

**Evaluation of perioperative  
chemotherapy for operable  
gastroesophageal and gastric cancer  
In western Denmark  
June 2008- August 2010**

Anders Christian Larsen,md. Phd student

Department of Surgery and Oncology

Aalborg University Hospital

# Background

- **The MAGIC trial** *Cunningham et al NEJM 2006*
  - *Resectable gastric or lower esophageal adenocarcinomas benefits from perioperative regimes of chemotherapy ECF:*
  - *Epirubicin iv (50mg/m<sup>2</sup>),*
  - *Cisplatin iv (60mg/m<sup>2</sup>)*
  - *5-fluorouracil (200mg/m<sup>2</sup> per day) iv continuously*
- **ACCORD07-FFCD 9703 trial.** *Boige et al ASCO 2007*
  - *Perioperative regimes of chemotherapy CF:*
  - *Cisplatin iv (100mg/m<sup>2</sup>)*
  - *5-fluorouracil (800mg/m<sup>2</sup> every 28 days) iv continuously*

# Aims

- To evaluate results of perioperative chemotherapy ad modum MAGIC in Denmark
- To study patient population characteristics
- To investigate toxicity by retrospective
- To study compliance and reasons for early drop out
- To study results of surgery after preoperative chemotherapy
- To compare results with similar reports

# Study population

All patients referred to the departments of oncology in Odense, Aarhus and Aalborg for intended perioperative chemotherapy (intention to treat) for operable adenocarcinoma in GEJ and stomach  
> stage Ia from the treatment introduction in June 2008 through August 2010

# Regiments in DK

- EXE-regime (cycle 21 days):
  - Oxaliplatin 130mg/m<sup>2</sup> iv day 1
  - Epirubicin 50 mg/m<sup>2</sup> iv day 1
  - Capecitabine 1000mg/m<sup>2</sup> bid continuously
- ECX-regime (cycle 21 days):
  - Cisplatin 60mg/m<sup>2</sup> iv day 1
  - Epirubicin 50 mg/m<sup>2</sup> iv day 1
  - Capecitabine 1000mg/m<sup>2</sup> bid continuously
- FLOX-regime (cycle 21 days):
  - Oxaliplatin 85mg/m<sup>2</sup> iv
  - Epirubicin 50 mg/m<sup>2</sup>
  - 5FU iv-bolus day 1 and 2

# Departments and Regiments

Odense

53 patients

Start November 2008

Regimes: EXE and FLOX

Aarhus

29 patients

Start January 2009

Regime: ECX

Aalborg

49 patients

Start June 2008

Regime: EXE

# Demography

- N=131
- Age mean 64 years (range 32-80)
- Gender
  - Male 105
  - Female 26

# Tumor Characteristics

- Esophagus lower 6
- GEJ 191
- Gastric 24
- Undefined 10

All adenocarcinomas



131 patients  
with resectable gastric or  
gastroesophageal cancer  
admitted to  
preoperative chemotherapy

7 patients not eligible

124 patients were scheduled for  
preoperative chemotherapy

27 Cisplatin regime

93 Oxaliplatin regime

4 flox regime

124  
scheduled for  
chemotherapy

6 discontinued

1 death

2 unconfirmed PD

3 toxicity - 2 had surgery one R1 and one R0

118 started 2.  
cycle  
chemotherapy

118 scheduled  
for 2. cycle  
chemotherapy

9 discontinued  
6 toxicity – 4 had R0 surgery  
3 unconfirmed PD – 1 had R0 surgery

109 started 3.  
cycle  
chemotherapy

109 scheduled  
for 3. cycle  
chemotherapy

11 discontinued

6 toxicity/clinical deterioration  
3 unconfirmed PD  
1 denied further treatment  
1 died

98 eligible for  
surgery

**98 curative intended resections**

**33 discontinued**

- 1 dead**
- 1 denied further treatment**
- 12 Postoperative complications including death**
- 5 clinical deterioration**
- 9 non curatively resected**
- 5 no data available**

**65 Scheduled for  
postoperative chemotherapy**

# Toxic effects was registered

- Analysis of toxicity is ongoing
- In general commonly known toxicities were reported such as:
  - nausea, fatigue, vomiting and neuropathies diarrhea, constipation, alopecia was seen as expected.
  - Neutropenia without fever was the most common cause of delaying chemotherapy
  - Very few cases were reported with admission due to neutropenic fever.
  - Phlebitis, DVT and Lung embolia

# Pathological Staging

N=operated	Cisplatin (N=23)	Oxaliplatin (N=75)
ypT0	1 (4%)	10 (13%)
ypT1	1 (4%)	5 (7%)
ypT2	13 (54%)	31 (41%)
ypT3	7 (30%)	24 (32%)
ypT4	0 (0%)	5 (7%)
ypTx	1*	0

\*data not complete

	Magic Cunninham et al NEJM 2006	Norway Hølmebakk et al EJSO 2010	West – DK ØGC-seminare
Regime	ECF	ECF	ECF+EXE
Period	1994-2002	2006-june 2009	Nov. 2008 – june 2010
N=intention to treat	250	169	131
Completed preoperative Chemotherapy	215/237(90%)	152/169(90%)	109(88%)
Started postoperative chemotherapy	137/250(58%)	92/169(54%)	65(52%)
Completed All cycles	104/250(42%)	68/169(40%)	37(30%)**
R0	169/244(69%)*	123/144(86%)	**
ypT0	None reported	7/144(5%)	11/98(11%)
ypN0	42/135(31%)	67/145(48%)	37/98(38%)

\*according to surgeon

\*\*data not complete



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