

# Population-based Quality Indicators of Cancer Care: **the QC3 pilot study**

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[www.ti.ch/cancer](http://www.ti.ch/cancer)

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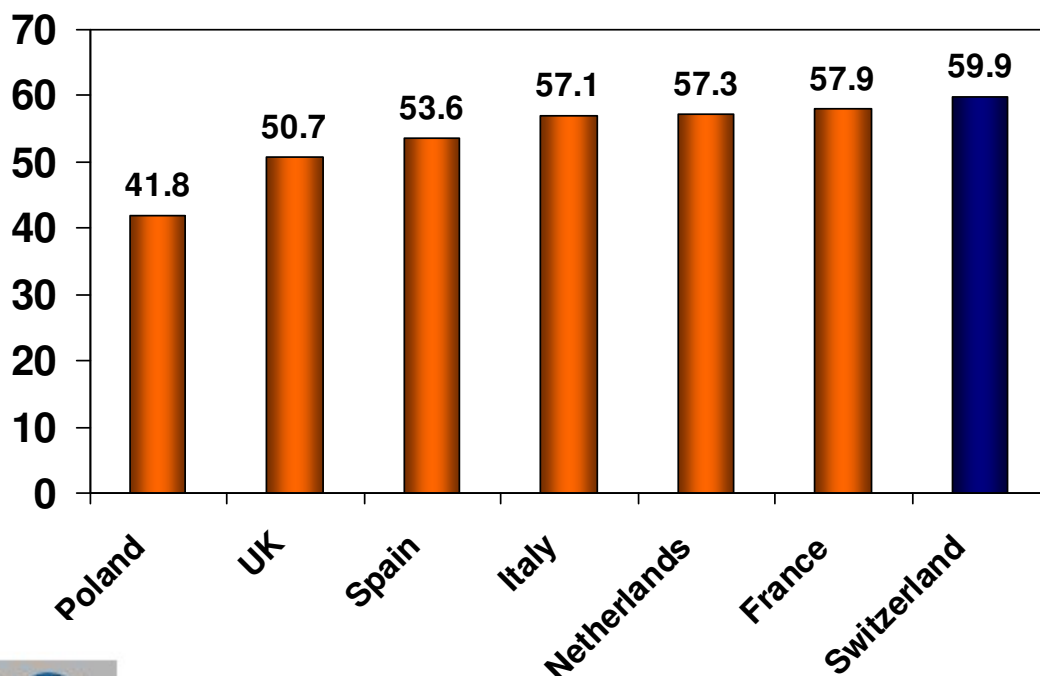
Qualità delle cure nella lotta contro il cancro  
Registro Tumori Canton Ticino

# EUROCARE IV Survival Study

## Colorectal cancer

### Advantages

- **Standardised** procedure, world wide recognised
- Regional and international **comparisons**
- Diagnostic precocity, treatment quality and follow-up **in one value**



“Disadvantage”

Long follow-up time



Additional instruments are needed: quality indicators



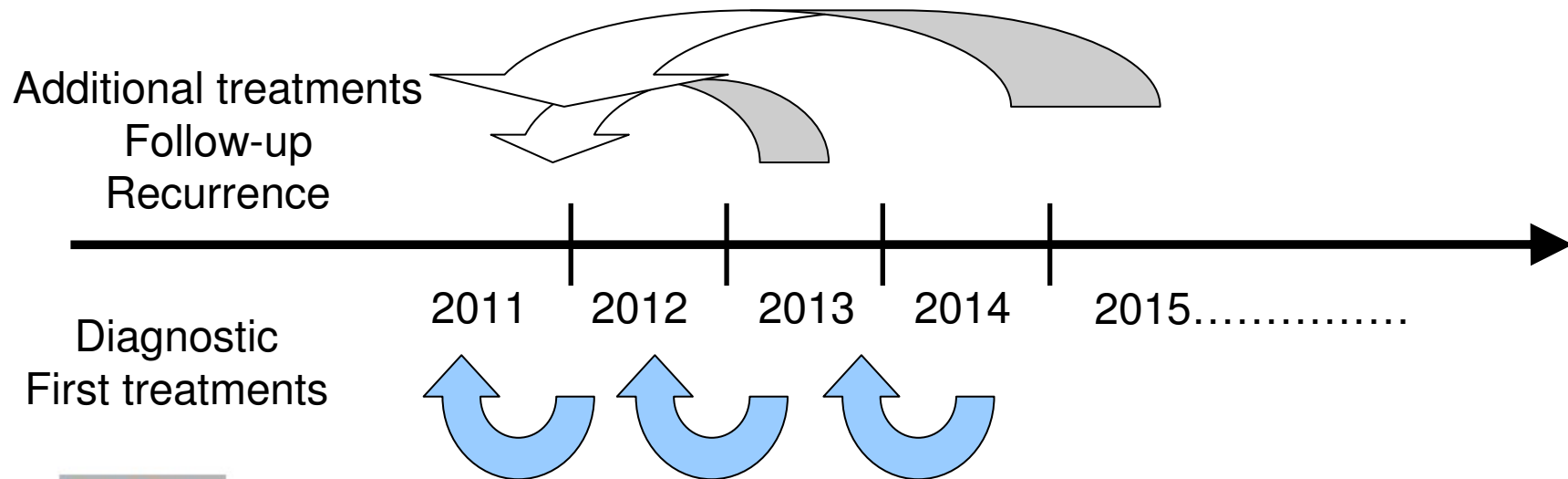
# Why quality indicators?

## Advantages

- **Defragmentation** of survival determinants
- Short follow-up time

## “Disadvantage”

Less worldwide defined → test





## Aims of quality indicator cancer care study?

- To promote discussion on quality **based on data**
- To understand/realise if there is still **room for additional increase** of quality on cancer care
- To in **deeper analyse** at the regional level EURO CARE survival results

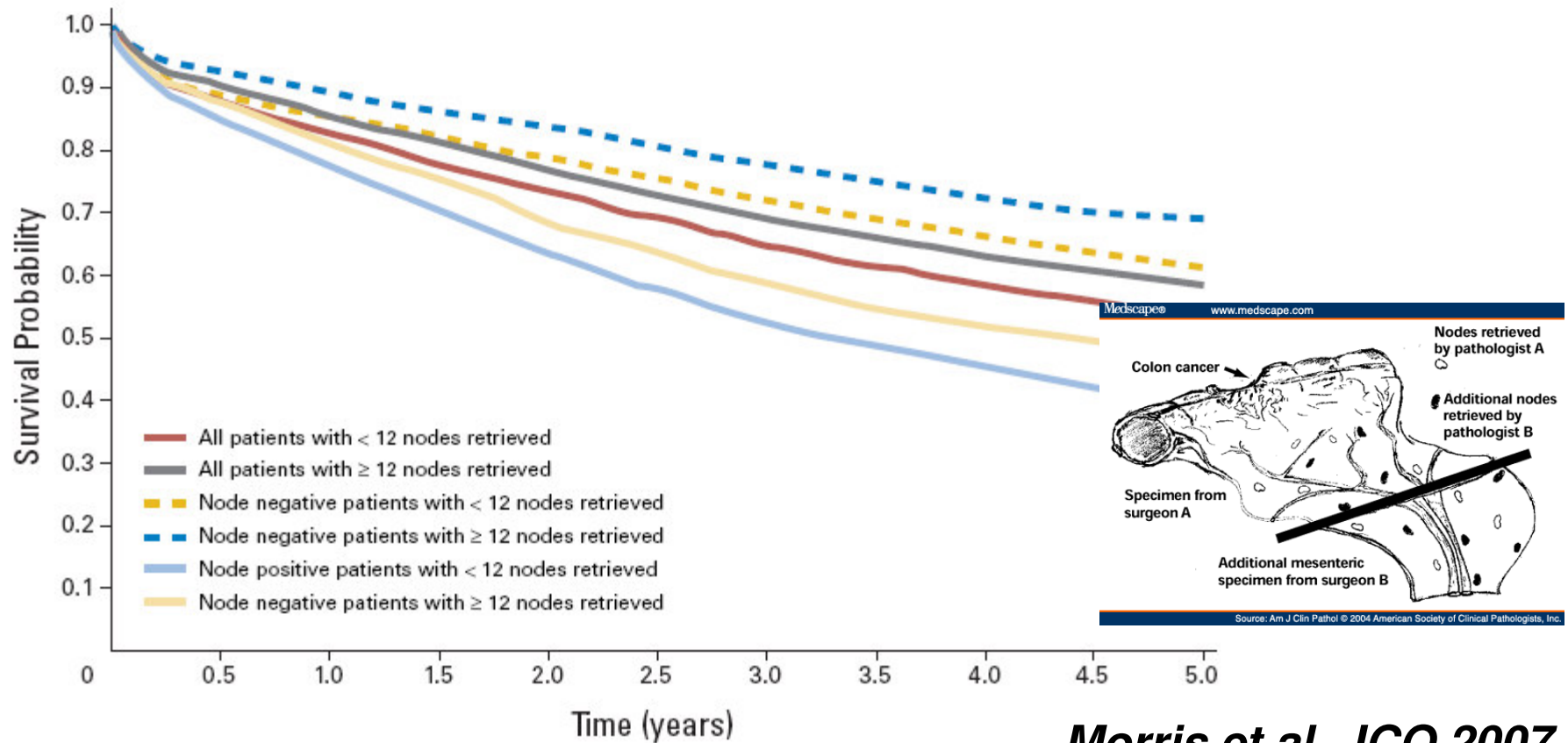
# What is a quality indicator?



## Resection margins

1. R0/R1
2. Proximal, distal, radial
3. Reported by pathologist

# Survival according to the number of retrieved lymph nodes



*Morris et al, JCO 2007*



## Other colorectal quality indicators...

- Proportion of patients with preoperative staging
- Proportion of patients with intestinal obstruction
- Proportion of patients with locally advanced rectal cancer undergoing neo-adjuvant radiotherapy±chemotherapy
- Proportion of patients with stage II high risk or stage III disease receiving adjuvant chemotherapy
- Proportion of patients with rectal cancer with sphincter preservation

# Examples of colorectal quality indicators

## Ticino, 2009-2010

INDICATOR	COLON (n=303)	MINIMUM REQUIREMENT	TARGET REQUIREMENT	RECTUM (n=125)	MINIMUM REQUIREMENT	TARGET REQUIREMENT
Proportion of patients with <b>microscopical confirmation</b> of the tumour	96.7%	≥95%	95-100%	100%	≥95%	95-100%
Proportion of patients with <b>defined tumour site</b> in the biopsy / surgical resection according to WHO (all but NOS)	99.3%	≥95%	95-100%	89.6% ^	≥95%	95-100%
Proportion of surgical patients with <b>known resection margins</b>	96.2%	≥95%	95-100%	95.2%	≥95%	95-100%
Proportion of surgical patients with <b>linfadenectomy</b>	99.3%	^^	^^	96.4%	^^	^^
Proportion of surgical patients not undergoing neo-adjuvant therapy with <b>more than 12 lymph nodes examined</b>	84.4%	≥80%	90-100%	84.1%	≥80%	90-100%
<b>Number of examined lymph nodes</b> in surgical patients not undergoing neo-adjuvant therapy (mean±std, median)	18.8±8.3 17.5	≥12	≥12	16.6±7.2 15.5	≥12	≥12





## **Material and methods of the study**

- All incident cases occurred in 2011-2013
- Colorectal, ovary, uterus, prostate and lung cancers (total 2000 cancer cases)

## **How are the indicators defined?**

- According to the up-to-date literature
- Through existing guidelines (NCCI, ESMO, other)

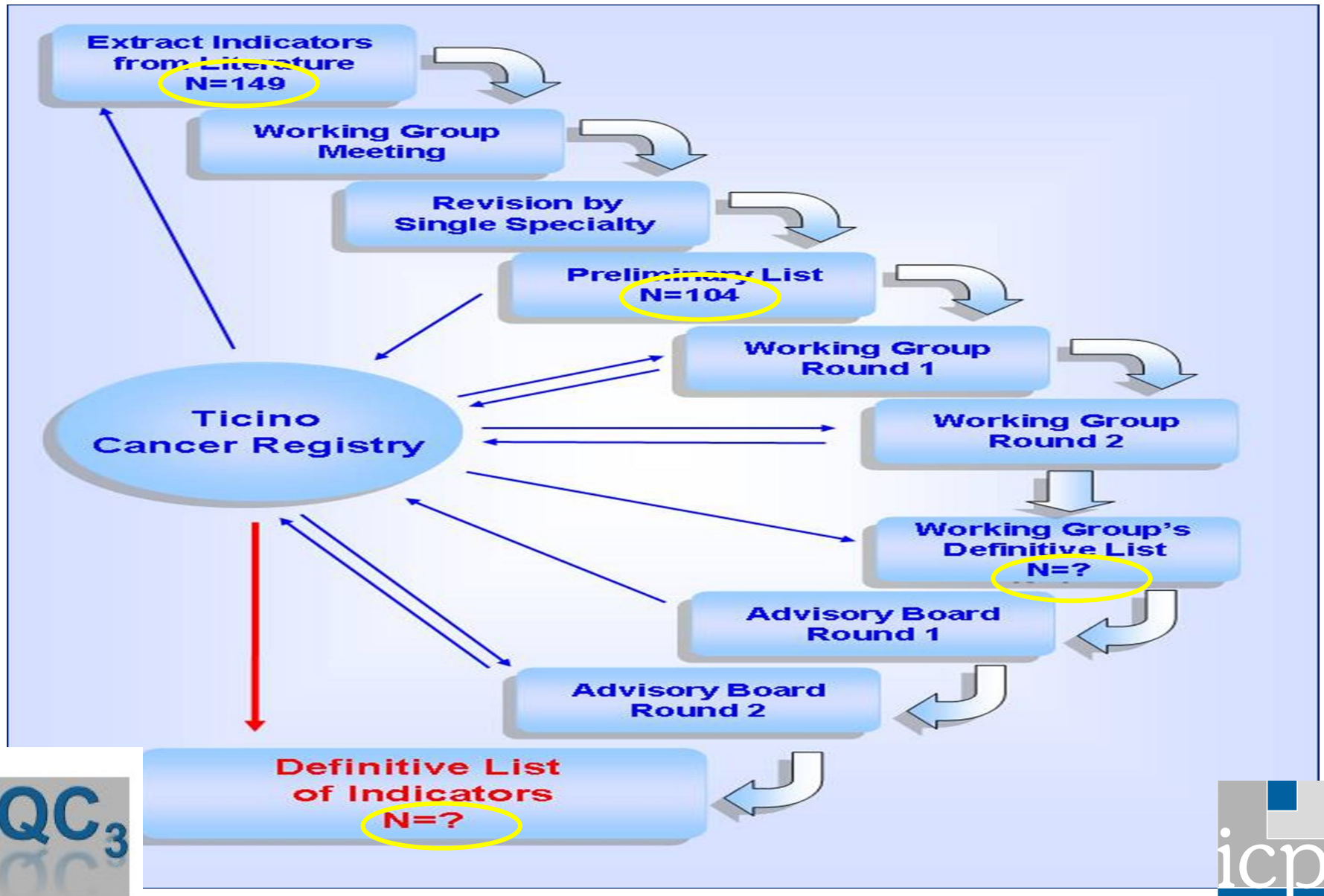


# How are the indicators defined?

- **Cancer Registry with a dedicated staff** (Bianchi-Galdi V, Spitale A, Bordoni A)
- **Working Group** (pathology, surgery, oncology, radiotherapy, urology, etc.....)
  1. Colon-Rectum WG: Barizzi J, Franzetti-Pellanda A, Giovanella L, Heinkel J, Miazza B, Pelloni A, Quattropani C, Rosso R, Saletti P, Valli MC, Varini M, Wytttenbach R
  2. Prostate WG: Ballerini G, Casanova G, Crippa S, Lladò A, Pesce G, Pedrazzini A, Roggero E, Stoffel F, Suriano S, Wytttenbach R.
  3. Ovary/uterus WG: Ballerini G, Bronz L, Calderoni A, Cannizzaro C, Gyr T, Manganiello M, Marini MC, Richetti A, Rusca T, Sessa C, Suriano S.
- **National and International Advisory Board**

Ghielmini M, Martinoli S, Mazzucchelli L, Cavalli F, Goldirsch A, Faivre J, Paci E, ....and others to be contacted...

# Delphy Process (ex. colo-rectal cancer)





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## Conclusion (I)

- Up-to-date quality indicators without waiting for survival data (ideally yearly produced)
- Aim is **not** to control doctors! Aim is to additionally stimulate the **discussion** based on data (cultural process) in order to identify the good quality and the lack of quality



## Conclusion (II)

- The study is population-based (Cancer Registry, **no selection bias**) and concerns public and private settings, ensuring a real description. Results should be compared with other national and international initiatives (US and Holland)
- Long-term study, so permitting trend analysis of quality indicators and the evaluation of other cancer sites
- Promote similar study in other region/cancer registry of Switzerland

# We are really grateful for the support of the study sponsors:



*Ricerca Svizzera Contro il Cancro*



*Zonta Club Locarno*



*Accademia Svizzera delle Scienze Mediche*



*Ente ospedaliero cantonale*



*Repubblica e cantone Ticino*

