Appraisal of CT Colonography

The Institute for Clinical and Economic Review (ICER)

Structure of the Day

- Introduction to ICER and purpose of today
- Introduction to CTC
- Comparative Clinical Effectiveness
- Comparative Value
- Evidence Ratings
- Close

ICER

- Diverse Funding
- Collaborative academic model
- First cycle of appraisals
  - IMRT for localized prostate cancer
  - Virtual colonoscopy
  - Pegfilgrastim

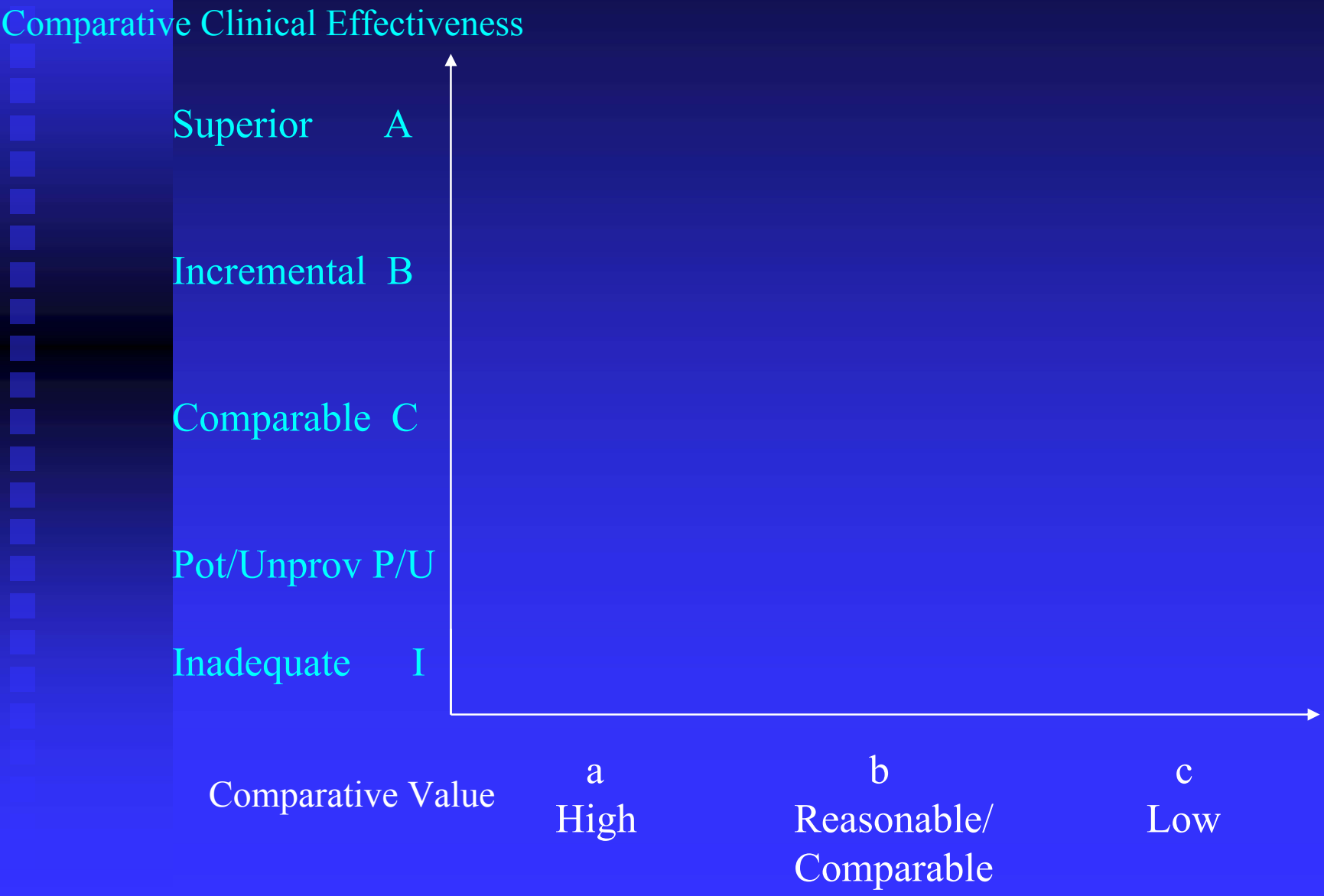
Goals of ICER

- Stimulate broader national policy to integrate value considerations into comparative effectiveness initiatives
- Test new methods for making technology assessments more accessible and actionable
- Support public dialogue

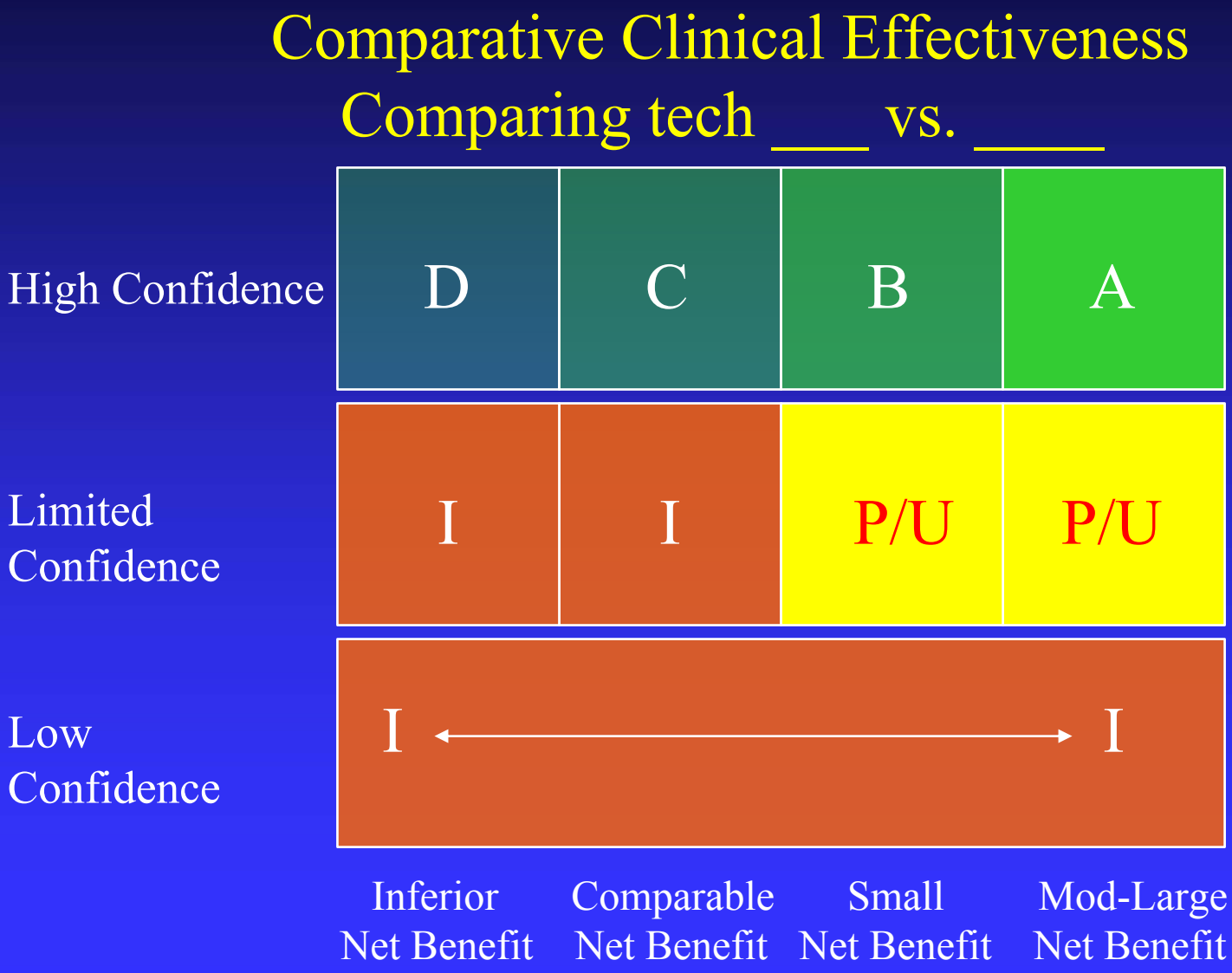
ICER Appraisal Process

- Topic selection
- Scoping committee
- Technology assessment
  - Clinical effectiveness
  - Comparative value
- Presentation to Evidence Review Group (ERG)
- Final Report with Integrated Evidence Rating

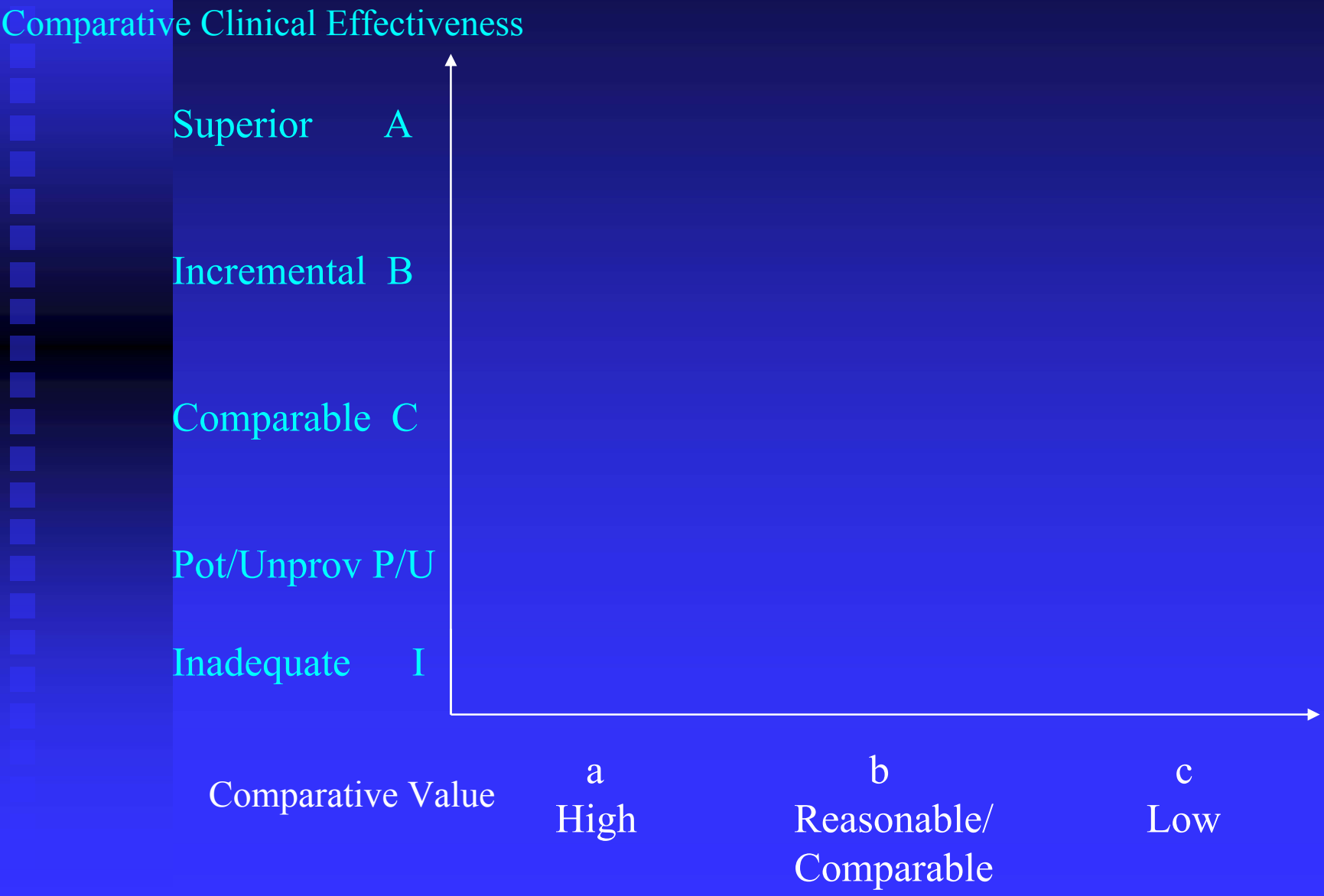
Integrated Evidence Rating



Comparative Clinical Effectiveness



Integrated Evidence Rating



Comparative Value Rating

Other considerations:

- Cost per key outcome(s)
- Relative cost to similar treatments/situations

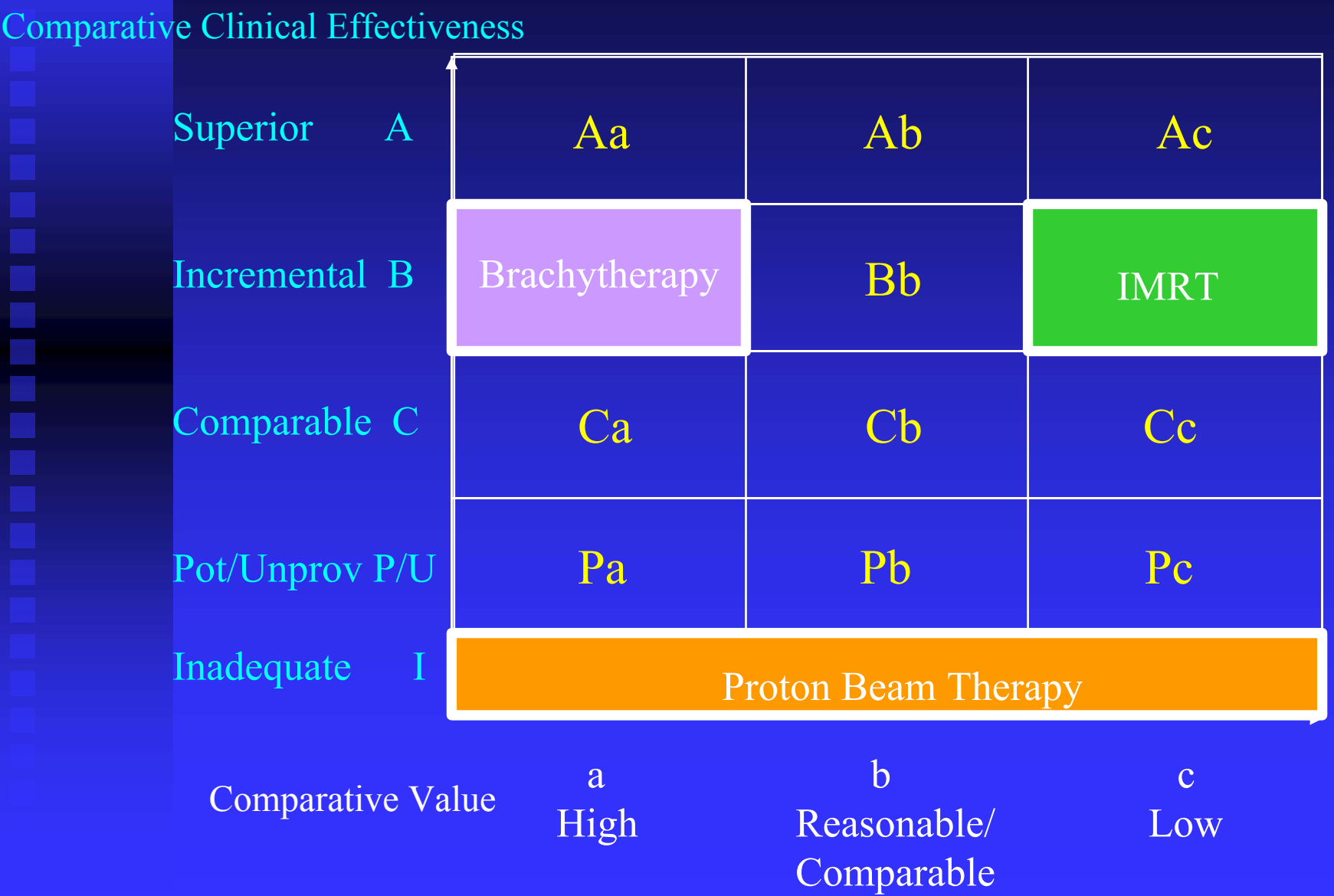
Integrated Evidence Rating

Comparative Clinical Effectiveness

	a High	b Reasonable/ Comparable	c Low
Superior A	Aa	Ab	Ac
Incremental B	Ba	Bb	Bc
Comparable C	Ca	Cb	Cc
Pot/Unprov P/U	Pa	Pb	Pc
Inadequate I	I	I	I

Comparative Value

Radiation treatments for prostate cancer



Purpose of the Day

- What is the structure and role of the Evidence Review Group?
  - Independent
  - Composition
  - Review of Draft Assessment
  - Recommend ratings of comparative clinical effectiveness and value

Introduction to CT Colonography

Mike Zalis, M.D.

Appraisal of CT Colonography

Background

Scope

- Patient population
- Comparator(s)
- Key questions
  - Technical issues
  - Sensitivity and specificity vs. OC
  - Safety
  - Patient acceptance
  - Extracolonic findings
  - Impact on population screening
  - Cost-effectiveness vs. no screening and vs. alternatives

Background

- Colorectal cancer screening
  - ~50% of eligible get screened
  - Non-invasive methods
  - Invasive methods: screening = prevention
  - Polyps
    - ≥ 10 mm
    - 6-9 mm
    - ≤ 5 mm

CT Colonography

- Potential benefits
  - Minimally invasive = fewer complications, no sedation
  - Availability and acceptance = More patients screened overall
  - ? Less costly overall
- Potential harms
  - False negatives
  - False positives
  - Hassle for patients of dual-phase testing
  - Loss to follow-up between positive CTC and OC
  - ? More costly overall

Assessing a diagnostic technology

- Evolution of data on devices/procedures
  - Technical effectiveness in selected patients and best hands
  - Generalizability to community patients and practice

Previous HTA on CTC

- MSAC (2006)
- ICSI (2006)
- NICE (2005)*
- BCBSA TEC (2004)
- CTAF (2004)

* Found evidence adequate to support its use

Clinical Guidelines

- NCCN (2007)
- ACR (2006)
  - CTC = 6 on appropriateness scale of 1-9
- ACS (2003)
- USPSTF (2002)
- ACG (2002)

Systematic Review of the Literature

Roberta Scherer, Ph.D

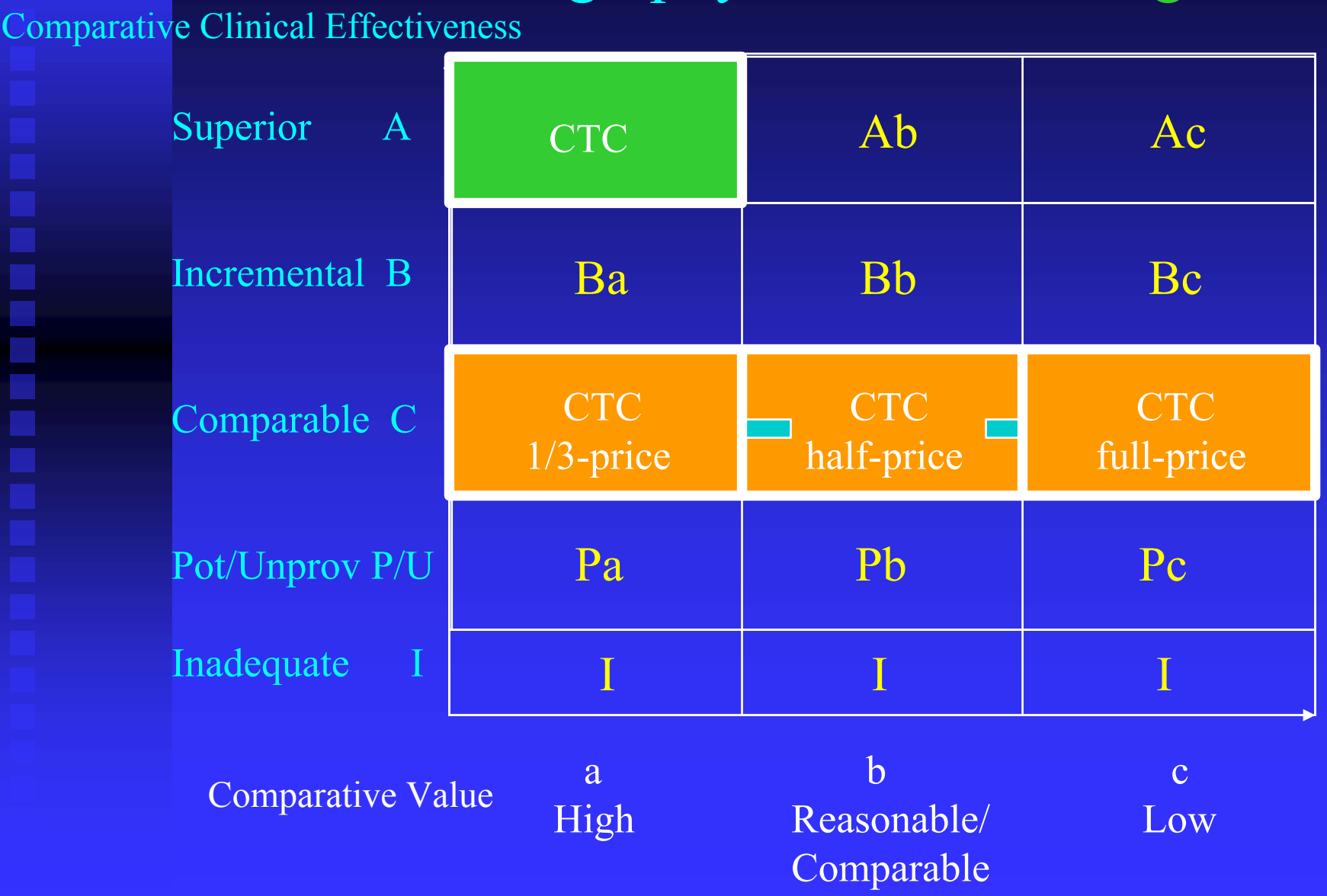
Draft Integrated Evidence Rating

Interpretation of Key Findings

- Safe, well accepted
- Test characteristics compare favorably to alternative screening methods other than OC
- Comparable to OC for large polyps
- Less sensitive for medium polyps but with q 5y strategy unlikely to miss many significant lesions
- Cost per LYS vs. no screening = $1,500
- Cost/LYS vs. OC
  - $630,000 if cost of CTC = colonoscopy
  - $100,000 if cost of CTC half price of colonoscopy
  - <$50,000 if cost of CTC one third of colonoscopy

Draft Integrated Evidence Ratings

CT Colonography vs. no screening and OC



ERG Feedback

- ICER format: useful?
- What information would you have liked?
  - Draft ratings before the meeting?
- What information did you not find useful?
- Process: a vote, consensus, or some blend for rating determination?
- Best role for patients, clinical experts, and manufacturers?
- Other?

Thank you!