



## **2<sup>nd</sup> AME Italian Meeting**

Associazione Medici Endocrinologi

## **Joint Meeting with AACE**

American Association of Clinical Endocrinologists

*Reggio Emilia, Italy - November 8-10, 2002*



# **Clinical Symposia**

# **Methodological Issues**

**Chairman**

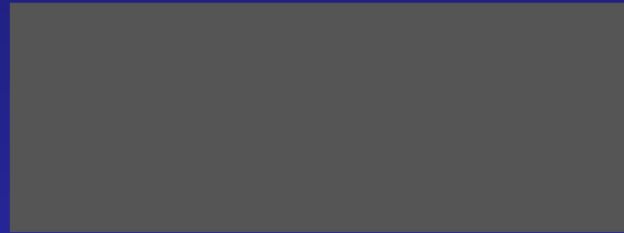
*Antonino Cartabellotta (Palermo, Italy)*

# Effectiveness of Health Interventions

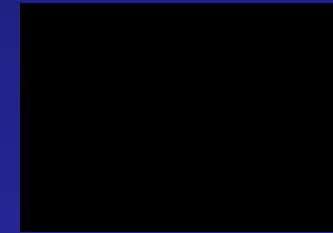
Effective



Grey zone



Ineffective/Harmful

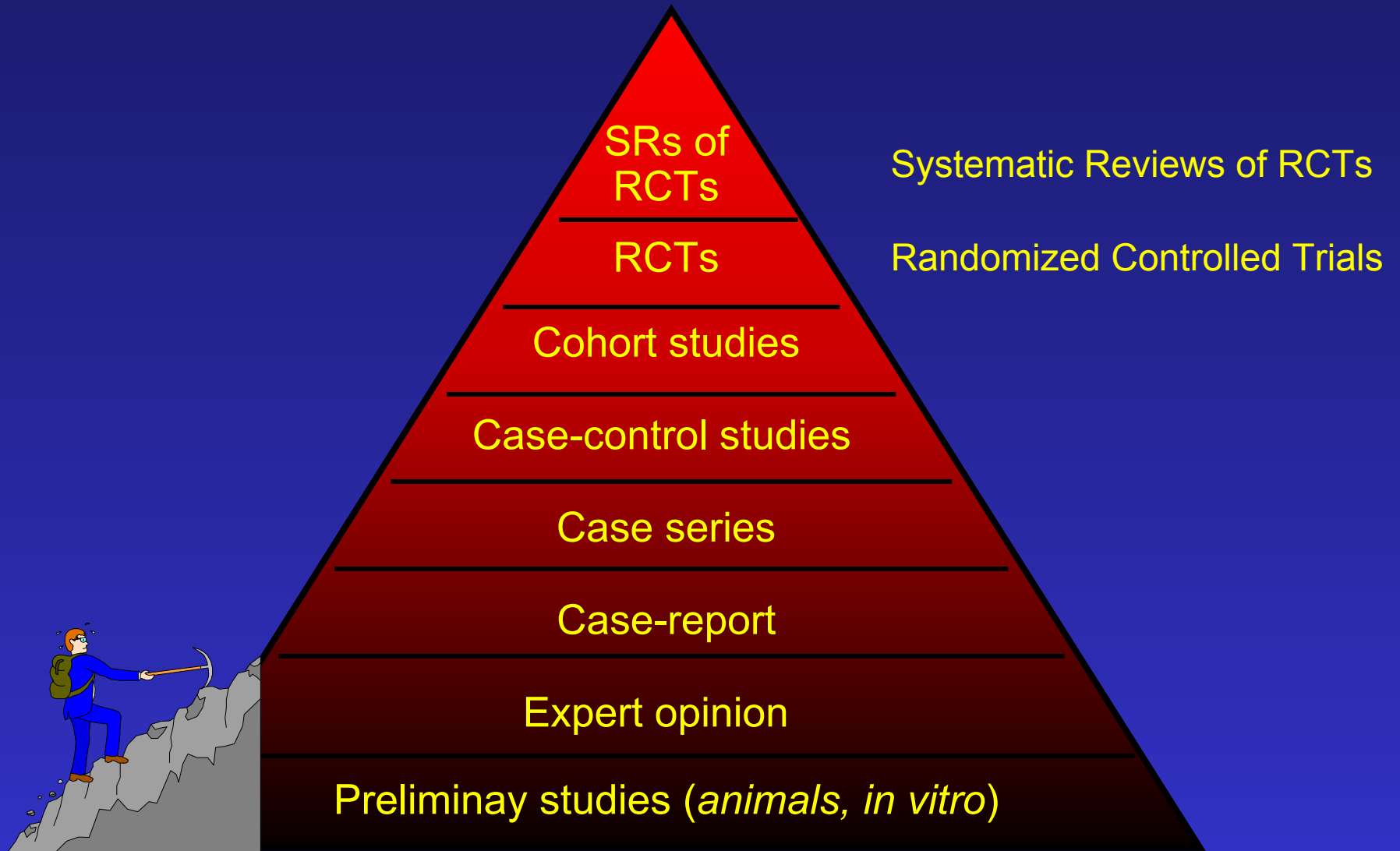


Research

CLINICAL PRACTICE II

*Cartabellotta A, et al.  
Ann It Med Int 1996*

# Hierarchy of Evidence



# Levels of evidence

- |                 |                                                                                                                                                                                                                     |
|-----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 <sup>++</sup> | High quality meta-analyses, systematic reviews of randomised controlled trials (RCTs), or RCTs with a very low risk of bias                                                                                         |
| 1 <sup>+</sup>  | Well-conducted meta-analyses, systematic reviews of RCTs, or RCTs with a low risk of bias                                                                                                                           |
| 1 <sup>-</sup>  | Meta-analyses, systematic reviews of RCTs, or RCTs with a high risk of bias                                                                                                                                         |
| 2 <sup>++</sup> | High quality systematic reviews of case control or cohort studies<br>High quality case control or cohort studies with a very low risk of confounding or bias and a high probability that the relationship is causal |
| 2 <sup>+</sup>  | Well-conducted case control or cohort studies with a low risk of confounding or bias and a moderate probability that the relationship is causal                                                                     |
| 2 <sup>-</sup>  | Case control or cohort studies with a high risk of confounding or bias and a significant risk that the relationship is not causal                                                                                   |
| 3               | Non-analytic studies, e.g. case reports, case series                                                                                                                                                                |
| 4               | Expert opinion                                                                                                                                                                                                      |

# Grades of recommendations

**A** At least one meta-analysis, systematic review of RCTs, or RCT rated as 1<sup>++</sup> and directly applicable to the target population; *or*

A body of evidence consisting principally of studies rated as 1<sup>+</sup>, directly applicable to the target population, and demonstrating overall consistency of results

**B** A body of evidence including studies rated as 2<sup>++</sup>, directly applicable to the target population, and demonstrating overall consistency of results; *or*

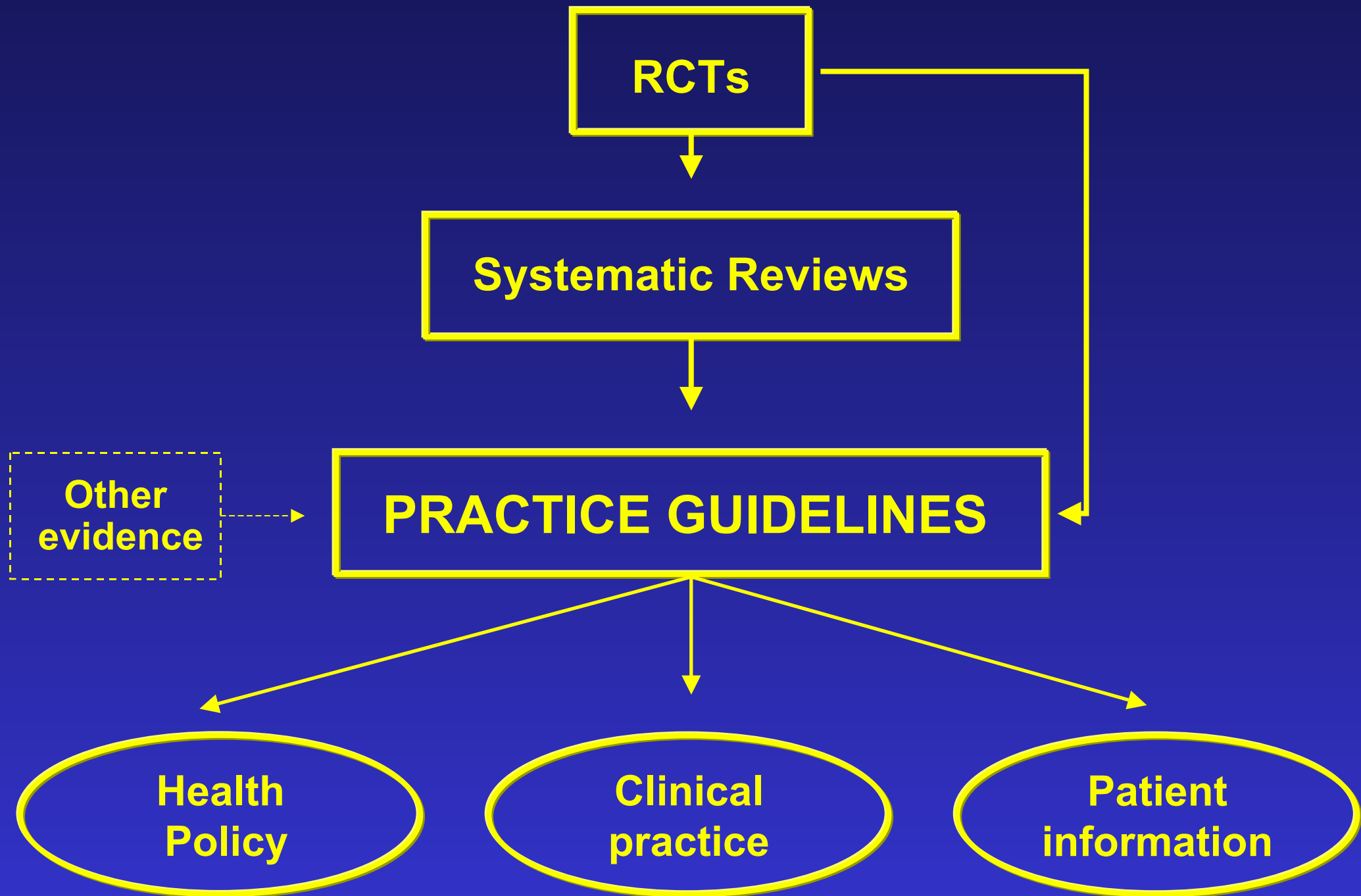
Extrapolated evidence from studies rated as 1<sup>++</sup> or 1<sup>+</sup>

**C** A body of evidence including studies rated as 2<sup>+</sup>, directly applicable to the target population and demonstrating overall consistency of results; *or*

Extrapolated evidence from studies rated as 2<sup>++</sup>

**D** Evidence level 3 or 4; *or*

Extrapolated evidence from studies rated as 2<sup>+</sup>



*Guidelines-based  
decision making*

*Knowledge-based  
decision making*

# 1. Searching: pre-appraised sources

## Practice Guidelines



- National Guideline Clearinghouse
- CMA Infobase
- SIGN
- Guidelines finder (UK)
- Other databases of PG
- MEDLINE

## Evidence-compendia



- *Clinical Evidence*  
(issue 7, August 2002)

## Systematic reviews



- *Cochrane Library* (issue 4, 2002)
- MEDLINE



# 1. Searching: primary studies

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**Randomized Controlled Trials**  
**Observational studies**



- MEDLINE
- *Best-Evidence 5*

## 2. Critical Appraisal

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### *Users' Guide to Biomedical Literature*

*JAMA 1993-2000*

### *AGREE Instrument*

*(Final version, September 2001)*

*[www.agreecollaboration.org](http://www.agreecollaboration.org)*

# Clinical Symposia Format

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- Presentation of clinical scenario and relevant questions 10'
- Remote control vote 5'
- Evidence-based data presentation 15'
- Comments of experts on topic-answers provided by the audience and on grey zones and clinical applicability of evidence 15'
- Open discussion and final remarks 15'

*The Electronic Library is free available at:*

**[www.gimbe.org/eventi/ame\\_aace](http://www.gimbe.org/eventi/ame_aace)**