

## **Cervical Cancer Clinical Case Discussion**

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# Disclosures

No potential conflicts of interest declared

# Staging in cervical cancer

- FIGO staging is based on clinical examination and is crucial to select and evaluate therapy
- TNM staging on pathological findings provide data to estimate prognosis and compare results
- FIGO clinical staging has been shown to result in understaging of up to 20-30% in stage IB and almost 40% in stage IIIB

# Which imaging in staging?

- MRI is an adjunct to clinical evaluation of early invasive cervical cancer, provides information on tumor diameter, volume, local invasion
- In a systematic review, MRI showed a significantly higher sensitivity (74%; 95% CI: 68-79%) than CT (55%; 95% CI 44-66%) but comparable specificity in the evaluation of parametrial involvement

# Which imaging in staging?

- There are divergent results on the role of MRI and CT in the evaluation of parametrial involvement
- In the prospective ACRIN/GOG study, MRI and CT showed similar accuracy in evaluating parametrial involvement in stages up to IIB; sensitivity decreased and specificity increased as the stage threshold increased
- In general, the superiority of MRI to CT has mostly been shown for the evaluation of large lesions

# Early invasive cervical cancer

## NIH Consensus Statement on Cervical Cancer Bethesda 1996

**“Patients with stage IB and IIA cervical cancer are appropriately treated with either radical hysterectomy with pelvic lymphadenectomy or radiation therapy with equivalent result. To minimize morbidity, primary therapy should avoid the routine use of both radical surgery and radiation therapy.**

**The combined use of radical surgery and radical radiation therapy results in high morbidity and cost.”**

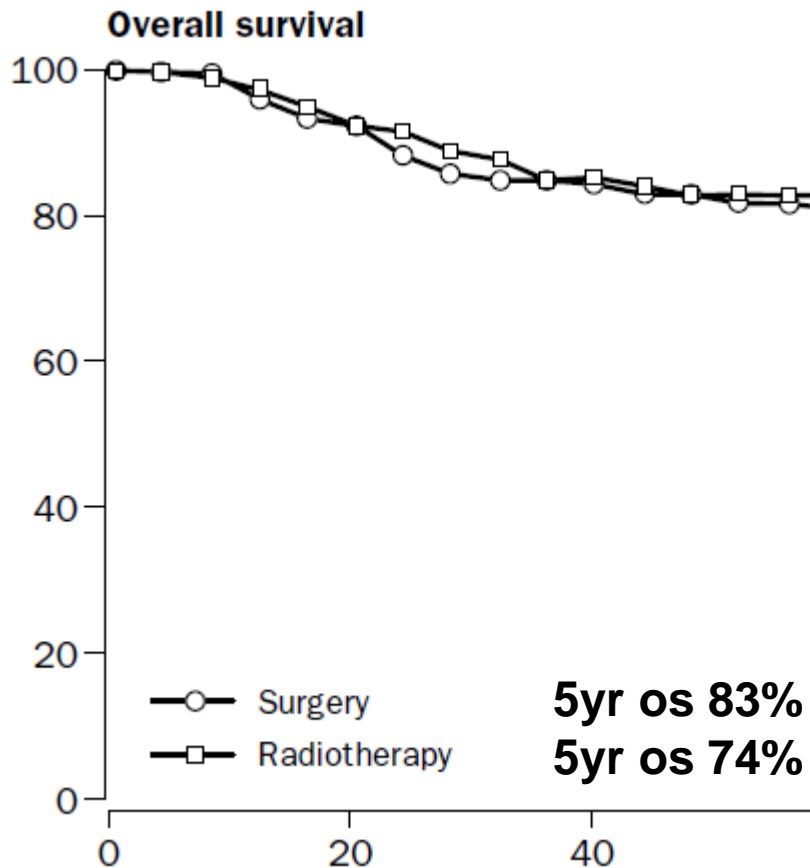
# Randomised study of radical surgery versus radiotherapy for stage Ib-IIa cervical cancer

Fabio Landoni, Andrea Maneo, Alessandro Colombo, Franco Placa, Rodolfo Milani, Patrizia Perego, Giorgio Favini, Luigi Ferri, Costantino Mangioni

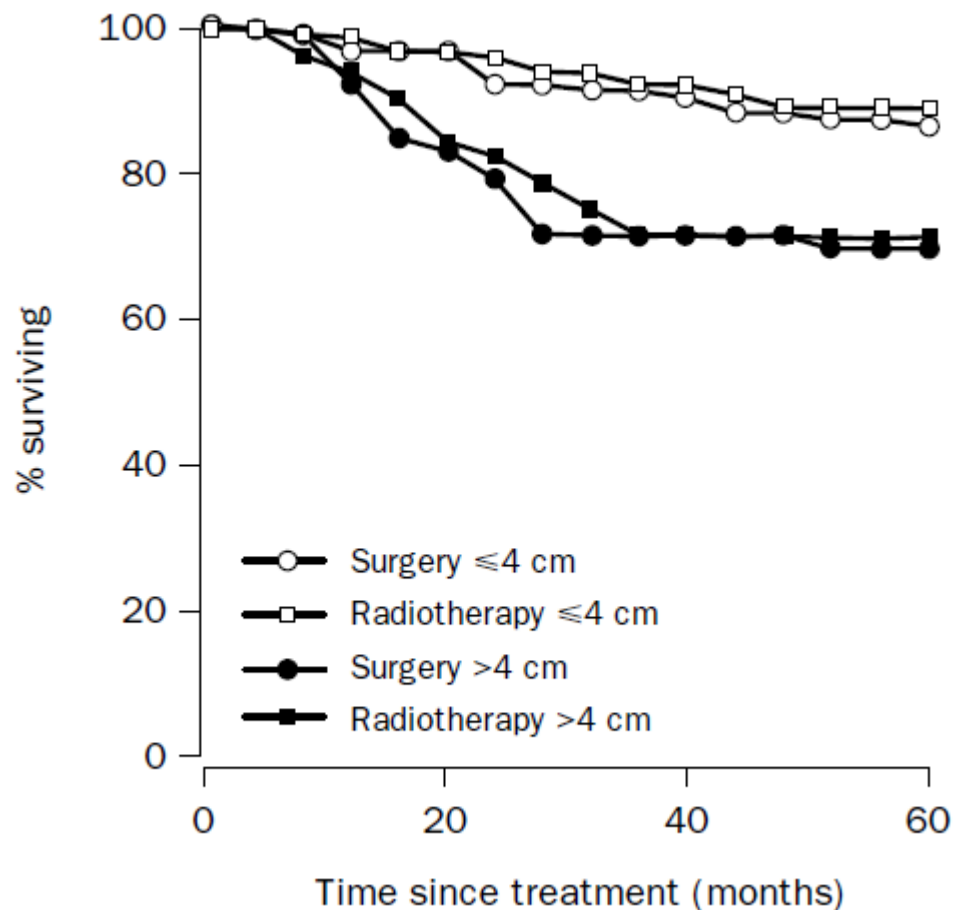
The Lancet, Vol 350,1997:535-540

|                    | Surgery (n=170) |        | Radiotherapy (n=167) |        |
|--------------------|-----------------|--------|----------------------|--------|
|                    | ≤ 4 cm          | > 4 cm | ≤ 4 cm               | > 4 cm |
| Number of patients | 115             | 55     | 113                  | 54     |
| FIGO stage IB      | 93%             | 85%    | 88%                  | 83%    |
| Adjuvant RT        | 54%             | 84%    |                      |        |

# Randomised study of radical surgery versus radiotherapy for stage Ib-IIa cervical cancer



**Overall survival by treatment group**



**Overall survival by treatment group and cervical diameter**



# Randomised study of radical surgery versus radiotherapy for stage Ib-IIa cervical cancer

|                  | Surgery<br>(N=170) | Radiotherapy<br>(N=167) | Total<br>(N=337) |
|------------------|--------------------|-------------------------|------------------|
| Relapses (%)     | 25                 | 26                      | 25.5             |
| Local/Pelvic (%) | 52                 | 64                      | 58               |
| Distant (%)      | 48                 | 36                      | 42               |

# Randomised study of radical surgery versus radiotherapy for stage Ib-IIa cervical cancer

| Morbidity      | Surgery                |                            | Radiotherapy group<br>(N=167) |
|----------------|------------------------|----------------------------|-------------------------------|
|                | Surgery only<br>(N=62) | Surgery plus RT<br>(N=108) |                               |
| Grade 2-3 (%)  | 31                     | 27                         | 11                            |
| Short-term (%) | 19                     |                            | 7                             |
| Long-term (%)  | 27                     |                            | 16                            |

# Radical surgery versus radiotherapy for stage Ib-IIa cervical cancer

## Optimum treatment strategy

Depends on:

- Prognostic factors
- Benefit and disadvantages of each treatment

| Surgery                                    | Radiotherapy   |
|--|--|
| Younger patients                           | Obese, elderly patients                                |
| Radiotherapy feasible in pelvic recurrence | Concomitant severe illness                             |
| Information on nodal status                | Salvage surgery in pelvic recurrence highly risky      |
|  | Delayed complications (mainly after combined approach) |

## 2/22/99: NCI issues clinical announcement on cervical cancer

The results of 5 large studies have shown that women with invasive cervical cancer have better survival when they receive chemotherapy which includes the *drug cisplatin along with radiation therapy*

# Concurrent chemoradiotherapy for cervical cancer: a meta-analysis of 18 randomized trials

- Greater effect for stage IB2-IIA/IIB
- Better results for platinum-based therapy
- Greater benefit in overall survival with additional adjuvant CT

# Recurrent metastatic cervical cancer

## Stage IVB

**Recurrence** not suitable for local treatment (pelvic and extrapelvic)

## Chemotherapy

CT platinum-based with:

|                     | PFS<br>(mos) | OS<br>(mos) |
|---------------------|--------------|-------------|
| • Topotecan         | 4.6          | 10          |
| • <b>Paclitaxel</b> | 5.8          | 13          |
| • Gemcitabine       | 4.7          | 10          |
| • Vinorelbine       | 4            | 10          |

# GOG 240: Schema

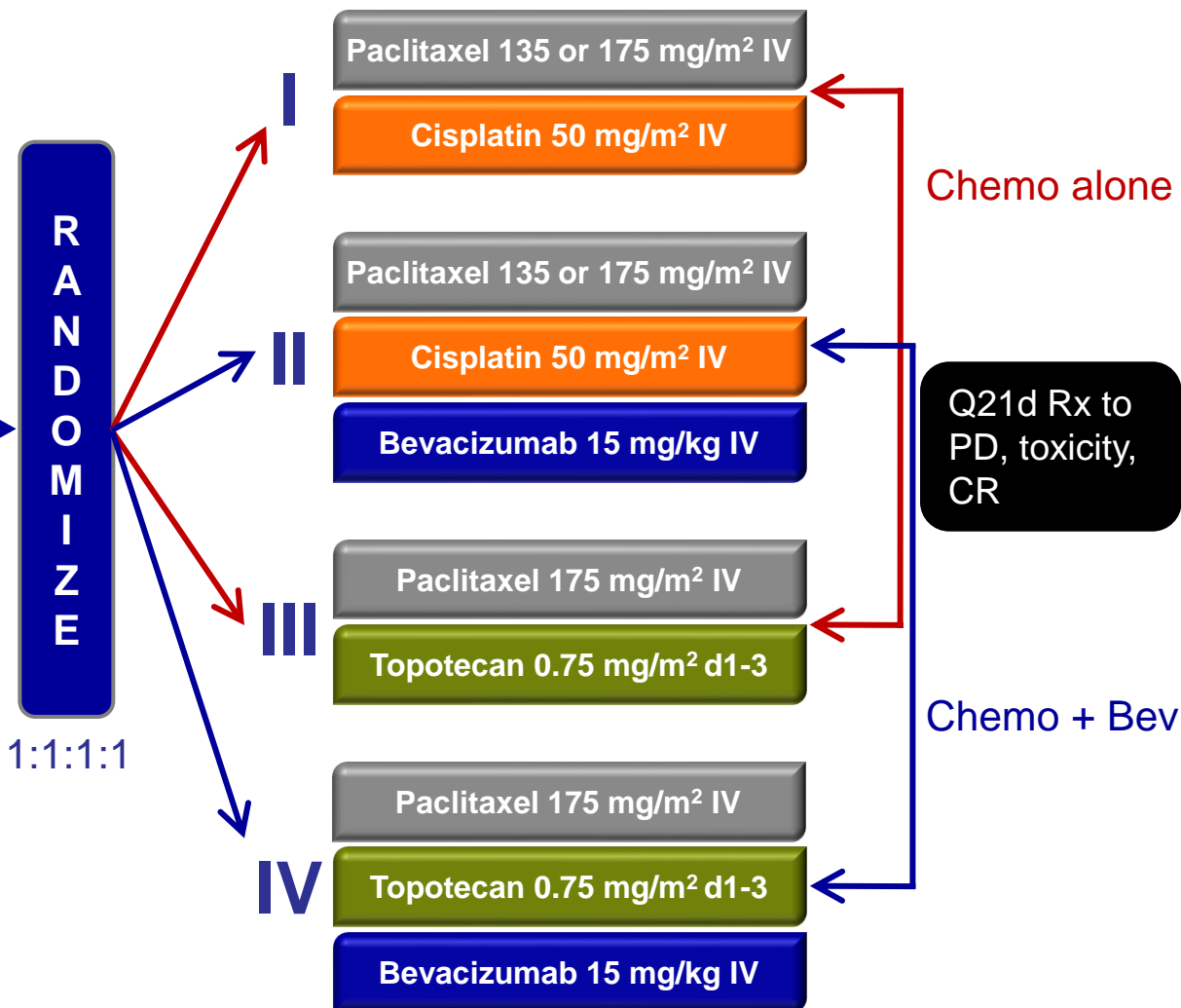
## Carcinoma of the cervix

- Primary stage IVB
  - Recurrent/persistent
  - Measureable disease
  - GOG PS 0–1
  - No prior chemotherapy for recurrence
- (N=452)

### Stratification factors:

- Stage IVB vs recurrent/persistent disease
- Performance status
- Prior cisplatin Rx as radiation-sensitizer

Activated: 4/6/09  
Closed to accrual: 1/3/12

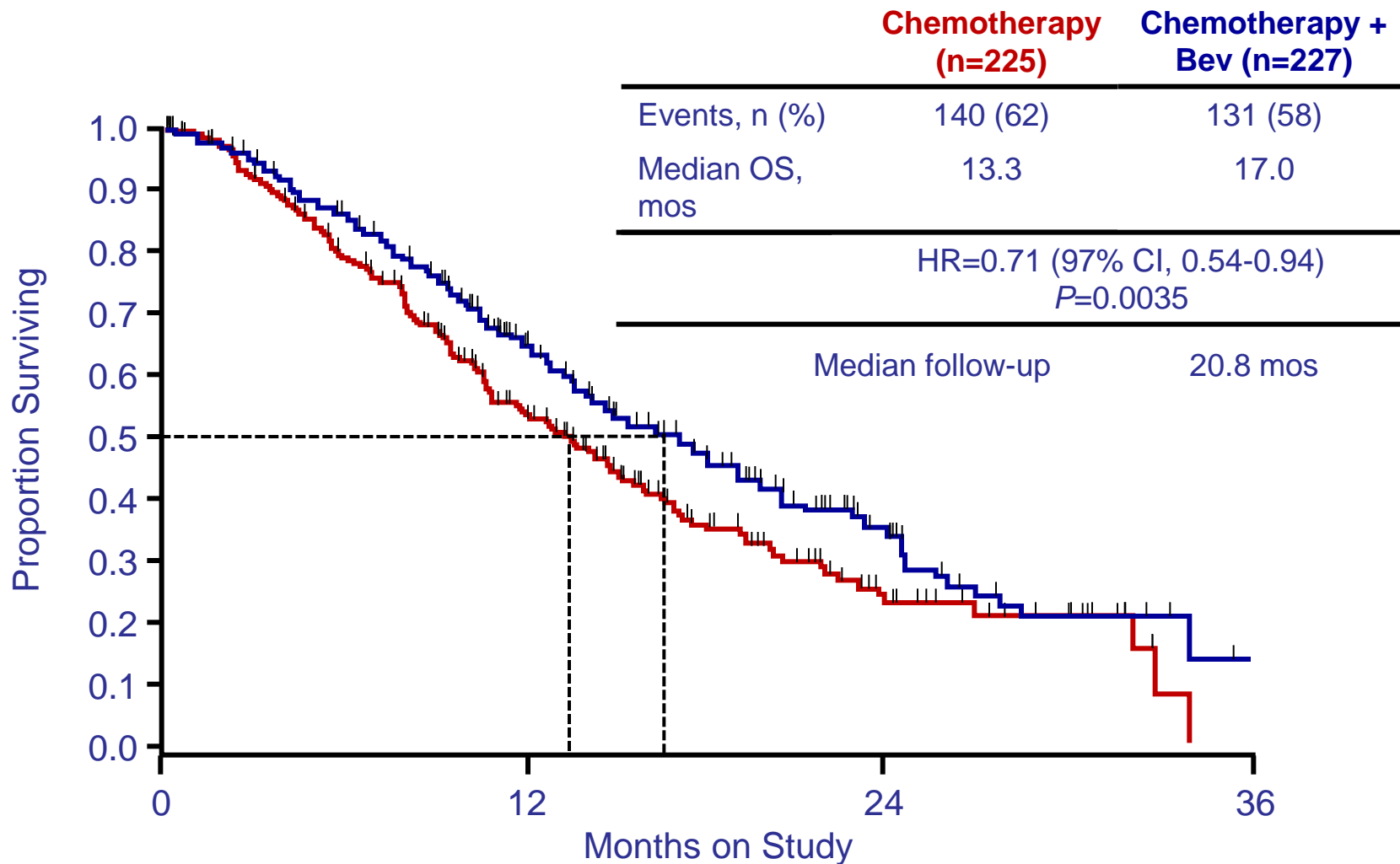


# GOG 240: Demographics & Baseline Characteristics

| Characteristic            | Chemo Alone<br>(n=225), % | Chemo + Bev<br>(n=227), % |
|---------------------------|---------------------------|---------------------------|
| Median age, years (range) | 46 (20–83)                | 48 (22–85)                |
| Histology, %              |                           |                           |
| Squamous                  | 68                        | 70                        |
| AdenoCa, unspec.          | 20                        | 19                        |
| Race, %                   |                           |                           |
| White                     | 80                        | 75                        |
| African American          | 11                        | 16                        |
| Asian                     | 3                         | 5                         |
| Pacific Islander          | 0                         | 0                         |
| Stage of disease, %       |                           |                           |
| Recurrent                 | 73                        | 70                        |
| Persistent                | 10                        | 12                        |
| Advanced                  | 16                        | 17                        |
| Performance status, %     |                           |                           |
| 0                         | 58                        | 58                        |
| 1                         | 42                        | 42                        |
| Prior platinum, %         | 74                        | 75                        |
| Pelvic disease, %         | 53                        | 54                        |



# GOG 240: OS for Chemo vs Chemo + Bev



# Incurable recurrent cervical cancer

## Individualized treatment of symptoms

- Pelvic pain
- Neurological symptoms (pain, motor and/or sensitivity dysfunction)
- Ureteric obstruction with renal failure
- Hemorrhage, malodourous discharge
- Lymphedema
- Fistula