

Search strategy

PubMed	#1	"Dry Eye Syndromes"[Mesh]
	#2	(((((((((Dry Eye Syndrome[Title/Abstract]) OR (Dry Eye Disease[Title/Abstract])) OR (Dry Eye Diseases[Title/Abstract])) OR (Dry Eye[Title/Abstract])) OR (Dry Eyes[Title/Abstract])) OR (Evaporative Dry Eye Disease[Title/Abstract])) OR (Evaporative Dry Eye Syndrome[Title/Abstract])) OR (Evaporative Dry Eye[Title/Abstract])) OR (Dry Eye, Evaporative[Title/Abstract])) OR (Evaporative Dry Eyes[Title/Abstract]))
	#3	#1 OR #2
	#4	"Risk Factors"[Mesh]
	#5	((((((((((((((Factor, Risk) OR (Risk Factor)) OR (Social Risk Factors)) OR (Factor, Social Risk)) OR (Factors, Social Risk)) OR (Risk Factor, Social)) OR (Risk Factors, Social)) OR (Social Risk Factor)) OR (Health Correlates)) OR (Correlates, Health)) OR (Population at Risk)) OR (Populations at Risk)) OR (Risk Scores)) OR (Risk Score)) OR (Score, Risk)) OR (Risk Factor Scores)) OR (Risk Factor Score)) OR (Score, Risk Factor)
	#6	#4 OR #5
	#7	#3 AND #6
Embase	#1	'dry eye syndromes'/exp OR 'dry eye syndromes'
	#2	'dry eye syndrome':ab,ti OR 'dry eye disease':ab,ti OR 'dry eye diseases':ab,ti OR 'dry eye':ab,ti OR 'dry eyes':ab,ti OR 'evaporative dry eye disease':ab,ti OR 'evaporative dry eye syndrome':ab,ti OR 'evaporative dry eye':ab,ti OR 'dry eye, evaporative':ab,ti OR 'evaporative dry eyes':ab,ti
	#3	#1 OR #2
	#4	'risk factors'/exp OR 'risk factors'
	#5	'factor, risk':ab,ti OR 'risk factor':ab,ti OR 'social risk factors':ab,ti OR 'factor, social risk':ab,ti OR 'factors, social risk':ab,ti OR 'risk factor, social':ab,ti OR 'risk factors, social':ab,ti OR 'social risk factor':ab,ti OR 'health correlates':ab,ti OR 'correlates, health':ab,ti OR 'population at risk':ab,ti OR 'populations at risk':ab,ti OR 'risk scores':ab,ti OR 'risk score':ab,ti OR 'score, risk':ab,ti OR 'risk factor scores':ab,ti OR 'risk factor score':ab,ti OR 'score,

		risk factor':ab,ti
	#6	#4 OR #5
	#7	#3 AND #6
Web of science	#1	TS=(Dry Eye Syndromes OR Dry Eye Syndrome OR Dry Eye Disease OR Dry Eye Diseases OR Dry Eye OR Dry Eyes OR Evaporative Dry Eye Disease OR Evaporative Dry Eye Syndrome OR Evaporative Dry Eye OR Dry Eye, Evaporative OR Evaporative Dry Eyes)
	#2	TS=(Risk Factors OR Factor, Risk OR Risk Factor OR Social Risk Factors OR Factor, Social Risk OR Factors, Social Risk OR Risk Factor, Social OR Risk Factors, Social OR Social Risk Factor OR Health Correlates OR Correlates, Health OR Population at Risk OR Populations at Risk OR Risk Scores OR Risk Score OR Score, Risk OR Risk Factor Scores OR Risk Factor Score OR Score, Risk Factor)
Cochrane library	#1	Dry Eye Syndromes
	#2	(Dry Eye Syndromes):ab,ti,kw OR (Dry Eye Syndrome):ab,ti,kw OR (Dry Eye Disease):ab,ti,kw OR (Dry Eye Diseases):ab,ti,kw OR (Dry Eye):ab,ti,kw OR (Dry Eyes):ab,ti,kw OR (Evaporative Dry Eye Disease):ab,ti,kw OR (Evaporative Dry Eye Syndrome):ab,ti,kw OR (Evaporative Dry Eye):ab,ti,kw OR (Dry Eye, Evaporative):ab,ti,kw OR (Evaporative Dry Eyes):ab,ti,kw
	#3	#1 OR #2
	#4	Risk Factors
	#5	(Factor, Risk):ab,ti,kw OR (Risk Factor):ab,ti,kw OR (Social Risk Factors):ab,ti,kw OR (Factor, Social Risk):ab,ti,kw OR (Factors, Social Risk):ab,ti,kw OR (Risk Factor, Social):ab,ti,kw OR (Risk Factors, Social):ab,ti,kw OR (Social Risk Factor):ab,ti,kw OR (Health Correlates):ab,ti,kw OR (Correlates, Health):ab,ti,kw OR (Population at Risk):ab,ti,kw OR (Populations at Risk):ab,ti,kw OR (Risk Scores):ab,ti,kw OR (Risk Score):ab,ti,kw OR (Score, Risk):ab,ti,kw OR (Risk Factor Scores):ab,ti,kw OR (Risk Factor Score):ab,ti,kw OR (Score, Risk Factor):ab,ti,kw
	#6	#4 OR #5
	#7	#3 AND #6

The search covered studies published between January 2000 and December 2022.

SUPPLEMENTAL DIGITAL CONTENT 1

SUPPLEMENTAL DIGITAL CONTENT 2

Newcastle-Ottawa Scale adapted for cross-sectional studies

Selection: (Maximum 5 stars)

1) Representativeness of the sample:

- a) Truly representative of the average in the target population. * (all subjects or random sampling)
- b) Somewhat representative of the average in the target population. * (non-random sampling)
- c) Selected group of users.
- d) No description of the sampling strategy.

2) Sample size:

- a) Justified and satisfactory. *
- b) Not justified.

3) Non-respondents:

- a) Comparability between respondents and non-respondents characteristics is established, and the response rate is satisfactory. *
- b) The response rate is unsatisfactory, or the comparability between respondents and non-respondents is unsatisfactory.
- c) No description of the response rate or the characteristics of the responders and the non-responders.

4) Ascertainment of the exposure (risk factor):

- a) Validated measurement tool. **
- b) Non-validated measurement tool, but the tool is available or described.*
- c) No description of the measurement tool.

Comparability: (Maximum 2 stars)

- 1) The subjects in different outcome groups are comparable, based on the study design or analysis. Confounding factors are controlled.

- a) The study controls for the most important factor (select one). *
- b) The study control for any additional factor. *

Outcome: (Maximum 3 stars)

1) Assessment of the outcome:

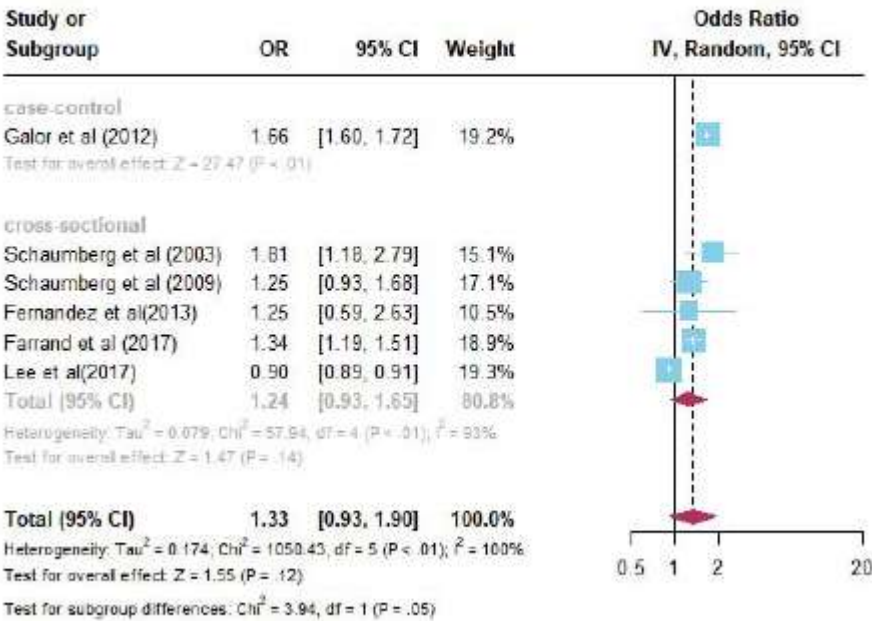
- a) Independent blind assessment. **
- b) Record linkage. **
- c) Self report. *
- d) No description.

2) Statistical test:

- a) The statistical test used to analyze the data is clearly described and appropriate, and the measurement of the association is presented, including confidence intervals and the probability level (p value). *
- b) The statistical test is not appropriate, not described or incomplete.

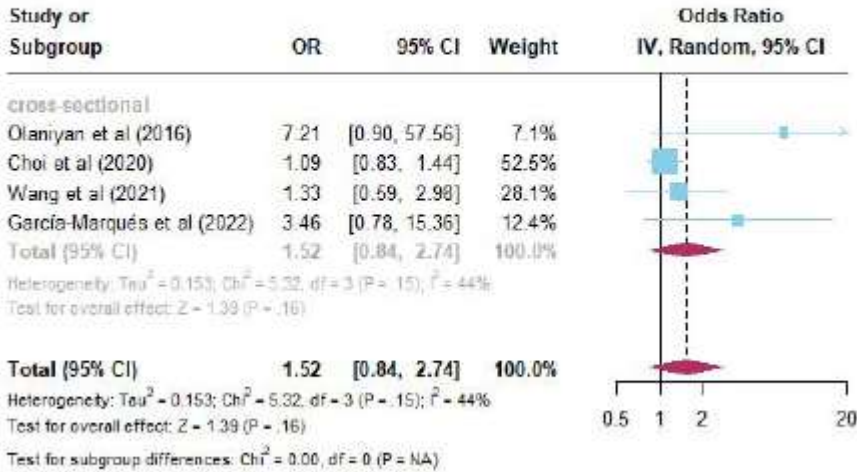
SUPPLEMENTAL DIGITAL CONTENT 3

Forest Plot of Hispanic Ethnicity

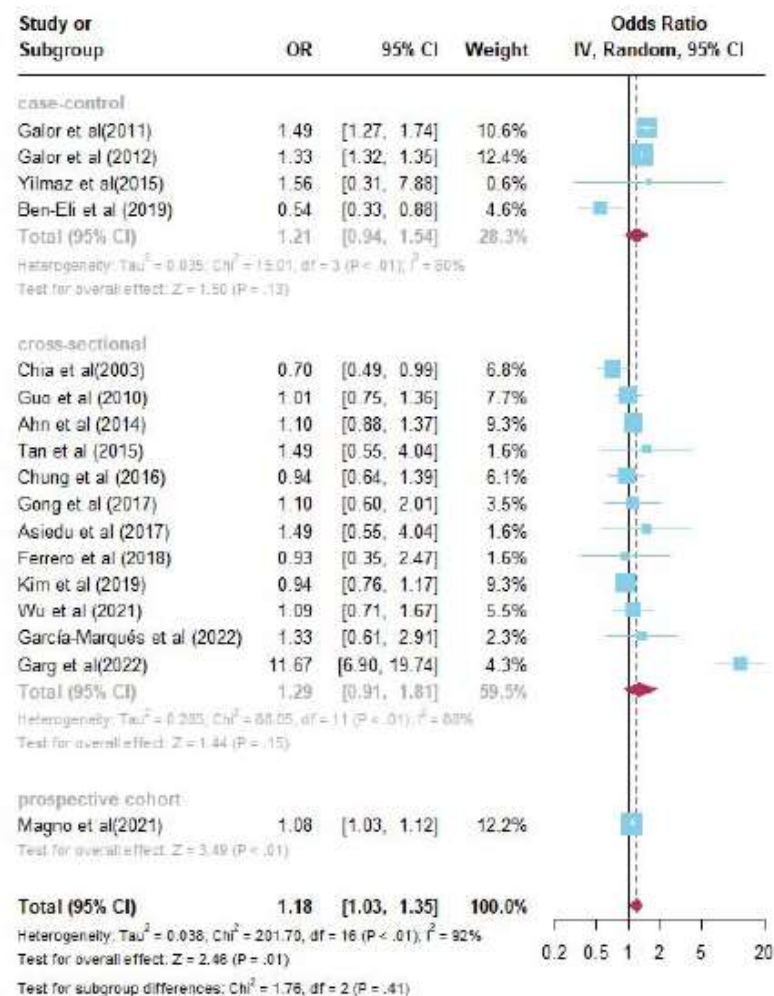


SUPPLEMENTAL DIGITAL CONTENT 4

Forest Plot of Menopause.

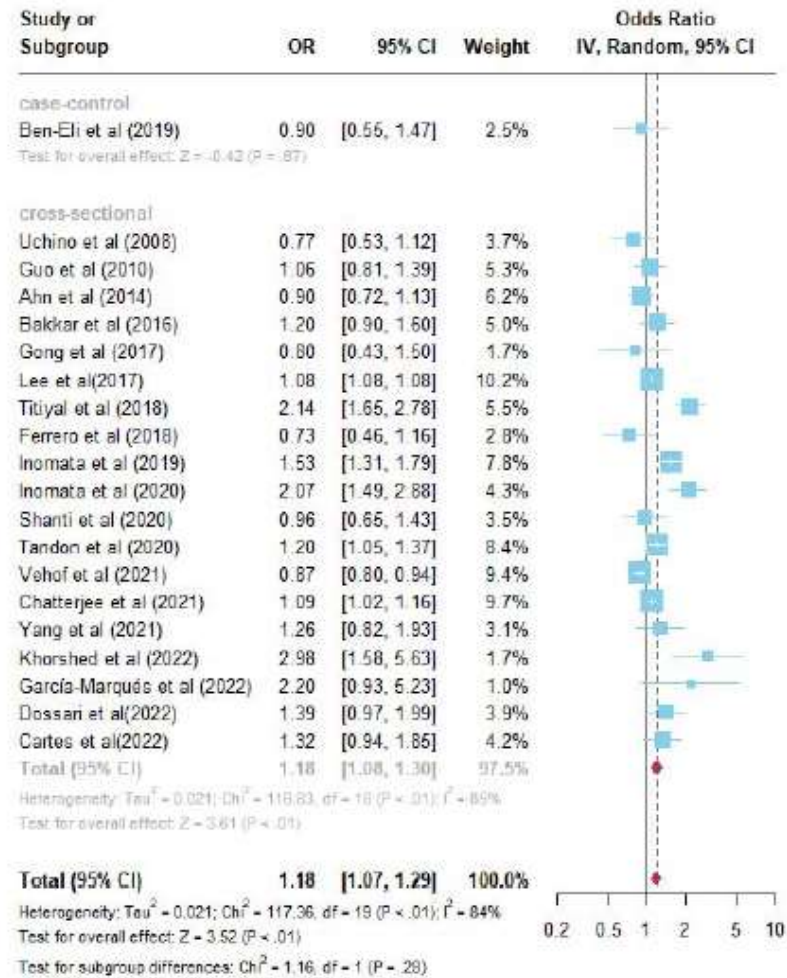


Forest Plot of Alcohol



SUPPLEMENTAL DIGITAL CONTENT 5

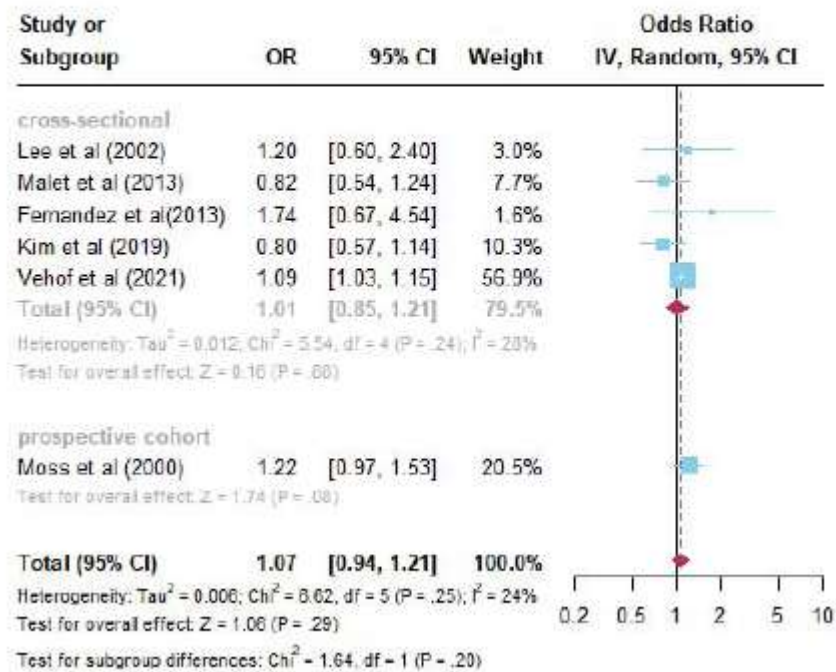
Forest Plot of Smoking



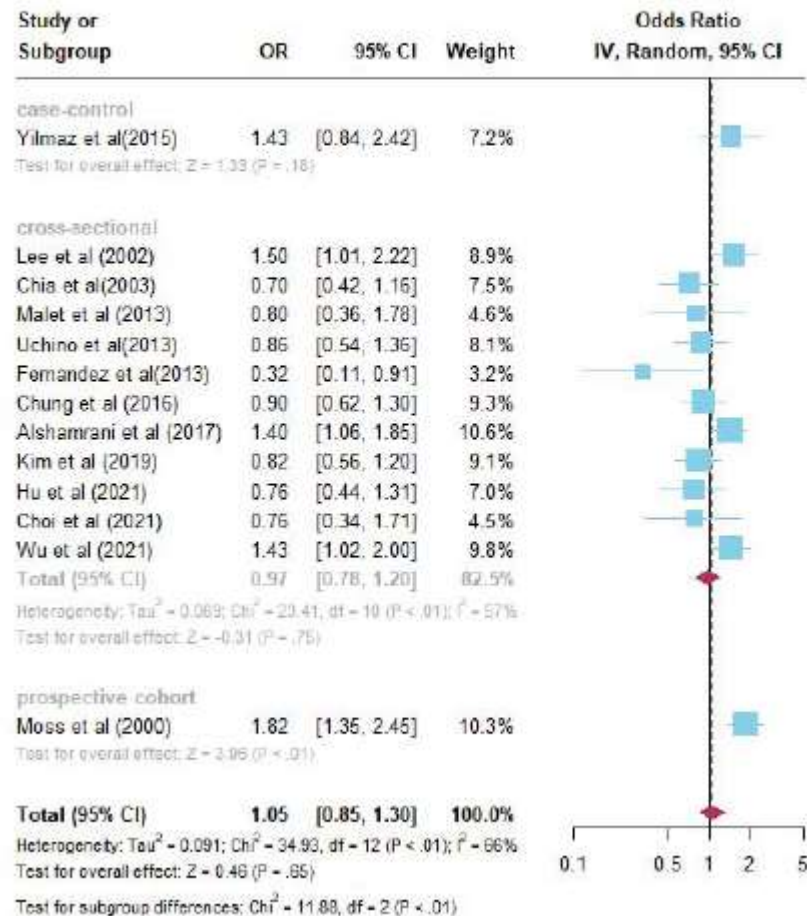
SUPPLEMENTAL DIGITAL CONTENT 6

SUPPLEMENTAL DIGITAL CONTENT 7

Forest Plot of Past Smoking



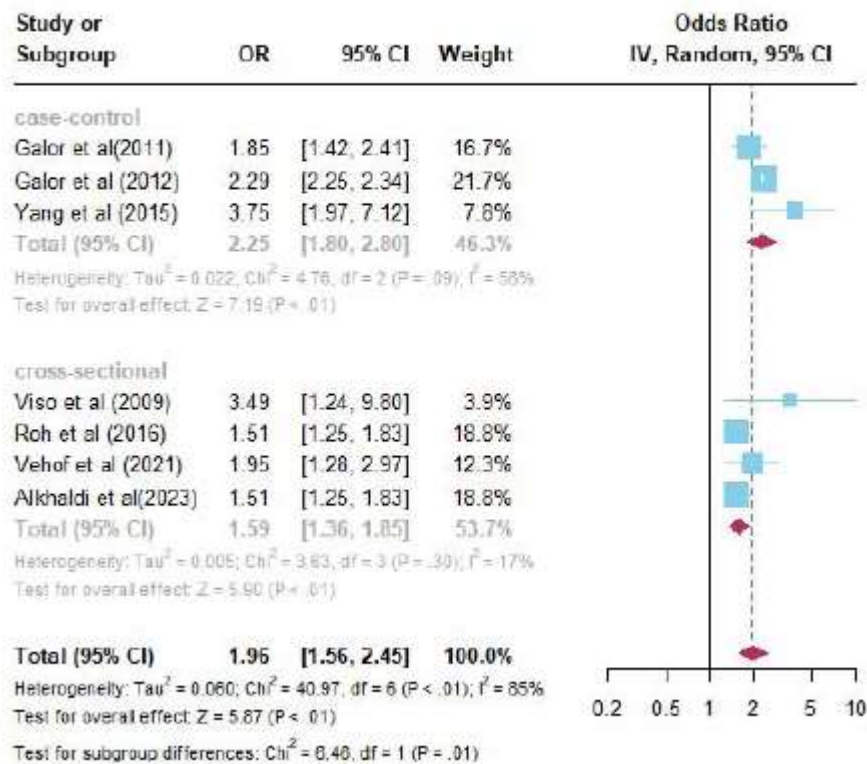
Forest Plot of Current Smoking



SUPPLEMENTAL DIGITAL CONTENT 8

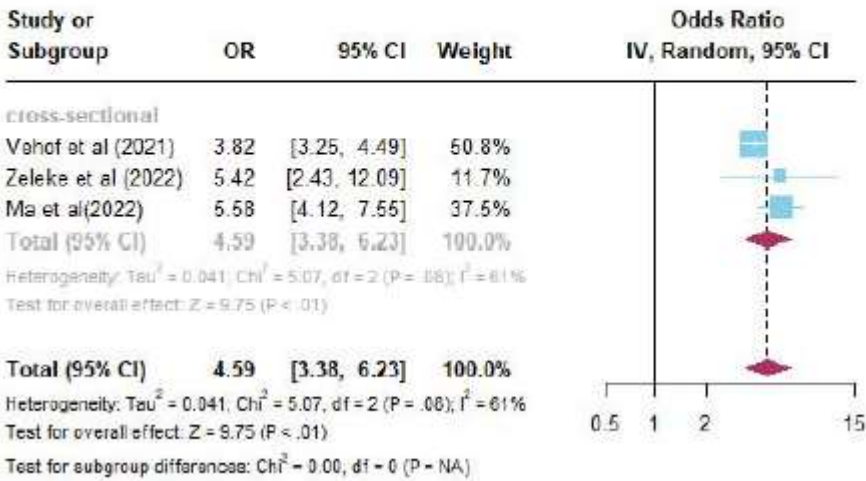
SUPPLEMENTAL DIGITAL CONTENT 9

Forest Plot of Rosacea or Acne

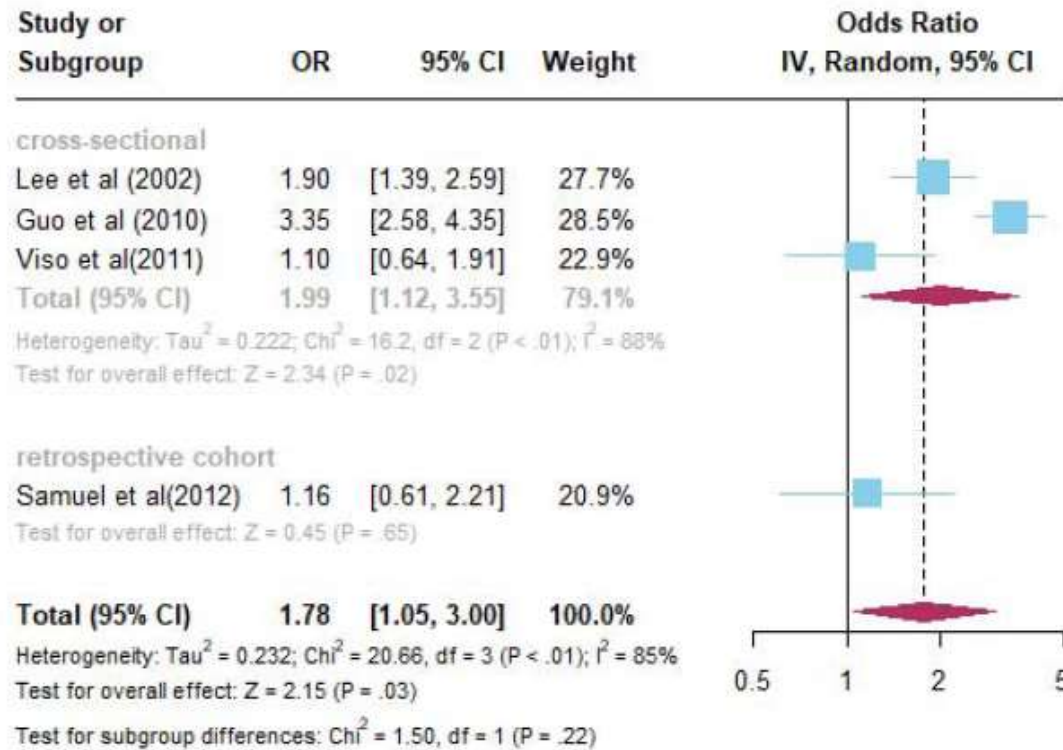


SUPPLEMENTAL DIGITAL CONTENT 10

Forest Plot of Allergic Conjunctivitis



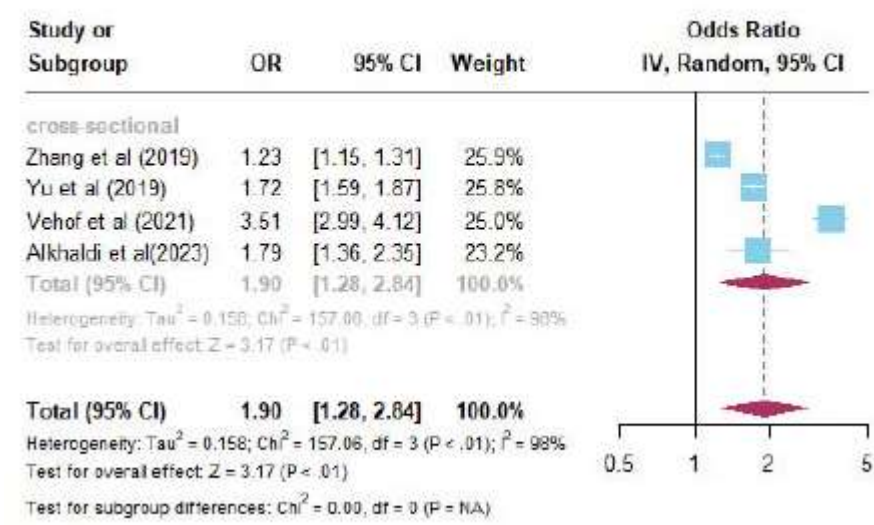
Forest Plot of Pterygium

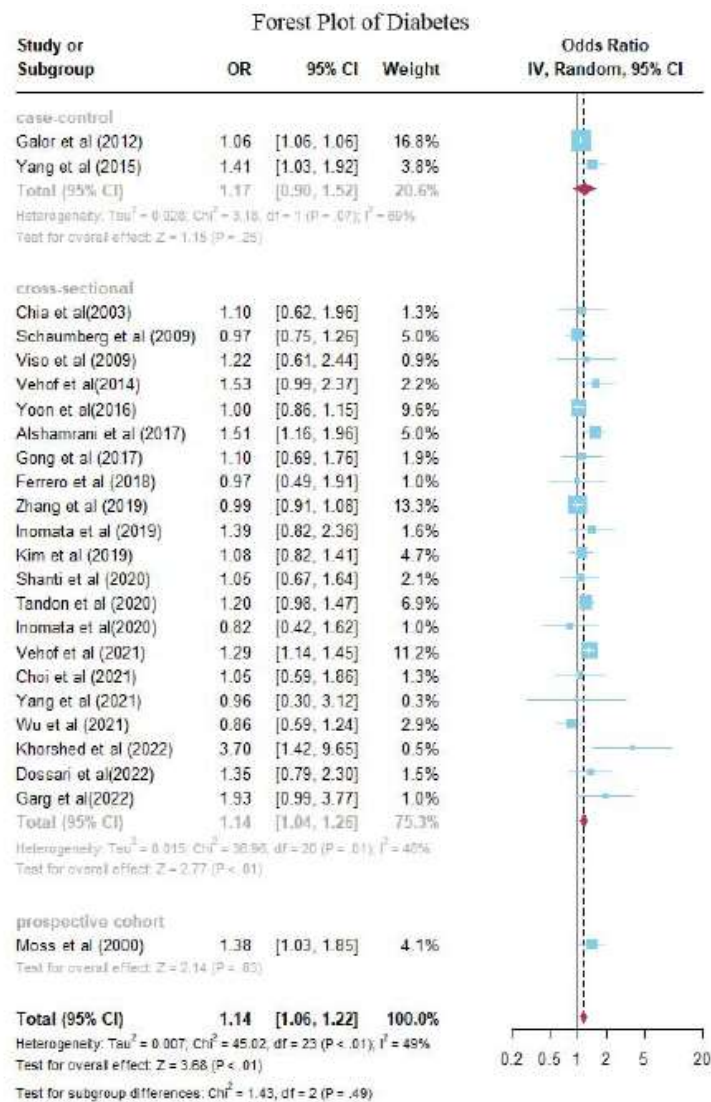


SUPPLEMENTAL DIGITAL CONTENT 11

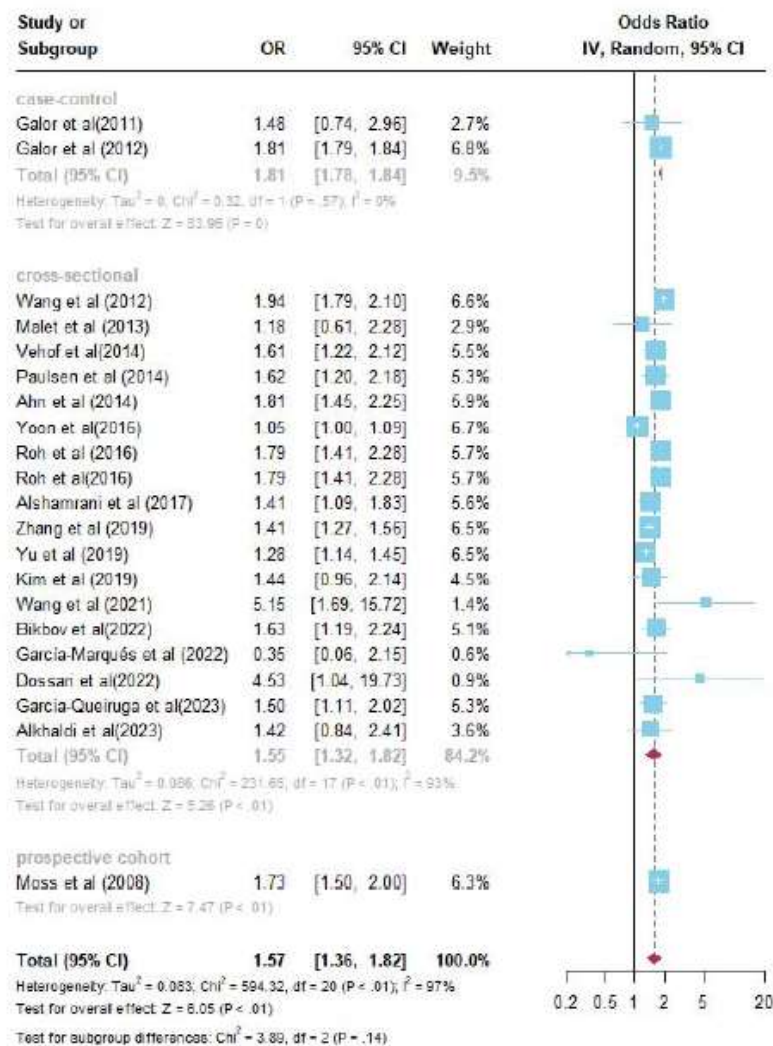
SUPPLEMENTAL DIGITAL CONTENT 12

Forest Plot of Refractive Surgery





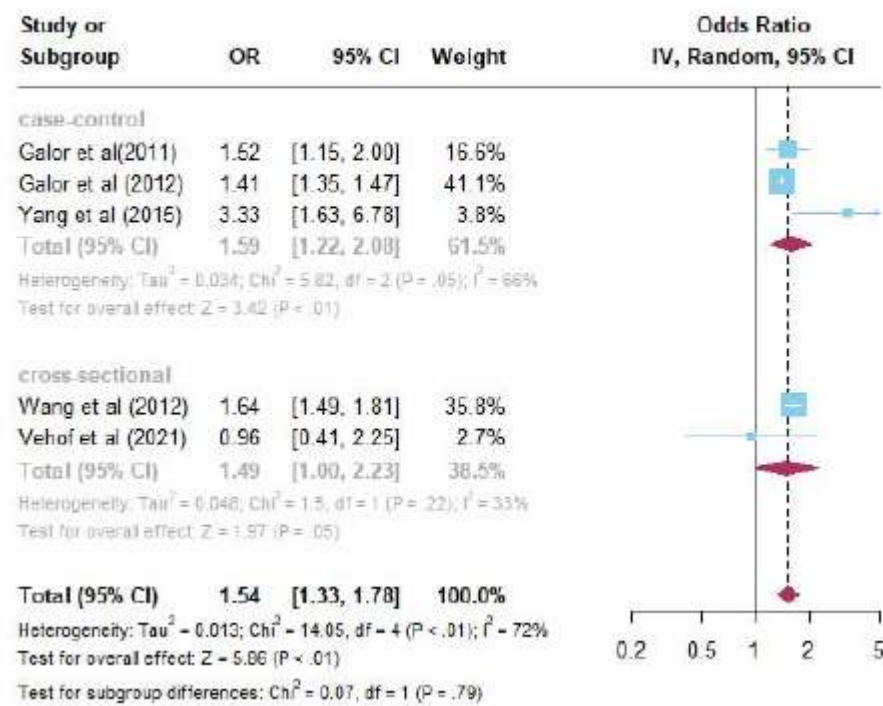
Forest Plot of Thyroid Disease



SUPPLEMENTAL DIGITAL CONTENT 14

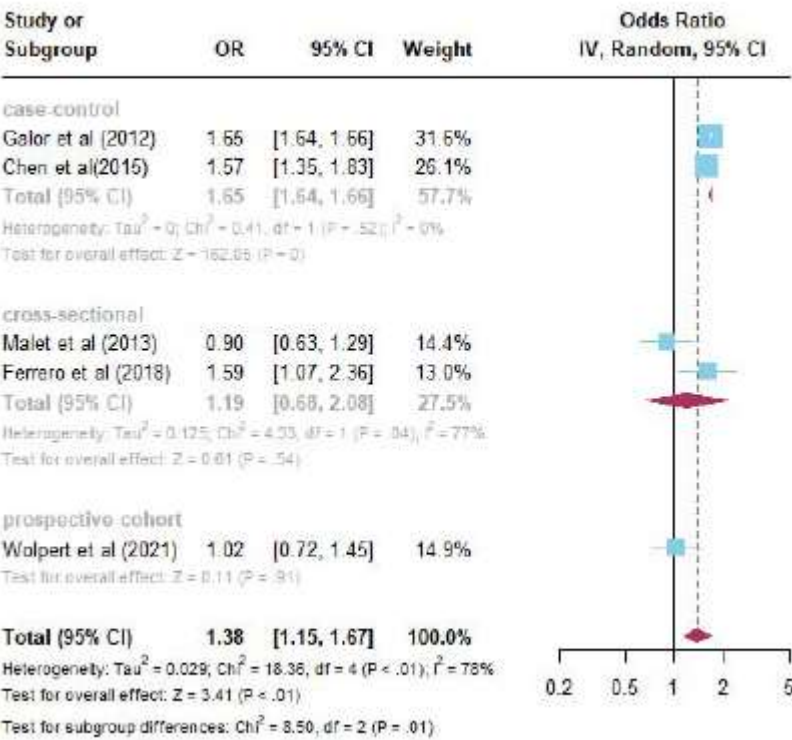
SUPPLEMENTAL DIGITAL CONTENT 15

Forest Plot of Viral Infection



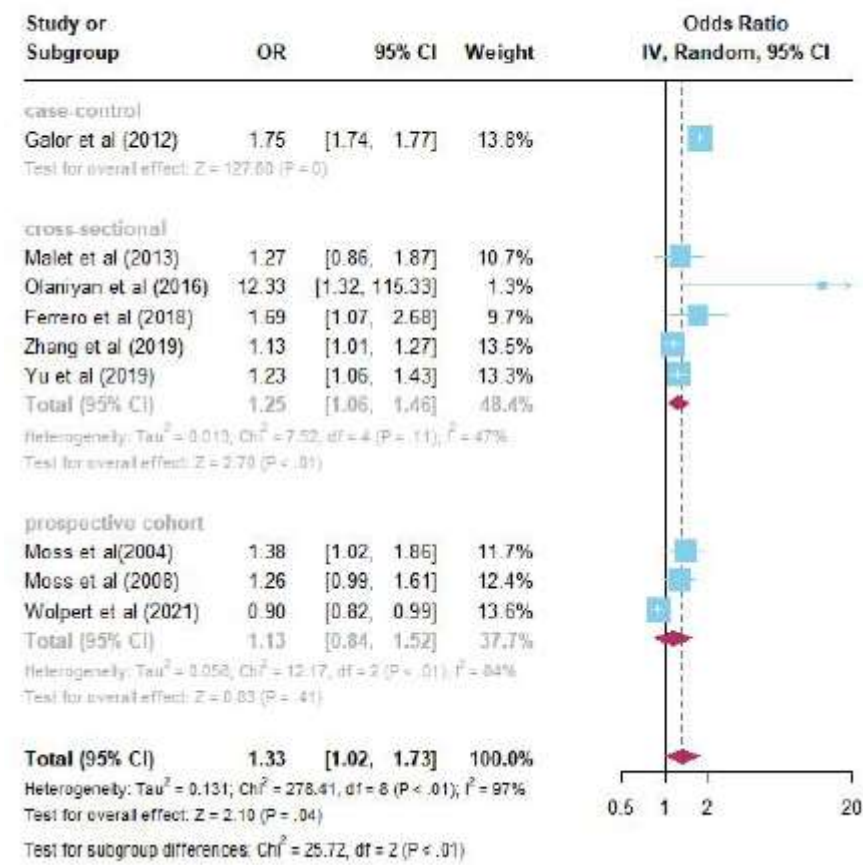
SUPPLEMENTAL DIGITAL CONTENT 16

Forest Plot of Betablockers



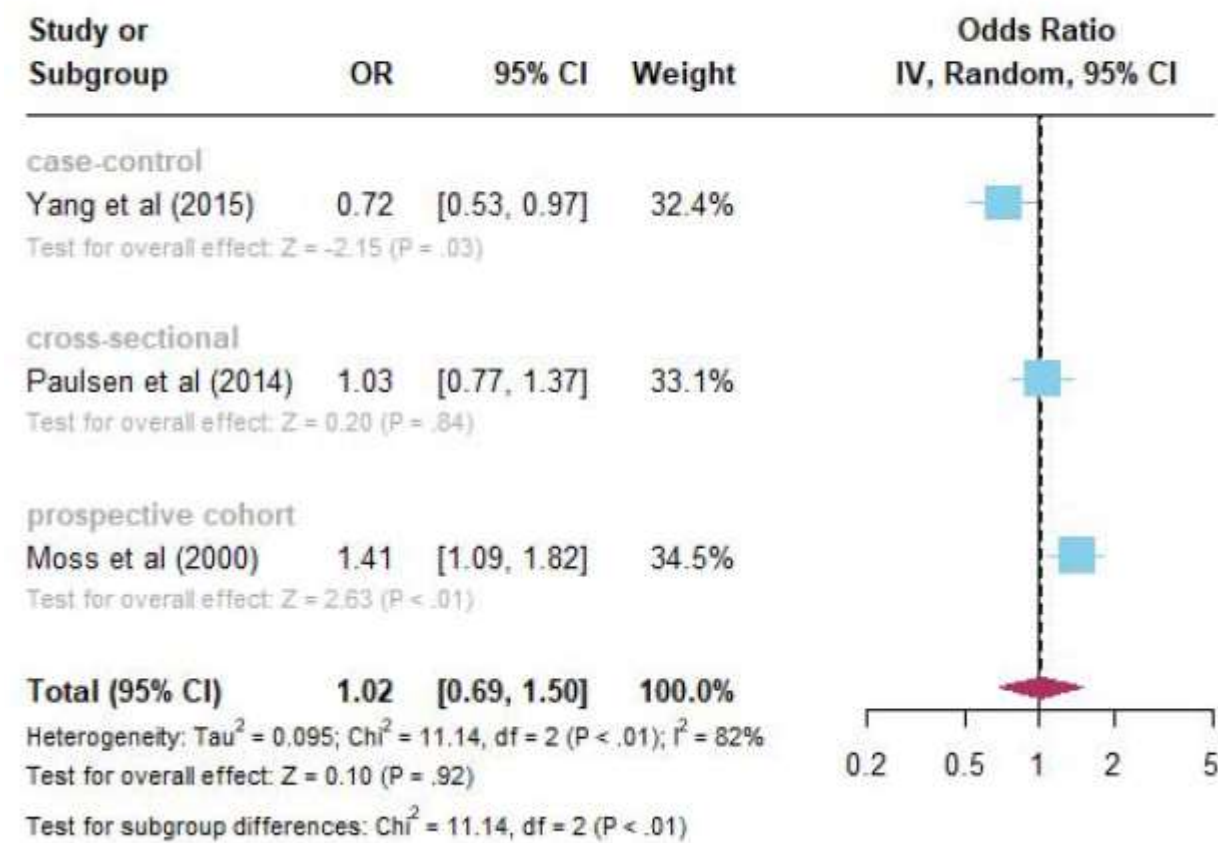
SUPPLEMENTAL DIGITAL CONTENT 17

Forest Plot of Diuretics



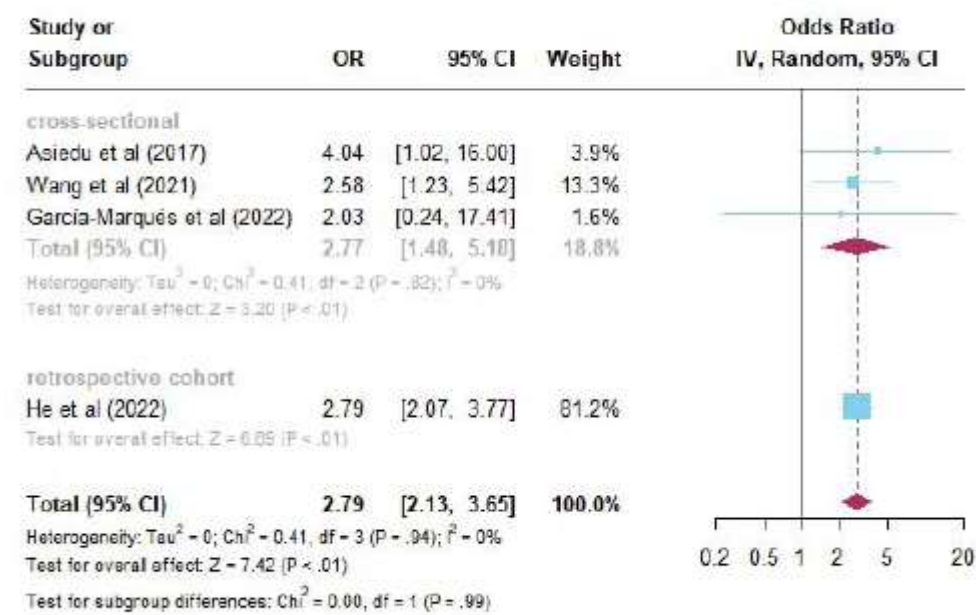
SUPPLEMENTAL DIGITAL CONTENT 18

Forest Plot of Multivitamins

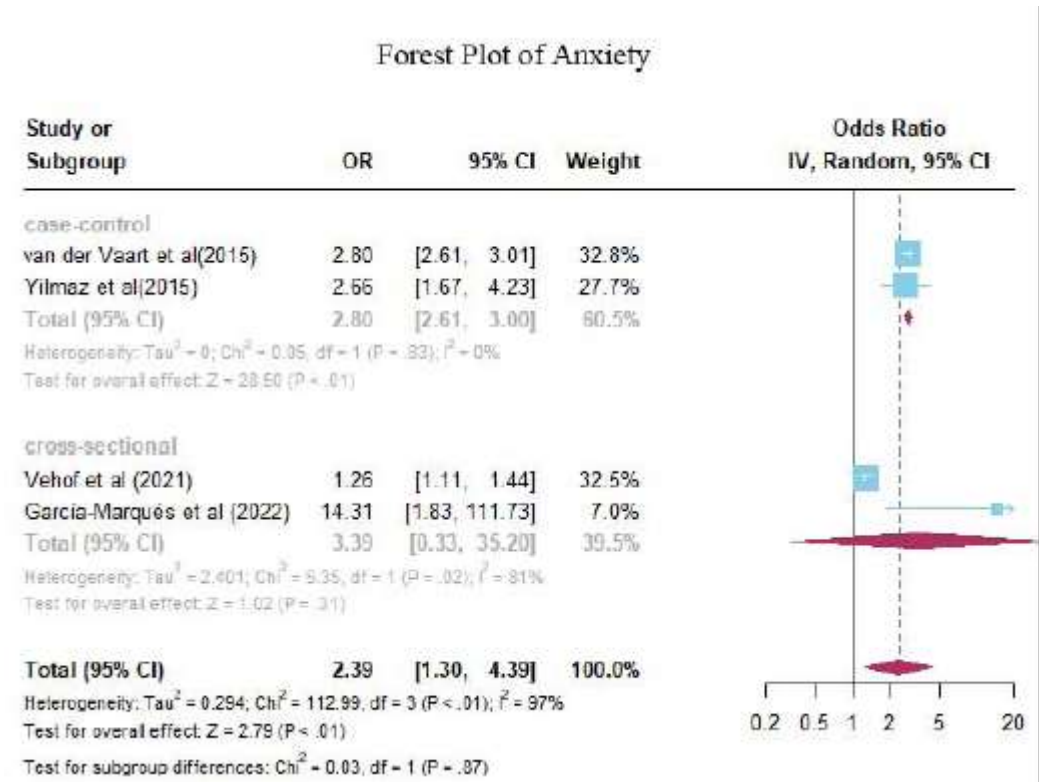


SUPPLEMENTAL DIGITAL CONTENT 19

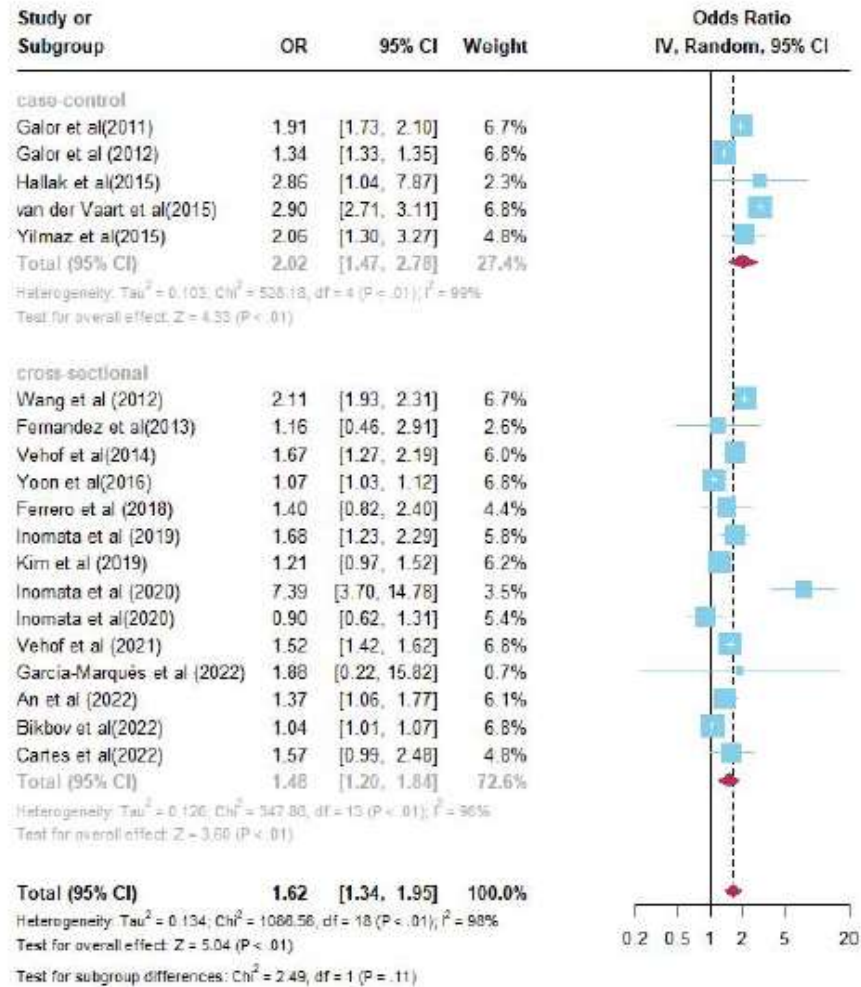
Forest Plot of Oral Contraceptives



SUPPLEMENTAL DIGITAL CONTENT 20

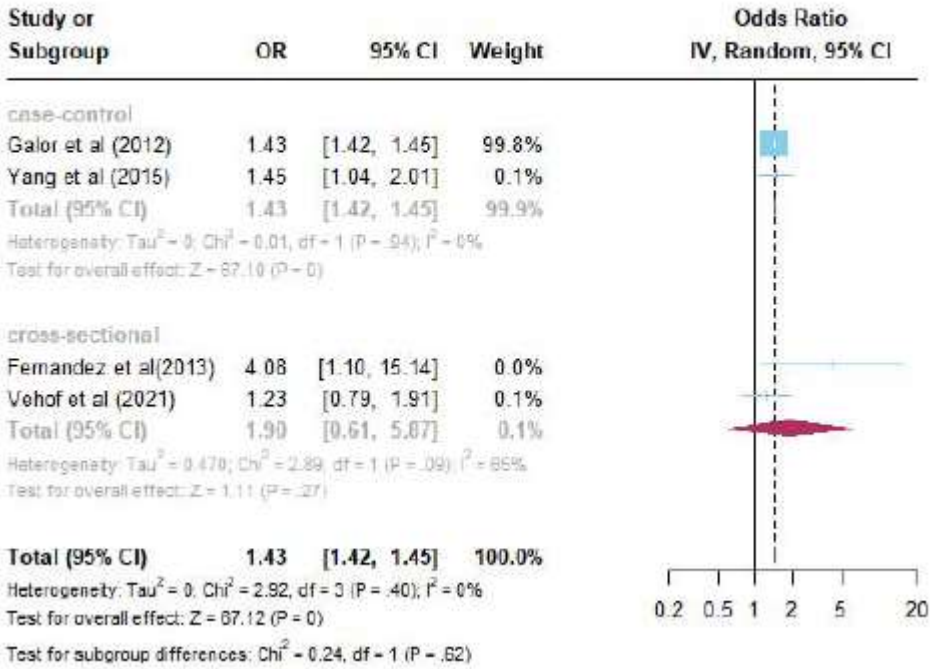


Forest Plot of Depression

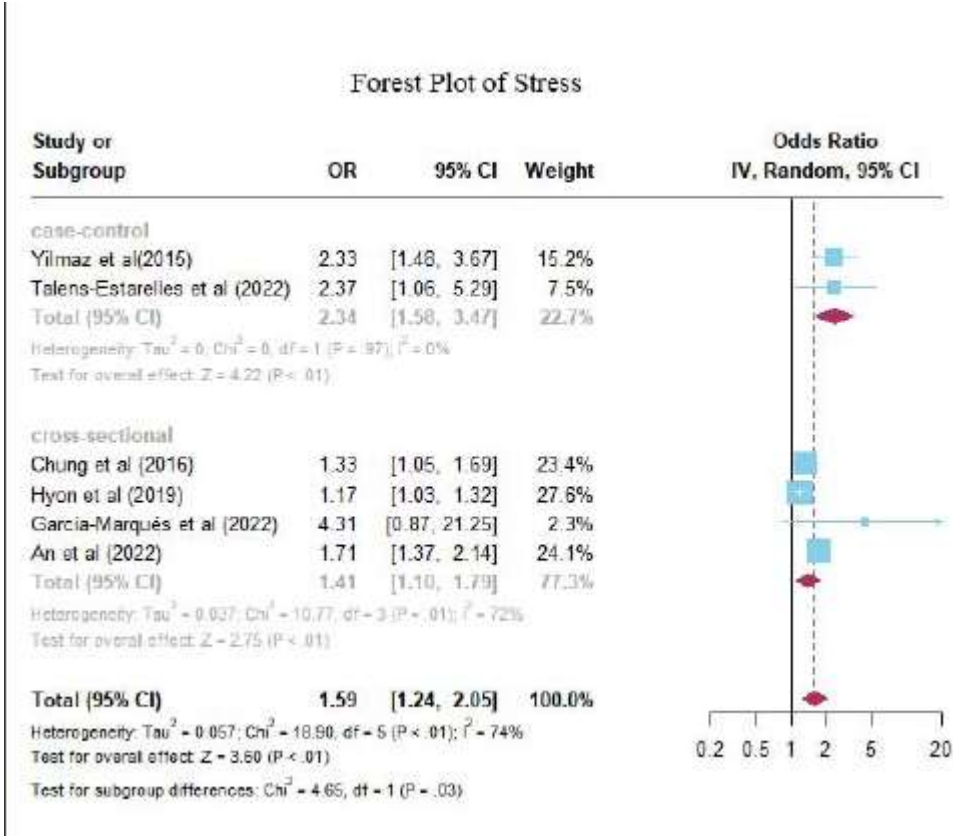


SUPPLEMENTAL DIGITAL CONTENT 22

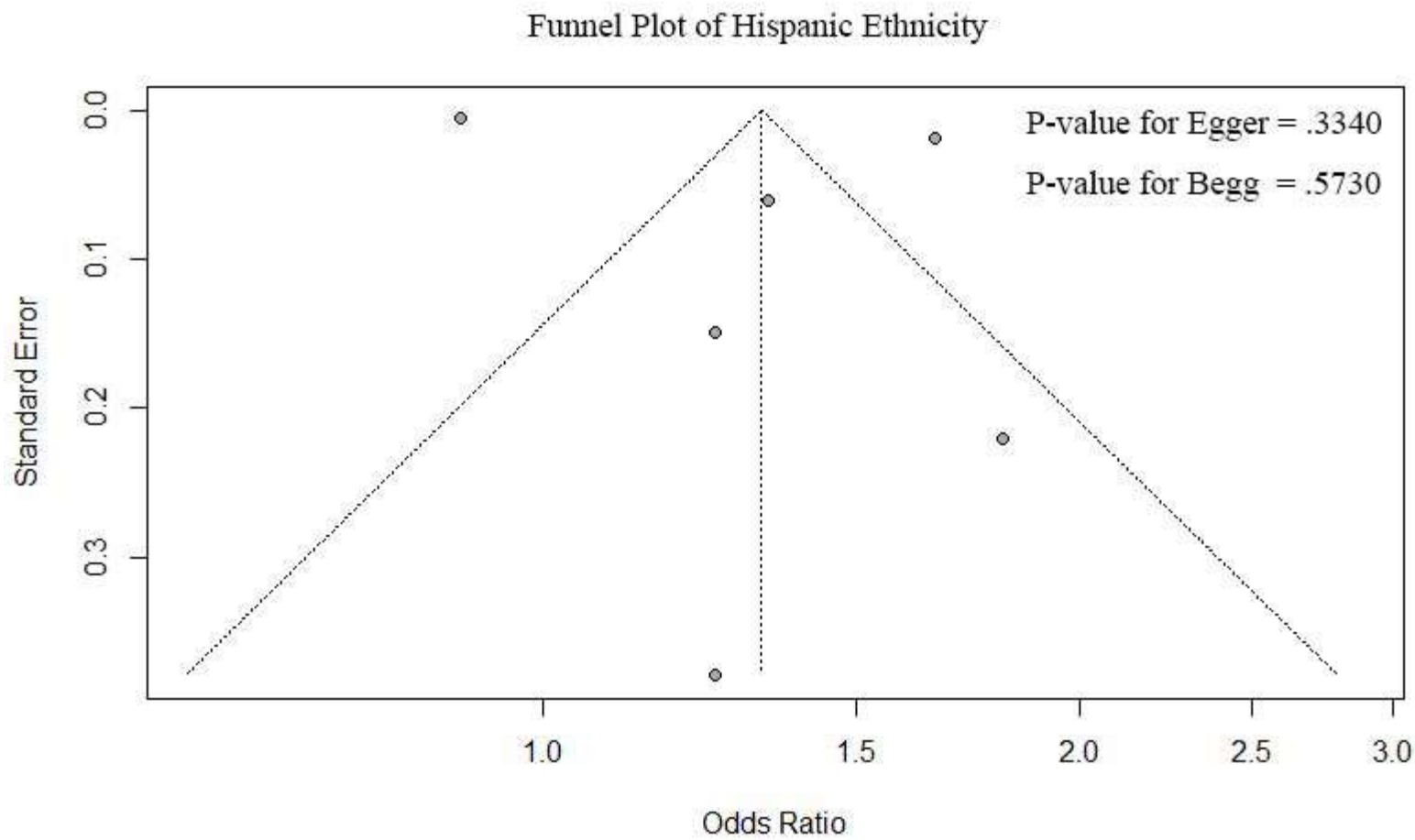
Forest Plot of Post-Traumatic Stress Disorder (PTSD)

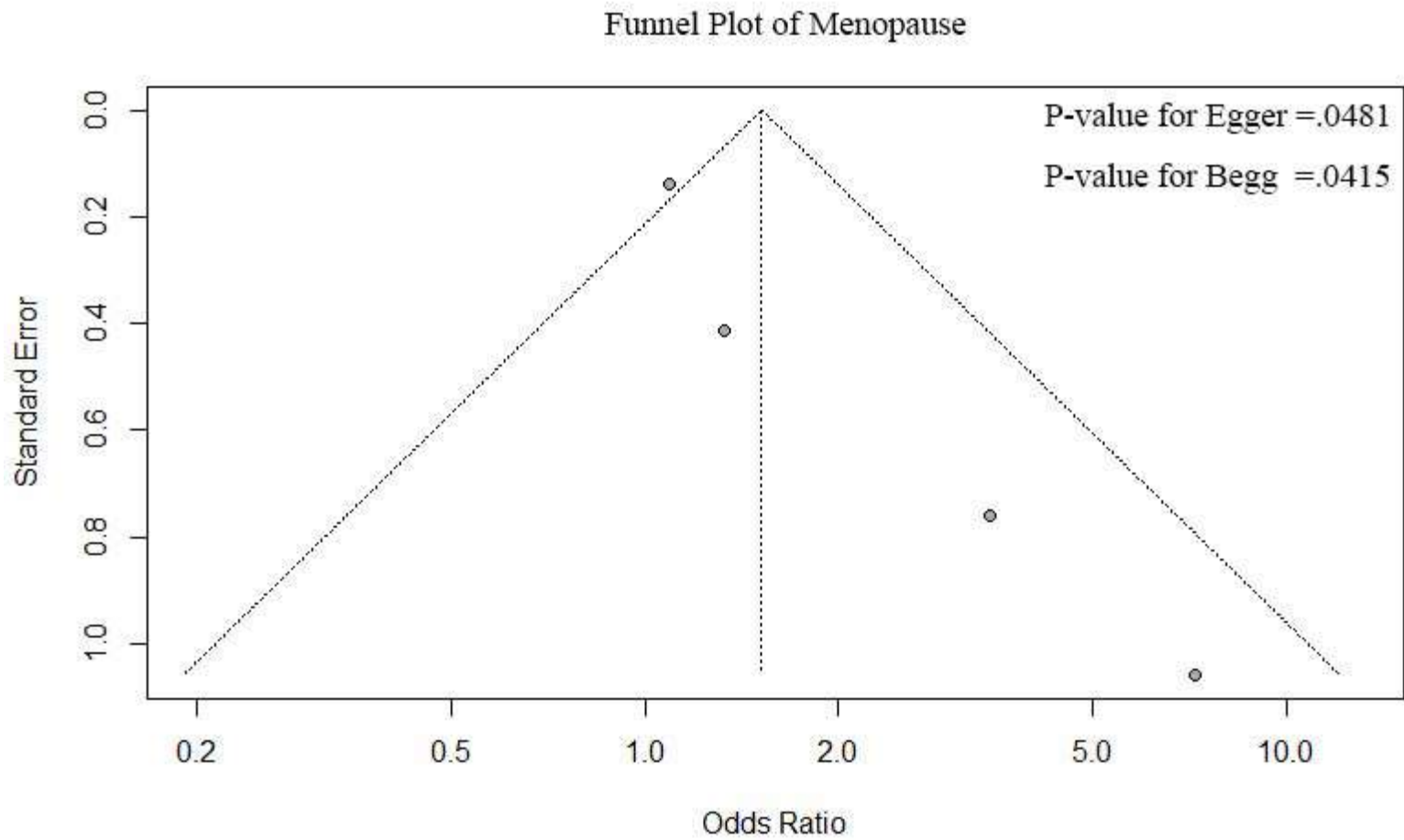


SUPPLEMENTAL DIGITAL CONTENT 23

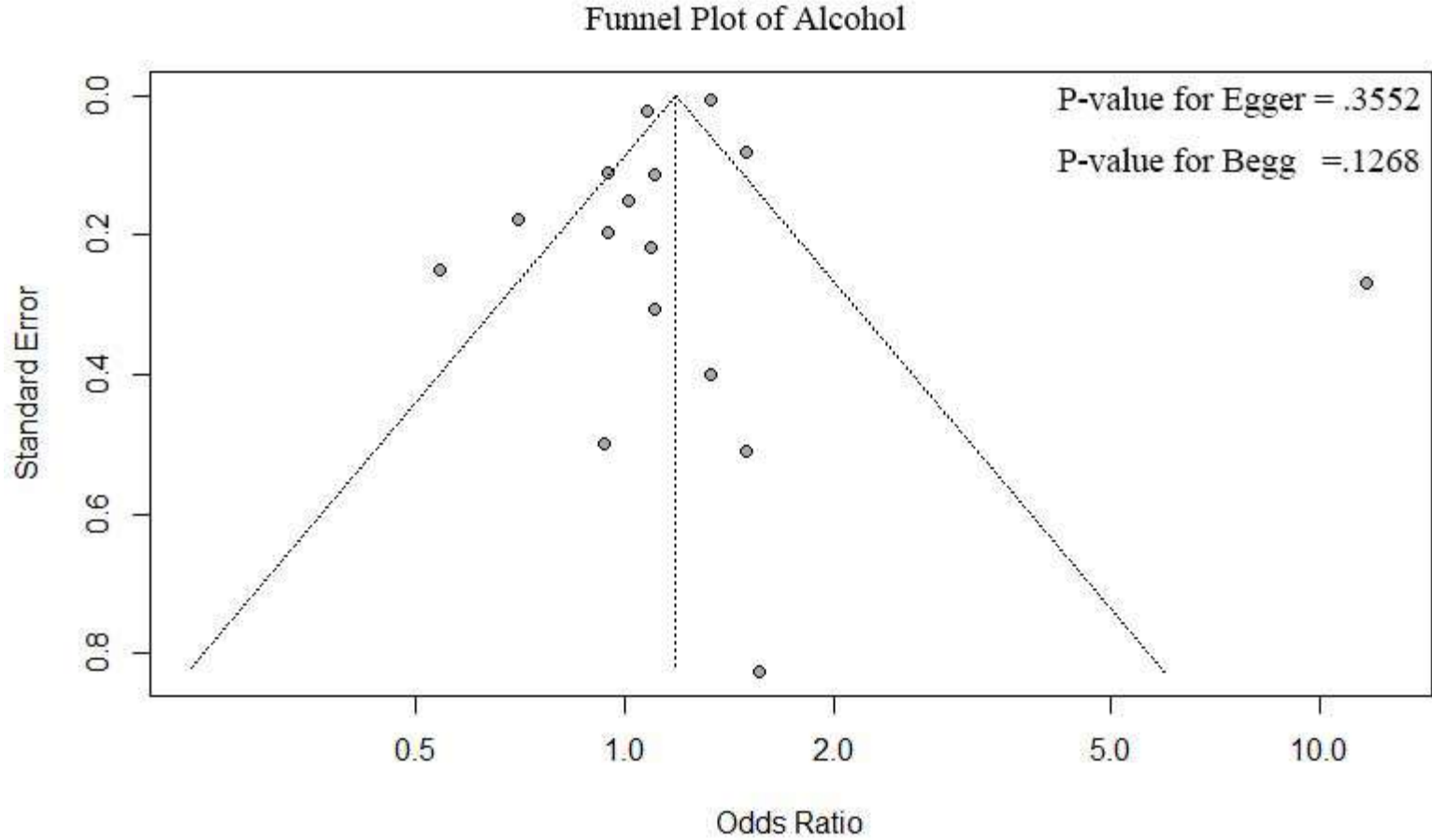


SUPPLEMENTAL DIGITAL CONTENT 24

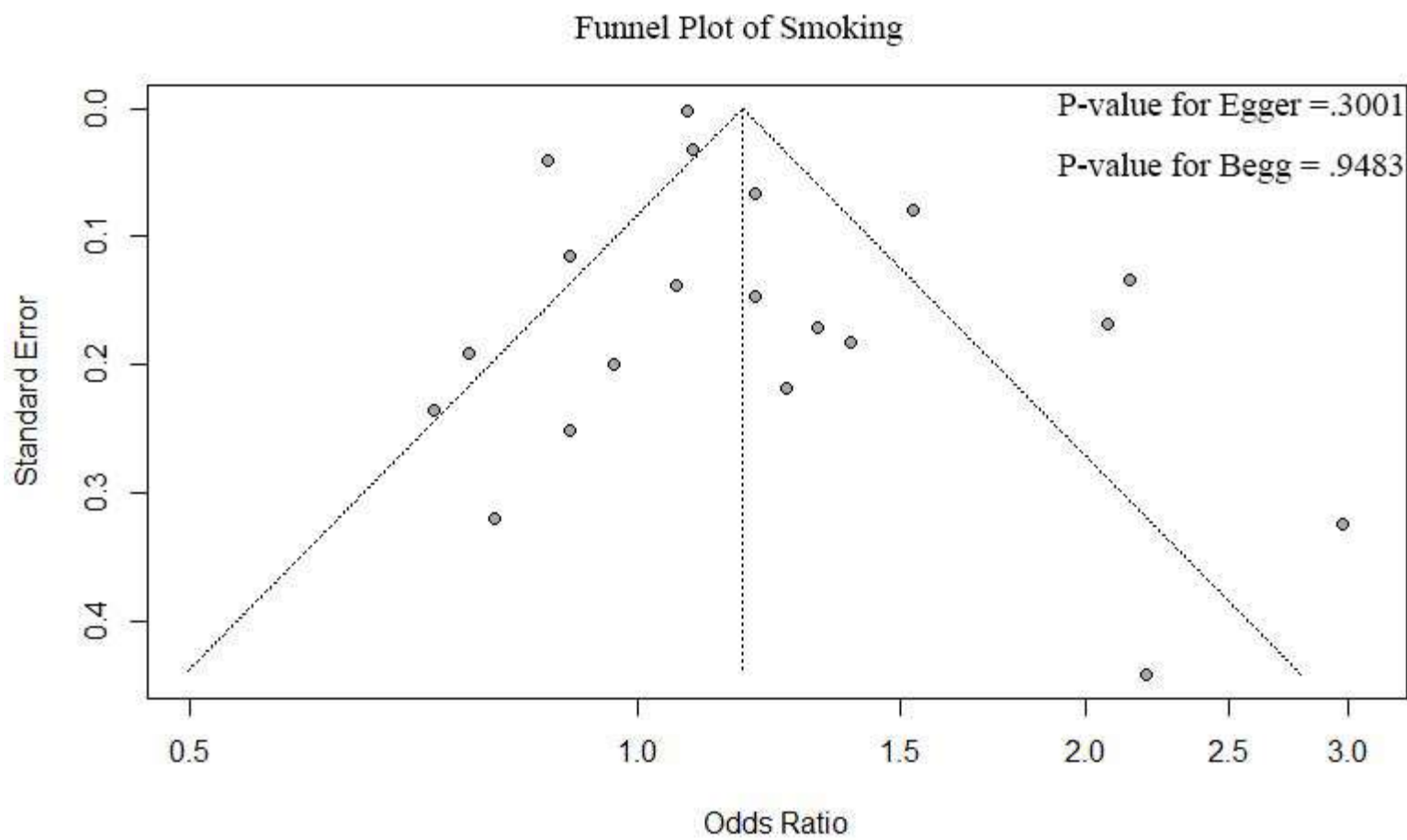


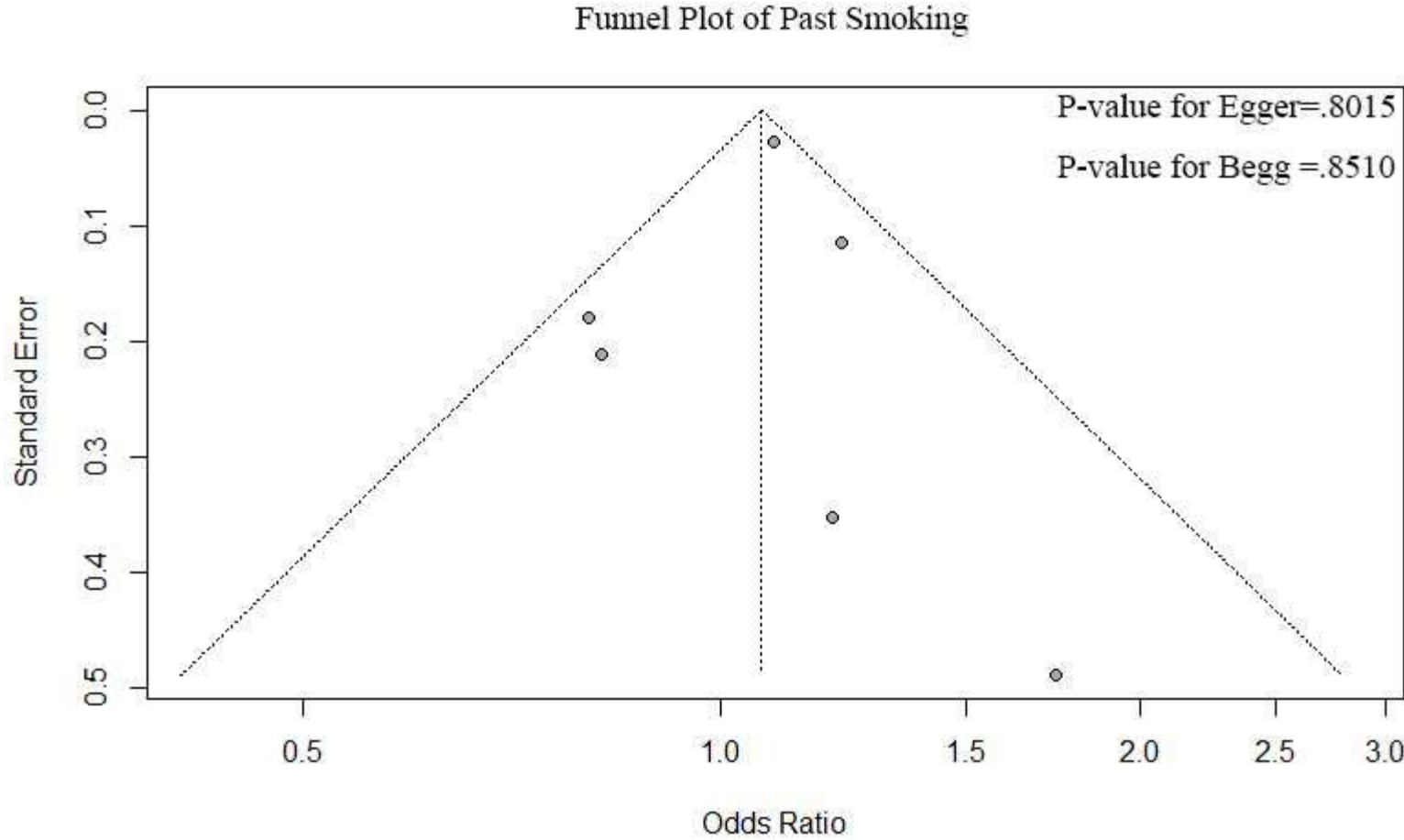


SUPPLEMENTAL DIGITAL CONTENT 26

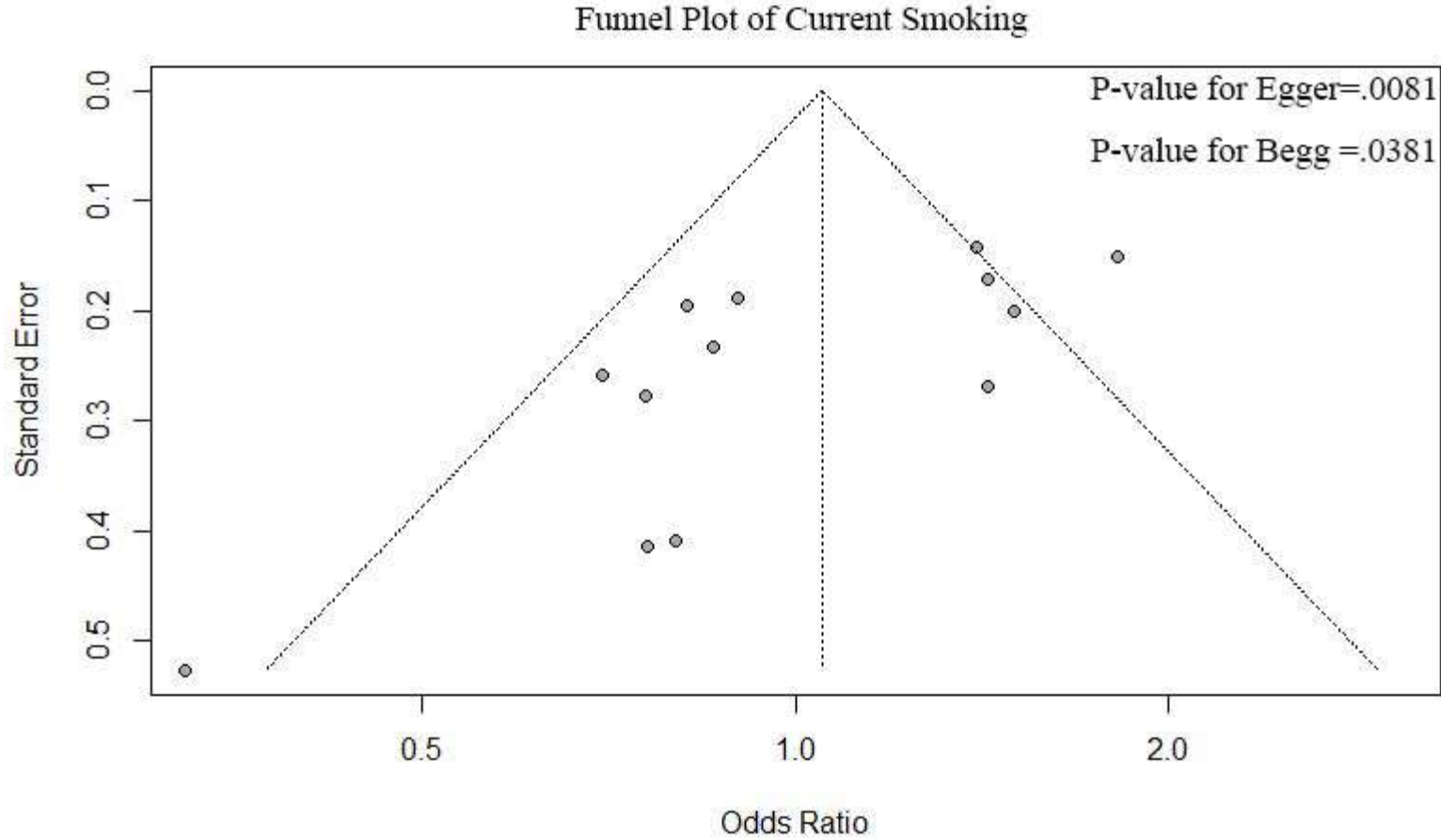


SUPPLEMENTAL DIGITAL CONTENT 27

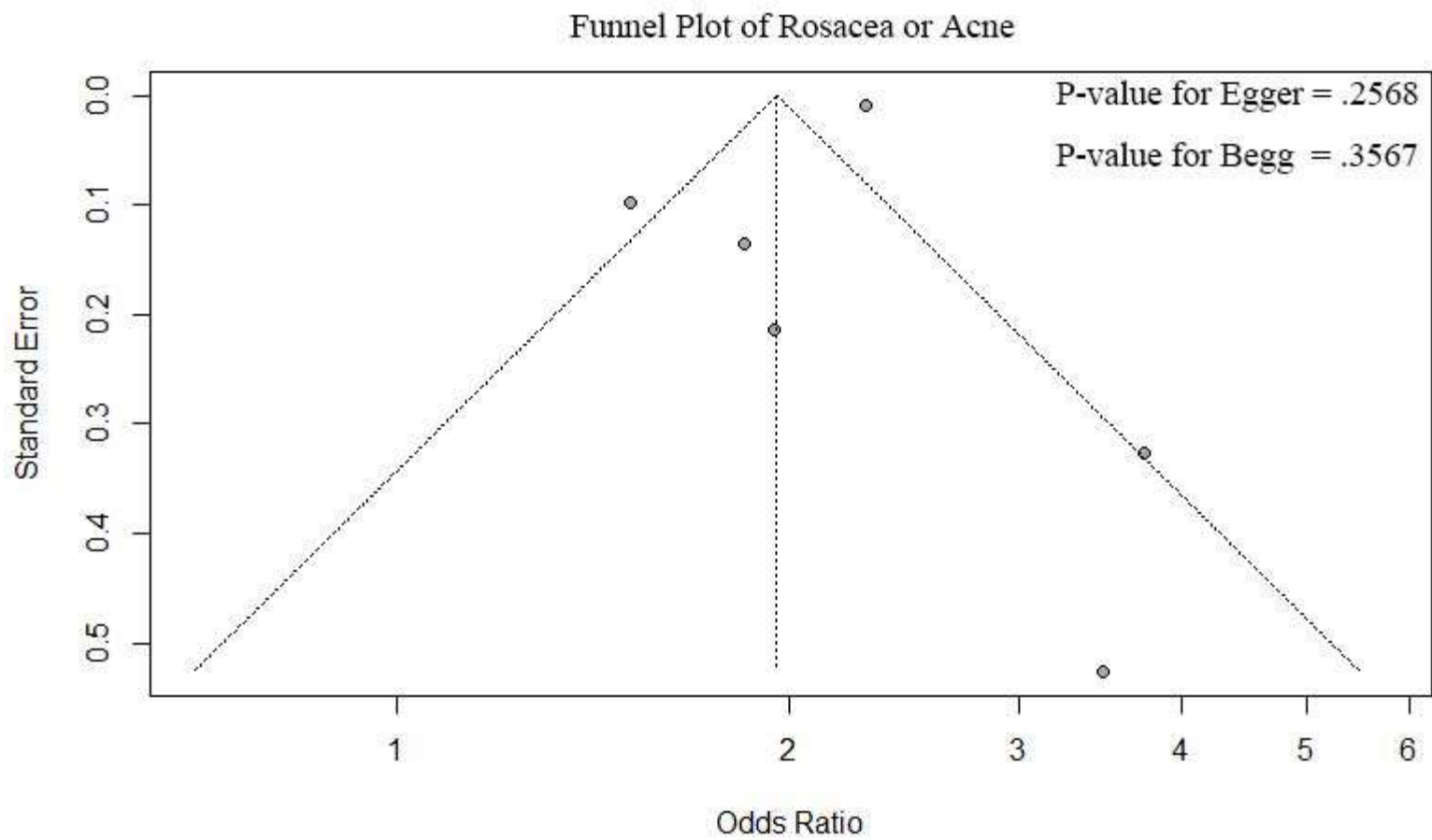




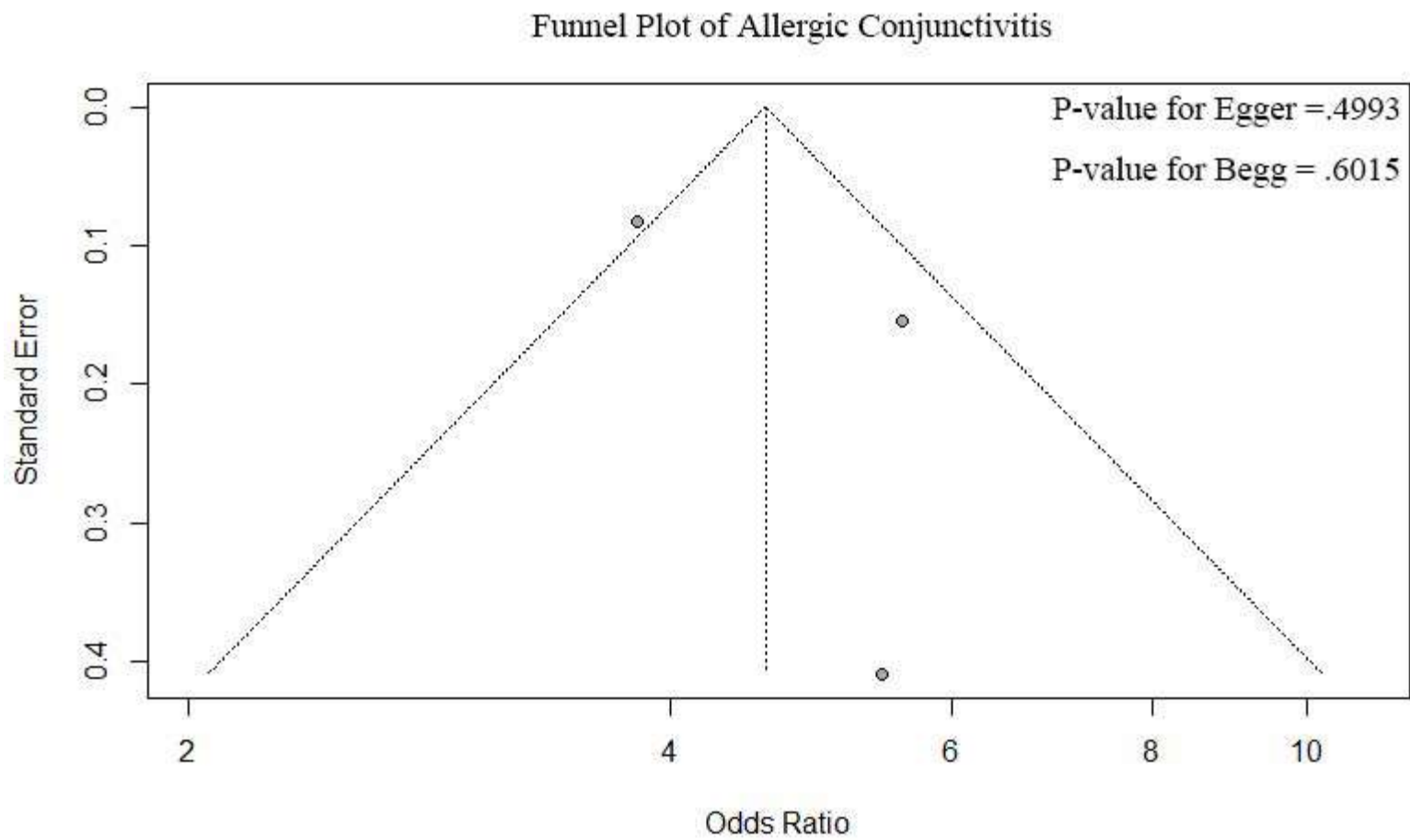
SUPPLEMENTAL DIGITAL CONTENT 29



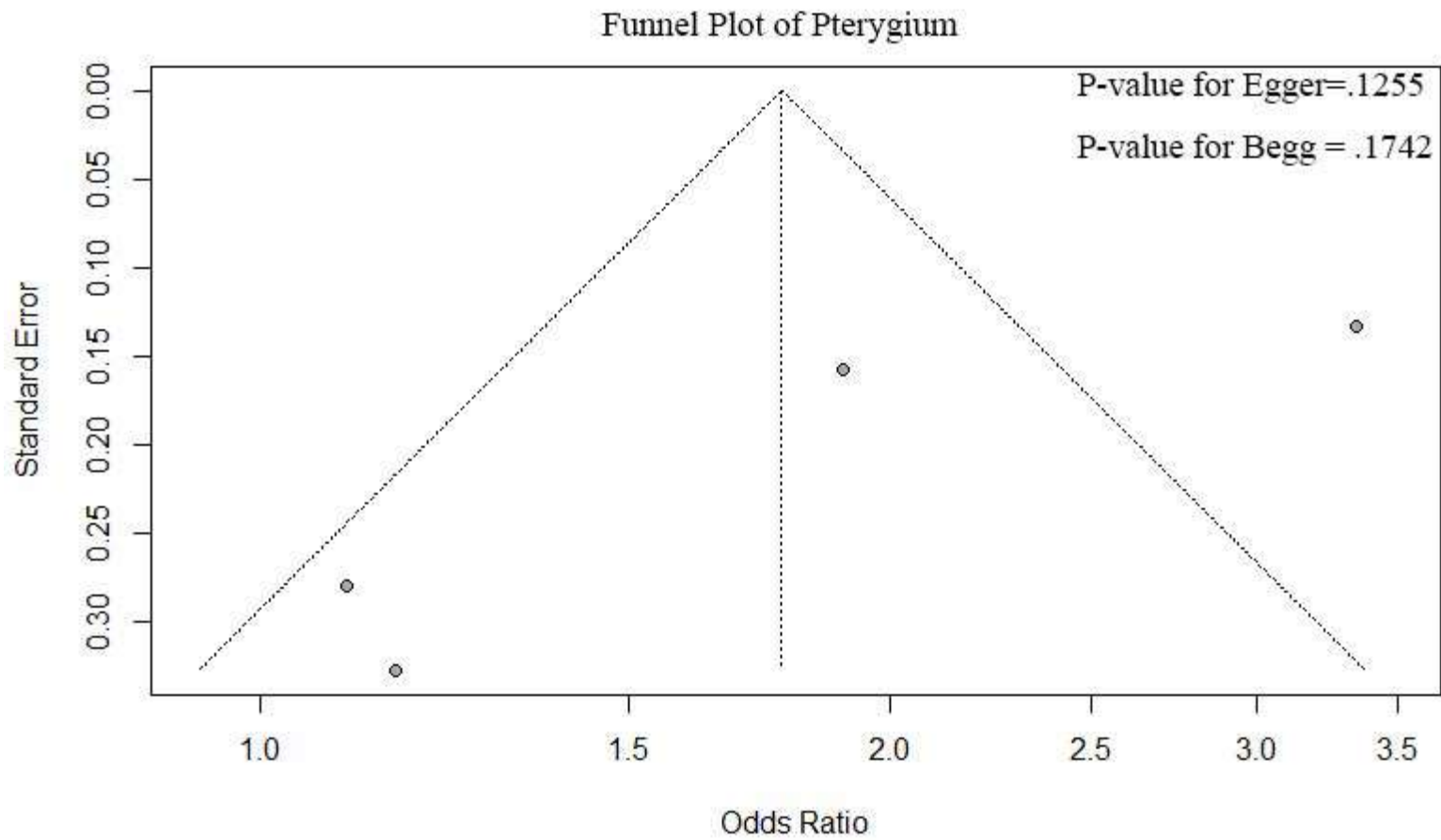
SUUPLEMENTAL DIGITAL CONTENT 30



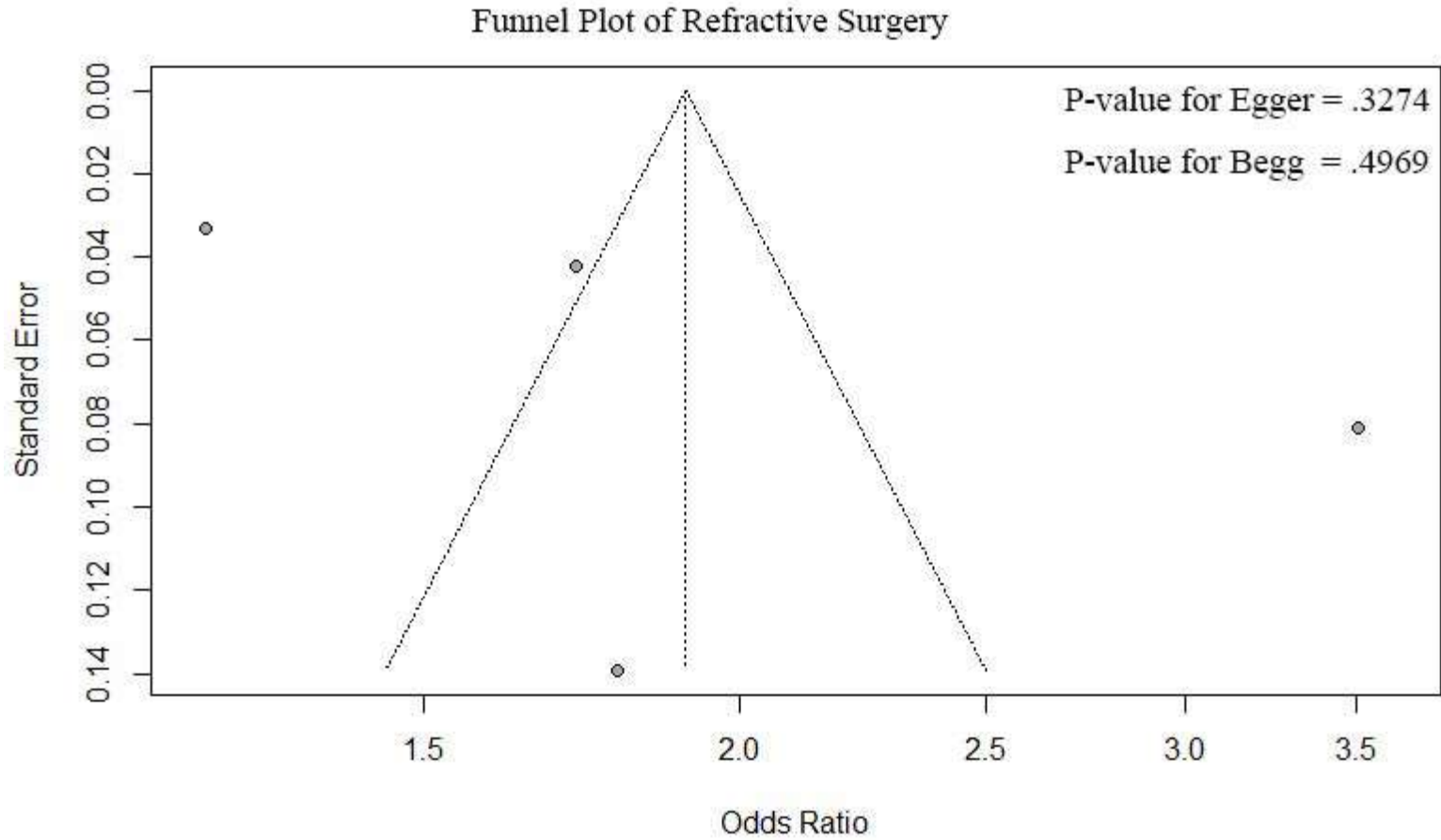
SUPPLEMENTAL DIGITAL CONTENT 31



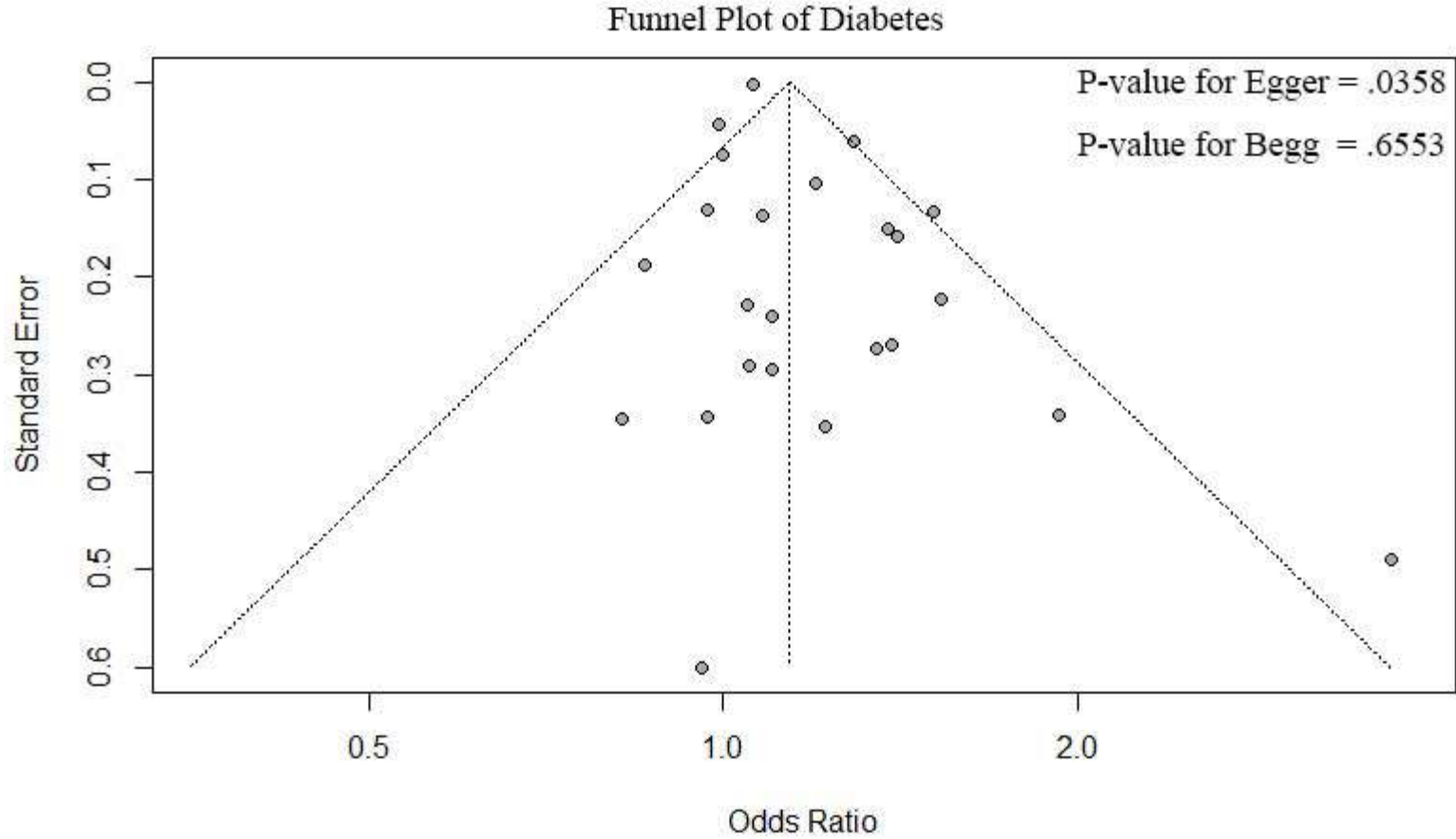
SUPPLEMENTAL DIGITAL CONTENT 32



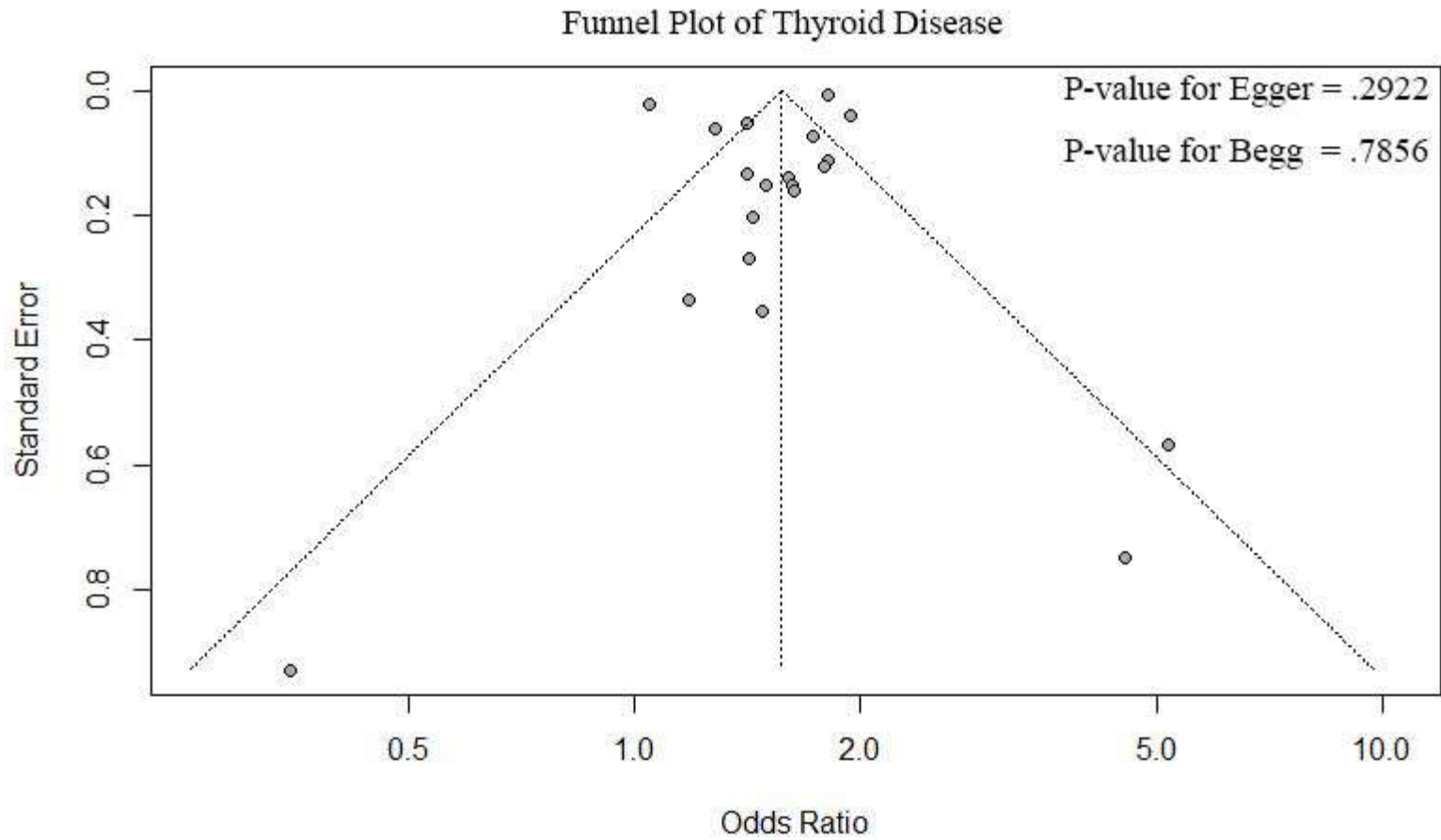
SUPPLEMENTAL DIGITAL CONTENT 33

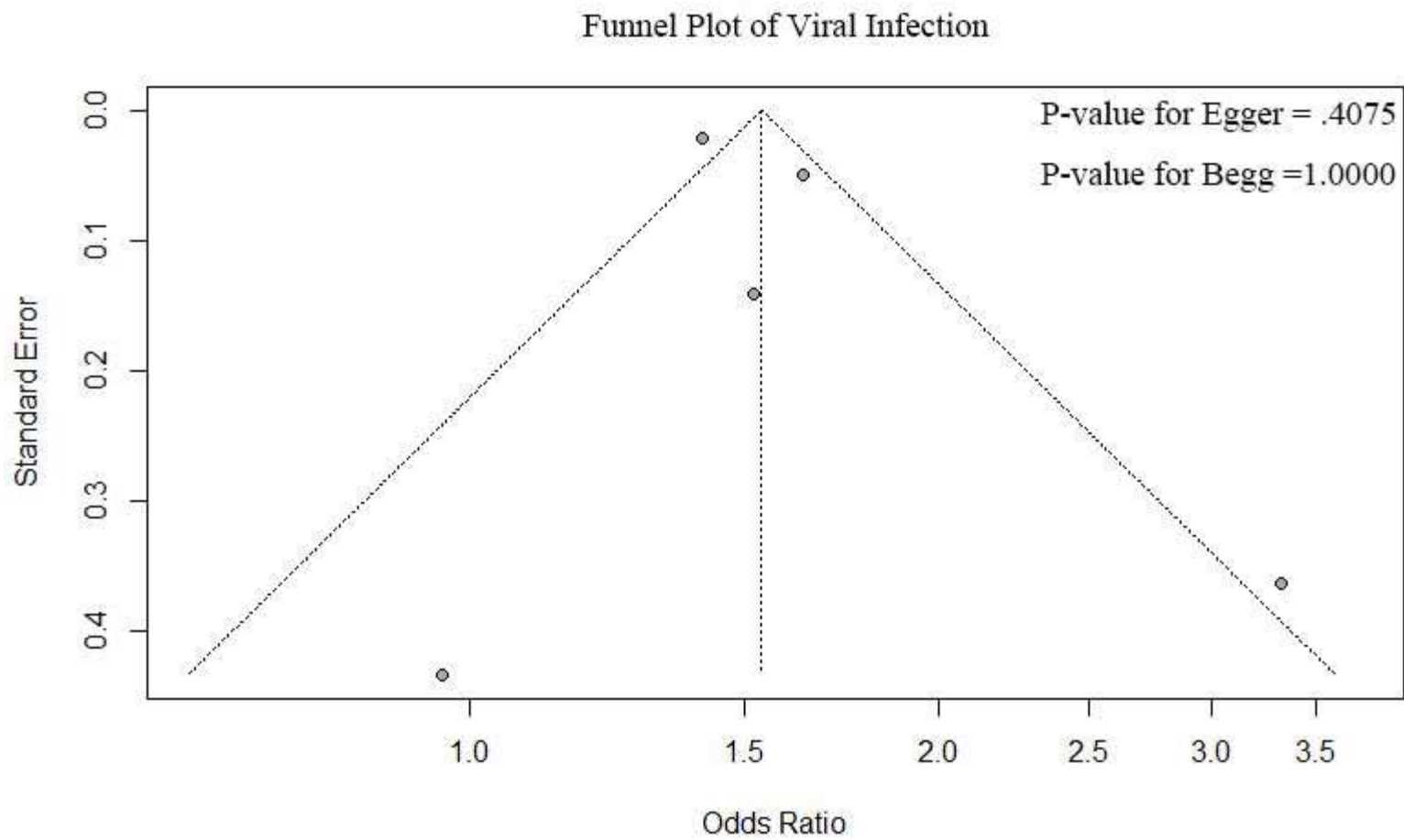


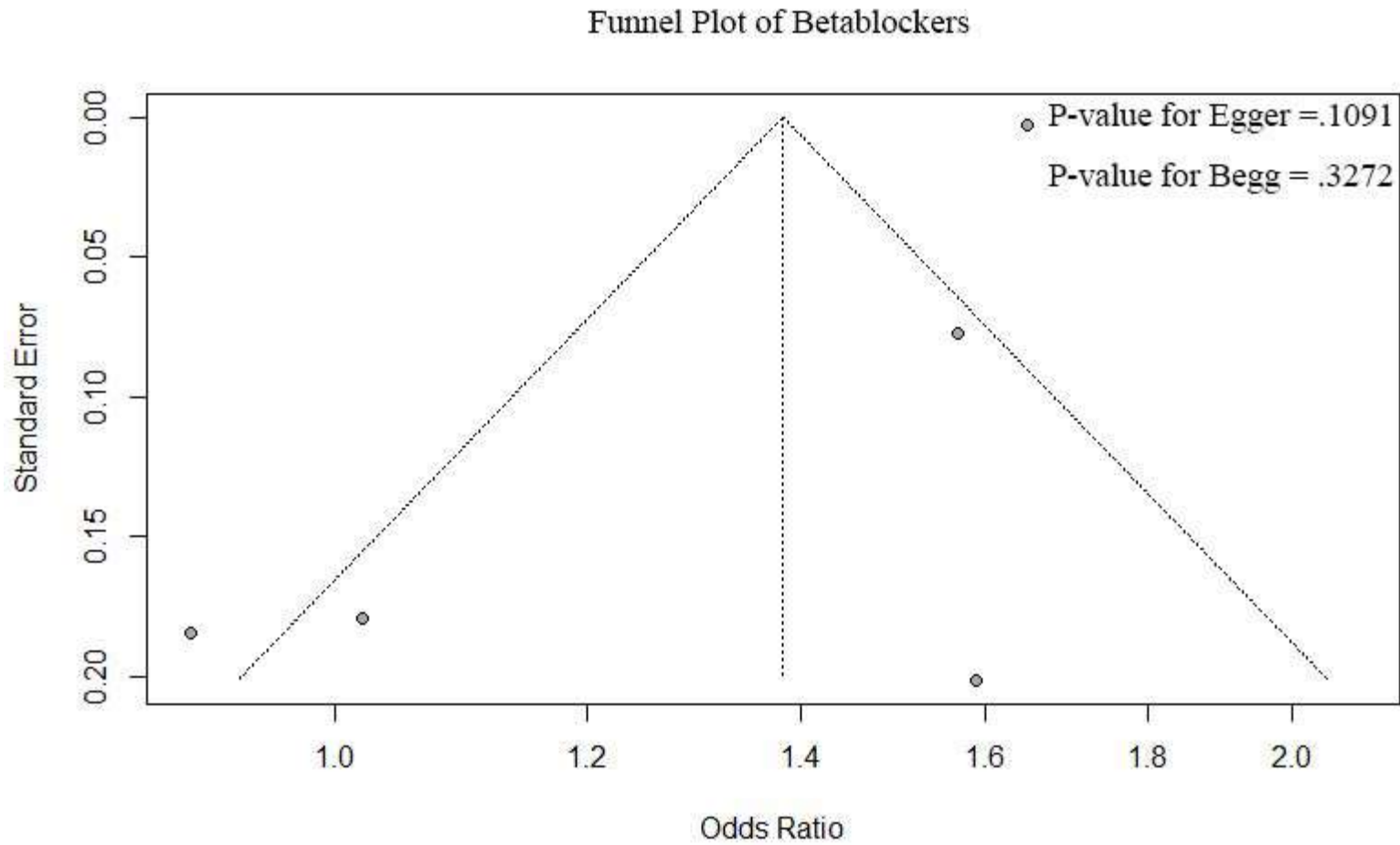
SUPPLEMENTAL DIGITAL CONTENT 34



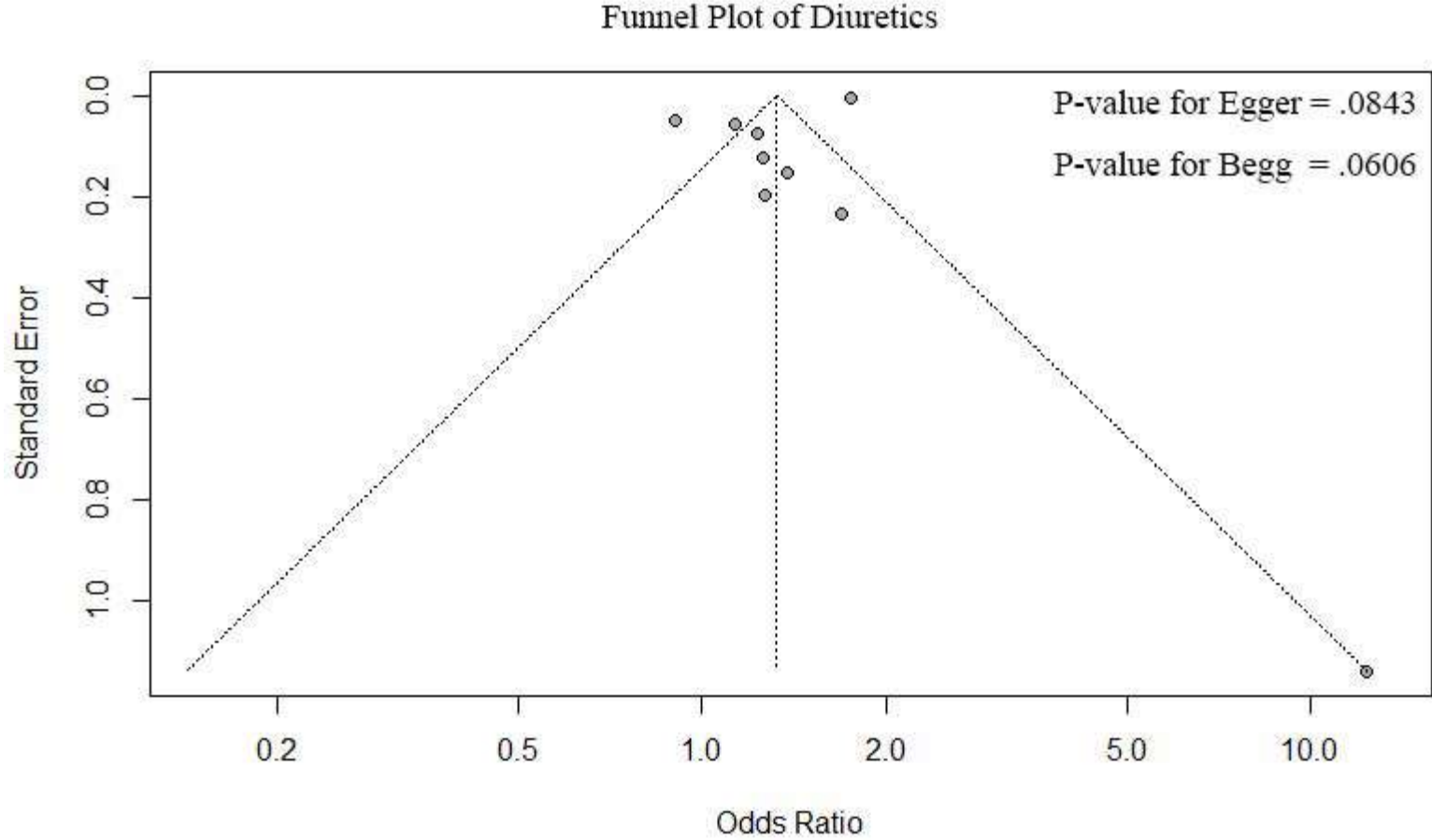
SUPPLEMENTAL DIGITAL CONTENT 35



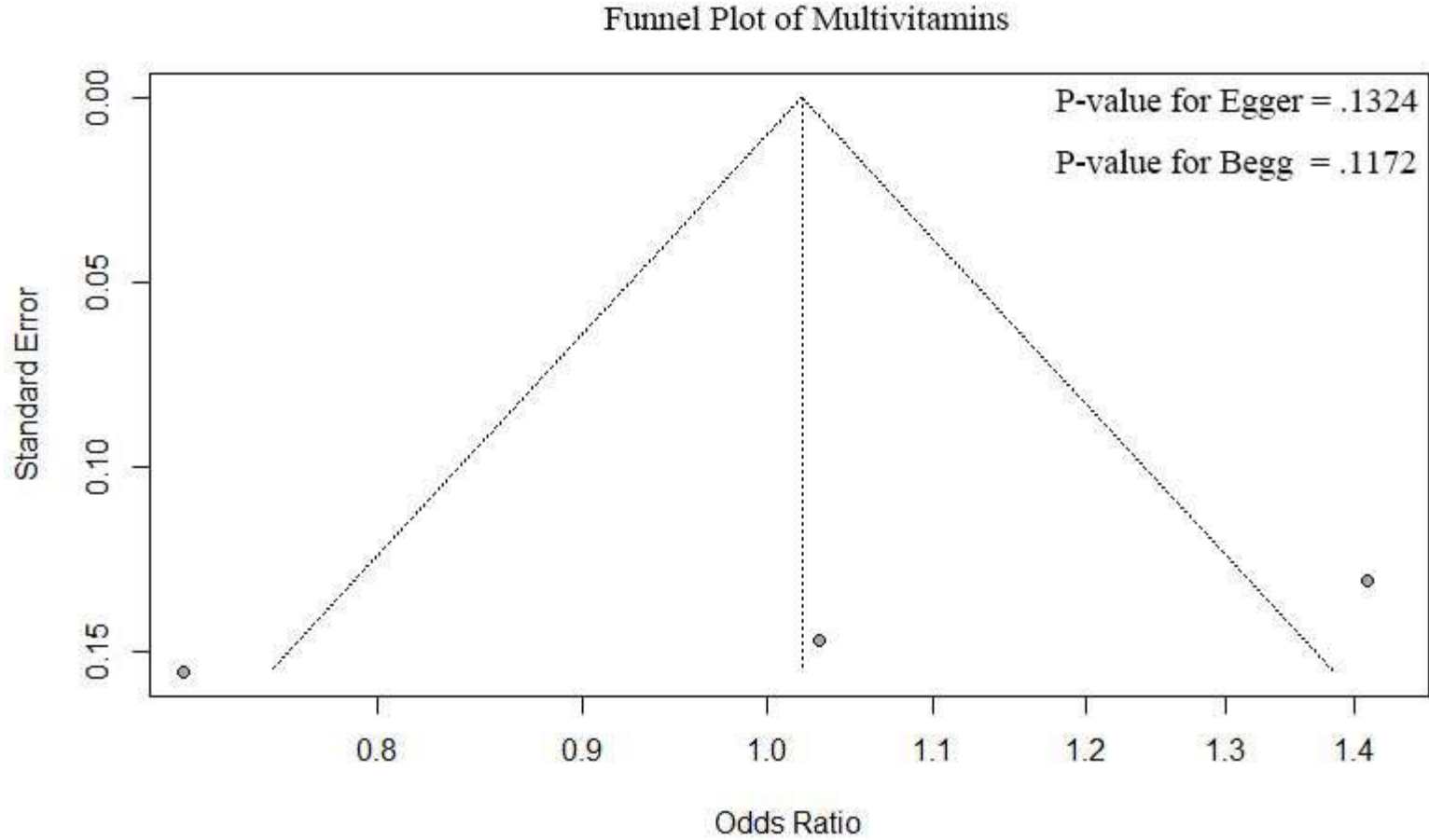




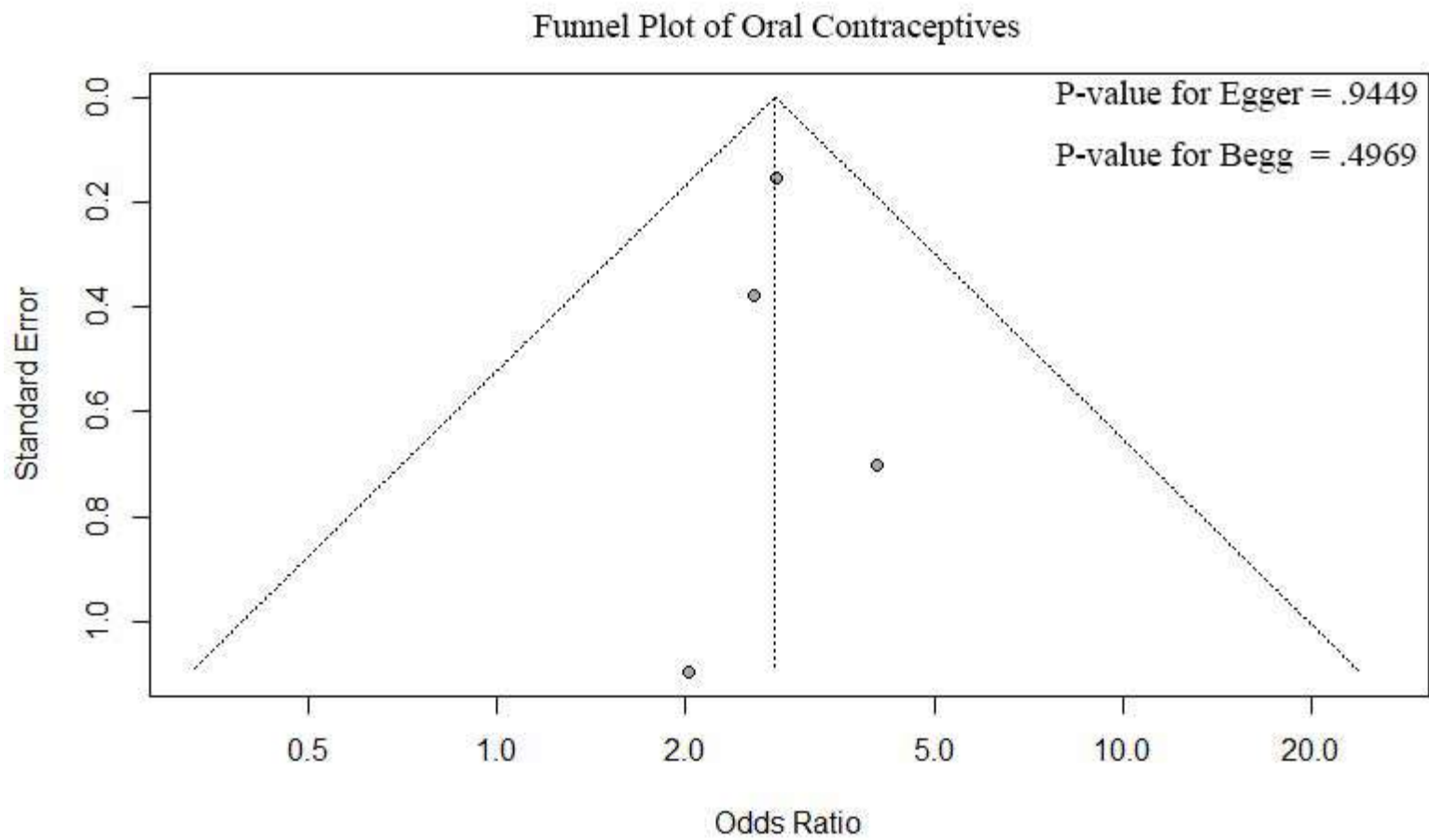
SUPPLEMENTAL DIGITAL CONTENT 38



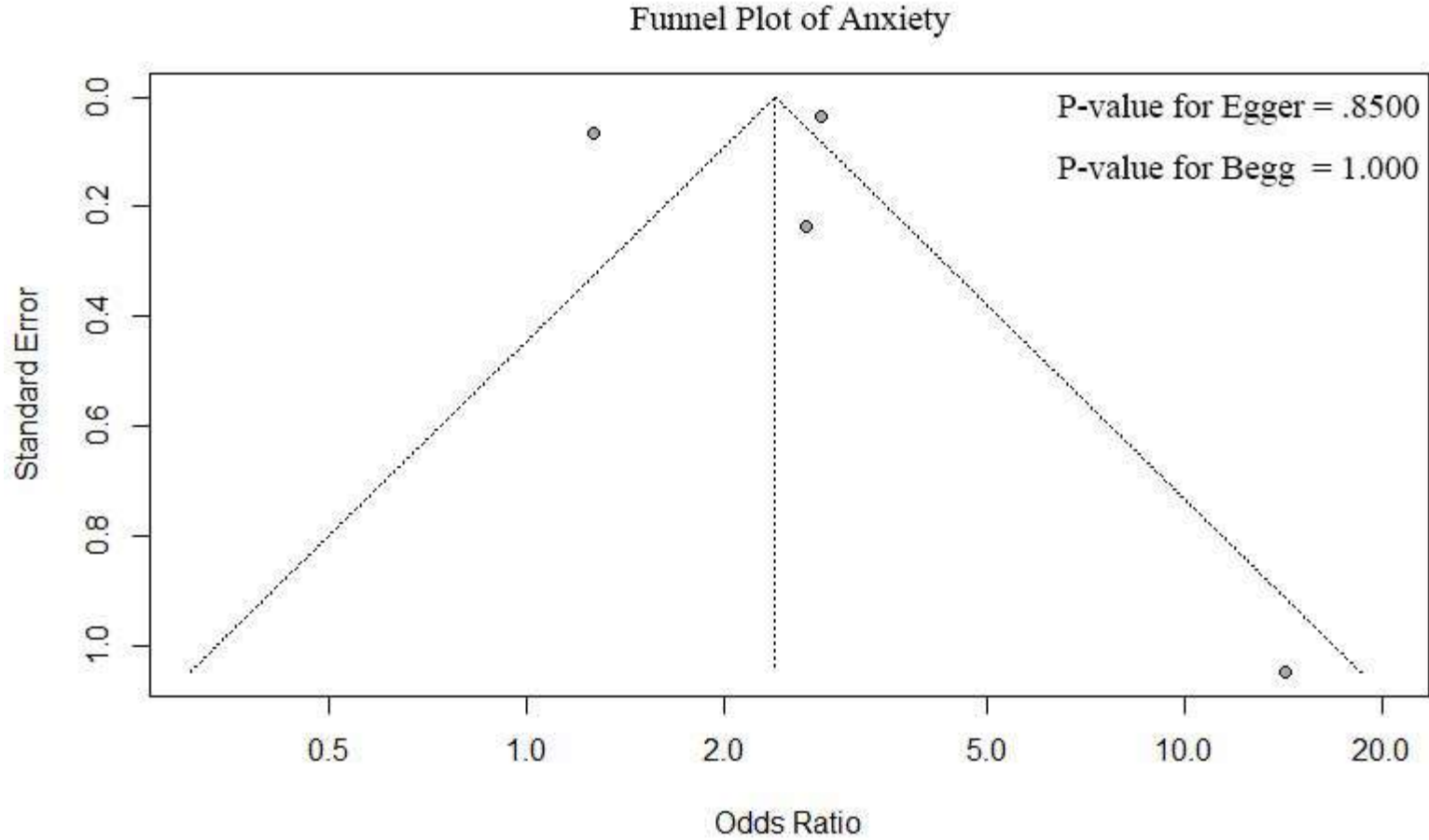
SUPPLEMENTAL DIGITAL CONTENT 39



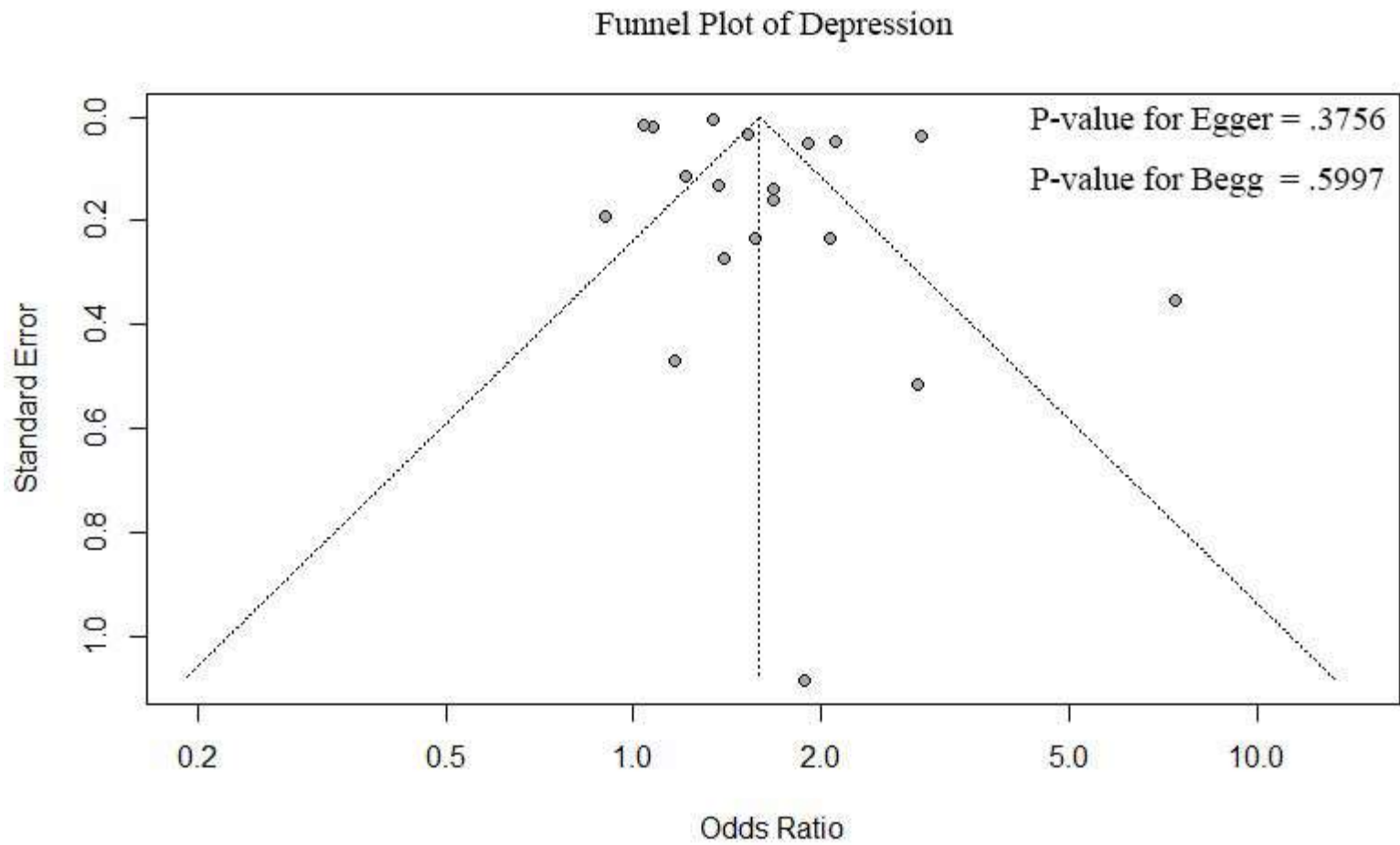
SUPPLEMENTAL DIGITAL CONTENT 40



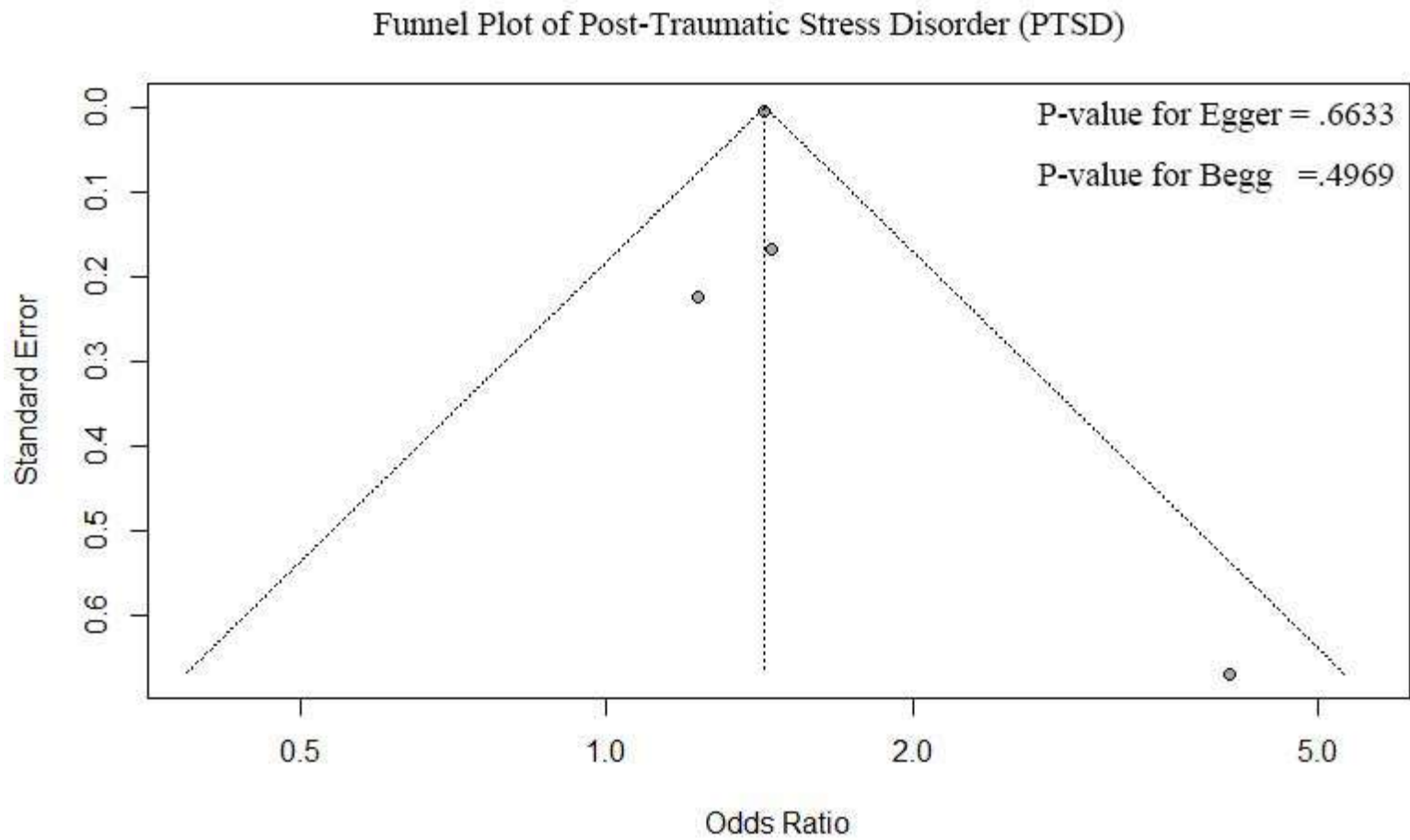
SUPPLEMENTAL DIGITAL CONTENT 41



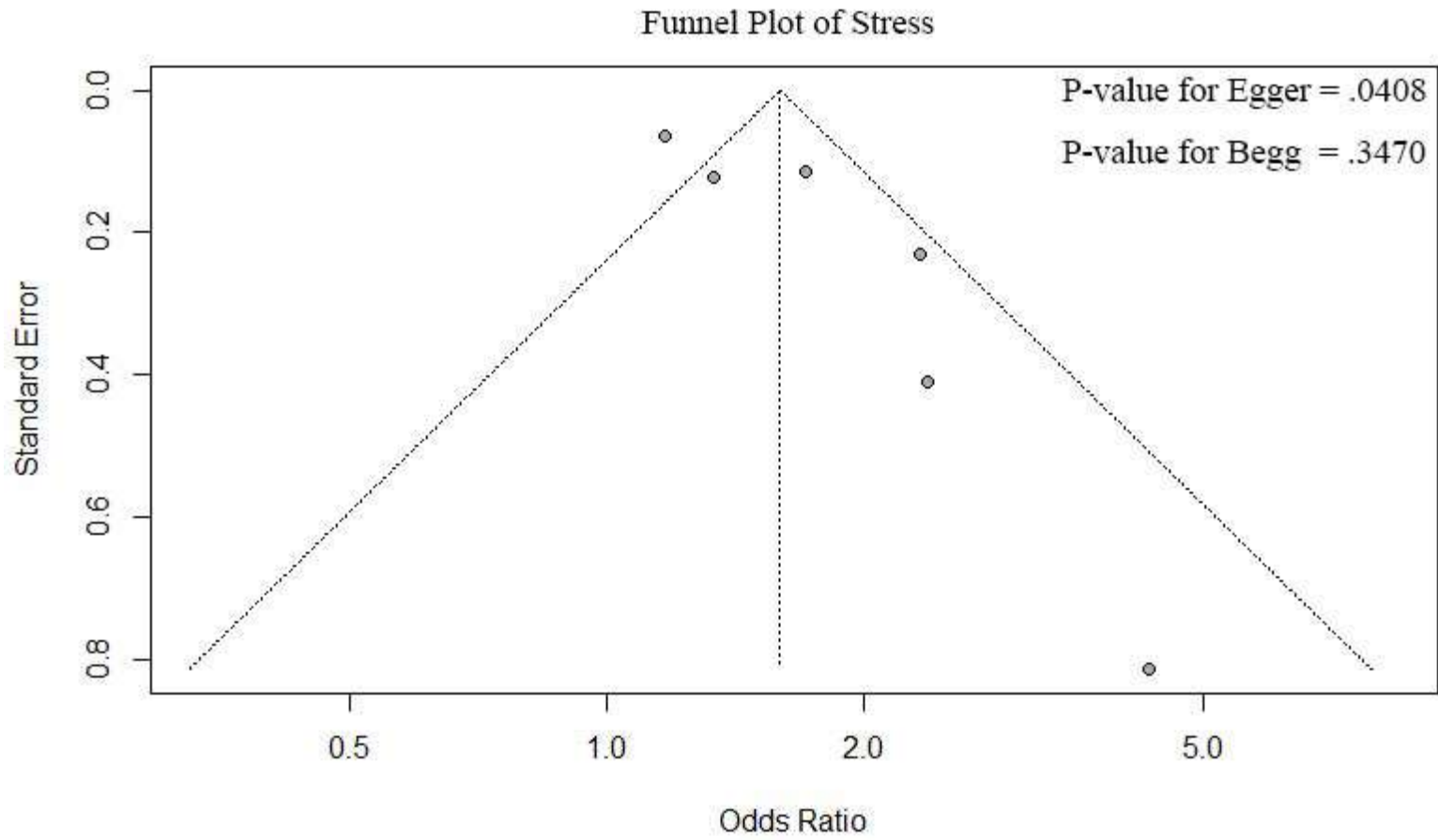
SUPPLEMENTAL DIGITAL CONTENT 42



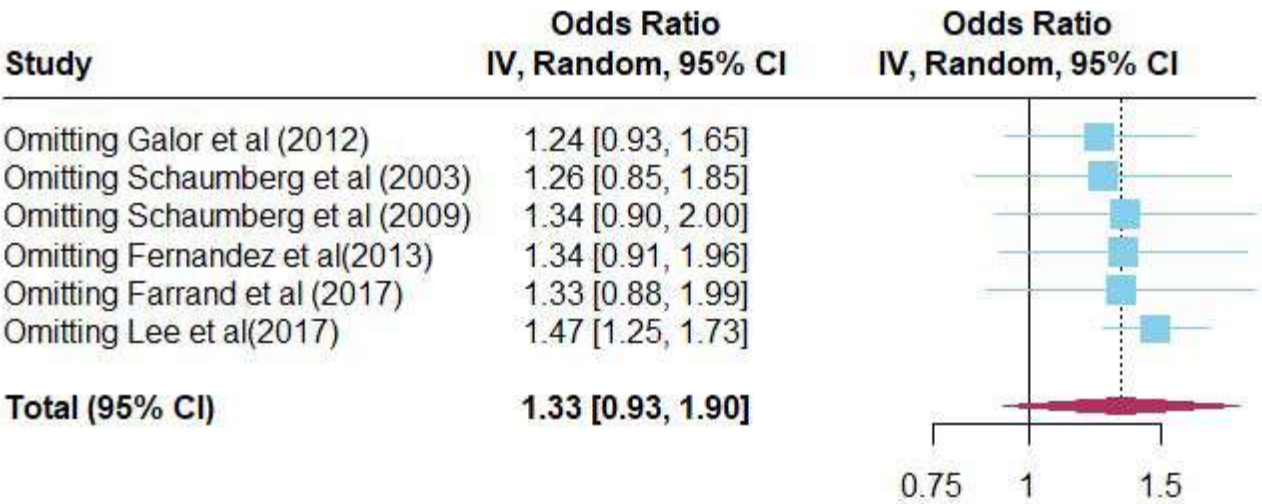
SUPPLEMENTAL DIGITAL CONTENT 43



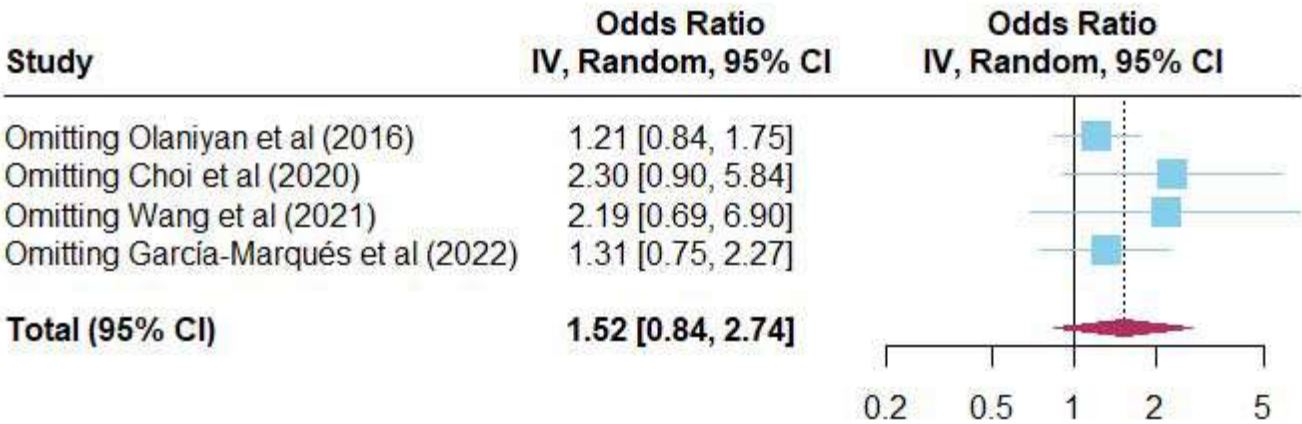
SUPPLEMENTAL DIGITAL CONTENT 44



Sensitivity Analysis of Hispanic Ethnicity

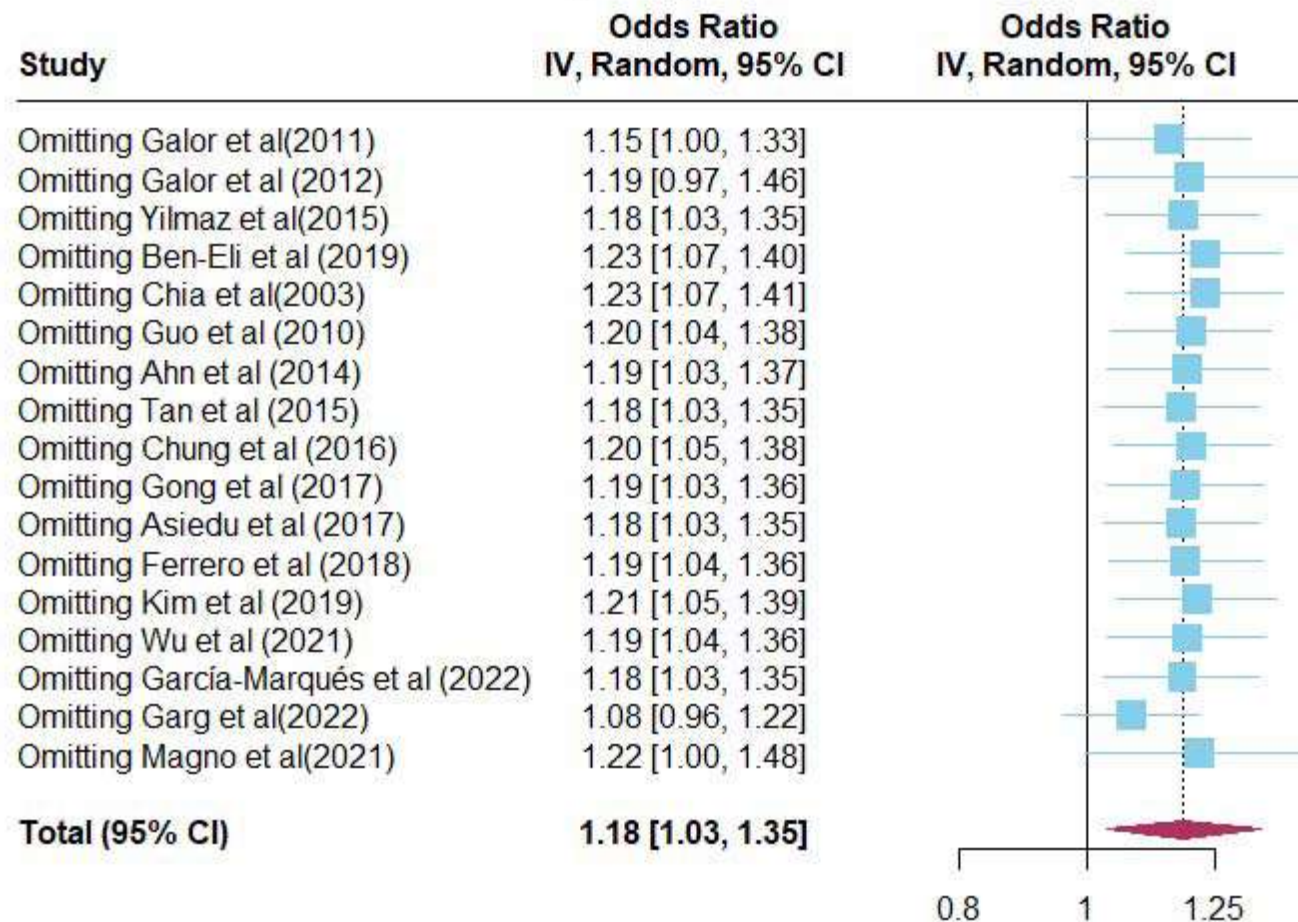


Sensitivity Analysis of Menopause



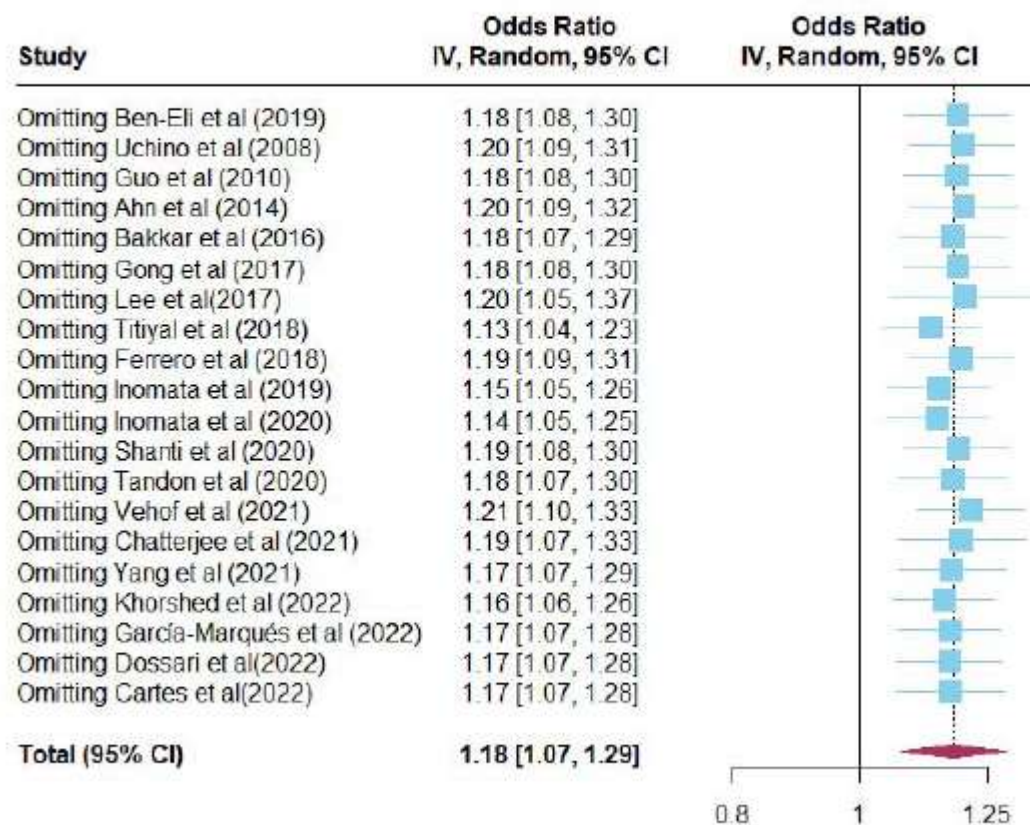
SUPPLEMENTAL DIGITAL CONTENT 47

Sensitivity Analysis of Alcohol

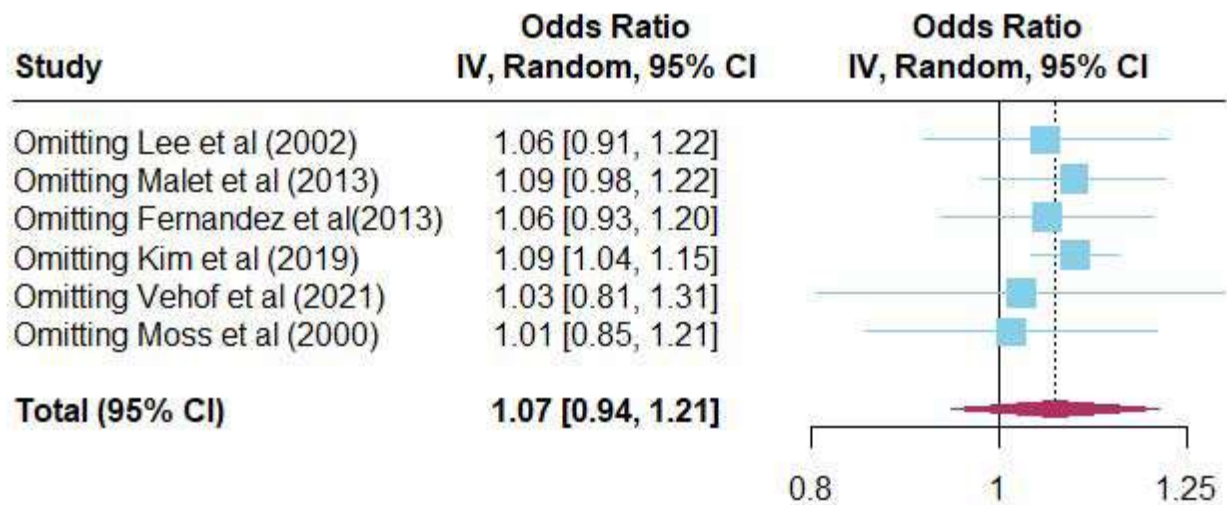


SUPPLEMENTAL DIGITAL CONTENT 48

Sensitivity Analysis of Smoking

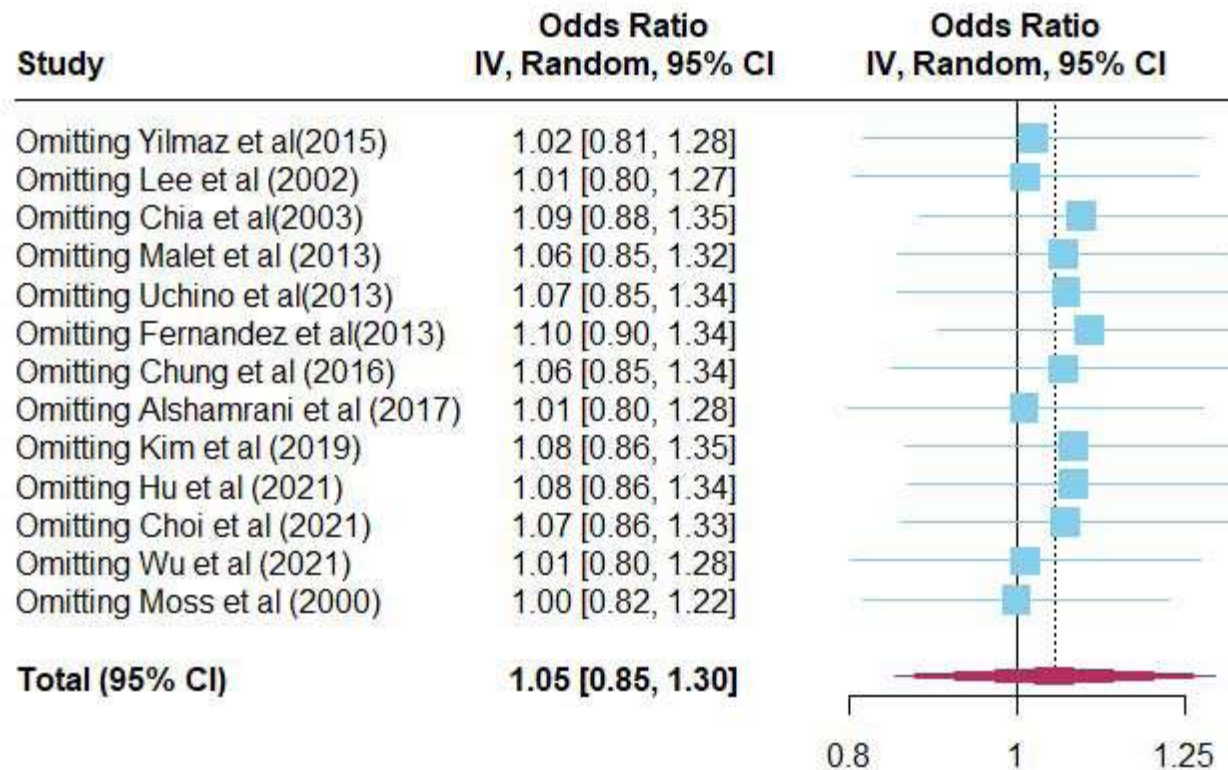


Sensitivity Analysis of Past Smoking

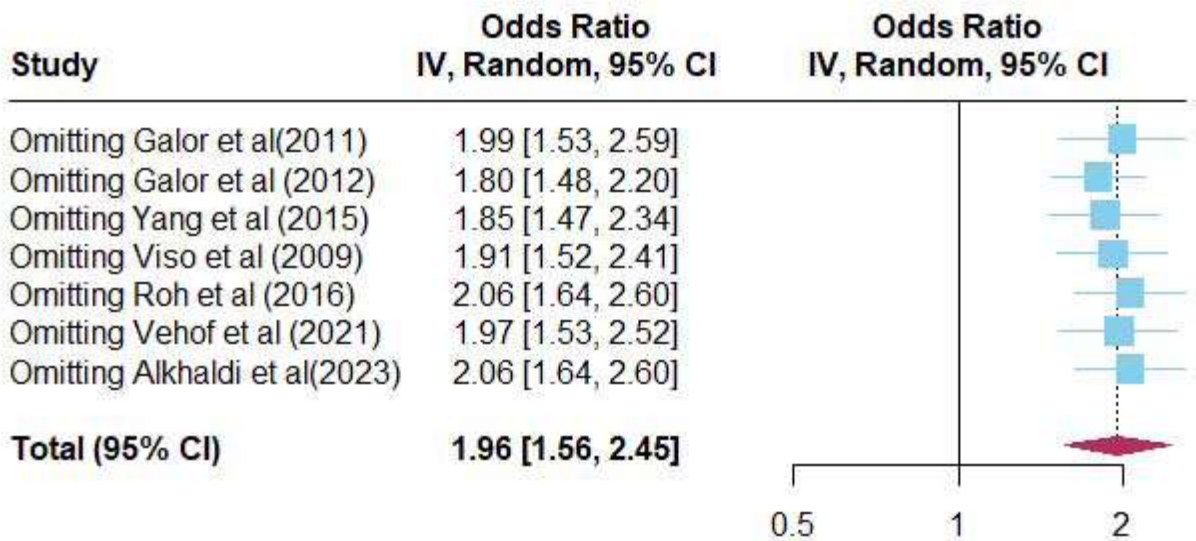


SUPPLEMENTAL DIGITAL CONTENT 50

Sensitivity Analysis of Current Smoking

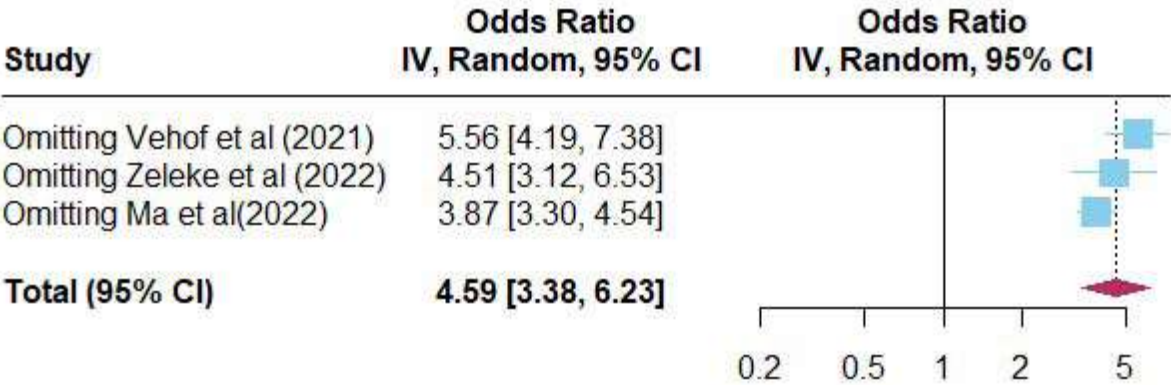


Sensitivity Analysis of Rosacea or Acne

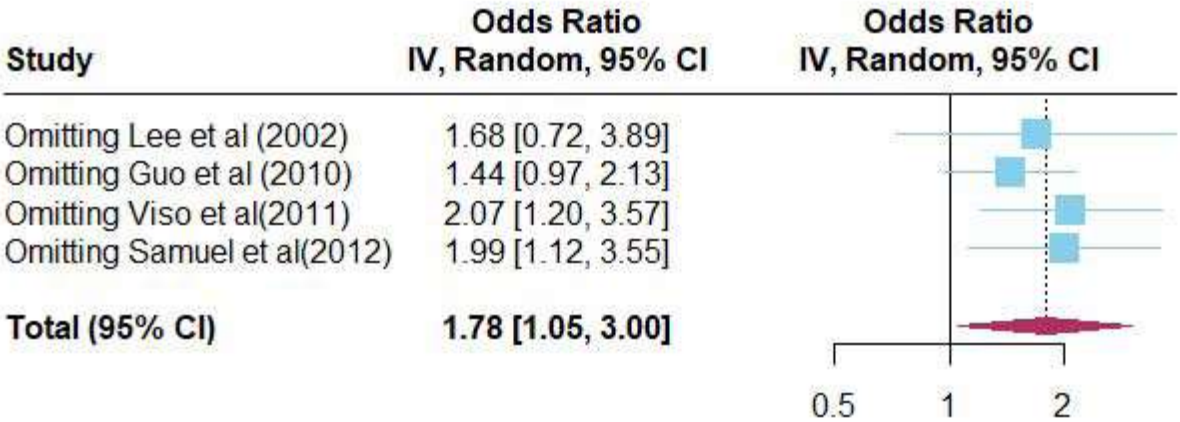


SUPPLEMENTAL DIGITAL CONTENT 52

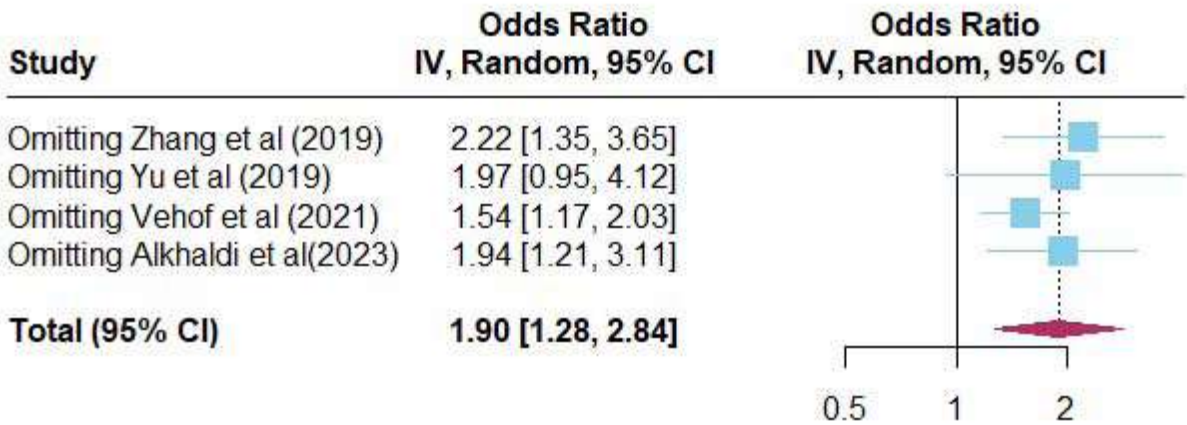
Sensitivity Analysis of Allergic Conjunctivitis



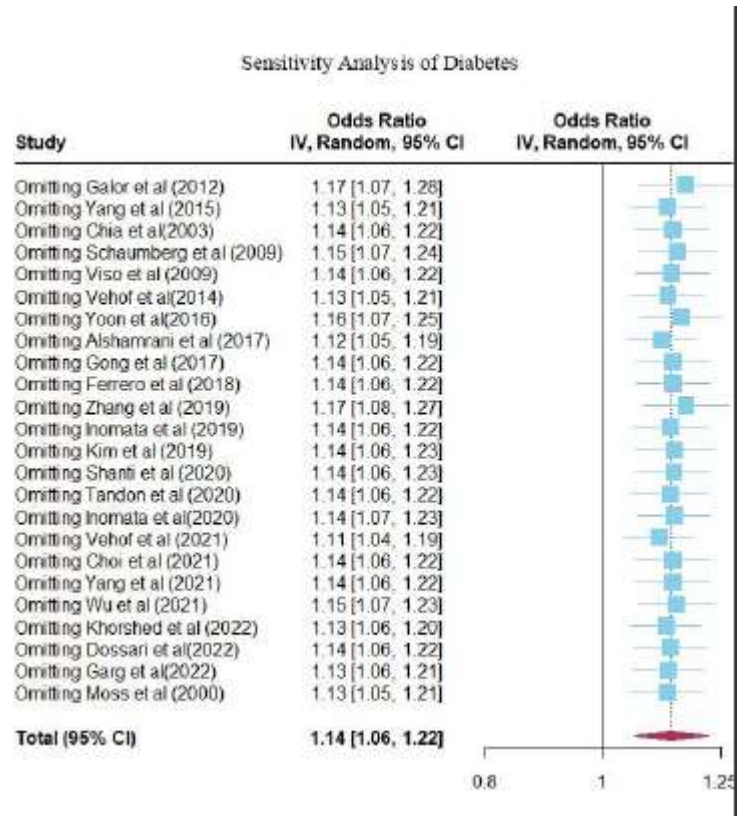
Sensitivity Analysis of Pterygium



Sensitivity Analysis of Refractive Surgery

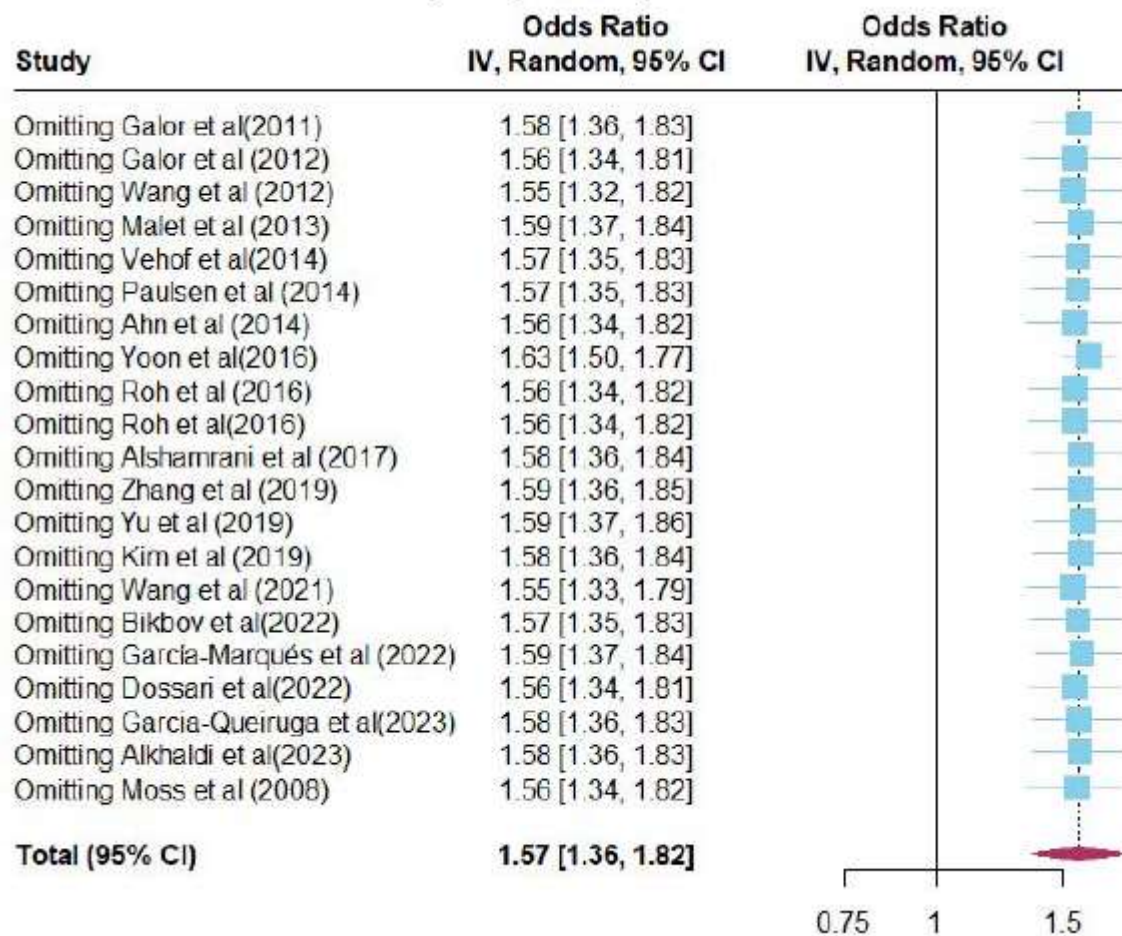


SUPPLEMENTAL DIGITAL CONTENT 55



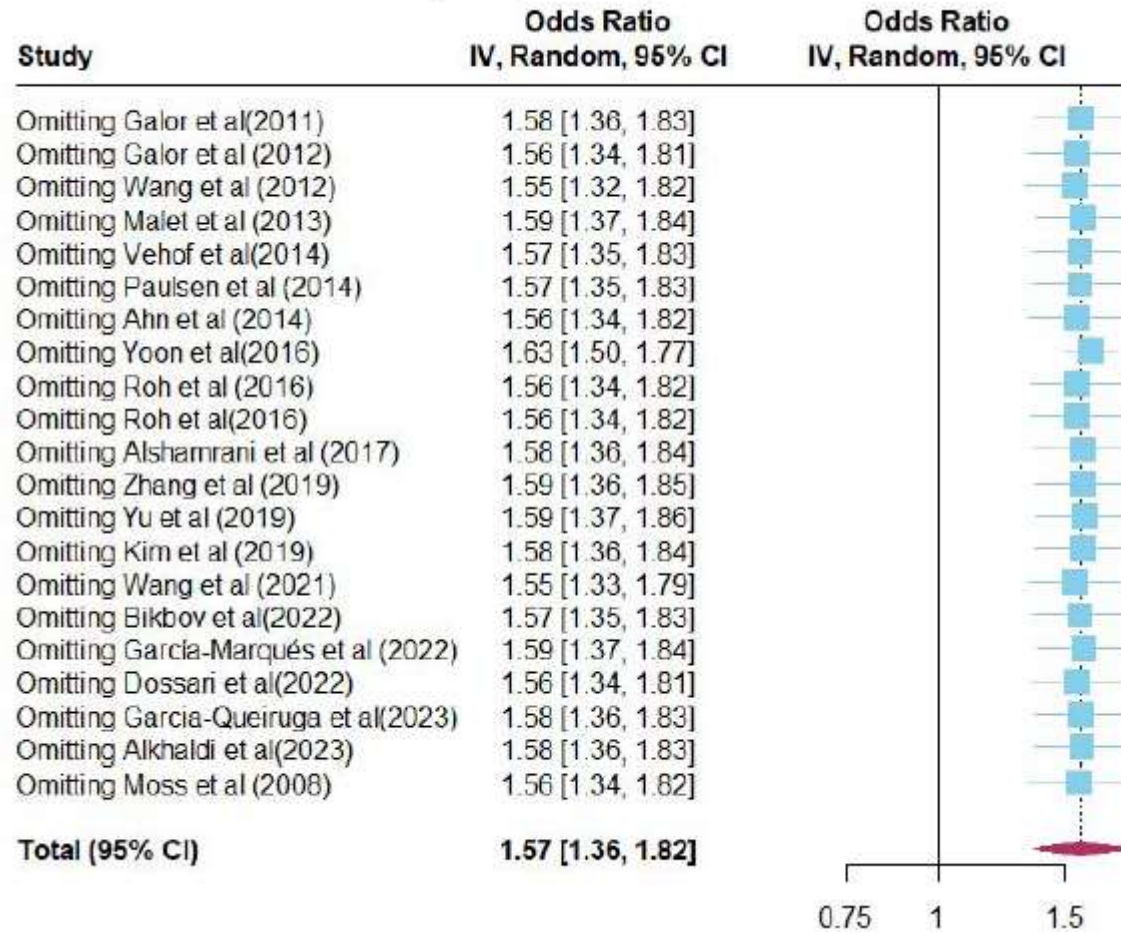
SUPPLEMENTAL DIGITAL CONTENT 56

Sensitivity Analysis of Thyroid Disease

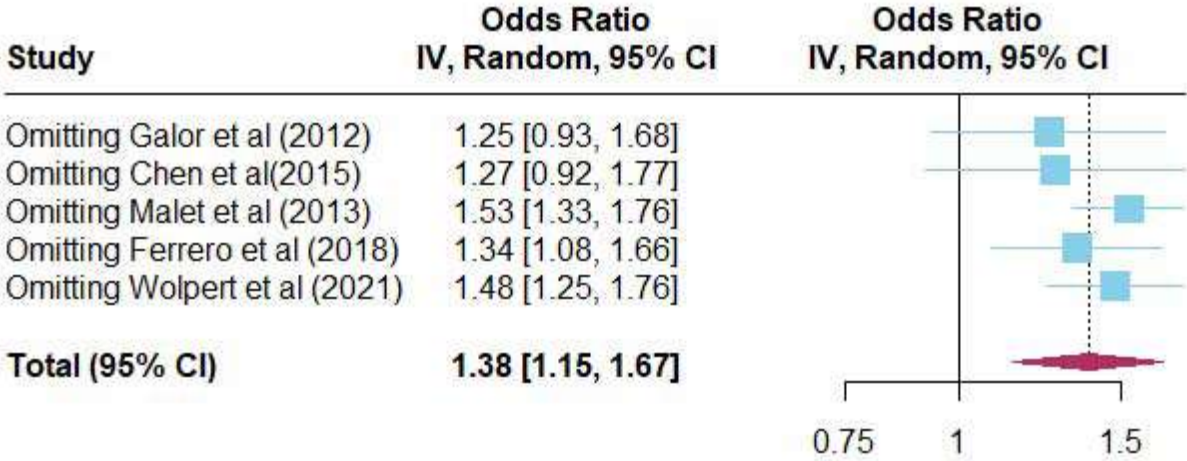


SUPPLEMENTAL DIGITAL CONTENT 57

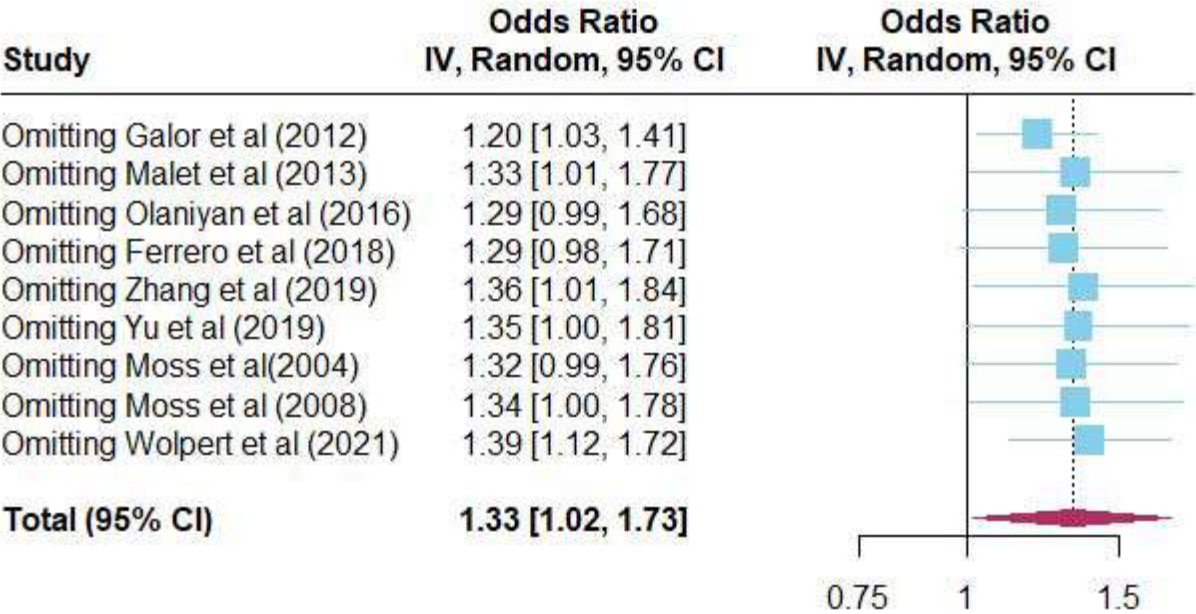
Sensitivity Analysis of Thyroid Disease



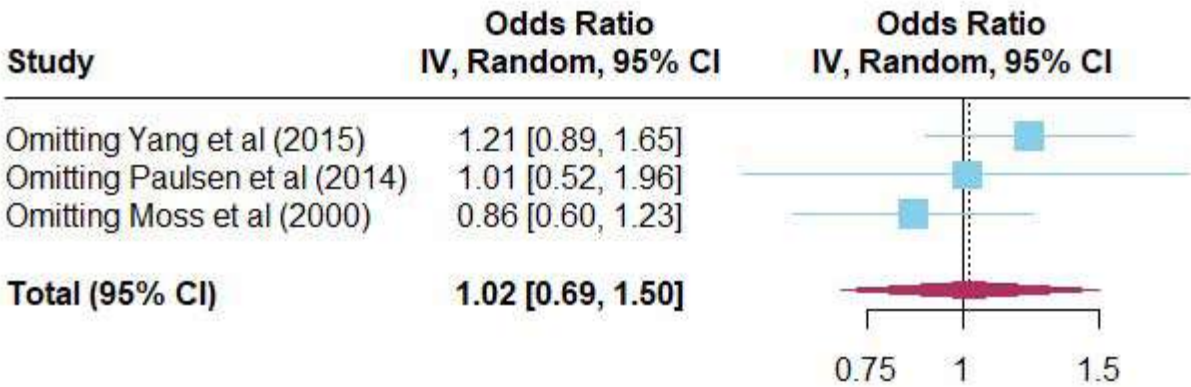
Sensitivity Analysis of Betablockers



Sensitivity Analysis of Diuretics

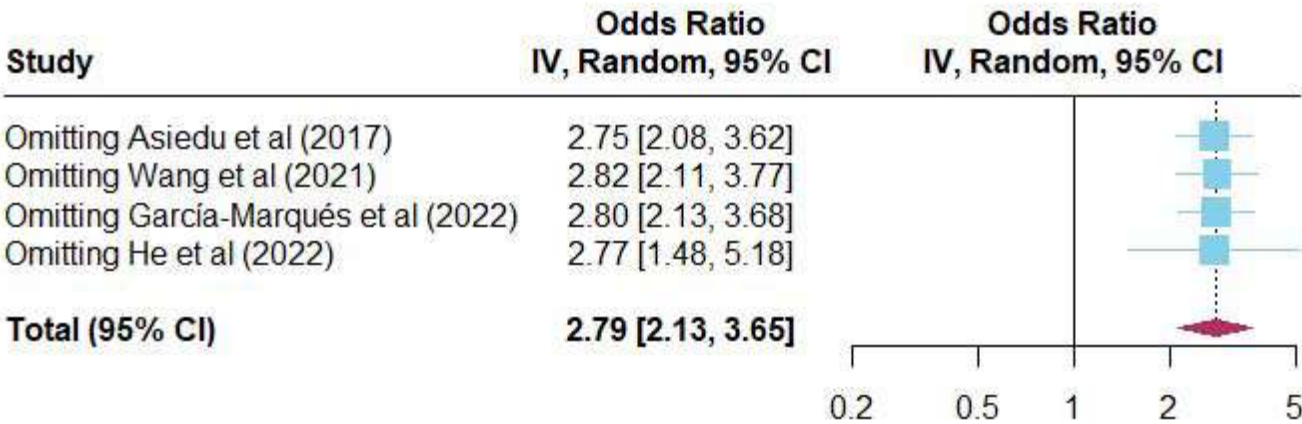


Sensitivity Analysis of Multivitamins

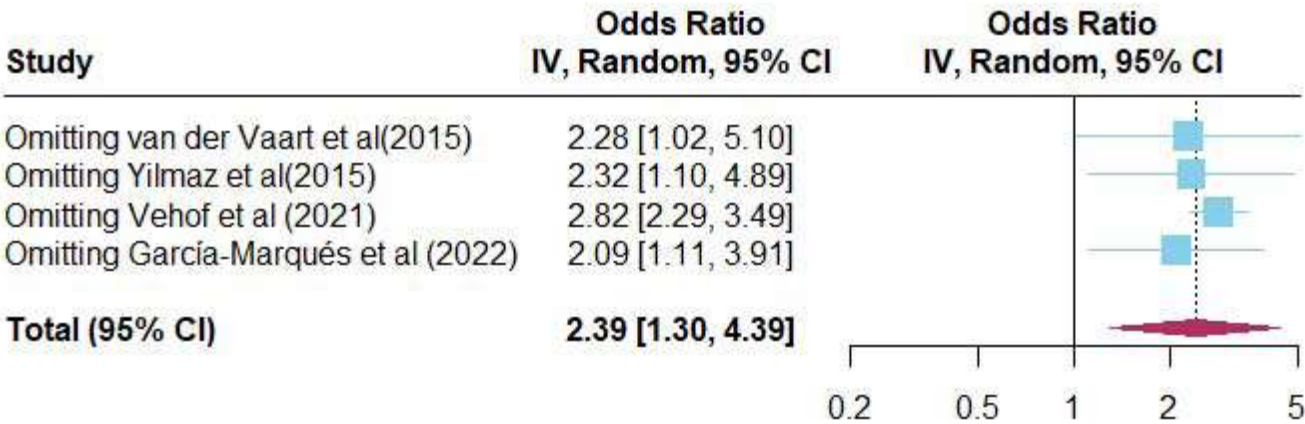


SUPPLEMENTAL DIGITAL CONTENT 61

Sensitivity Analysis of Oral Contraceptives

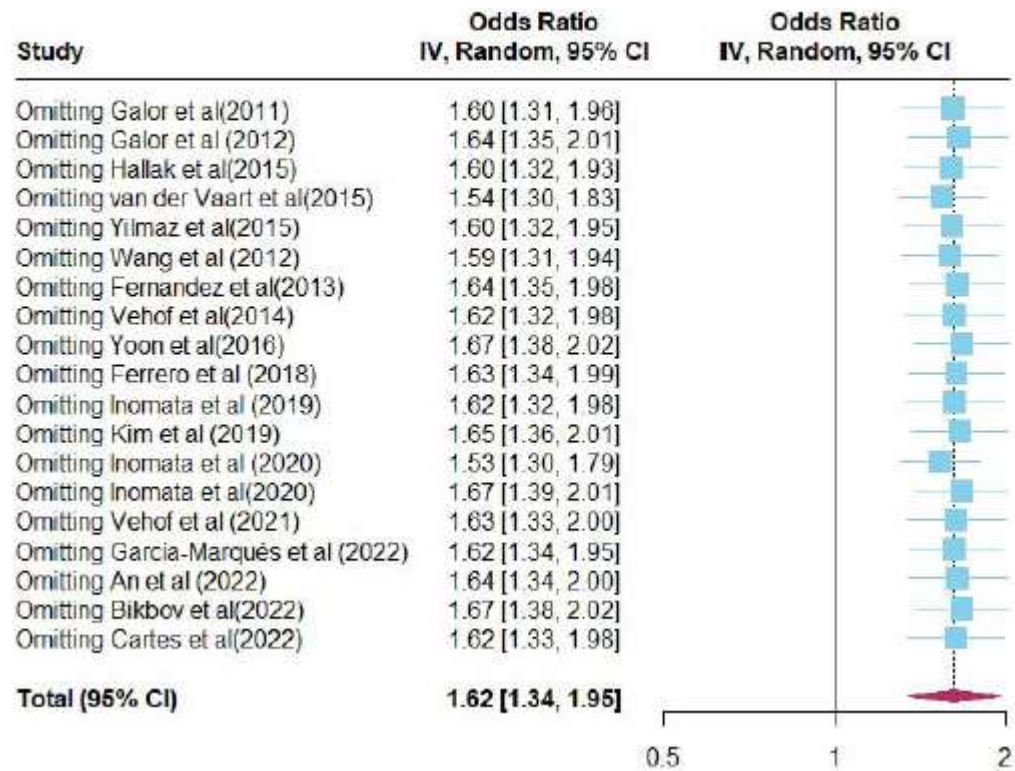


Sensitivity Analysis of Anxiety

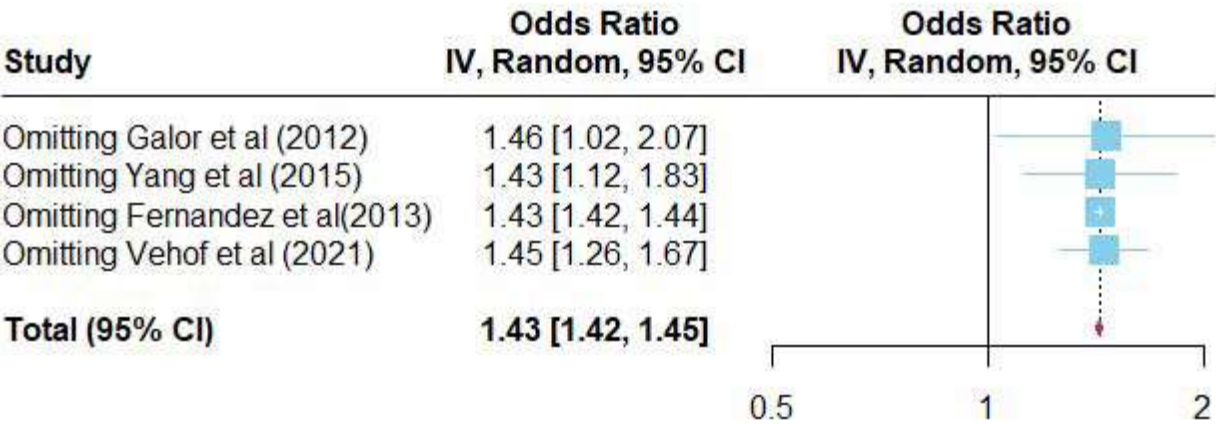


SUPPLEMENTAL DIGITAL CONTENT 63

Sensitivity Analysis of Depression



Sensitivity Analysis of Post-Traumatic Stress Disorder (PTSD)



Sensitivity Analysis of Stress

