Value
across the cancer care continuum

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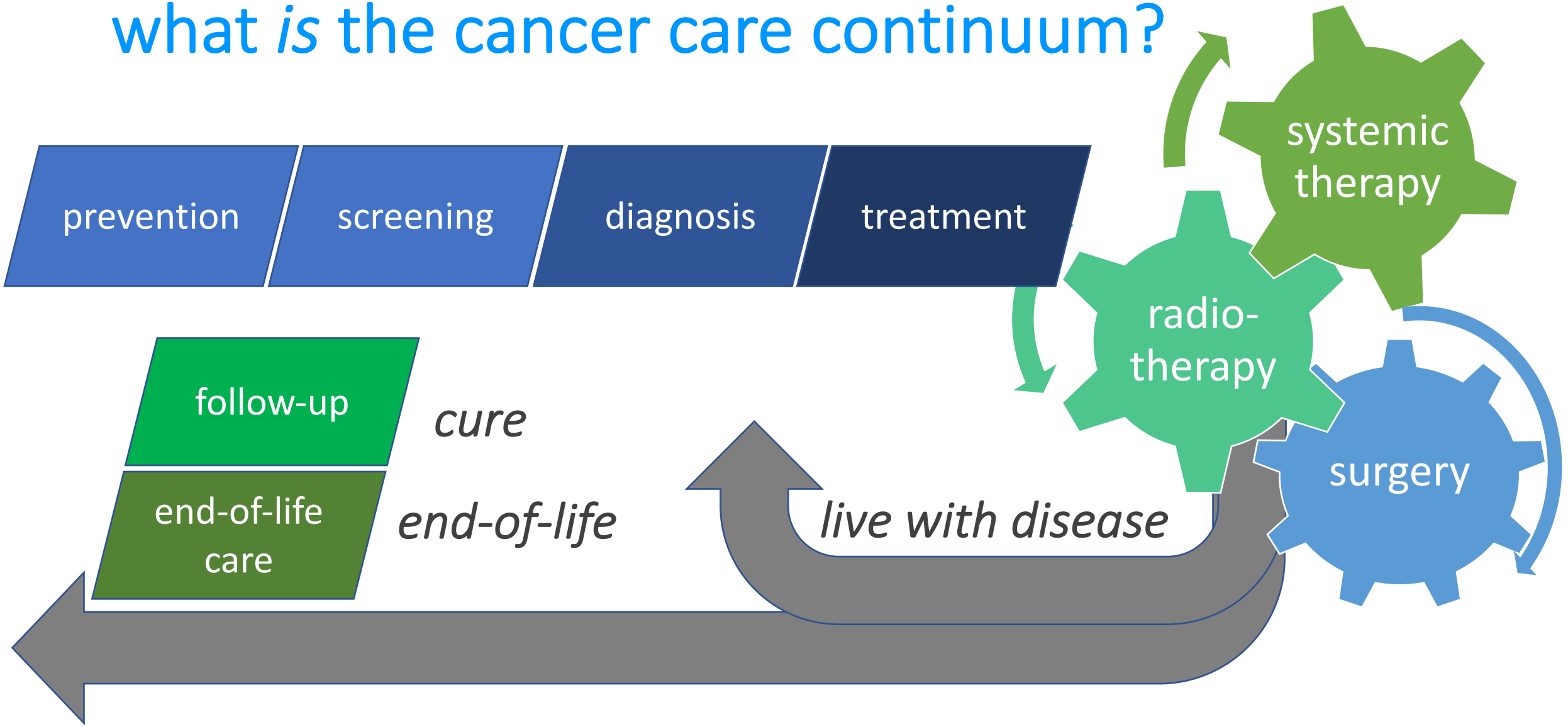
On behalf of
The European CanCer Organisation (ECCO)

ECCO represents the cancer care continuum…

24 member societies representing **150,000 HCPs**

advised by **17** patient associations through its **Patient Advisory Committee**

what *is* the cancer care continuum?



VALUE is delivered by HC professionals and service providers in every part of care

…and is united in concern about cancer patients' access to innovation

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Position Paper

Identifying critical steps towards improved access to innovation in cancer care: a European CanCer Organisation position paper

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1. Greater involvement of **patients** and **caregivers** in defining and assessing the value of innovation
2. A **whole-system**, **whole-patient** approach to guide investment in innovation
3. More efficient and harmonised **evaluation** of innovation
4. Investment in **real-world data** to guide investment in innovation
5. Promotion of an **innovation culture** within the delivery of cancer care
6. A **pan-European vision** on innovation (a vision and a will)

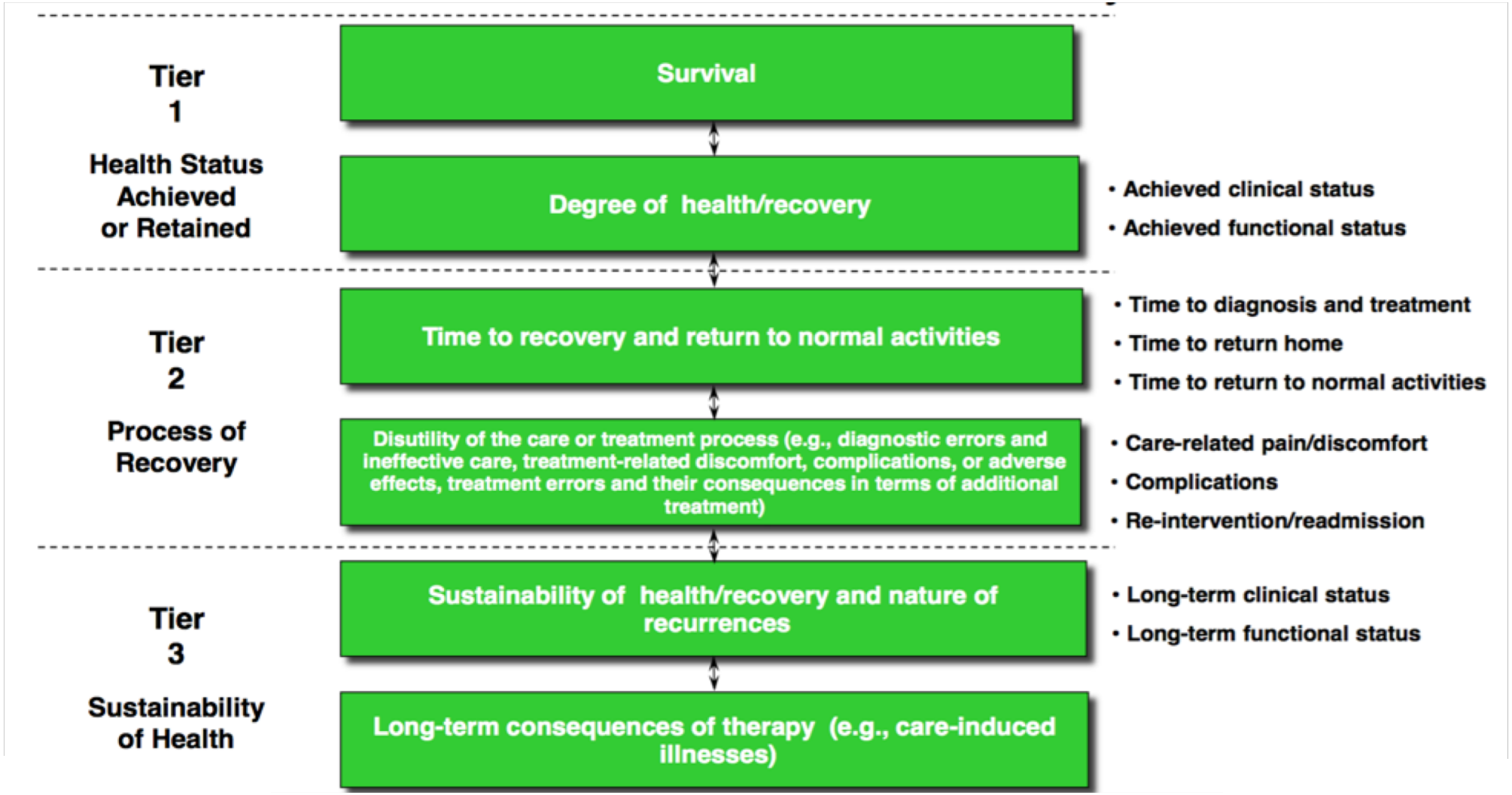
what *is* value based healthcare?

$$\text{Value} = \frac{\text{Health } \textbf{outcomes} \text{ that matter to } \textbf{patients}}{\text{Costs of delivering these outcomes}}$$

Porter M. N Engl J Med 2010

what do *patients* value?

the outcome measures hierarchy



Porter M. N Engl J Med 2010

VBHC *by* ECCO's member community

EUROPEAN SOCIETY OF RADIOLOGY

the value of imaging

ESTRO
European Society for RADIOTHERAPY & ONCOLOGY

HERO
Health Economics in Radiation Oncology

EUROPEAN ONCOLOGY NURSING SOCIETY

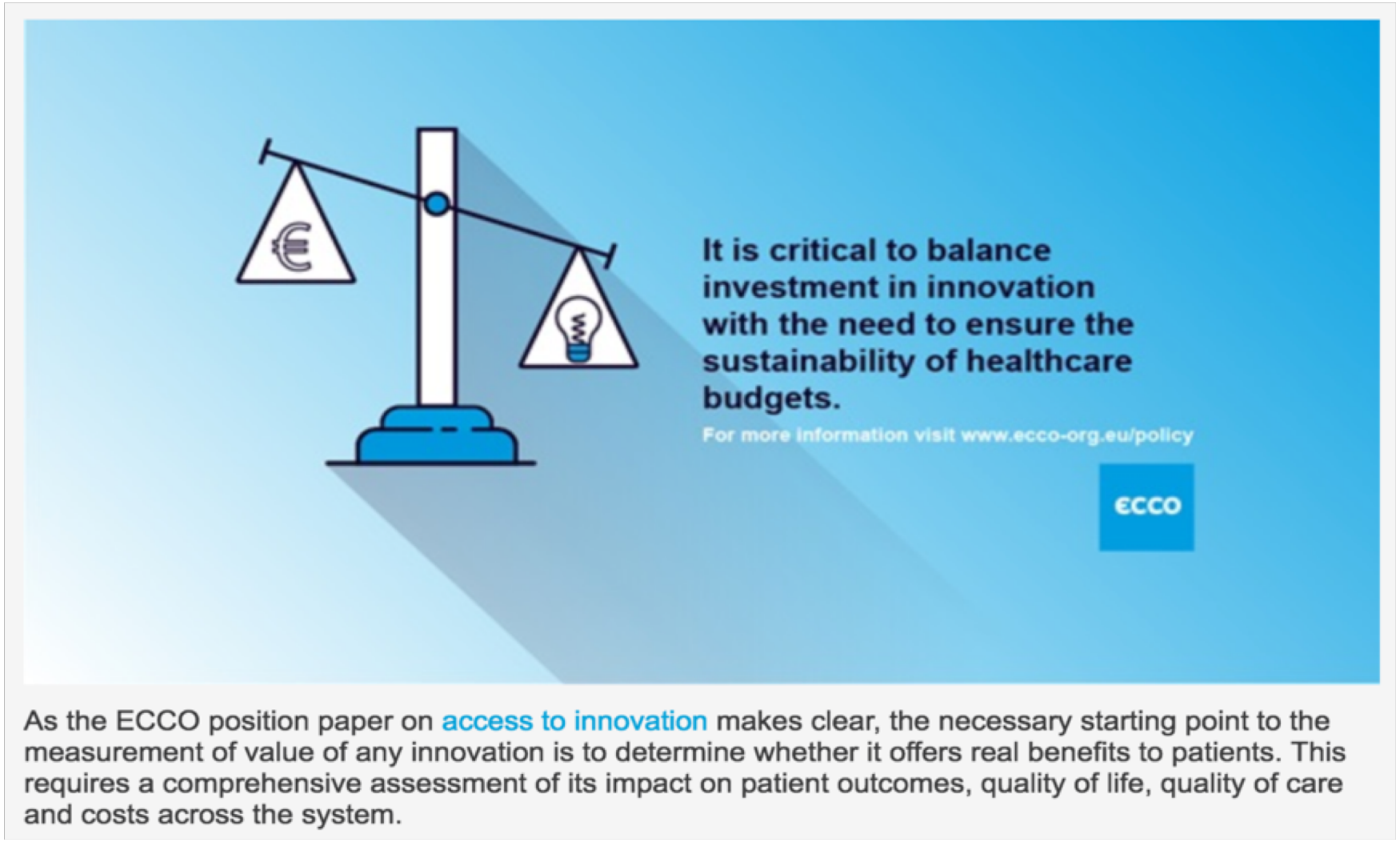
ReCAN
Recognising European Cancer Nursing

IPOS

Cost-Effectiveness of Psycho-Oncology

For more information:
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5621991/
https://www.estro.org/about/health-economics-in-radiation-oncology---hero/hero
http://www.cancernurse.eu/research/recan.html
https://www.eccosummit.eu/Programme

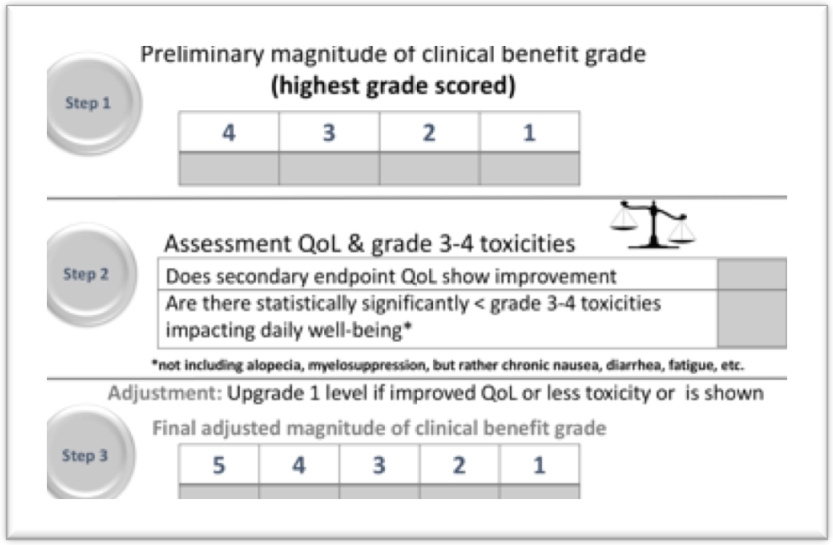
ECCO's Value-Based Healthcare Project



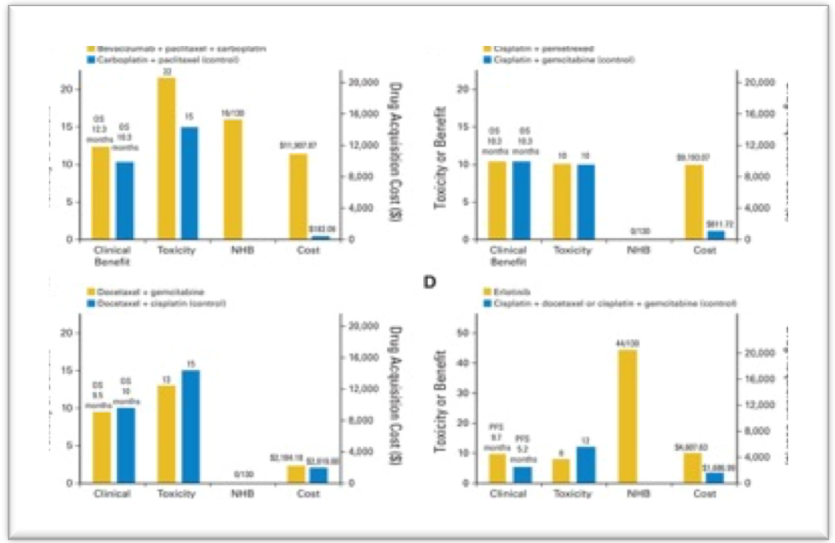
https://www.ecco-org.eu/Policy/Policy-Priorities/Access-to-Innovation/ECCO-Value-Based-Healthcare-project

3 primary questions:

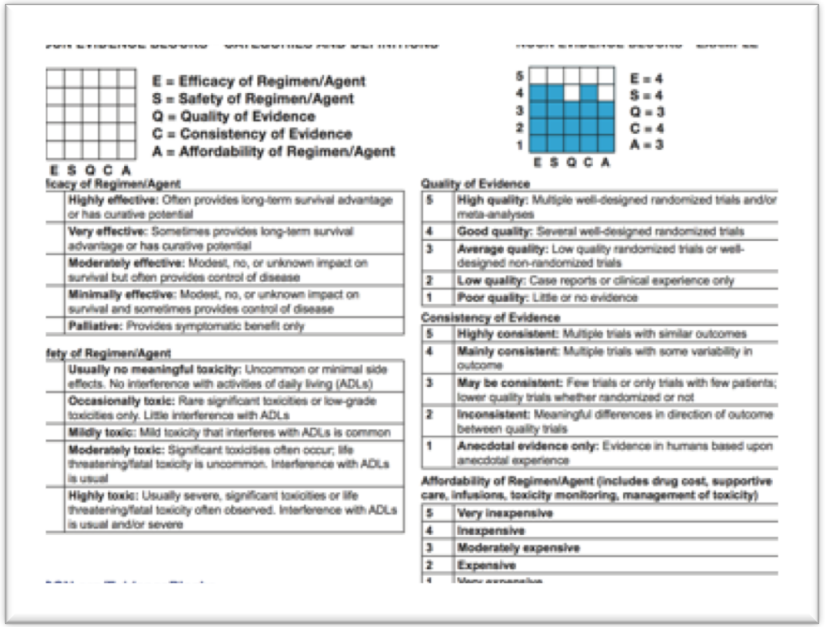
1. What **methodologies** for assessing value do currently exist?
2. Is the definition of value in these methodologies **applicable** to the non-pharmaceutical domain and if not, how should value be defined for non-pharmaceutical interventions?
3. What **recommendations/reflections** could be made to health policy decision-makers about their adjusted application to the non-pharmaceutical domain?



ESMO
GOOD SCIENCE
BETTER MEDICINE
BEST PRACTICE



ASCO® AMERICAN SOCIETY OF CLINICAL ONCOLOGY



most frequently used value scales in oncology
detailed appraisal of their methodologies
developed by professional and scientific bodies

NCCN National Comprehensive Cancer Network®

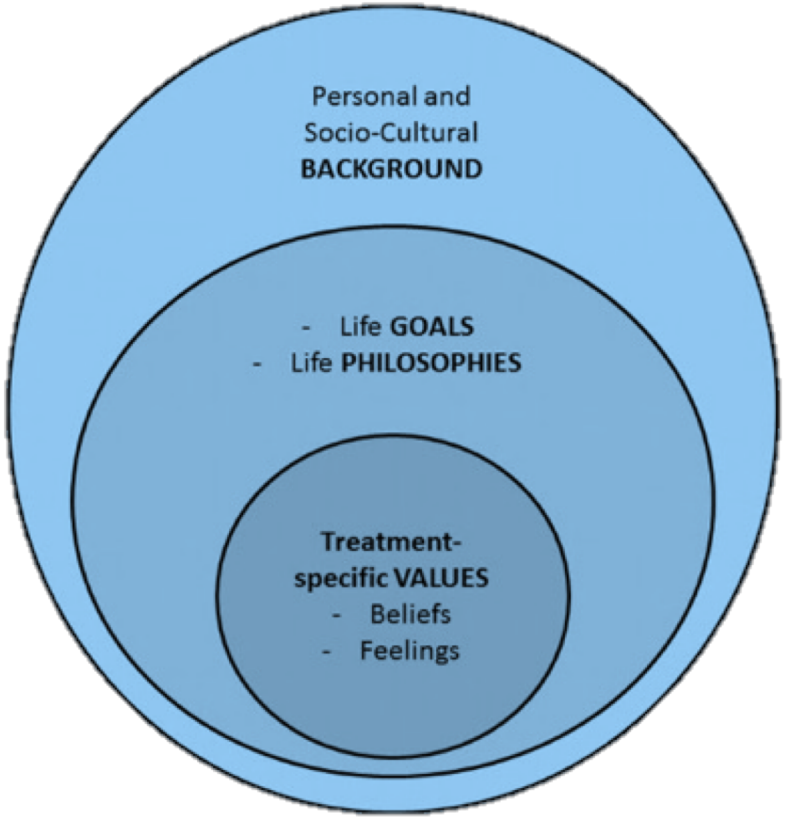
general aspects

		ESMO	ASCO	NCCN
Cancer Types	solid tumours	✓	✓	✓
	haematological malignancies	-	✓	✓
Treatment intent	curative/adjuvant	✓	✓	NS
	palliative	✓	✓	NS
Treatment modalities	systemic anticancer therapies	✓	✓	✓
	radiotherapy	-	-	-
	surgery	-	-	-
Development Team	physicians	✓	✓	✓
	nurses	-	-	-
	epidemiologists	-	-	-
	statisticians	✓	NS	-
	patients	-	-	-
	patient advocates	-	-	-
	public	-	-	-
Intended Users/Stakeholders	patients	-	✓	✓
	providers	-	✓	✓
	payers	✓	-	-
	policy makers	✓	-	-
	public	-	✓	-

the importance of the *patient* perspective

clinical impact is defined for populations, not for individual patients

- values vary between cancers and stages
- values differ between groups & individuals
- values shift over time
- values vary with education, age, gender
- values are impacted by care-giver burden



Addario et al. Health Expectations. 2017

endpoints

		ESMO	ASCO	NCCN
key criteria VBHC	outcome	efficacy	efficacy	efficacy & effectiveness
	cost	-	direct cost	affordability
clinical endpoints	overall survival	✓	✓	NS
	progression-free survival	✓	✓	NS
	disease-free survival	✓	✓	NS
	treatment-free survival	-	✓	NS
	cause specific survival	-	-	-
	response rate	-	✓	-
	treatment-related mortality	-	-	-
	local control	-	-	NS
	reintervention rate	-	-	-
	quality of life	✓	-	-
	toxicity/safety*	✓	✓	✓
	palliation of symptoms	-	✓	✓

which endpoints?

The three major perspectives in evaluating clinical benefit and value.

Stakeholders	Priorities	Availability biases
Patient	Cure	Prior experiences from relatives, friends and acquaintances
	Long-term disease free survival	Information by media
	Long-term survival	Prejudices and personal beliefs
	Well-being, getting better	Possibility effect
	Continuing daily life	
	Disease control	
	Doing something	
Provider (doctors, hospital)	Cure	Scientific conformism
	Patients' satisfaction	Clinical conformism
	Symptoms palliation	Prior experiences
	HR and gains in median OS, PFS	Response to therapy
	Long-term OS PFS rates	Non-miraculistic beliefs
	Tumour responses	Possibility effect
	Doing something	
Payer	Cost-effectiveness	Economical perspective
	Cost benefit	Scientific perspective
	Public health relevance	Media impact
	Costs	Marginal cost

Abbreviations: HR, hazard ratio; OS, overall survival; PFS, progression-free survival.

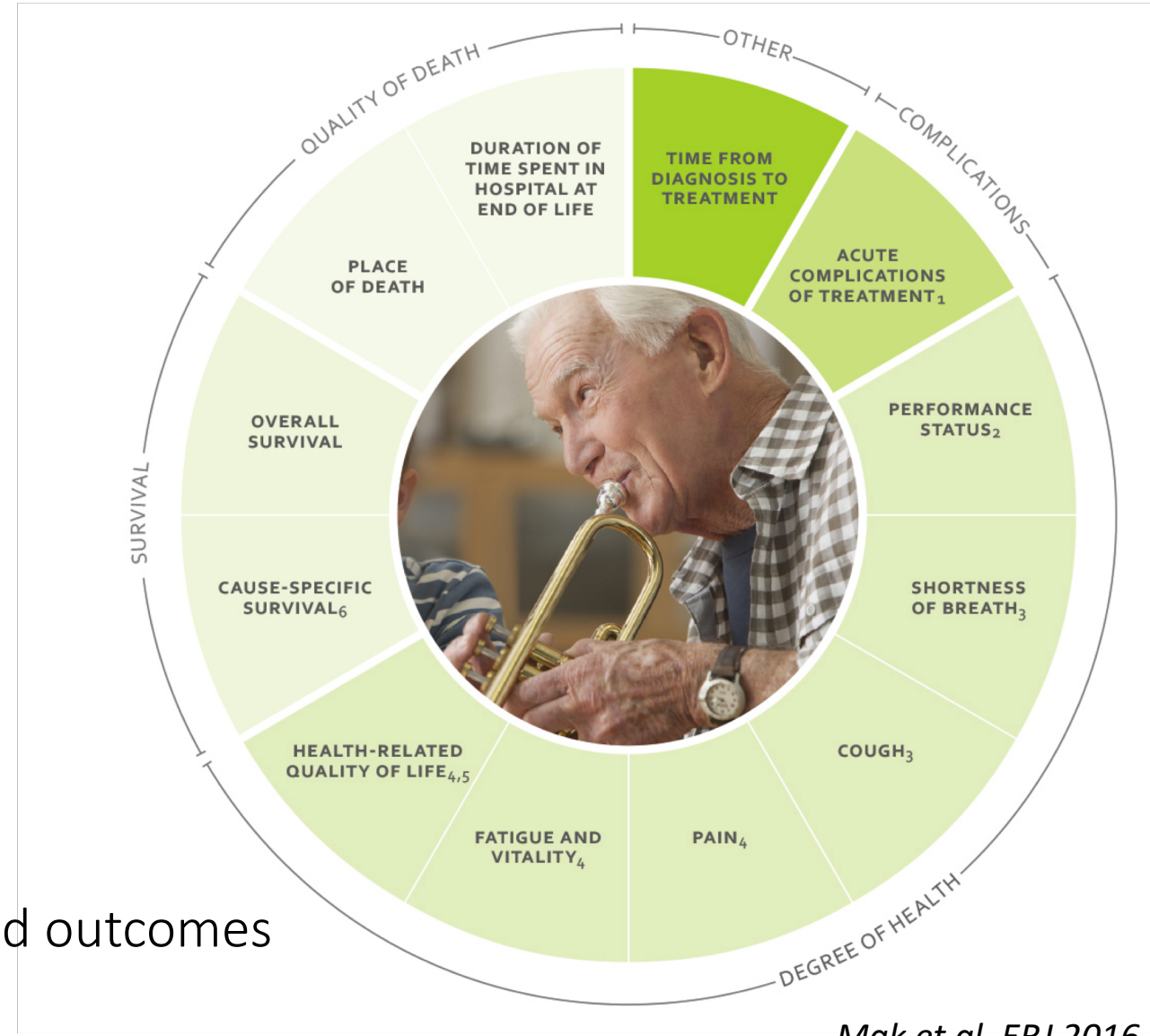
Sobrero et al, EJC 2017

which endpoints?

ICHOM

standard sets of patient-centred outcomes

process indicators and efficiency
acute and long-term complications
survival, QoL and quality of death
clinical, administrative and patient-reported outcomes

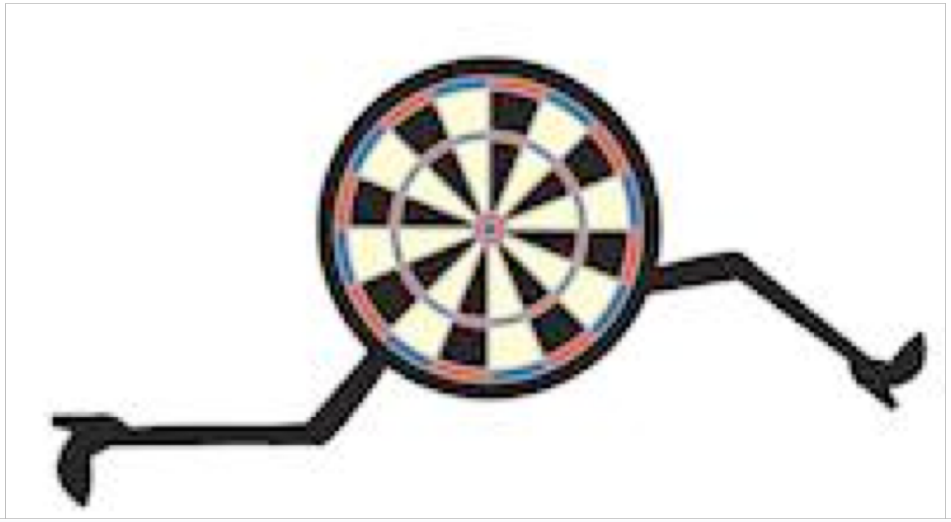


Mak et al. ERJ 2016

level of evidence

	ESMO	ASCO	NCCN
meta-analyses	-	-	✓
phase 3 trials	✓	✓	✓
phase 2 trials	✓	-	✓
cohort studies	-	-	NS
case control studies	-	-	NS
case series	-	-	NS
expert opinion	-	-	✓

evidence generation in radiotherapy



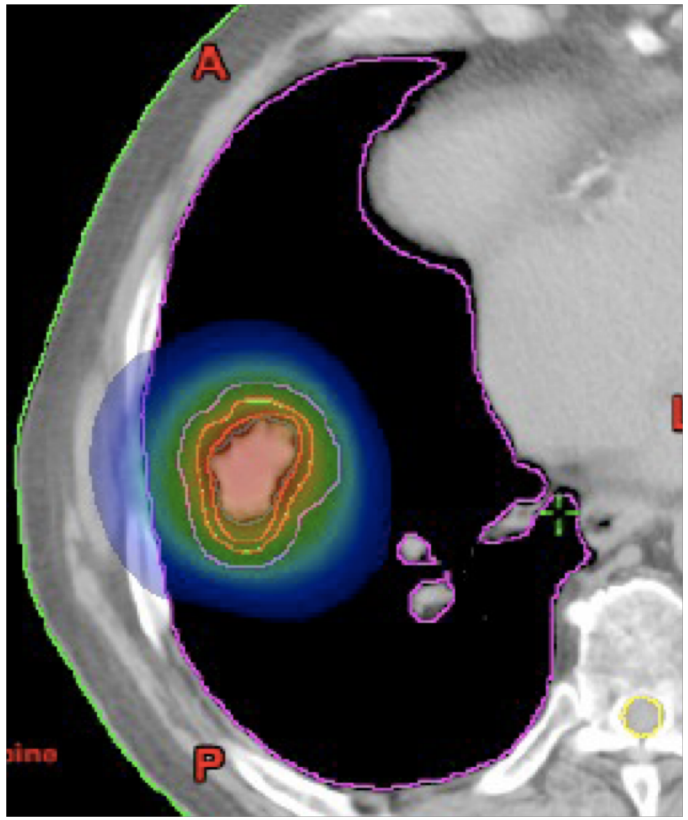
changing radiation technology
changing imaging modalities
changing patient population
changing disease presentation
changing surgical techniques
changing systemic treatment

technology and techniques
outcome

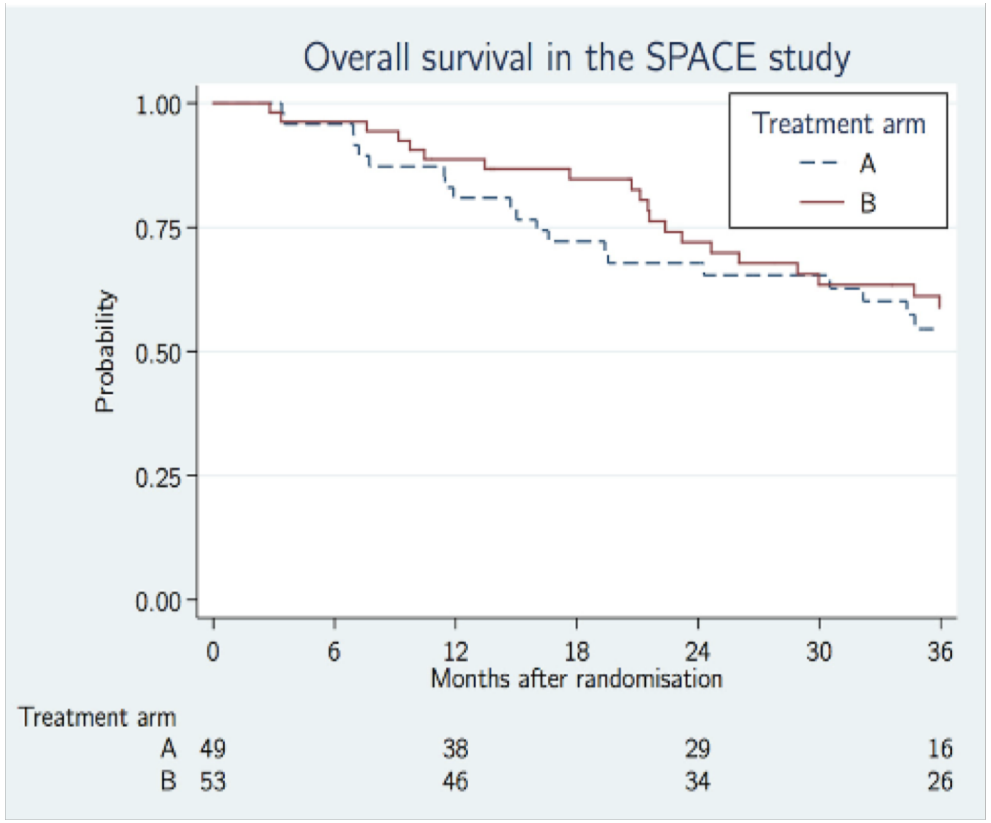
acute and long-term toxicity

time

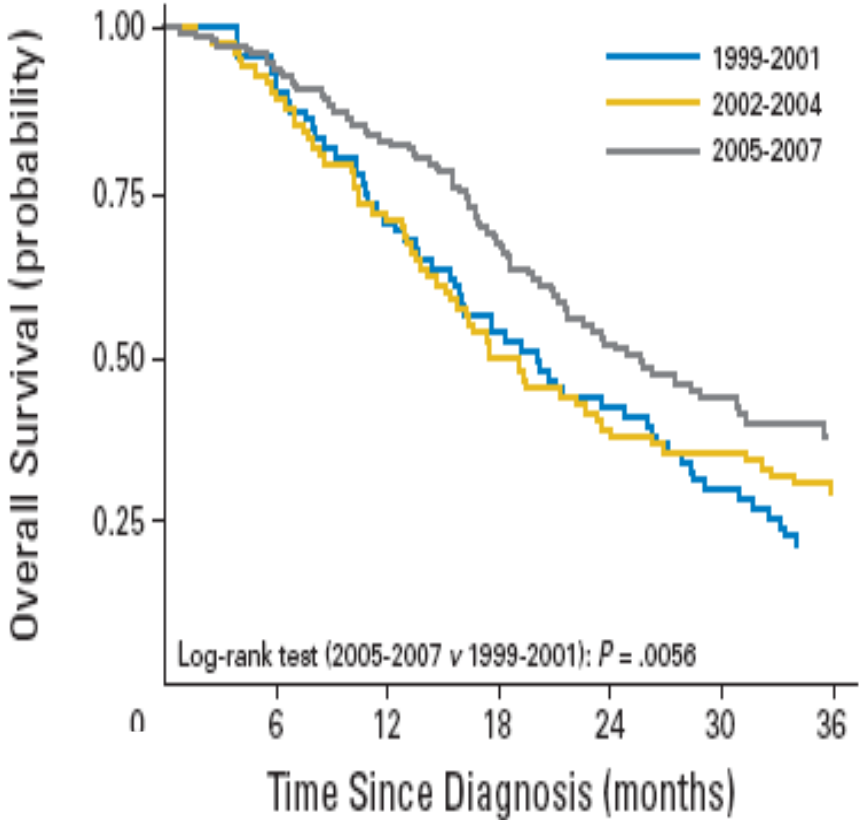
the value of innovation – lung radiotherapy



Stereotactic Body Radiotherapy
SBRT - SABR



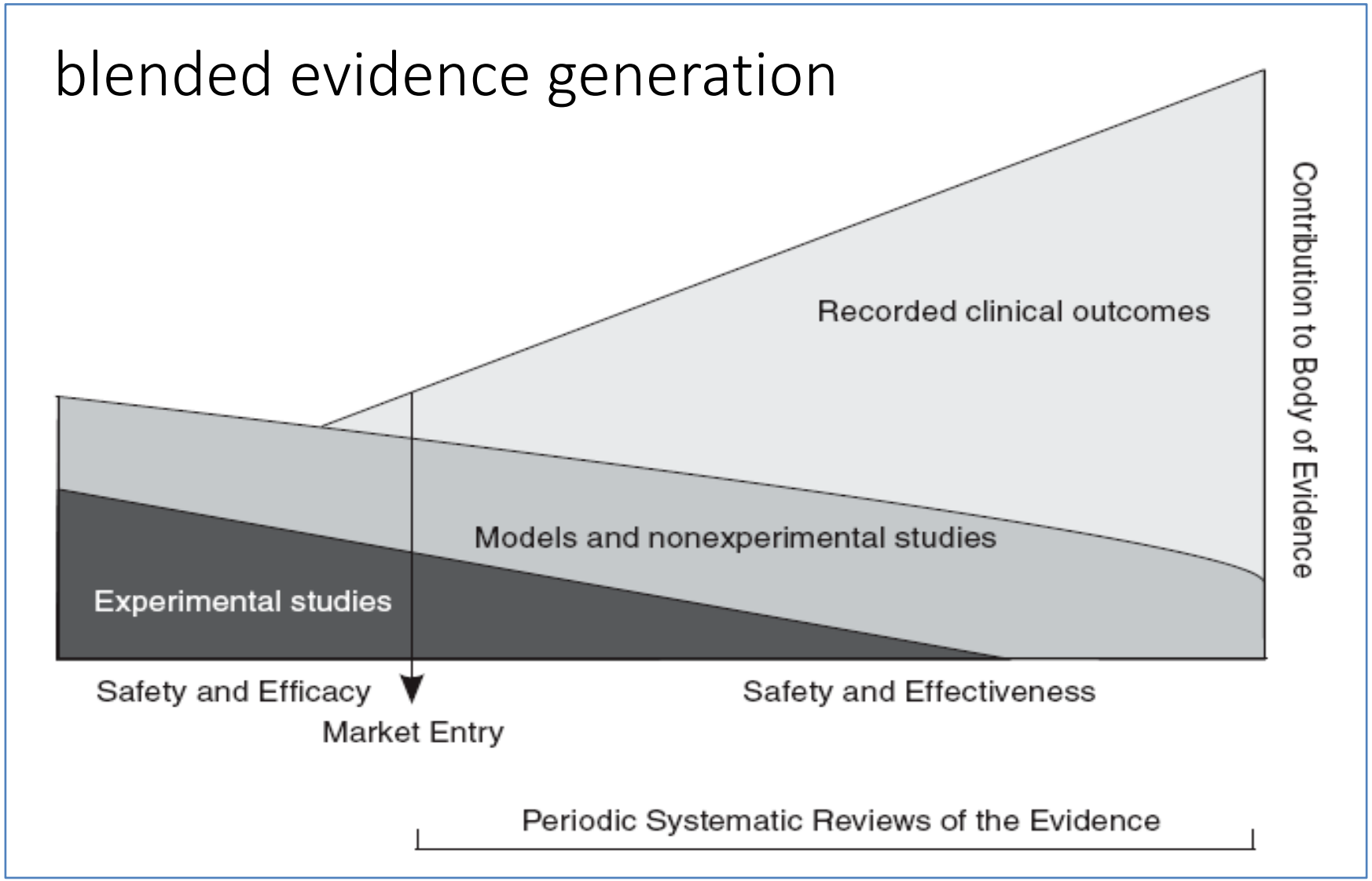
Randomised Controlled Trial
RCT



Real-World Evidence
RWE

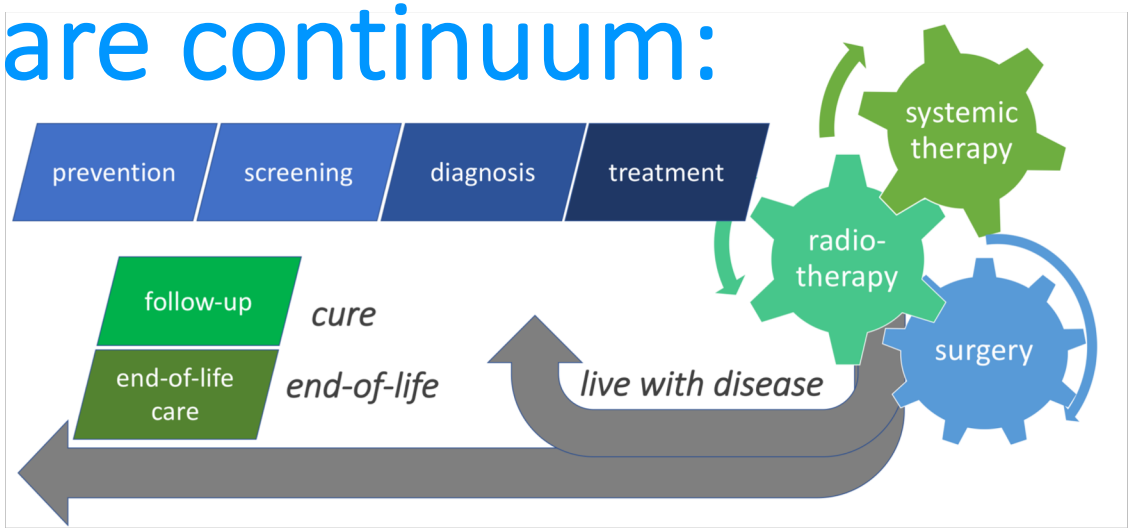
Nyman et al, R&O 2016
Palma et al, JCO 2010

which evidence?



Redesigning clinical effectiveness paradigm. Institute of Medicine, 2010

value *across* the cancer care continuum: *where do we go next?*



3 calls to action

1. develop **value methodologies** for assessing loco-regional cancer treatment, aligned to other treatment modalities and interventions, to cover the entire cancer care continuum
2. obtain a greater consensus and agreement on the **endpoints and outcomes** most valued by patients
3. adopt a **blended approach to evidence generation**: from experimental data to non-experimental studies and real-life clinical outcomes

thanks to

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