

Integrazione di cetuximab nella strategia terapeutica combinata dei tumori del testa-collo: la realtà italiana

Nuove prospettive di terapie combinate con cetuximab

G. Numico

Discussant: U. Ricardi



Con il contributo educativo di

 Merck Serono

 MERCK

Le domande da porre



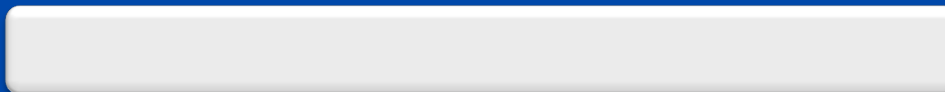
1. Cetuximab è una alternativa al cisplatino?
 - > Tremplin
 - > RTOG 0116 (HPV+), HN 07
2. Serve aggiungere Cetuximab alla CT-RT?
 - > Studi di fase II
 - > RTOG 0522
3. Si può aggiungere Cetuximab alla CT-RT?
 - > L'influenza sulla tossicità generale
 - > Le tossicità specifiche

Quali le possibili combinazioni con CT-RT?



Quali le possibili combinazioni con CT-RT?





| Trial | N. | CT | RC | RP | RR |
|----------------------------|----------------|--------------------|------------|------------|-------------|
| Vokes JCO 2003 | 22 | wCb-Tax | 35% | 52% | 87% |
| Kies JCO 2010 | 47 N2-3 | wCb-Tax + C | 19% | 77% | 96% |
| Posner NEJM 2010 | 255 | TPF | 17% | 55% | 72% |
| Haddad JCO 2009 | 28 | TPF + C | 21% | 79% | 100% |



| Trial | N. | CT | RT | CR | PFS | OS |
|------------------------|----|-----------|------------------|-----|----------|----------|
| Pfister JCO 2006 | 22 | P 100 x 2 | CB 70Gy | 12% | 56% (3y) | 76% (3y) |
| ECOG 3303 ASCO 2008 | 61 | P 75 x 3 | CF 70 Gy | 23% | NR | 76% (1y) |
| Khunt ASCO 2008 | 18 | wP | HF 70 Gy | 33% | NR | NR |
| Ma Ann Oncol 2011 | 30 | wP | IMRT 66-74 Gy | 83% | 86% (2y) | 90% (2y) |

RTOG 0522

R

HF-RT 72Gy/6W + Cisplatino
100 d1, 22

HF-RT 72Gy/6W + Cisplatino
+ Cetuximab

940 pz

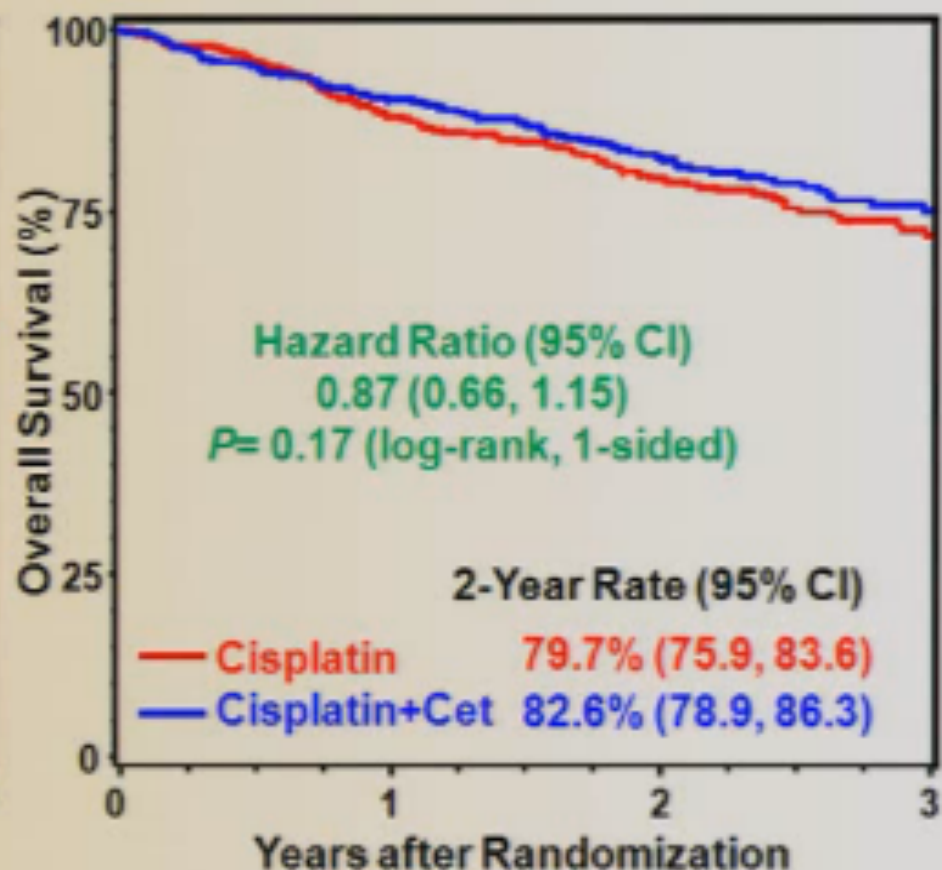
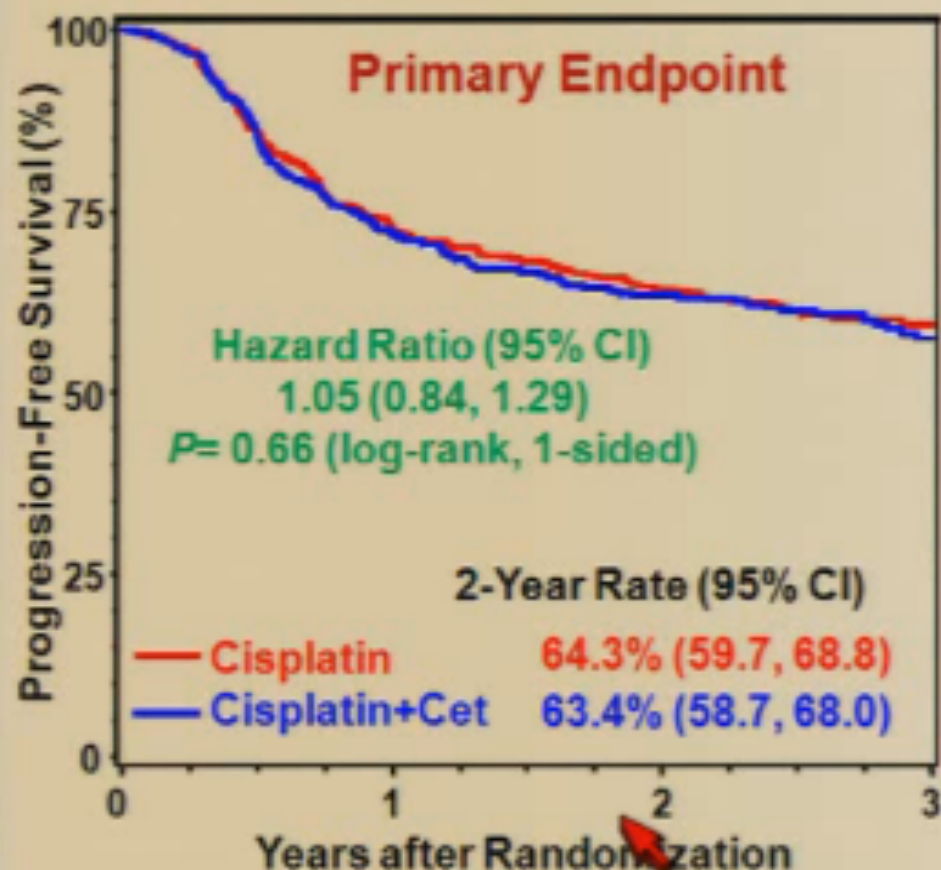
Stadio III-IV

End Point PFS

Follow up mediano: 2,4 anni

RTOG 0522

Progression-Free Survival & Overall Survival



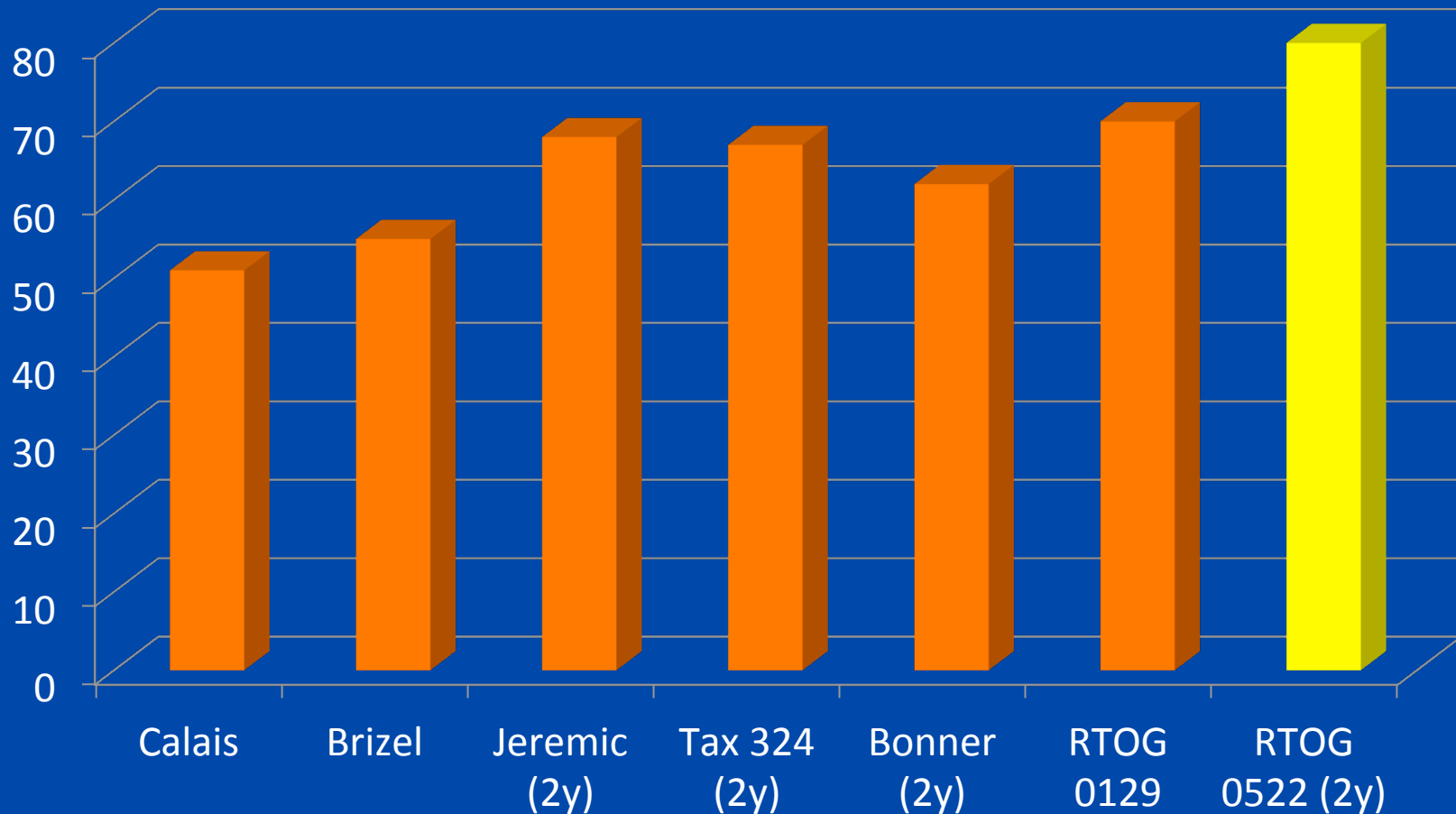
Patients at Risk

| | | | |
|-----|-----|-----|----|
| 448 | 316 | 217 | 78 |
| 447 | 302 | 197 | 80 |

Patients at Risk

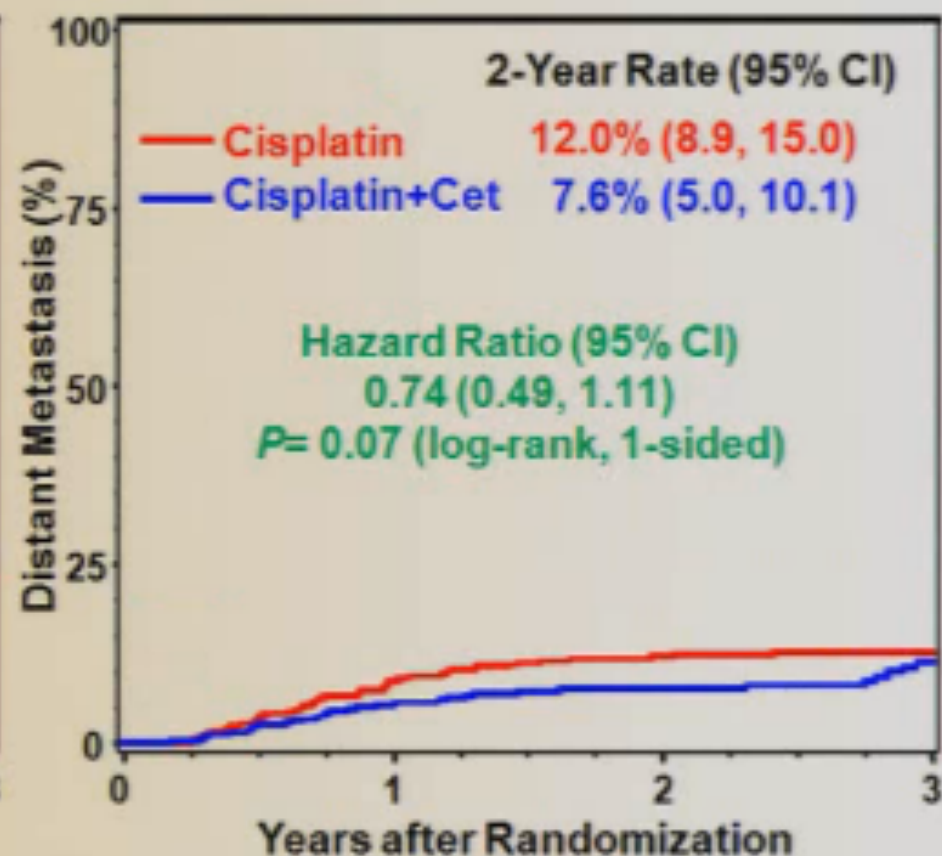
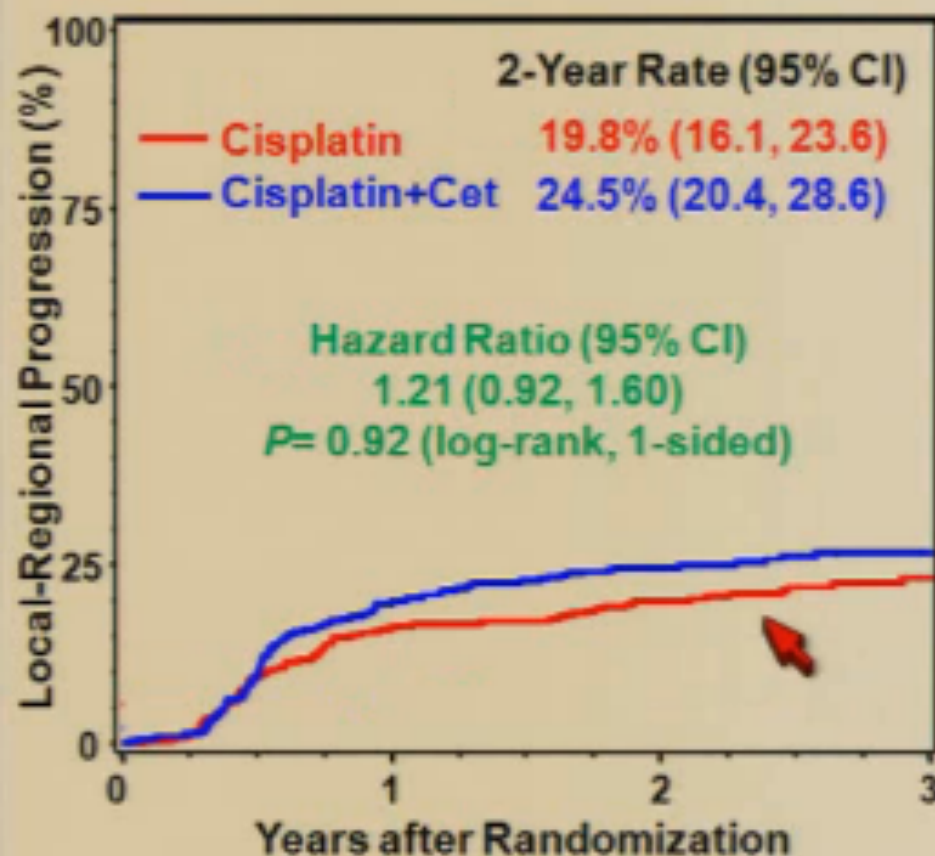
| | | | |
|-----|-----|-----|----|
| 448 | 385 | 266 | 96 |
| 447 | 378 | 251 | 94 |

RTOG 0522: confronto con gli altri studi di CT-RT



RTOG 0522

Local-Regional Relapse & Distant Metastasis



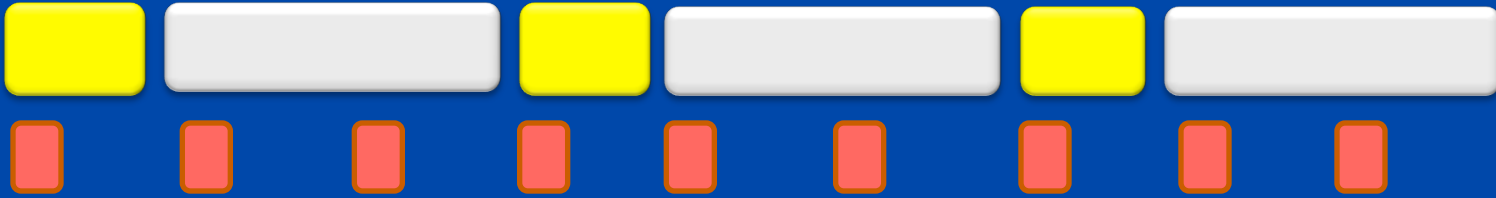
Patients at Risk

| | | | |
|-----|-----|-----|----|
| 448 | 316 | 217 | 78 |
| 447 | 302 | 197 | 80 |

Patients at Risk

| | | | |
|-----|-----|-----|----|
| 448 | 316 | 217 | 78 |
| 447 | 302 | 197 | 80 |

| Trial | N. | Ind | Conco | RRi | PFS | OS |
|----------------------|-----|---------|------------|-------------|----------------------|----------------------|
| Argiris JCO 2010 | 39 | TP x 3 | wP | 86% | 70% (3y) | 74% (3y) |
| Wanebo ASCO 2010 | 63 | wCb Tax | Cb Tax | 59% (rc) | 66% (2y) | 82% (2y) |
| Seiwert ASCO 2011 | 110 | CbTax | HU-FU P | 92% | 82% (2y) 90% (2y) | 89% (2y) 91% (2y) |
| Posner NEJM 2007 | 255 | TPF | w Cb | 72% | 53% (2y) | 67% (2y) |



| Trial | N. | CR | PFS | OS |
|---------------------------|-----|-----|----------|----------|
| AlteRCC Ann Oncol 2011 | 45 | 71% | 38% (4y) | 40% (4y) |
| HN8 NEJM 1992 | 157 | 43% | 25% (3y) | 41% (3y) |
| Benasso Ann Oncol 2004 | 47 | 79% | 39% (3y) | 43% (3y) |
| Numico IJROBP 2006 | 28 | 78% | 39% (3y) | 43% (3y) |

Quali conclusioni?



- > “Segnali” di interazione positiva sia con CT di induzione che con CT-RT → studi clinici di associazione
- > RTOG 0522: studio negativo
 - Buoni risultati del braccio di controllo (P + HFRT)
 - Bassa dose di Cetuximab?
- > Non indicazione all’uso di Cetuximab in associazione alla CT-RT nella pratica clinica

Gli studi in corso

| Pz | Studio | Trattamento |
|---------------------|-------------|------------------------------|
| Post-CHIR | RTOG 0920 | IMRT |
| | | IMRT + Cetuximab |
| Orofaringe HPV + | RTOG 1016 | HFRT + Cisplatino |
| | | HFRT + Cetuximab |
| HN stadio III-IV | INTERCEPTOR | RT + Cisplatino |
| | | TPF → RT + Cetuximab |
| HN stadio III-IV | HN 07 | RT + Cisplatino-FU |
| | | RT + Cetuximab |
| | | TPF x 3 → RT + Cisplatino-FU |
| | | TPF x 3 → RT + Cetuximab |



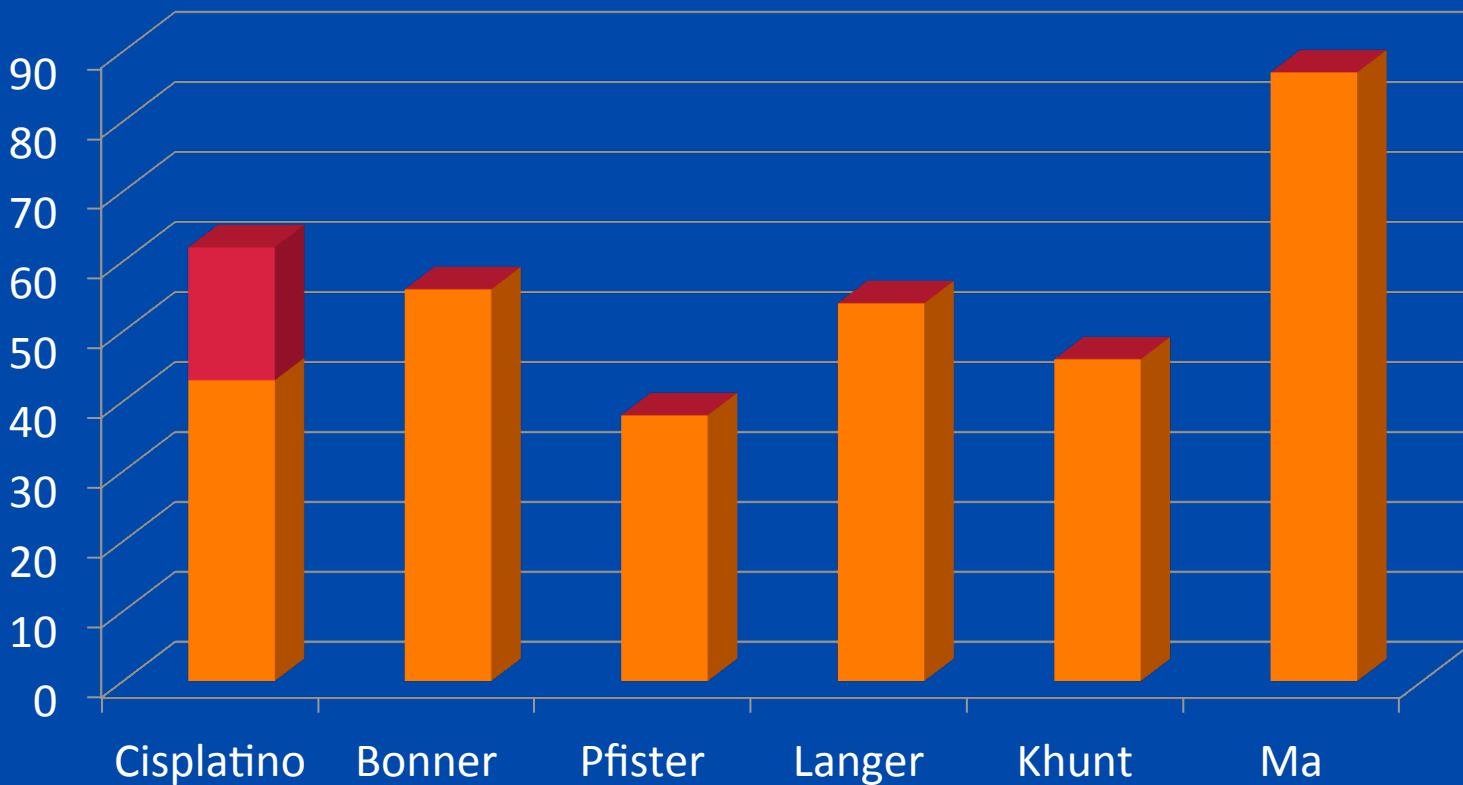
Tossicità



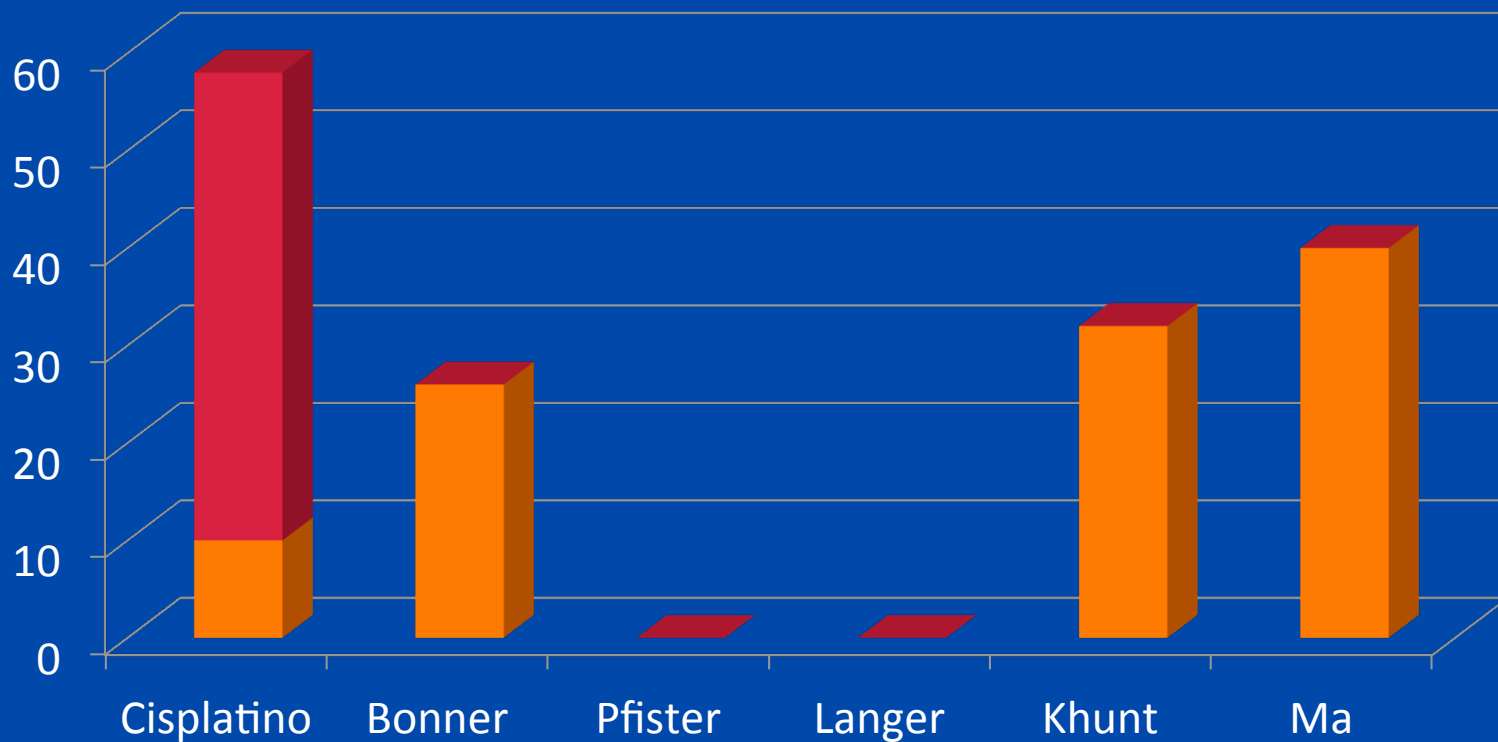
Le domande da porre



- > L'aggiunta di Cetuximab a CT-RT aumenta la tossicità?
- > Quali tossicità specifiche?



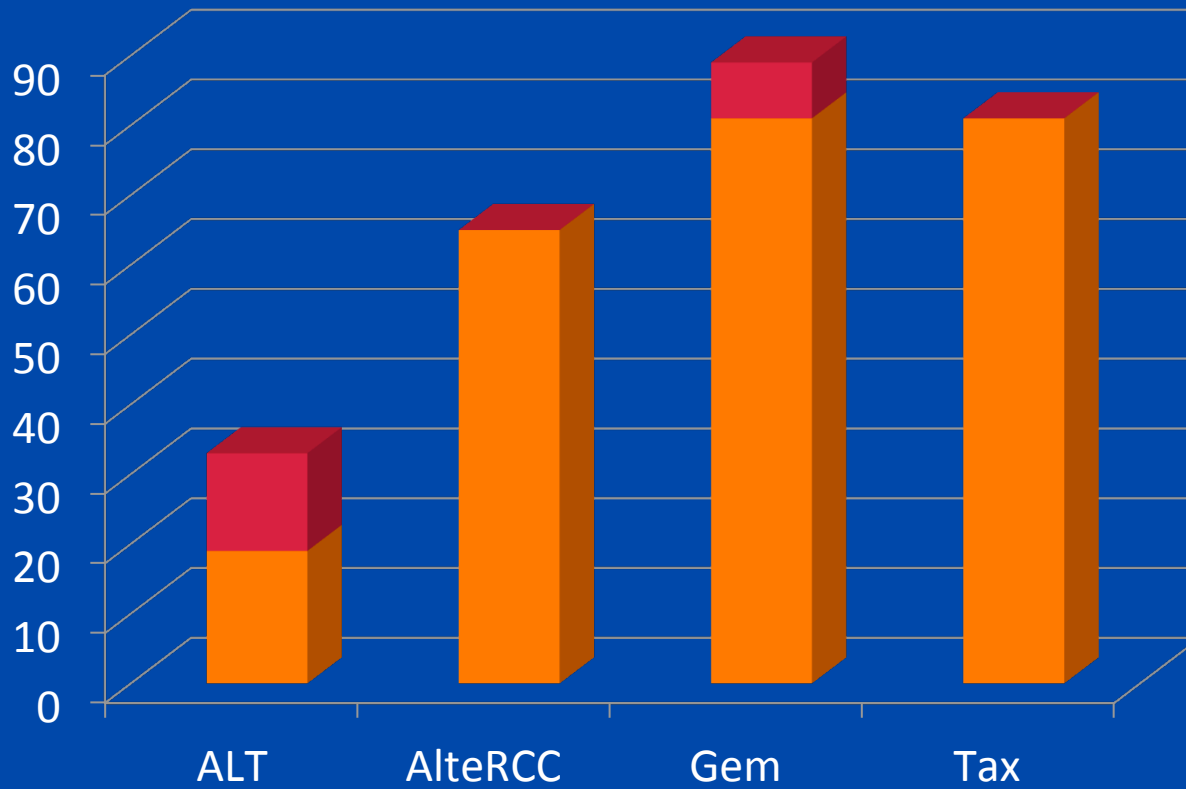
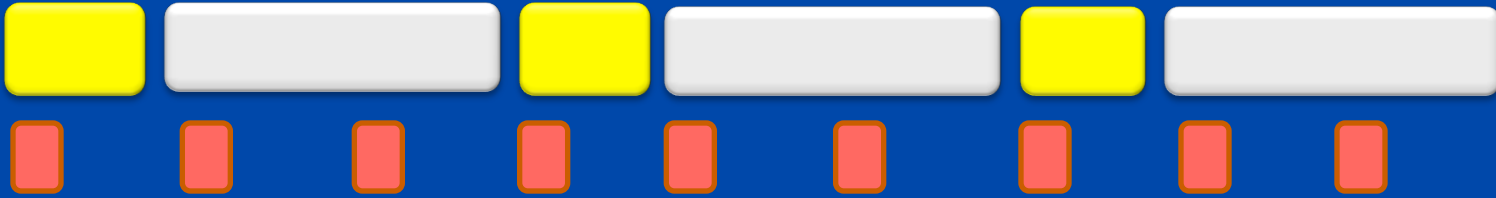
Stomatite g 3-4



Disfagia g 3-4

RTOG 0522

| | RT + P | RT + P + C |
|-----------------|------------|----------------------|
| Stomatite | 33% | 43% p 0.004 |
| Disfagia > 90 g | 35% | 37% p 0.62 |
| Dermatite | 15% | 25% p < 0.001 |
| TD | 2% | 2% |



Stomatite g 3-4

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JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Phase I Study of C-TPF in Patients With Locally Advanced Squamous Cell Carcinoma of the Head and Neck

Robert L. Haddad, Roy B. Tishler, Charles Norris, Laura Goguen, Tracy A. Balboni, Rosemary Costello, Lori Wirth, Jochen Lorch, Britta Andreozzi, Donald Annino, and Marshall R. Posner

Posner NEJM 2007

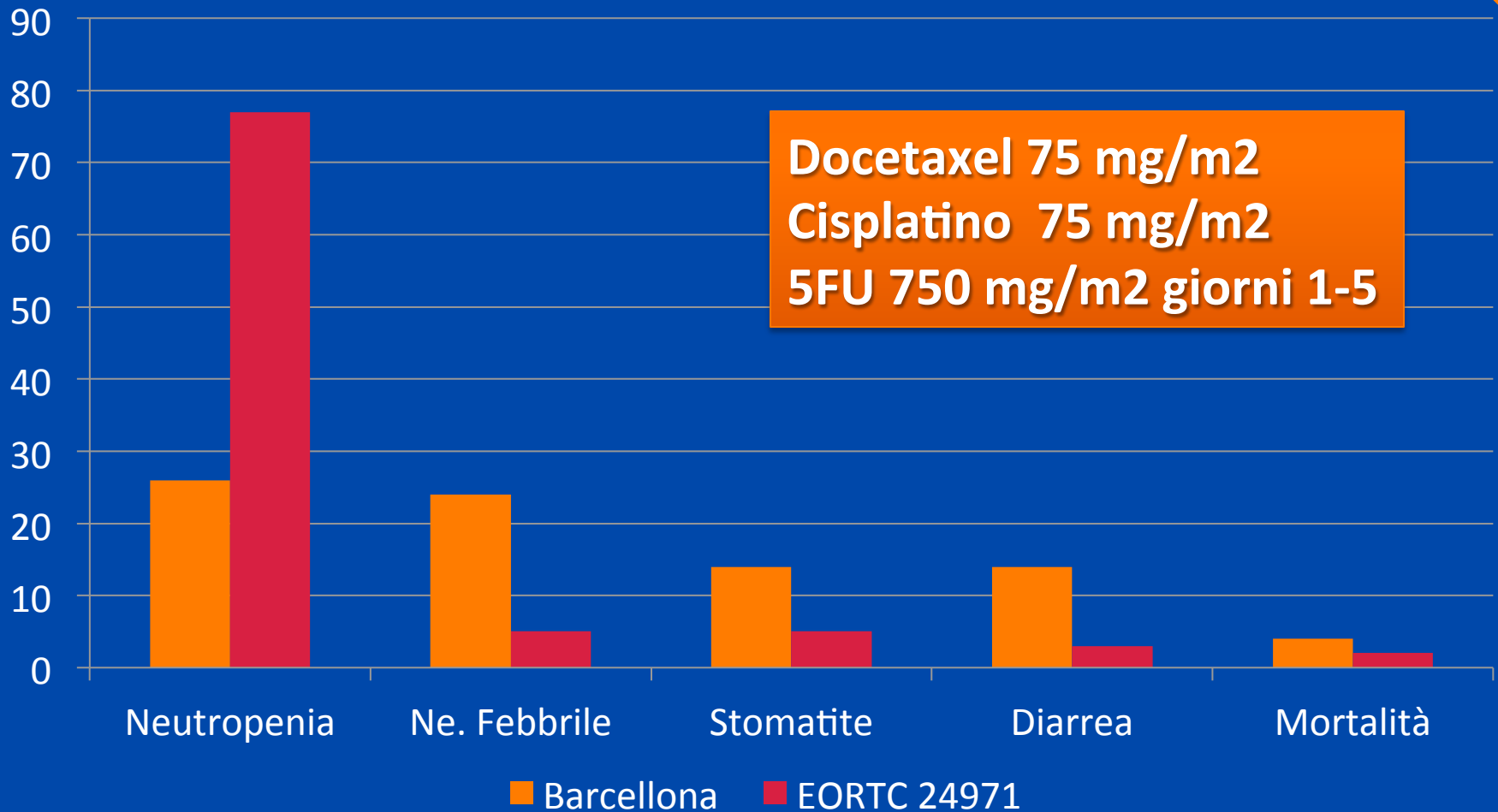
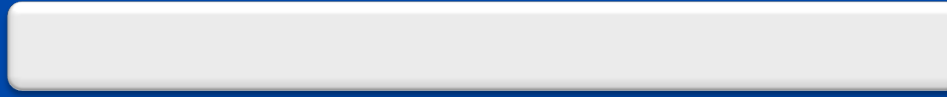
Docetaxel 75 mg/m² d1
Cisplatin 100 mg/m² d1
5FU 1000 mg/m² d1-4

+ C =

Haddad JCO 2009

Docetaxel 75 mg/m² d1
Cisplatin 100 mg/m² d1
5FU 850 mg/m² d1-4

Stomatite
Diarrea
Neutropenia febbrile



Mortalità ed eventi avversi severi

Pfister, J Clin Oncol 2006

| | Evento | Studio | # | TD | % |
|---|-----------------------|------------------------------|----|----|-------------|
| | | Pfister J Clin Oncol 2006 | 21 | 2 | 9,5% |
| 1 | Polmonite | Langer ASCO 2008 | 61 | 1 | 1,6% |
| 2 | «weakness and disorie | Argiris J Clin Oncol 2010 | 39 | 3 | 7,7% |
| 3 | IMA | Merlano Ann Oncol 2011 | 45 | 3 | 6,6% |
| 4 | Sepsi MRSA (CVC) | Ma An Oncol 2011 | 30 | 0 | 0 |
| 5 | Shock settico | RTOG 0522 ASCO 2011 | NR | NR | 2% |

La mortalità dei trattamenti integrati *dati dagli studi randomizzati*

| Studio | CT | RT | Mortalità |
|------------|-----|--------------|-----------|
| Brizel | PF | HF | 2% |
| Calais | CbF | Conv | 1% |
| Wendt | PFL | HF – split | 2% |
| Adelstein | P | Conv | 4% |
| Adelstein | PF | Conv – split | 2% |
| Forastiere | P | Conv | 5% |
| Bonner | C | Conv / HF | 5% |

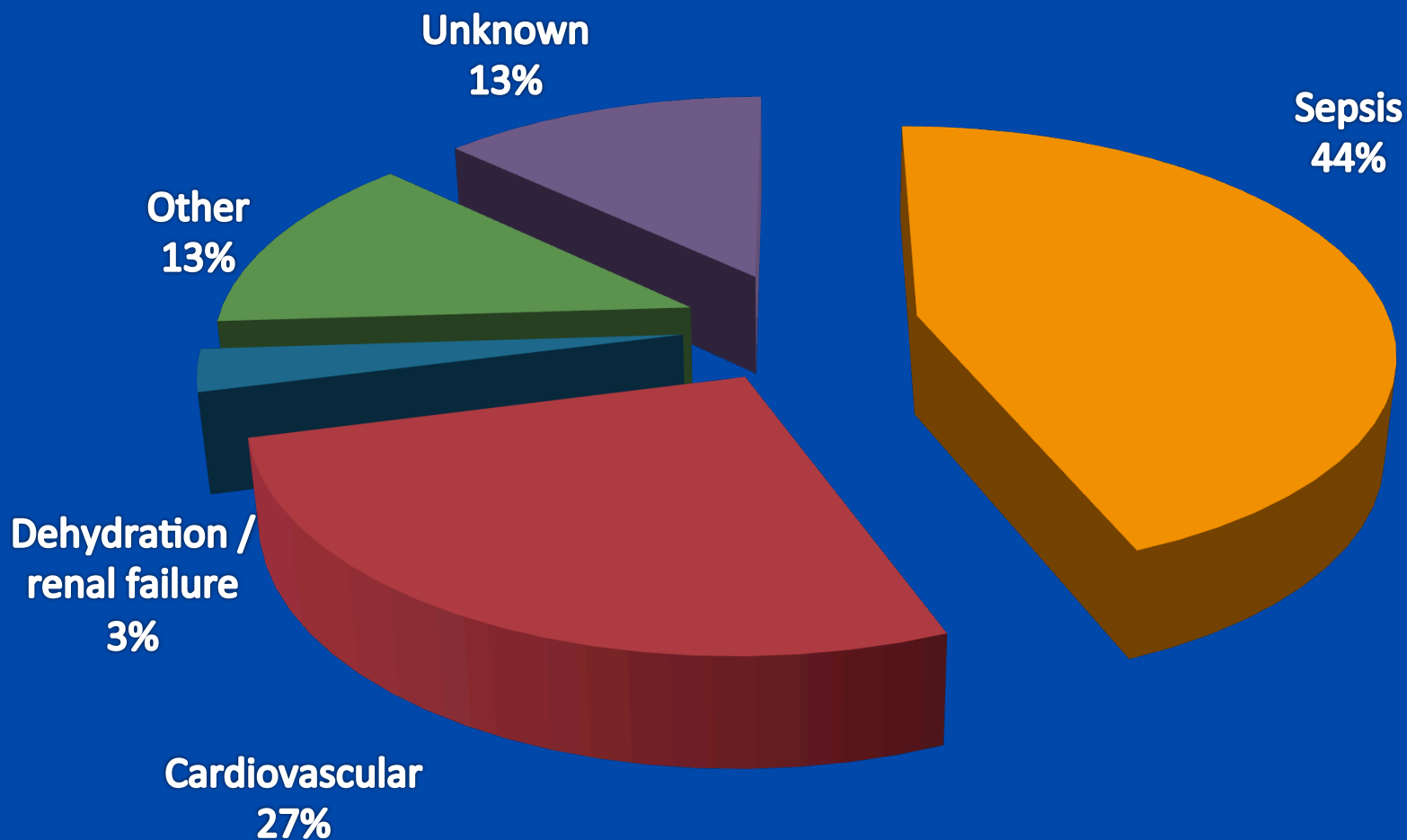
La mortalità dei trattamenti integrati

dati dalle casistiche istituzionali



| Studio | Centro | # | Mortalità |
|----------------|-----------|-----|-------------|
| Argiris 2002 | Chicago | 324 | 9.2% |
| Nguyen 2004 | Dallas | 55 | 9,1% |
| Merlano 2008 | Cuneo | 155 | 6.4% |
| Adelstein 2006 | Cleveland | 222 | 14% |
| Mell 2010 | San Diego | 479 | 7,8% |

Quali sono le cause di morte nei pazienti sottoposti a CT-RT?



Il danno tissutale ha effetti sistemici

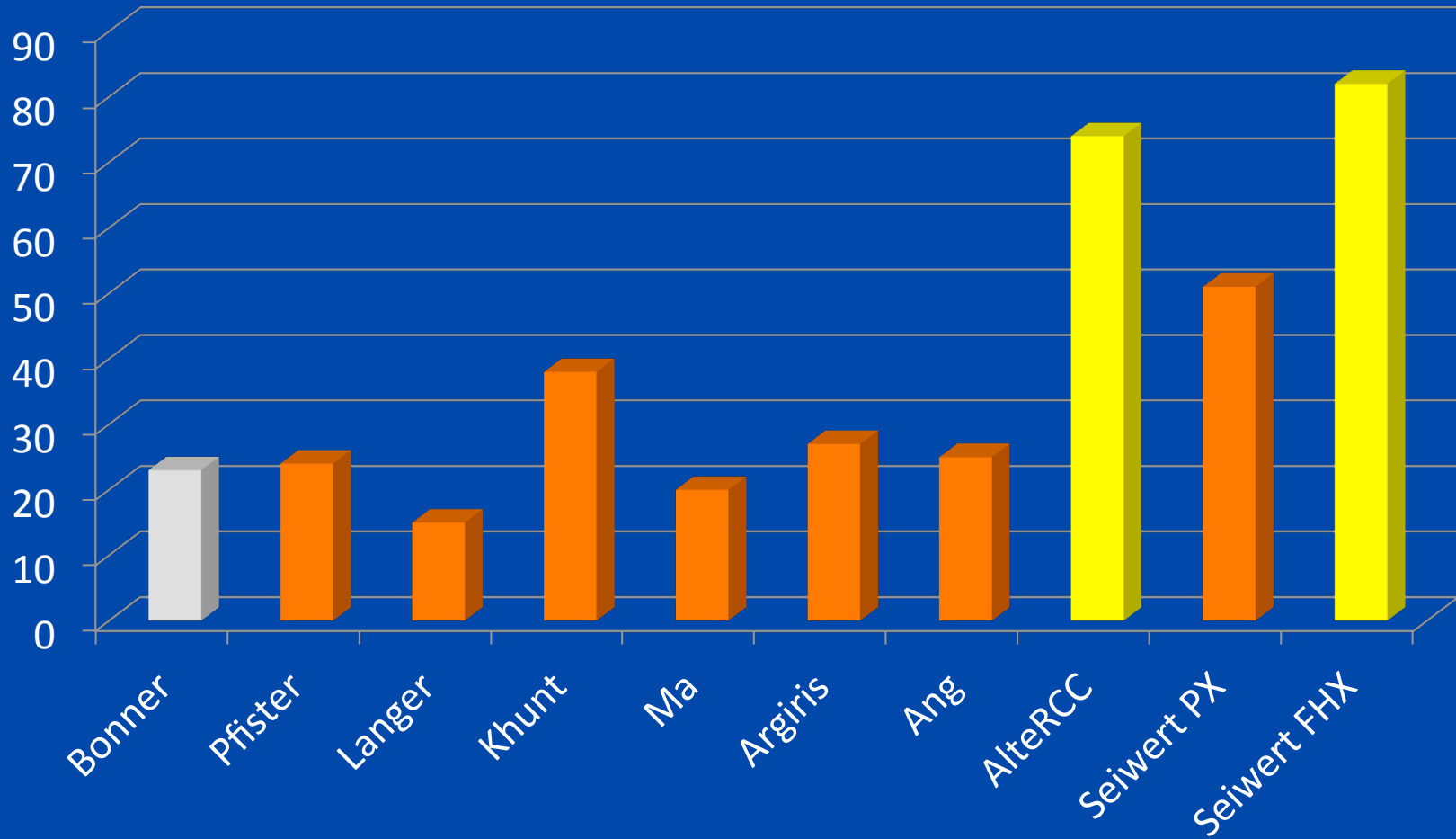


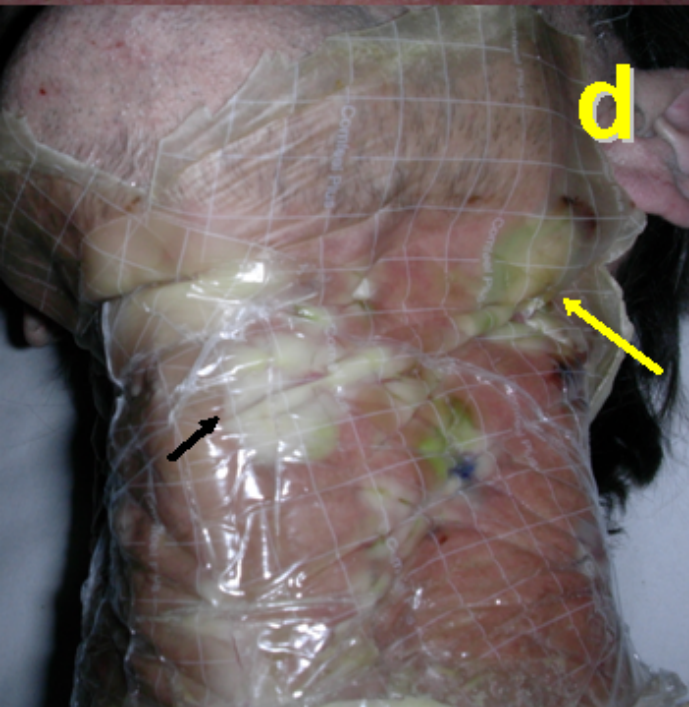
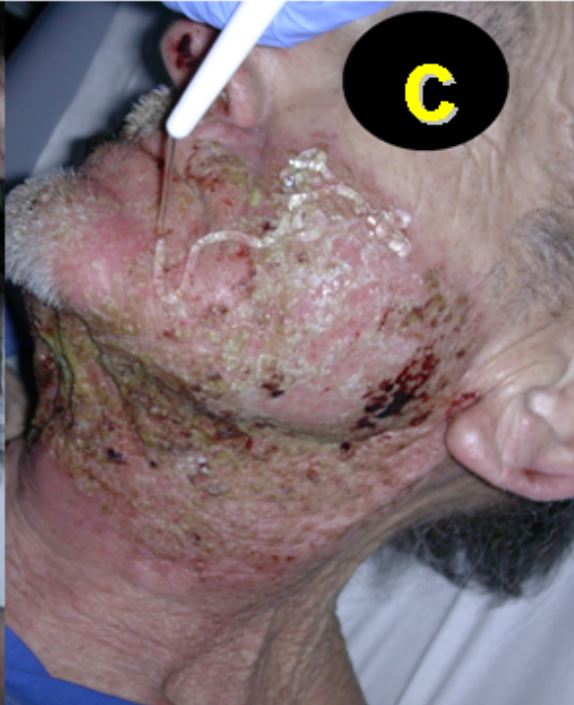
Le tossicità specifiche



- > Radiodermite
- > Reazioni infusionali
- > Alterazioni elettrolitiche (ipomagnesemia)

Radiodermite

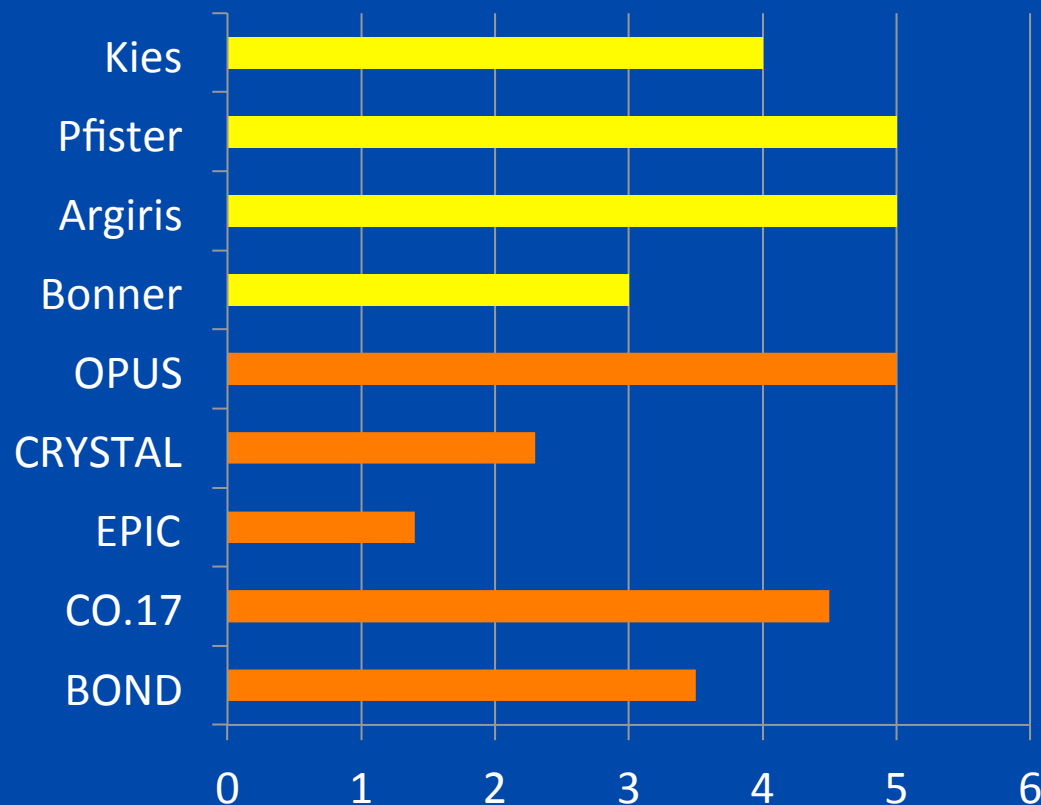




Reazioni infusionali

Reazione infusionale severa (g3-4 CTCAE v4):
non miglioramento dopo
sospensione
dell'infusione

Indicata doppia
premedicazione con
antistaminico + steroide



Alterazioni elettrolitiche

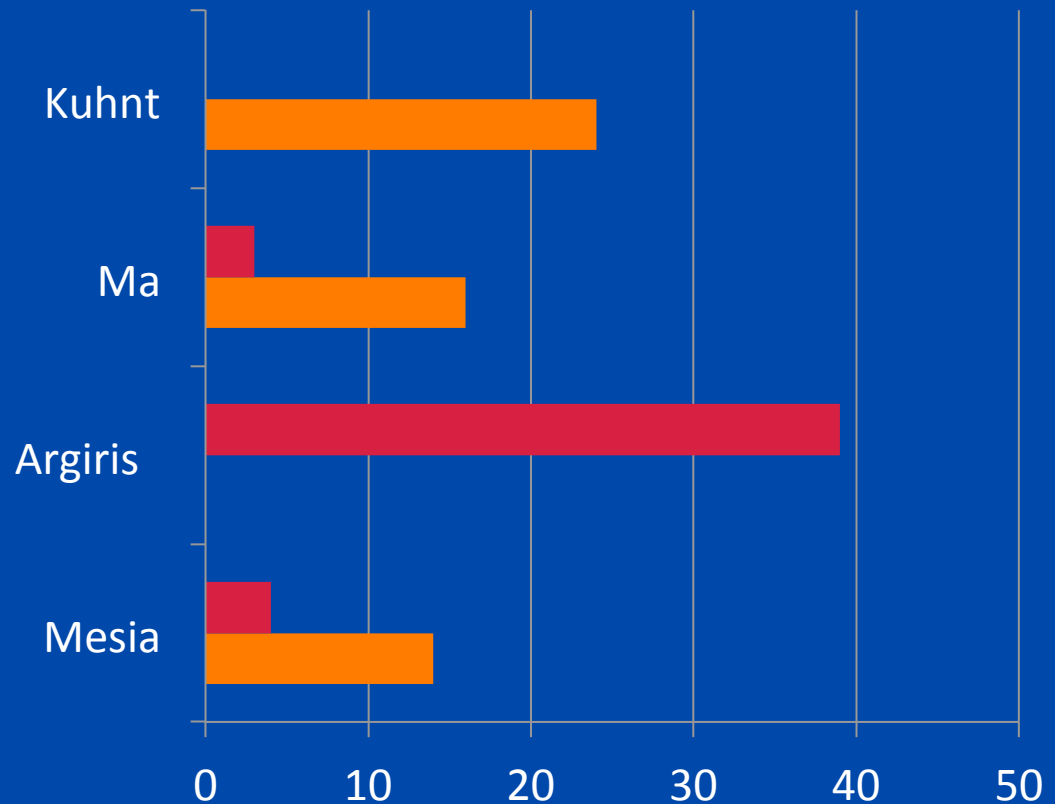
| Parameter | Median pre-chemo-RT (range) | Median at end of chemo-RT (range) | Median % change from pre-chemo-RT to end of chemo-RT | <i>p</i> value |
|--------------------------|--------------------------------|--------------------------------------|---|----------------|
| BUN (mg/dL) | 14 (5–36) | 22 (8–54) | 55 (–23–400) | <0.0001 |
| Creatinine (mg/dL) | 0.9 (0.4–1.4) | 1 (0.4–3.2) | 14 (–17–256) | <0.0001 |
| BUN:creatinine | 16 (7–42) | 20 (6–60) | 35 (–66–167) | 0.0001 |
| HCO ₃ (meq/L) | 27 (20–34) | 30.5 (22–36) | 14 (–21–43) | <0.0001 |
| Mg (mg/dL) | 1.8 (1.5–2.4) | 1.7 (1–2.3) | –8 (–48–19) | <0.0001 |
| K (meq/L) | 4.3 (3.3–5.7) | 3.9 (2.7–4.9) | –7.5 (–44–18) | <0.0001 |
| Na (meq/L) | 140 (127–144) | 136 (125–143) | –2 (–10–4) | <0.0001 |
| Albumin (gr/dL) | 3.7 (2.7–4.4) | 3.4 (2.3–4.2) | –8 (–32–33) | <0.0001 |
| Weight (lbs) | 179 (92–322) | 167 (88–297) | –9 (–31–1) | <0.0001 |

Ipomagnesemia

Grado 3-4 =
Mg < 0,9 mg/dL

- Astenia
- Parestesie
- Ipocalcemia
- Aritmie

Infusione e.v. di Mg-
Solfato 6-10 mg/die



Per concludere



- > L'associazione di Cetuximab con i regimi di CT-RT è fattibile, anche se sembra aumentare le tossicità del trattamento (sia quando associato alla CT di induzione sia quando associato a CT-RT)
- > Le tossicità specifiche, se monitorate e trattate non ostacolano la conduzione del trattamento