

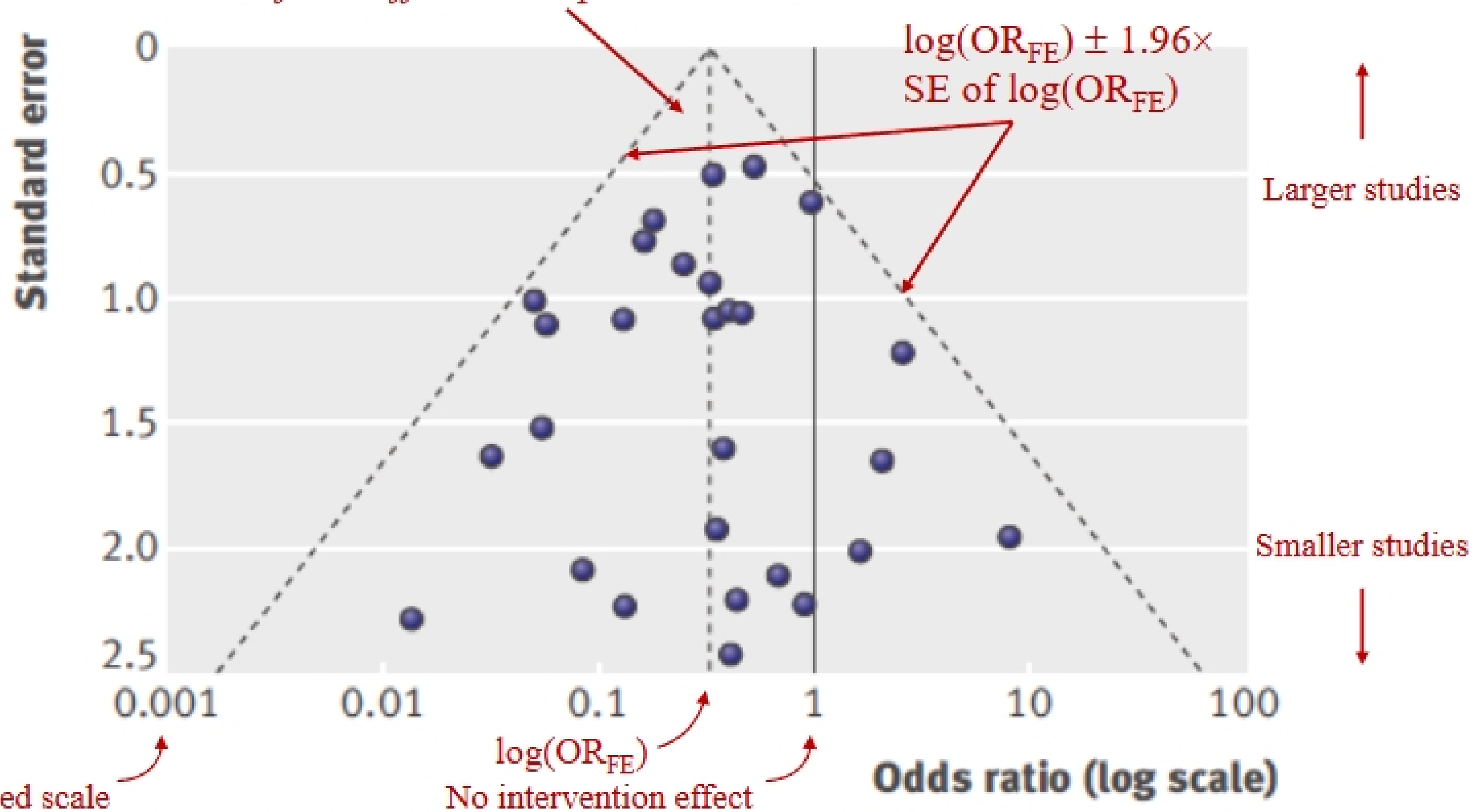
**BIOSTATISTICS 740 (BIOS7400)**  
**Clinical Trials**

**Lecture 25**

**Cluster Sampling,  
Data Management and Data Collection using  
PDAs in Clinical Trials**

# Symmetrical Funnel Plot

The *triangle* will include about 95% of studies if *no bias* is present and the *fixed-effect assumption* is valid



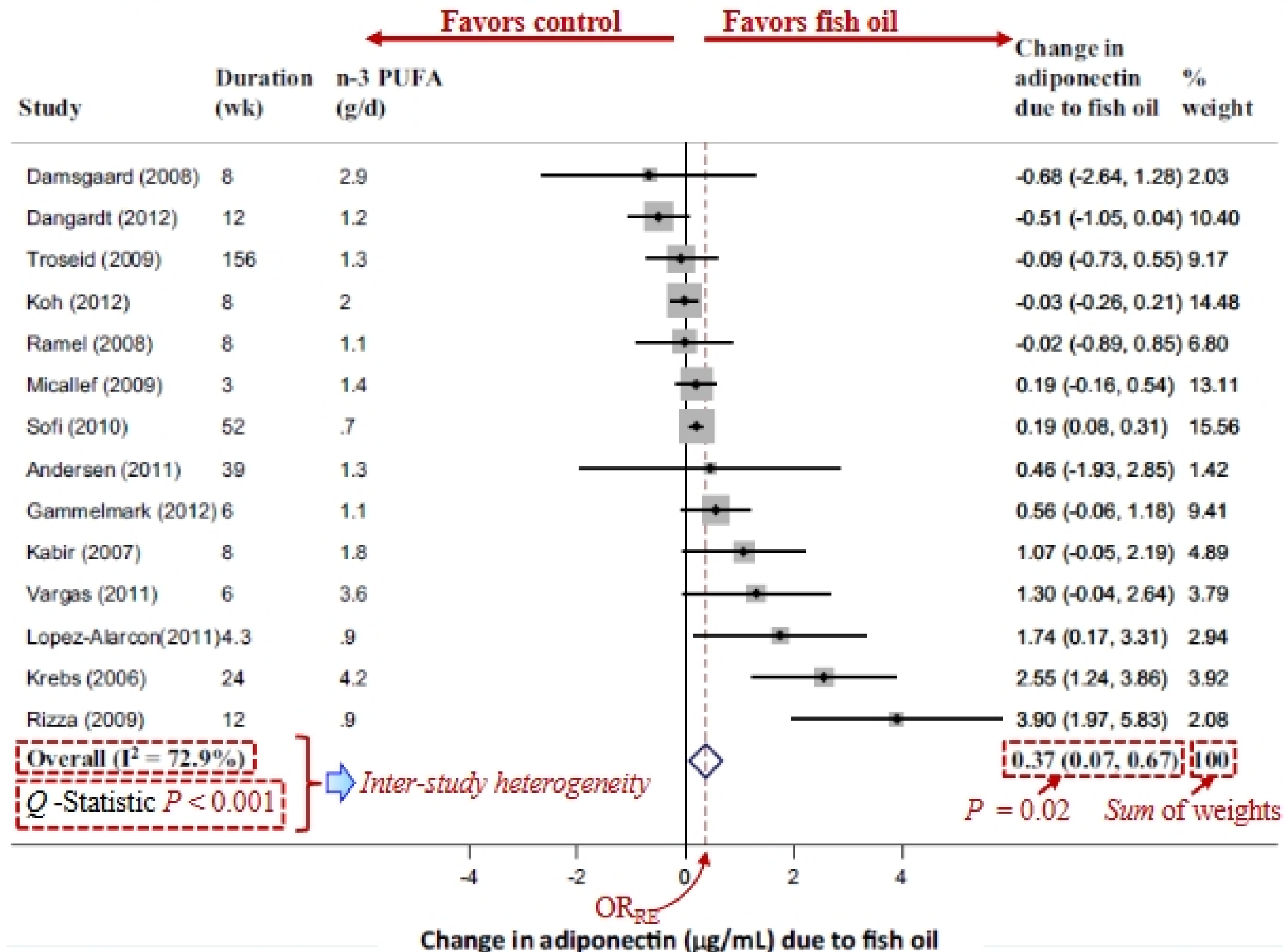
In the absence of *bias* and *between-study heterogeneity*, the *scatter* will be due to *sampling variation alone* and the plot will resemble a *symmetrical inverted funnel*

Wu JH, Cahill LE, Mozaffarian D. Effect of fish oil on circulating adiponectin: a systematic review and meta-analysis of randomized controlled trials. *J Clin Endocrinol Metab.* 2013;98:2451-9. PMID: 23703724.

# Meta-Analysis Example

## Forest plot

of change in circulating adiponectin in 14 RCTs of fish oil consumption



Wu JH, Cahill LE, Mozaffarian D. Effect of fish oil on circulating adiponectin: a systematic review and meta-analysis of randomized controlled trials. J Clin Endocrinol Metab. 2013;98:2451-9. PMID: 23703724.