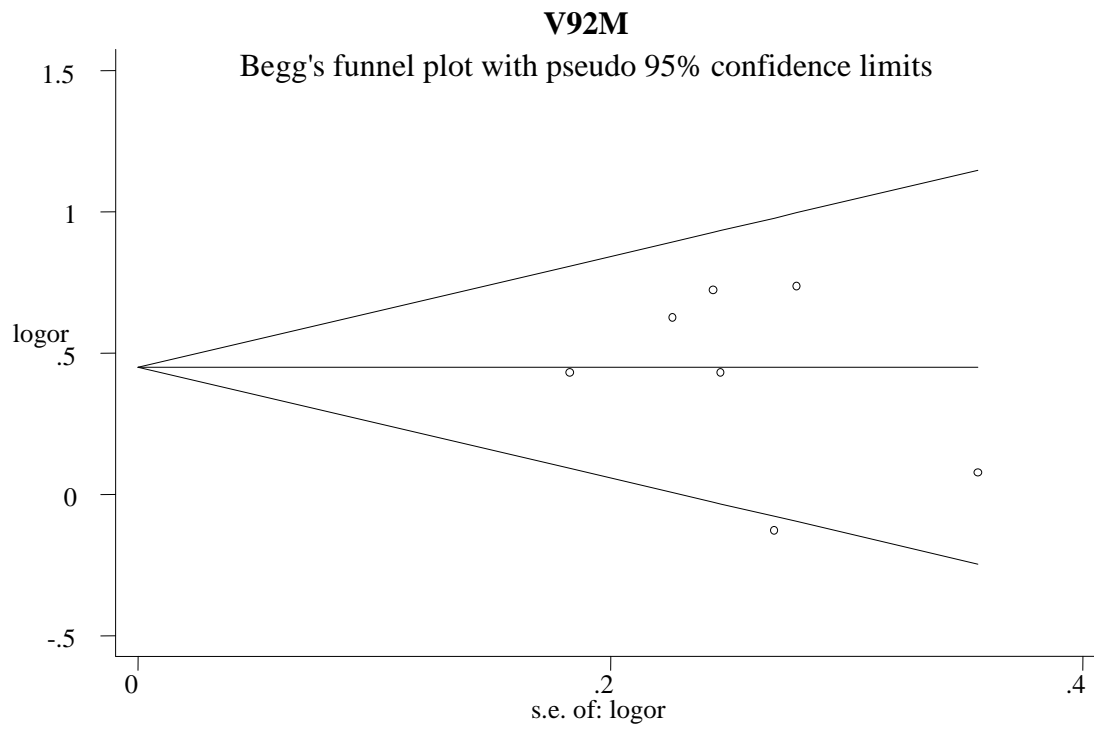
Egger's test: p-value = 0.187

(b)



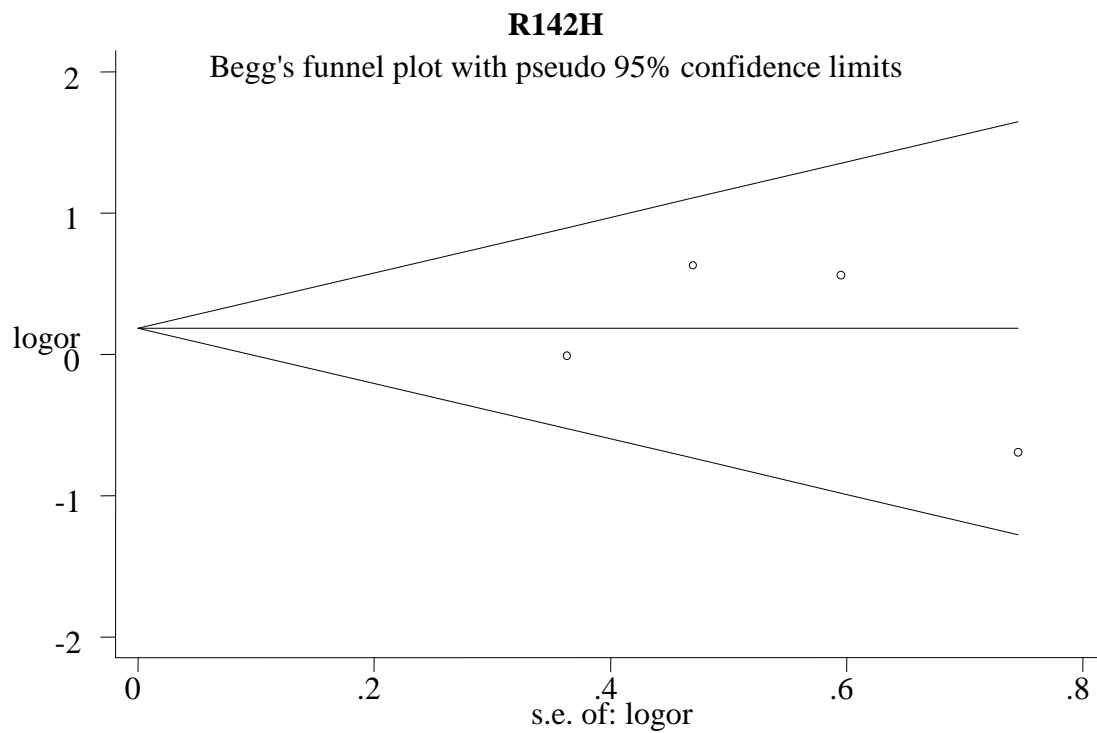
Egger's test: p-value = 0.477

(c)



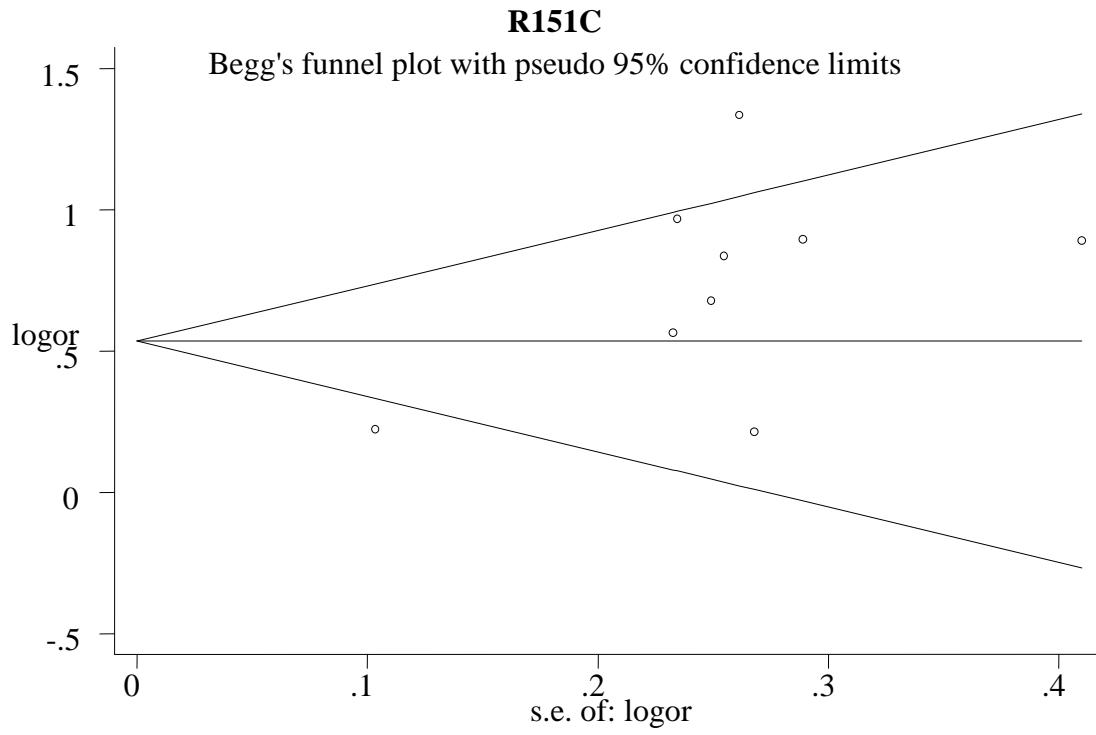
Egger's test: p-value = 0.512

(d)



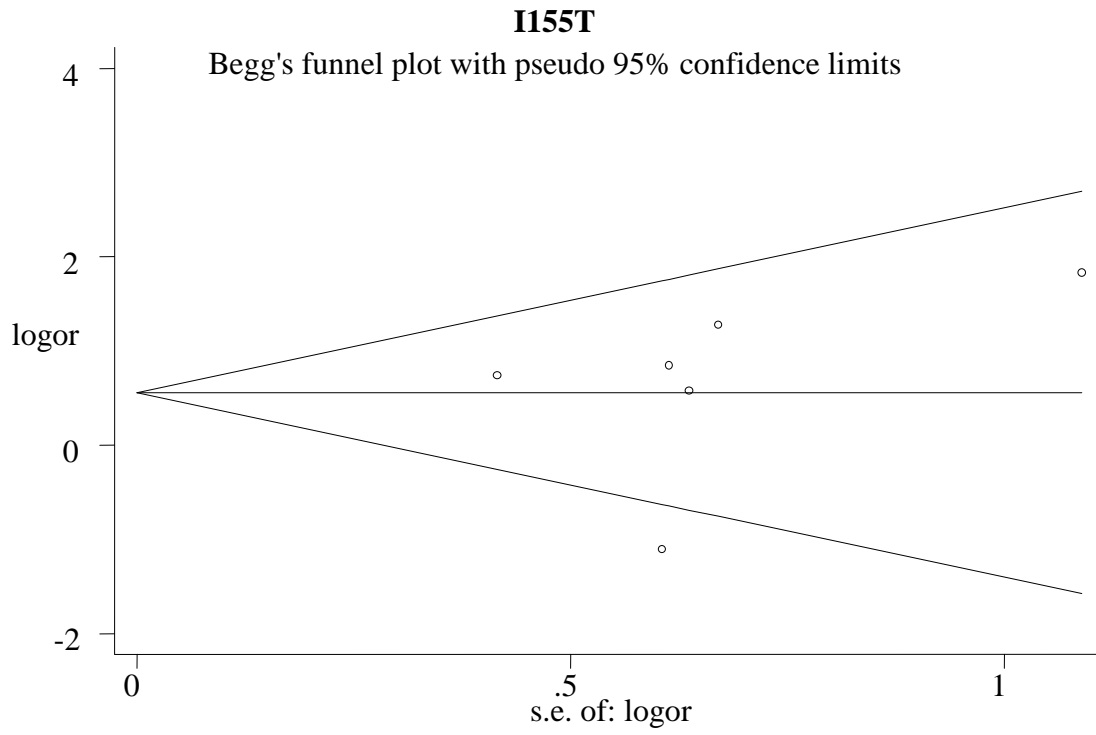
Egger's test: p-value = 0.835

(e)



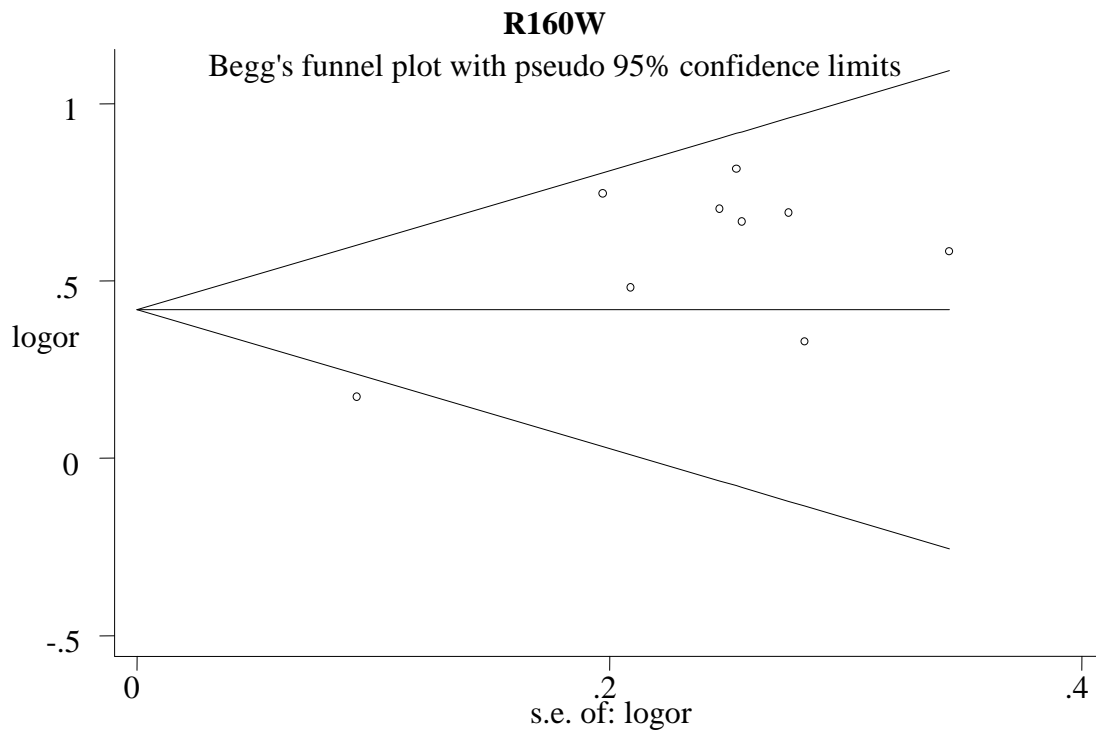
Egger's test: p-value = 0.021

(f)



Egger's test: p-value = 0.691

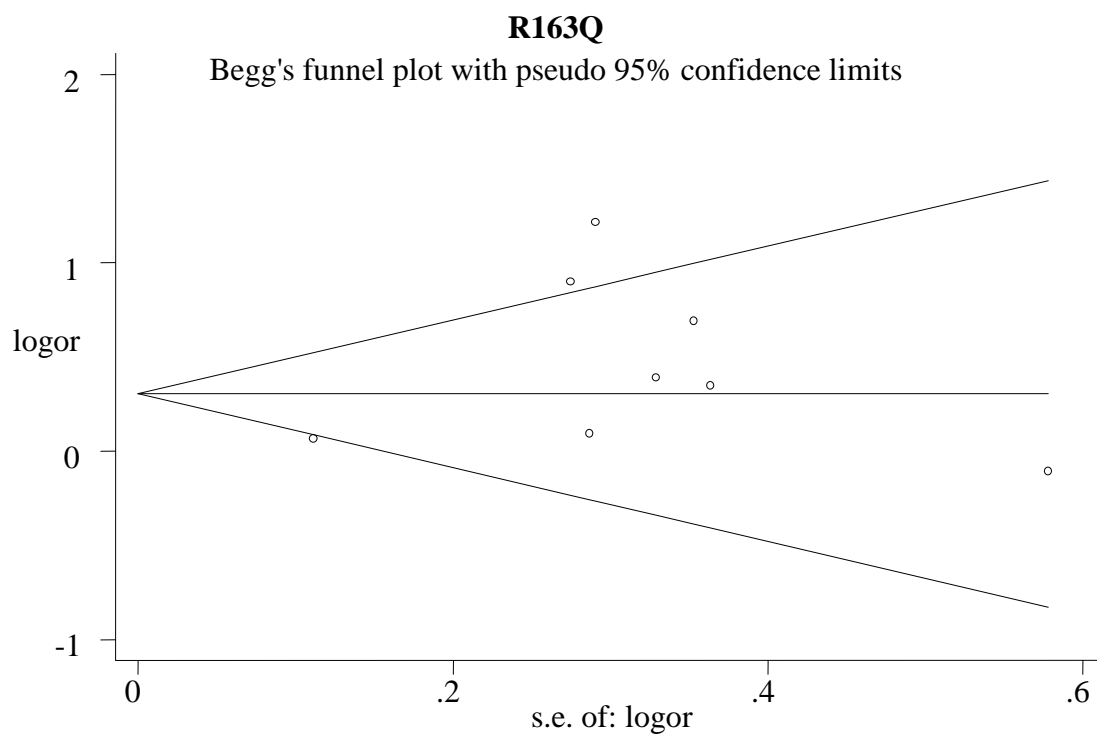
(g)



Egger's test: p-value = 0.006

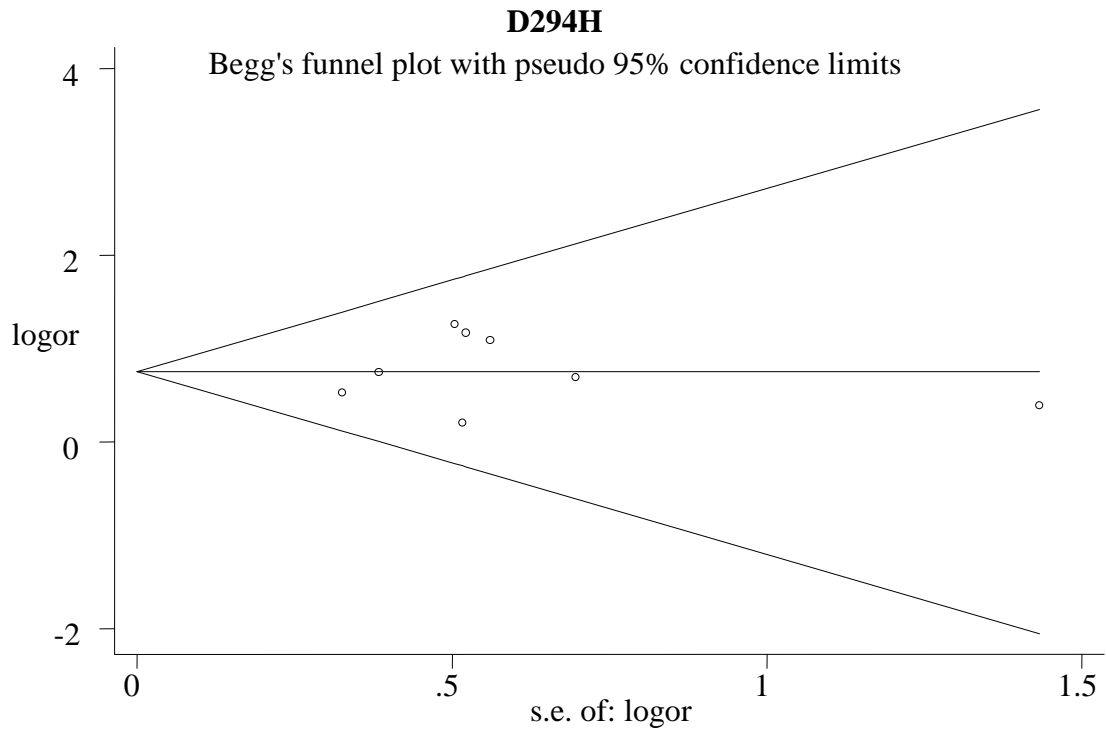


(h)



Egger's test: p-value = 0.198

(i)



Egger's test: p-value = 0.721

**Table S1. Description of cases identification for the 8 case-control studies included in the pooled-analysis of BCC and SCC**

<b>first author, publication year</b>	<b>country</b>	<b>recruiting period</b>	<b>source of cases</b>	<b>incident/ prevalent cases</b>	<b>diagnosis</b>	<b>age range</b>
<b>BCC</b>						
Kennedy, 2001	The Netherlands	January 1985- December 1997	Leiden University Medical Center and other 3 hospitals in the same region	incident	histologically confirmed	30-80
Dwyer, 2004	Australia	July 1998 - June 1999	cases were chosen at random from registration in Tasmanian Cancer Registry	incident	histologically confirmed	20-59
Scherer, 2008	Hungary, Romania, Slovakia	2002 - 2004	cases diagnosed in a study area with known hotspots of arsenic in drinking water	incident	histologically confirmed	30-85
Brudnik, 2009	Poland	1997-2007	Dermatology Department of the University Hospital in Cracow	incident	histologically confirmed	20-85
Nan, 2009	USA	May 1989 – June 1998	cases randomly selected from the Nurses' Health Study (NHS) cohort	incident	self reported	45-80
Rotterdam study, 2009	The Netherlands	study started in 1990	cases from Rotterdam Study	incident	histologically confirmed	55-100
Ferrucci, 2012	USA	July 2006- September 2010	cases identified through Yale University's Dermatopathology database	incident	histologically confirmed	10-40
<b>SCC</b>						
Kennedy, 2001	The Netherlands	January 1985- December 1997	Leiden University Medical Center and other 3 hospitals in the same region	incident	histologically confirmed	30-80
Dwyer, 2004	Australia	July 1998 - June 1999	cases were chosen at random from registration in Tasmanian Cancer Registry	incident	histologically confirmed	20-59
Nan, 2009	USA	May 1989 - September 1990	cases from the Nurses' Health Study (NHS) cohort	incident	histologically confirmed	45-80
Rotterdam study, 2009	The Netherlands	study started in 1990	cases from Rotterdam Study	incident	histologically confirmed	55-100
Andresen, 2013	Norway	not available	cases identified from Norwegian Renal Registry	prevalent	histologically confirmed	20-75