1. Record Nr. UNINA9910488710403321 Principles and practice of systematic reviews and meta-analysis / / **Titolo** edited by Sanjay Patole Pubbl/distr/stampa Cham, Switzerland:,: Springer,, [2021] ©2021 **ISBN** 3-030-71921-9 1 online resource (189 pages): illustrations Descrizione fisica Disciplina 610.72 Soggetti Systematic reviews (Medical research) Ressenyes sistemàtiques (Investigació mèdica) Metaanàlisi Llibres electrònics Lingua di pubblicazione Inglese **Formato** Materiale a stampa Monografia Livello bibliografico Nota di bibliografia Includes bibliographical refences. Nota di contenuto Chapter 1. Systematic reviews, meta-analysis, and evidence-based medicine -- Chapter 2. Literature search for systematic reviews --Chapter 3. Assessing and exploringheterogeneity -- Chapter 4. Assessment of the risk of bias -- Chapter 5. Assessment of publication bias -- Chapter 6. Data extraction from included studies -- Chapter 7. Fixed effect versus random effects model for meta-analysis -- Chapter 8. Forest plots in a meta-analysis -- Chapter 9. Subgroup and sensitivity analyses -- Chapter 10. Rating certainty of the evidence using GRADE guidelines -- Chapter 11. Reporting of meta-analysis (PRISMA) -- Chapter 12. Critical appraisal of systematic reviews and meta-analysis -- Chapter 13. Systematic reviews of non-randomised studies -- Chapter 14. Individual participant data (IPD) meta-analysis -- Chapter 15. Systematic reviews of diagnostic test accuracy --Chapter 16. Network meta-analysis -- Chapter 17. Systematic reviews of animal studies. Evidence based medicine is at the core of modern medicine. It involves Sommario/riassunto the integration of individual clinical expertise with the best available

clinical evidence from systematic research and patient's values and expectations. Systematic reviews offer a summary of the best available

evidence. They are the most reliable and comprehensive statement about what works. Written by clinical academics from Australia, UK. USA, and Switzerland, this contributed volume introduces the readers to the principles and practice of systematic reviews and meta-analysis. It covers the various steps involved in systematic reviews including development of a focused question and the strategy for conducting a comprehensive literature search, identifying studies addressing the underlying question, assessment of heterogeneity and the risk of bias in the included studies, data extraction, and the approach to metaanalysis. Crucial issues such as selecting the model for meta-analysis, generating and interpreting forest plots, assessing the risk of publication bias, cautions in the interpretation of subgroup and sensitivity analyses, rating certainty of the evidence using GRADE guideline, and standardized reporting of meta-analysis (PRISMA) are covered in detail. Every attempt is made to keep the narrative simple and clear. Mathematical formulae are avoided as much as possible. While the focus of this book is on systematic reviews and metaanalyses of randomised controlled trials (RCTs), the gold standard of clinical research, the essentials of systematic reviews of non-RCTs, diagnostic test accuracy studies, animal studies, individual participant data meta-analysis, and network meta-analysis are also covered. Readers from all faculties of medicine will enjoy this comprehensive and reader friendly book to understand the principles and practice of systematic reviews and meta-analysis for guiding their clinical practice and research.