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XXXIII CONGRESSO NAZIONALE AIRB  
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# AIRO2022

Radioterapia di precisione per un'oncologia innovativa e sostenibile

BOLOGNA, 25-27 NOVEMBRE  
PALAZZO DEI CONGRESSI



Associazione Italiana  
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AIRO



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## VALIDAZIONE DELLE RACCOMANDAZIONI DI FOKAS ET AL. SULLA MISURAZIONE DEGLI OUTCOMES NEL TUMORE DEL RETTO ATTRaverso UNA POOLED ANALYSIS PROVENIENTE DA STUDI INTERNAZIONALI RANDOMIZZATI

Giuditta Chiloiro



## DICHIARAZIONE

Relatore: Giuditta Chiloiro

Come da nuova regolamentazione della Commissione Nazionale per la Formazione Continua del Ministero della Salute, è richiesta la trasparenza delle fonti di finanziamento e dei rapporti con soggetti portatori di interessi commerciali in campo sanitario.

- Posizione di dipendente in aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Consulenza ad aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Fondi per la ricerca da aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Partecipazione ad Advisory Board (**NIENTE DA DICHIARARE**)
- Titolarità di brevetti in compartecipazione ad aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Partecipazioni azionarie in aziende con interessi commerciali in campo sanitario (**NIENTE DA DICHIARARE**)
- Altro

## Background

### Outcome measures in multimodal rectal cancer trials



Emmanouil Fokas\*, Robert Glynne-Jones\*, Ane Appelt, Regina Beets-Tan, Geerard Beets, Karin Haustermans, Corrie Marijnen, Bruce D Minsky, Ethan Ludmir, Phil Quirke, David Sebag-Montefiore, Julio Garcia-Aguilar, Maria Antonietta Gambacorta, Vincenzo Valentini, Marc Buyse†, Claus Rödel†

- Large variability regarding the definition and choice of primary endpoints in phase 2 and 3 rectal cancer trials
- Surrogate properties of early and intermediate endpoints have not been systematically assessed
- In phase 3 trials, OS is the most objectively defined endpoint and is considered the standard measure of treatment efficacy

Fokas et al *Lancet Oncol* 2020



## Background

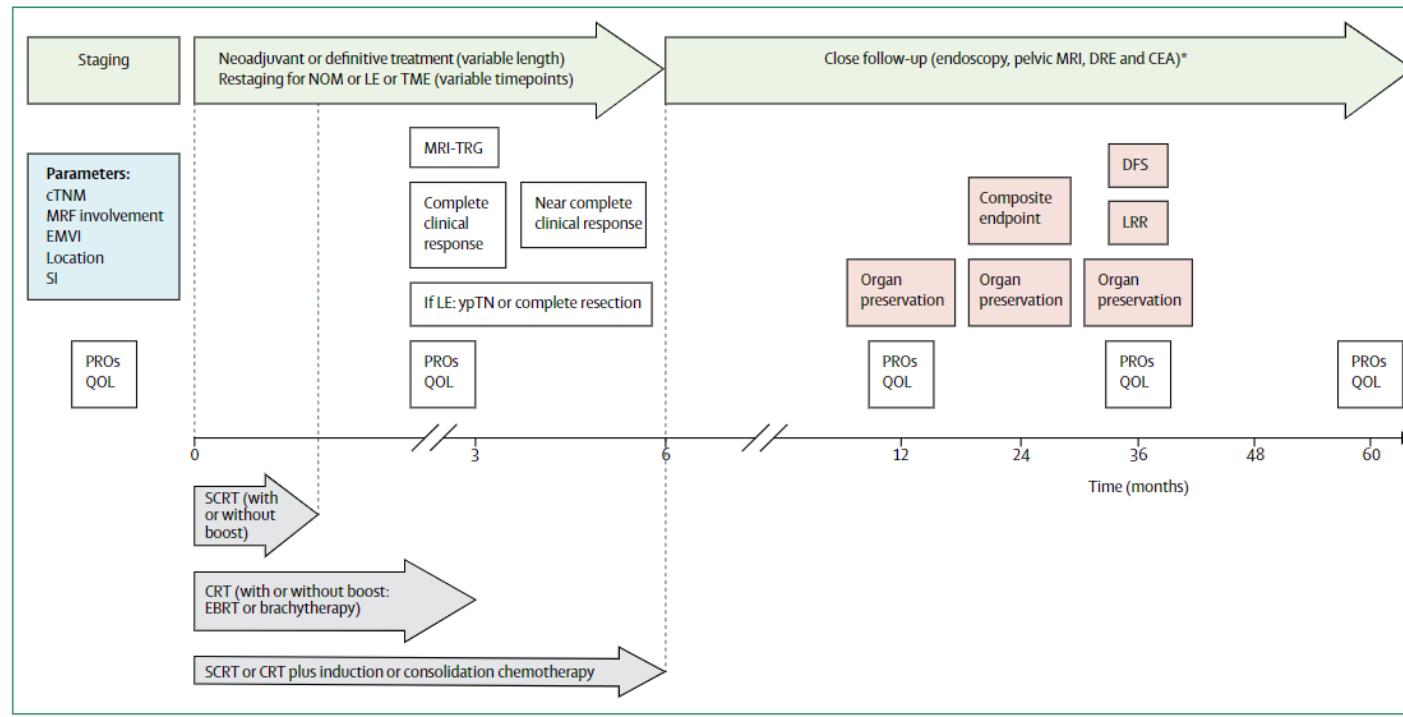
### Overall Survival requires:

- *large sample size;*
- long-term follow-up → *expensive* and carries risk of the investigated treatment *losing novelty* by the time the trial is completed
- can be confounded by effective successive treatment lines in case of disease progression or recurrence
- confusion with non-cancer related deaths

*Fokas et al Lancet Oncol 2020*



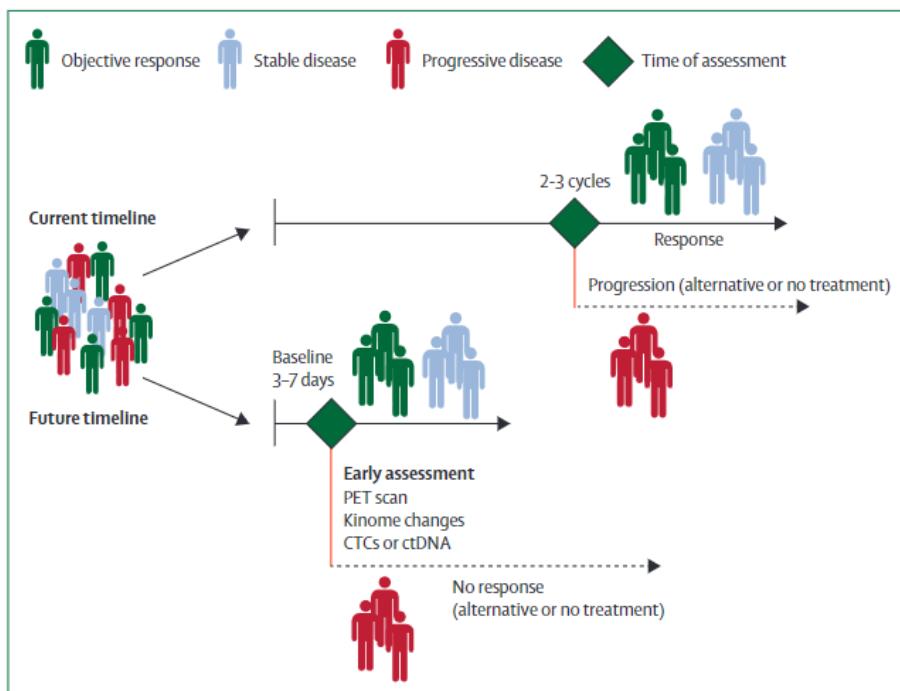
## Background



Fokas et al Lancet Oncol 2020



## Background

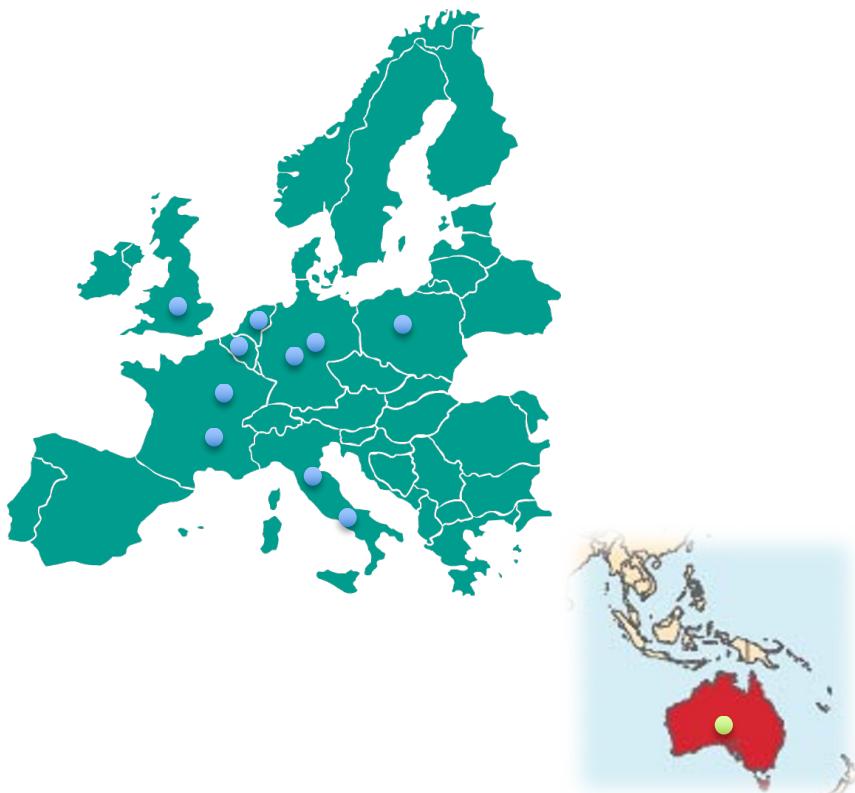


Wilson M et al Lancet Oncol 2015

*The objective of this study is to validate through a pooled analysis from international randomized trials in rectal cancer the early and intermediate endpoints as surrogate measures of overall survival (OS) in oncology trials*



## Materials and Methods



- The EORTC trial (Bosset et al. 2006)
- The French trial (Gerard et al. 2006)
- The German trial (Sauer et al. 2004)
- The German trial (Roedel et al. 2015)
- The TROG trial (Ngan et al. 2012)
- The ACCORD trial (Gerard et al. 2012)
- The INTERACT trial (Valentini et al. 2019)
- The CHRONICLE trial (Glynne-Jones et al 2014)
- The Dutch trial (Kapiteijn et al 2001)
- The I-CNR-RT trial (Sainato et al. 2014)
- The Polish II trial (Bujko et al. 2016)

## Materials and Methods

## Inclusion criteria

- > 18 years old
- SC-RT
- LG-RT
- ± concomitant
- CHT
- ± adjuvant CHT
- Surgery

## Exclusion criteria

- M+
- TAMIS/TEM

## EARLY variables

cTNM  
Location  
N status

## INTERMEDIATE variables

LR  
DM  
2yDFS  
3yDFS

## Correlation with 5y-OS

Downstaging TNM

Downstaging T

Downstaging N

SI≤ 12w

Surgical procedure

NAR score  
pCR

FOLLOW-UP

SCRT/LGCRT

SURGERY

Pearson's Chi-squared test was used for data analysis.  
A p-value less than 0.01 was considered as a statistical significant value.

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## Results

Patients enrolled

**5473/9564**  
patients met  
the inclusion  
criteria

988 (18%) SC-  
RT  
4485 (82%) LC-  
RT

### EARLY variables

cTNM

Location

N status

Downstaging TNM

Downstaging T

Downstaging N

SI  $\leq$  12w

Surgical procedure

### INTERMEDIATE variables

LR

DM

2yDFS

3yDFS

**5y-OS: 75%**

FOLLOW-UP

SCRT/LGCRT

SURGERY



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## Conclusions

- Validation of Fokas et al. outcomes measures revision in rectal cancer  
(Fokas et al Lancet Oncol 2020)
- Early and intermediate endpoints could be considered surrogates of overall survival in a pooled dataset.
- Future clinical trials on rectal cancer could be designed using these early and intermediate endpoints as primary or secondary outcomes.