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NOVEL METHODS FOR DOSE-RESPONSE META-ANALYSIS

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NOVEL METHODS FOR DOSE-RESPONSE META-ANALYSIS

THESIS FOR DOCTORAL DEGREE (Ph.D.)

By

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“Dedication text.”
—Author’s name, *Source*

Abstract

My abstract:
In Paper I,
In Paper II,
In Paper III,
In Paper IV,
In conclusion,

List of publications

I. Andrea Discacciati, Alessio Crippa, and Nicola Orsini
Goodness of fit tools for dose–response meta-analysis of binary outcomes
Research Synthesis Methods 2015; in press

The articles will be referred to in the text by their Roman numerals, and are reproduced in full at the end of the thesis.

Related publications

- Alessio Crippa, Andrea Discacciati, Nicola Orsini, and Viktor Oskarsson
  Letter: coffee consumption and gallstone disease—a cautionary note on the assignment of exposure values in dose–response meta-analyses
  Alimentary Pharmacology & Therapeutics 2015; in press

Contents

List of abbreviations

AIC	Akaike Information Criterion
CI	Confidence Interval
df	Degrees of Freedom
GLS	Generalized Least Squares
GRSS	Generalized Residual Sum of Squares
GTSS	Generalized Total Sum of Squares
FP2	Second-degree Fractional Polynomials
HRR	Hazard Rate Ratio
IR	Incidence Rate
IRR	Incidence Rate Ratio
logRR	log–Relative Risk
MR	Mortality Rate
MRR	Mortality Rate Ratio
RCS	Restricted Cubic Splines
R^2	Coefficient of Determination
RR	Relative Risk
WLS	Weighted Least Squares

Chapter 1

Introduction

Write my introduction

Chapter 2

Background

Write my background with subsections

2.1 Title Subsection

2.1.1 Title Subsubsection

Title Subsubsubsection

Chapter 3

Aims of the thesis

The overall aims of this thesis were to <>.

More specifically, the aims were:

- <>
- <>
- <>
- <>

Chapter 4

Materials and methods

Write materials and methods with subsections as in the background section

Chapter 5

Results

Write the results with subsections as in the background section

Chapter 6

Discussion

Write the discussion with subsections as in the background section

Chapter 7

Conclusions

Write summary of conclusions.

More specifically we conclude the following:

- <>
- <>
- <>
- <>

Chapter 8

Future research

Based on the conclusions presented in this thesis, future research includes:

- <>
- <>
- <>

Appendix A

Supplementary figures

Figures.

Appendix B

Supplementary tables

Tables.

References

Crippa, A., P. Khudyakov, M. Wang, N. Orsini, and D. Spiegelman. 2016. A new measure of between-studies heterogeneity in meta-analysis. *Statistics in Medicine* 35(21): 3661–3675.

Crippa, A., and N. Orsini. 2016a. Dose-response meta-analysis of differences in means. *BMC medical research methodology* 16: 91.

———. 2016b. Multivariate Dose–Response Meta-Analysis: The dosresmeta R Package. *Journal of Statistical Software, Code Snippets* 72(1): 1–15.

Discacciati, A., A. Crippa, and N. Orsini. 2015. Goodness of fit tools for dose-response meta-analysis of binary outcomes. *Research Synthesis Methods* .

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