



## Systemic treatment of peritoneal carcinomatosis from colorectal cancer

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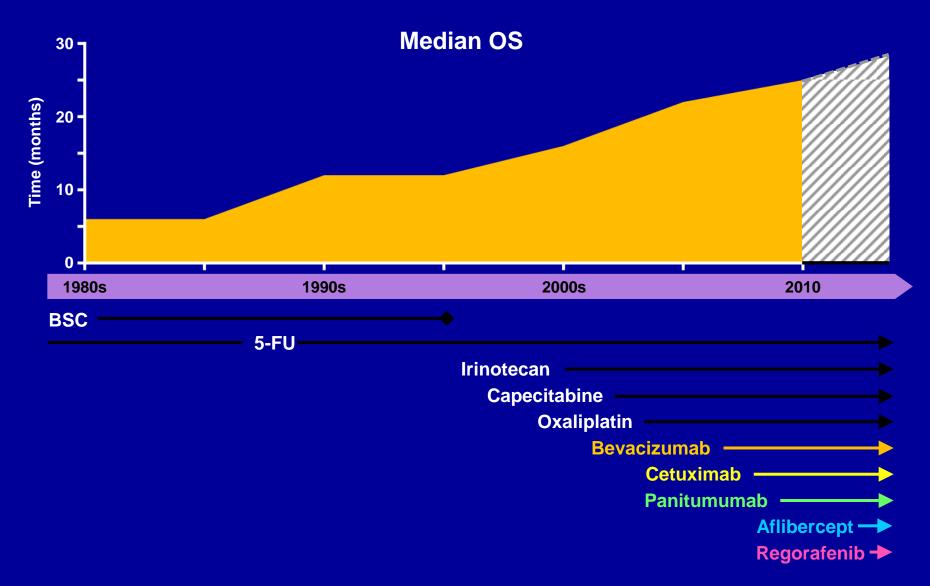
#### **Disclosures**

Advisor for

Roche, Amgen, Merck-Serono, Sanofi, Bayer, Nordic Pharma

# In the past 3 decades, advances in the treatment of mCRC have led to improved OS

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#### Peritoneal carcinomatosis of CRC - incidence -



- Data are scarce!
- PC in 4%-8% in synchronous disease and 4%-19% in metachronous disease
- In autopsy series, PC is found in up to 40%

Jayne et al. Br J Surg 2002 Lemmens et al. Int J Cancer 2011 Segelman et al. Br J Surg 2012 Koppe et al. Ann Surg 2006 Gilbert et al. Br J Surg 1984

#### Peritoneal carcinomatosis of CRC - risk factors -



- Right-sided tumor
- Stage T4 and/or N+
- Poor differentation grade
- Young age
- Initial emergency procedures
- Non-radical resection of primary

### Peritoneal carcinomatosis of CRC - prognosis -



- PC is a poor prognostic feature
- Value of systemic therapy has been questioned
- This subset of patients is rarely analyzed in phase 3 studies
- Published series are prone to selection bias



#### Q:

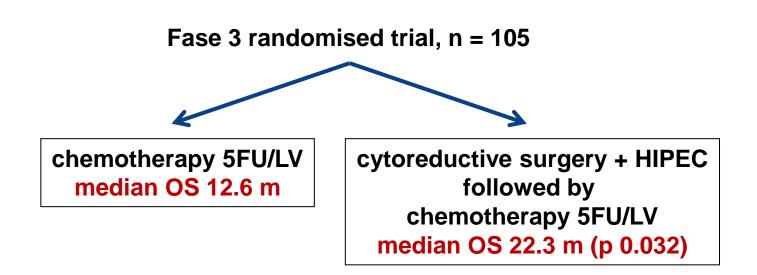
• So if the prognosis of PC is poor, why don't we stratify for this in randomised clinical trials?

#### **A:**

 Extent of PC is frequently underestimated by imaging modalities, and, if visible, usually non-measurable<sup>1</sup>

This obviously complicates the interpretation of retrospective series!

## Peritoneal carcinomatosis (PC) of CRC - pivotal trial -



#### **Comments:**

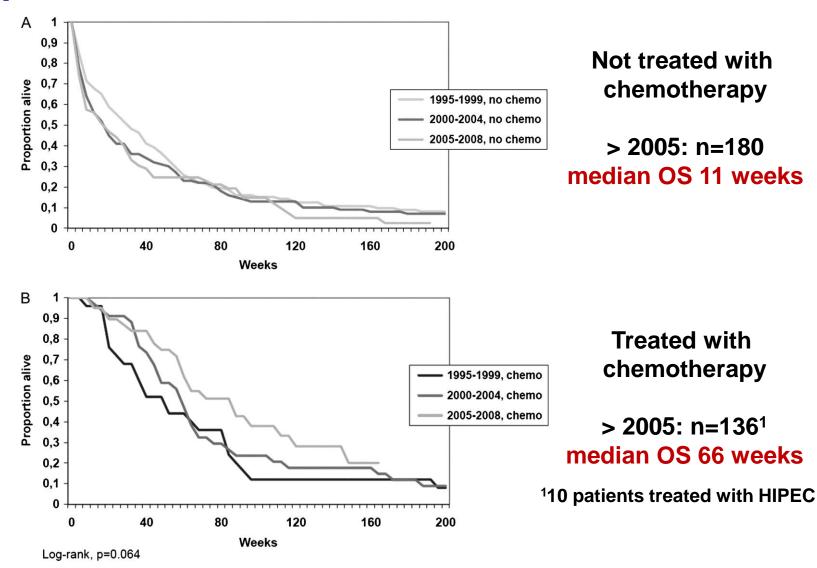
- low number of patients
- some imbalances in treatment groups
- outdated systemic therapy

Verwaal et al. J Clin Oncol 2003



- Retrospective survey in local Dutch registry, 1995 2008
- Synchronous cancer with PC, n = 904
- Over time, there was an increased use of chemotherapy
- Trend towards an improved overall survival after 2005
- No data on use of targeted therapies
- Only 10 pts received cytoreductive surgey+HIPEC (>2005)

# Population-based survival of patients with <sup>am</sup> peritoneal carcinomatosis of CRC



Klaver et al. Ann Oncol 2011



	Chemotherapy	Chemotherapy + targeted therapy in any line	Chemotherapy + targeted therapy in 1st line
n	38	22	14
Median OS	12.5 m	18.5 m	22.4 m

These data suggest a benefit of the addition of targeted therapies, however the retrospective nature and small numbers do not allow definite conclusions

Klaver et al. Am J Clin Oncol 2013

### Peritoneal carcinomatosis (PC) of CRC <sup>am</sup> - subset analysis of CAIRO/CAIRO2 studies -

- CAIRO: sequential versus combination chemotherapy<sup>1</sup>
- CAIRO2: CAPOX+bevacizumab +/- cetuximab<sup>2</sup>

#### Median overall survival<sup>3</sup>

	PC	No PC	P value
CAIRO n = 803, PC n = 34	10.4 m	17.3 m	≤ 0.001
CAIRO2 n = 736, PC n = 47	15.2 m	20.7 m	< 0.001

These data suggest a benefit of the addition of targeted therapies, however cross-study comparisons are hazardous!

<sup>1</sup>Koopman et al. Lancet 2007
<sup>2</sup>Tol et al. NEJM 2009
<sup>3</sup>Klaver et al. Eur J Surg Oncol 2012

## 

- Single-center retrospective review 2005-2012 of patients with PC who underwent neoadjuvant chemotherapy followed by cytoreductive surgery +/- HIPEC
- Irinotecan- or oxaliplatin-based chemotherapy, n = 115
- Pathological response: 9.7% complete, 20.2% major
- <u>Conclusion</u>: pathological response in PC can be achieved with systemic therapy, and was the only independent predictor for survival

## Peritoneal carcinomatosis (PC) of CRC - conclusions -

- Lack of prospective data on modern systemic treatment
- Published retrospective series may be biased
- Data suggest efficacy for chemotherapy + targeted therapy
- Role of systemic therapy in relation to cytoreductive surgery/HIPEC is not clear