Update in Cervical Cancer Management
Sharing of Local Experience with Targeted Therapy

DR. SF NGU
THE UNIVERSITY OF HONG KONG

Initial Work-up for Cervical Cancer

- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

Optional investigations
- EMA
- Cytology
- Sigmoidoscopy
- MRI or CT scan or PET-CT

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy OR Cone biopsy with negative margins + pelvic lymphadenectomy OR Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy • High risk (positive lymph node or close/+margin) – adjuvant chemoRT • Intermediate risk (at least 2 of the following: LVSI, &gt;1/3 stromal invasion, large tumour) – small field RT</td>
</tr>
<tr>
<td>IIB</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB2, IIA1, IIA2, IIB</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIA2</td>
<td>If poor response, consider subsequent radical hysterectomy or pelvic exenteration</td>
</tr>
<tr>
<td>IIA5</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
<tr>
<td>IB3</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
<tr>
<td>Recurrence</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
</tbody>
</table>

Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility

- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVSI
- Estimated length of cervix >1 cm (in imaging)

Concurrent Chemoradiation

- Pelvic irradiation Standard Field
- Dose External irradiation to 40-50 Gy/4-5 weeks
- Brachytherapy boost 60-65 Gy for small tumour and 80-90 Gy for large tumour
- Total Duration 6-7 weeks
- Chemotherapy Capcitabine 450mg/m2 weekly during ERT for at least 4 doses
- For patients who have contraindications for Capcitabine, epirubicin could be used as an alternative
Update in Cervical Cancer Management
Sharing of Local Experience with Targeted Therapy

DR. SF NGU
THE UNIVERSITY OF HONG KONG

Initial Work-up for Cervical Cancer

- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

Optional investigations
- EUS
- Cystoscopy
- Sigmoidoscopy
- MRI or CT scan or PET-CT

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td></td>
<td>Cone biopsy with negative margins + pelvic lymphadenectomy</td>
</tr>
<tr>
<td></td>
<td>Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
</tbody>
</table>

- Early risk: (positive lymph node or close/+margin) – adjuvant chemoradiotherapy
- Intermediate risk (at least 2 of the following: LVSI, >1/3 stromal invasion, large tumour) – small field RT

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IIA1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td></td>
<td>High risk (positive lymph node or close/+margin) – adjuvant chemoRT</td>
</tr>
<tr>
<td></td>
<td>Intermediate risk (at least 2 of the following: LVSI, &gt;1/3 stromal invasion, large tumour) – small field RT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IB2, IIA2</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIB - IVA</td>
<td>ChemoRT + brachytherapy</td>
</tr>
</tbody>
</table>

- If poor response, consider subsequent radical hysterectomy or pelvic exenteration
- IVB or Recurrence: Palliative radiotherapy or chemotherapy

Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility

- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVSI
- Estimated length of cervix >1 cm (on imaging)

Concurrent Chemoradiation

- Pelvic Irradiation: Standard Field
- Dose: External irradiation to 40-50 Gy/4-5 weeks
- Brachytherapy boost 80-85 Gy for small tumour and 85-90 Gy for large tumour
- Total Duration: 6-7 weeks
- Chemotherapy: Cisplatin 40mg/m² weekly during ERT for at least 4 doses
- For patients who have contraindications for Cisplatin, 4-epidoxorubicin could be used as an alternative
# Update in Cervical Cancer Management
Sharing of Local Experience with Targeted Therapy

**DR. SF NGU**
THE UNIVERSITY OF HONG KONG

## Initial Work-up for Cervical Cancer
- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

### Optional Investigations
- MRI or CT scan or PET-CT

## Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td></td>
<td>Cone biopsy with negative margins + pelvic lymphadenectomy</td>
</tr>
<tr>
<td></td>
<td>Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IIA1</td>
<td>High risk (positive lymph node or close/+margin) – adjuvant chemoRT</td>
</tr>
<tr>
<td></td>
<td>Intermediate risk (at least 2 of the following: LVSI, &gt;1/3 stromal invasion, large tumour) – small field RT</td>
</tr>
<tr>
<td>IB2, IIA2</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIB - IVA</td>
<td>If poor response, consider subsequent radical hysterectomy or pelvic exenteration</td>
</tr>
<tr>
<td>IVB or Recurrence</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
</tbody>
</table>

## Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility
- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVSI
- Estimated length of cervix >1 cm (on imaging)

## Concurrent Chemoradiation
- Pelvic Irradiation Standard Field
- Dose: External irradiation to 40-50 Gy/4-5 weeks
- Brachytherapy boost 80-85 Gy for small tumour and 85-90 Gy for large tumour
- Total Duration: 6-7 weeks
- Chemotherapy: Cisplatin 40mg/m² weekly during ERT for at least 4 doses
- For patients who have contraindications for Cisplatin, 4-epidoxorubicin could be used as an alternative

---

**Initial Work-up for Cervical Cancer**
- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

### Optional Investigations
- MRI or CT scan or PET-CT
Update in Cervical Cancer Management Sharing of Local Experience with Targeted Therapy

DR. SF NGU
THE UNIVERSITY OF HONG KONG

Initial Work-up for Cervical Cancer

- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

Optional investigations
- EAU
- Cytostatography
- sigmoidoscopy
- MRI or CT scan or PET-CT

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy OR Cone biopsy with negative margins + pelvic lymphadenectomy OR Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IIA1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IIA2</td>
<td>ChemoRT + brachytherapy</td>
</tr>
</tbody>
</table>

Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility

- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVSI
- Estimated length of cervix >1 cm (on imaging)

Concurrent Chemoradiation

- Pelvic Irradiation Standard Field
- Dose External Irradiation to 40-50 GY / 4 - 5 weeks
- Boosted Irradiation 50-60 Gy for small tumour and 60-90 Gy for large tumour
- Total Duration 6-7 weeks
- Chemotherapy Cisplatin 40mg/m² weekly during ERT for at least 4 doses
- For patients who have contraindications for Cisplatin, 4-epidoxorubicin could be used as an alternative
Update in Cervical Cancer Management
Sharing of Local Experience with Targeted Therapy

DR. SF NGU
THE UNIVERSITY OF HONG KONG

Initial Work-up for Cervical Cancer

- History and physical examination
- Complete blood count, Liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Ultrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

Optional investigations
- EMA
- Cytology
- Sigmoidoscopy
- MRI or CT scan or PET-CT

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy OR Cone biopsy with negative margins + pelvic lymphadenectomy OR Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>II A1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB2, IIA2</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIB</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIA</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIB</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIIA</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IVB</td>
<td>ChemoRT + brachytherapy</td>
</tr>
</tbody>
</table>

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IIIA</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IVB</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>Recurrence</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
</tbody>
</table>

Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility

- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVSI
- Estimated length of cervix ≥ 1 cm (in imaging)

Concurrent Chemoradiation

- Pelvic Irradiation Standard Field
- Dose: External irradiation to 40-50 Gy in 4-5 weeks
- Brachytherapy boost 80-85 Gy for small tumour and 85-90 Gy for large tumour
- Total Duration: 6-7 weeks
- Chemotherapy: Cisplatin 40mg/m² weekly during ERT for at least 4 doses
- For patients who have contraindications for Cisplatin, 4-epidoxorubicin could be used as an alternative
Update in Cervical Cancer Management
Sharing of Local Experience with Targeted Therapy

DR. SF NGU
THE UNIVERSITY OF HONG KONG

Initial Work-up for Cervical Cancer

- History and physical examination
- Complete blood count, liver and renal function tests
- SCC / CA125
- Chest X-ray
- Renal tract imaging (Utrasound or IVU or CT/MRI)
- Slide review for biopsy taken in other institutions

Optional Investigations
- EGA
- Cytology
- Cystoscopy
- Sigmoidoscopy
- MRI or CT scan or PET-CT

Overview of Treatment

<table>
<thead>
<tr>
<th>Stage</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>IA1</td>
<td>Simple hysterectomy or Cone biopsy with negative margins</td>
</tr>
<tr>
<td>IA2</td>
<td>Modified Radical hysterectomy + pelvic lymphadenectomy OR Cone biopsy with negative margins + pelvic lymphadenectomy OR Radical trachelectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB1</td>
<td>Radical hysterectomy + pelvic lymphadenectomy</td>
</tr>
<tr>
<td>IB2, IIA2</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IIB - IVA</td>
<td>ChemoRT + brachytherapy</td>
</tr>
<tr>
<td>IVB or Recurrence</td>
<td>Palliative radiotherapy or chemotherapy</td>
</tr>
</tbody>
</table>

Patient Selection Criteria for Radical Trachelectomy in Patients Desiring Future Fertility

- Stage IA2 or Stage IB1 disease
- Tumour size ≤ 2 cm
- Favourable histology (including squamous cell carcinoma, adenocarcinoma or adenosquamous carcinoma)
- No evidence of lymph node, or distant metastases or extensive LVI
- Estimated length of cervix > 1 cm (on imaging)

Concurrent Chemoradiation

- Pelvic Irradiation Standard Field
- Dose: External Irradiation to 40-50 Gy in 4-5 weeks; Brachytherapy boost 50-65 Gy for small tumour and 65-90 Gy for large tumour
- Total Duration: 6-7 weeks
- Chemotherapy: Cisplatin 40mg/m² weekly during ERT for at least 4 doses
- For patients who have contraindications for Cisplatin, 4-epidoxorubicin could be used as an alternative
Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

First line combination
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Cisplatin + Paclitaxel
- Cisplatin + Gemcitabine

First line single agent
- Cisplatin
- Carboplatin
- Paclitaxel

Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

Second line
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-Fluorouracil
- Gemcitabine
- IFO

NCCN Guidelines Cervical cancer 2016

Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505

- Open-label Phase III Randomized Trial
- 253 women with metastatic or recurrent cervical cancer
  - Carboplatin/Paclitaxel (median OS 17.5 months)
  - Cisplatin/Paclitaxel (median OS 18.3 months)
- Among patients who had not received prior platinum:
  - OS carboplatin/paclitaxel and cisplatin/paclitaxel was 13.0 and 23.2 months, respectively (HR=1.571; 95% CI, 1.06 to 2.32)
- Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy
- Lower toxicity with Carboplatin/Paclitaxel

GOG 240

- Phase 3 randomized trial
- 432 patients in frontline setting of metastatic, persistent or recurrent cervical cancer (>70% in each group had previously received platinum-based chemoRT)
  - Group 1: Cisplatin + paclitaxel
  - Group 2: Topotecan + paclitaxel
  - Group 3: Cisplatin + paclitaxel + bevacizumab
  - Group 4: Topotecan + paclitaxel + bevacizumab


Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

**First line combination**
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel + Topotecan
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

**First line single agent**
- Cisplatin
- Carboplatin
- Paclitaxel
- Cisplatin + Gemcitabine

**Second line**
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-fluorouracil
- Gemcitabine
- Rituximab
- 4-Epidoxorubin (QHM)

---

**Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505**

- Open-label Phase III Randomized Trial
- 253 women with metastatic or recurrent cervical cancer
- Carboplatin/Paclitaxel (median OS 17.5 months) vs. Cisplatin/Paclitaxel (median OS 18.3 months); HR=0.994 (90% CI, 0.79 to 1.25); P = .032

**Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy.**

---

**GOG 240**

- Phase 3 randomized trial
- 432 patients in frontline setting of metastatic, persistent or recurrent cervical cancer (70% in each group had previously received platinum-based chemoradiation)

**Groups**
- Group 1: Cisplatin + paclitaxel
- Group 2: Topotecan + paclitaxel
- Group 3: Cisplatin + paclitaxel + bevacizumab
- Group 4: Topotecan + paclitaxel + bevacizumab

---

**Significant improvement in overall survival with bevacizumab of 3.7 months (17.0 months vs. 13.3 months; P = 0.004)**

---

**NCCN Guidelines Cervical cancer 2016**

**First line combination**
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

**First line single agent**
- Cisplatin
- Carboplatin
- Paclitaxel
- Cisplatin + Gemcitabine

**Second line**
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-fluorouracil
- Gemcitabine
- Rituximab
- 4-Epidoxorubin (QHM)
Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

First line combination
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

First line single agent
- Cisplatin
- Carboplatin
- Paclitaxel

Second line
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-Fluorouracil
- Gemcitabine
- Rotamidne

Irinotecan
Mitomycin
Premetrexed
Topotecan
Vinorelbine
4-Epidoxorubin (Qnpl)

Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505
- Open-label Phase III Randomized Trial
- 253 women with metastatic or recurrent cervical cancer
- Carboplatin/Paclitaxel (median OS 17.5 months) is non-inferior to Cisplatin/Paclitaxel (median OS 18.3 months), HR=0.994 (90% CI, 0.79 to 1.25); P = .023
- Among patients who had not received prior cisplatin:
- OS carboplatin/paclitaxel and cisplatin/paclitaxel was 13.0 and 23.2 months, respectively (HR=1.571; 95% CI, 1.06 to 2.32)
- Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy
- Lower toxicity with Carboplatin/Paclitaxel

GOG 240
- Phase 3 randomized trial
- 432 patients in frontline setting of metastatic, persistent or recurrent cervical cancer (>70% in each group had previously received platinum-based chemoradiotherapy)
- Group 1: Cisplatin + paclitaxel
- Group 2: Topotecan + paclitaxel
- Group 3: Cisplatin + paclitaxel + bevacizumab
- Group 4: Topotecan + paclitaxel + bevacizumab

Significant improvements in overall survival with bevacizumab of 3.7 months (17.0 months vs. 13.3 months; P = 0.004)
Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

First line combination
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

First line single agent
- Cisplatin
- Carboplatin
- Paclitaxel

Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

Second line
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-fluorouracil
- Gemcitabine
- Mitomycin
- Topotecan
- Vinorelbine
- 4-Epidoxorubin (QNH)

Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505

- Open-label Phase III Randomized Trial
- 253 women with metastatic or recurrent cervical cancer
- Carboplatin/Paclitaxel (median OS 17.5 months), HR=0.994 (95% CI, 0.79 to 1.25); P = 0.002
- Among patients who had not received prior cisplatin:
  - OS carboplatin/paclitaxel and cisplatin/paclitaxel was 13.0 and 23.2 months, respectively (HR=1.571; 95% CI, 1.06 to 2.32)
- Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy
- Lower toxicity with Carboplatin/Paclitaxel

GOG 240

- Phase 3 randomized trial
- 432 patients in frontline setting of metastatic, persistent or recurrent cervical cancer (>70% in each group had previously received platinum-based chemoradiation)
- Group 1: Cisplatin + paclitaxel
- Group 2: Topotecan + paclitaxel
- Group 3: Cisplatin + paclitaxel + bevacizumab
- Group 4: Topotecan + paclitaxel + bevacizumab


Significant improvements in overall survival with bevacizumab of 3.7 months (17.0 months vs. 13.3 months; P = 0.004)

Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

**First line combination**
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel + Bevacizumab
- Carboplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

**First line single agent**
- Cisplatin
- Carboplatin
- Paclitaxel
- Irinotecan
- Mitomycin
- Premetrexed
- Topotecan
- Vinorelbine
- 4-Epidoxorubicin (QNH)

**Second line**
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-Fluorouracil
- Gemcitabine
- Raltitrexed
- 4-Epidoxorubicin (QNH)

NCCN Guidelines Cervical cancer 2016

**Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505**
- Open-label Phase III Randomized Trial
- 253 women with metastatic or recurrent cervical cancer
- Carboplatin/Paclitaxel (median OS 17.5 months) is non-inferior to Cisplatin/Paclitaxel (median OS 18.3 months); HR = 0.994 (90% CI, 0.79 to 1.25); P = .025
- Among patients who had not received prior cisplatin:
  - OS carboplatin/paclitaxel and cisplatin/paclitaxel was 13.0 and 23.2 months, respectively (HR = 1.571; 95% CI, 1.06 to 2.32)
- Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy
- Lower toxicity with Carboplatin/Paclitaxel

**GOG 240**
- Phase 3 randomized trial
- 432 patients in first-line setting of metastatic, persistent or recurrent cervical cancer (>70% in each group had previously received platinum-based chemotherapy)
- Group 1: Cisplatin + paclitaxel
- Group 2: Topotecan + paclitaxel
- Group 3: Cisplatin + paclitaxel + bevacizumab
- Group 4: Topotecan + paclitaxel + bevacizumab

**Significant improvements in overall survival with bevacizumab of 3.7 months (17.0 months vs. 13.3 months); P = 0.004**

Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

First line combination
- Cisplatin + Paclitaxel + Bevacizumab
- Cisplatin + Paclitaxel
- Topotecan + Paclitaxel + Bevacizumab
- Carboplatin + Paclitaxel
- Carboplatin + Paclitaxel + Bevacizumab
- Cisplatin + Topotecan
- Topotecan + Paclitaxel
- Cisplatin + Gemcitabine

First line single agent
- Cisplatin
- Carboplatin
- Paclitaxel

Possible Chemotherapy for Recurrent or Metastatic Cervical Cancer

Second line
- Bevacizumab
- Albumin-bound paclitaxel
- Docetaxel
- 5-fluorouracil
- Gemcitabine
- Rituximab
- 4-epidoxorubicin (QNM)

Carboplatin/Paclitaxel vs. Cisplatin/Paclitaxel in Metastatic or Recurrent Cervical Cancer: JCOG0505
- Open-label Phase III Randomized Trial
- 293 women with metastatic or recurrent cervical cancer
- Carboplatin/Paclitaxel (median OS 17.5 months) is non-inferior to Cisplatin/Paclitaxel (median OS 18.3 months); HR=0.994 (90% CI, 0.79 to 1.25; P=0.92)
- Among patients who had not received prior cisplatin:
  - OS carboplatin/paclitaxel and cisplatin/paclitaxel was 13.0 and 23.2 months, respectively (HR=1.57; 95% CI, 1.06 to 2.32)
- Carboplatin/Paclitaxel is recommended for patients who have received prior cisplatin therapy
- Lower toxicity with Carboplatin/Paclitaxel

GOG 240
- Phase 3 randomized trial
- 432 patients in frontline setting of metastatic, persistent or recurrent cervical cancer (>70% in each group had previously received platinum-based chemotherapy)
- Group 1: Cisplatin + paclitaxel
- Group 2: Topotecan + paclitaxel
- Group 3: Cisplatin + paclitaxel + bevacizumab
- Group 4: Topotecan + paclitaxel + bevacizumab

Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; P = 0.002)

TP not superior to CP
TP may be considered as an alternative in patients who are not candidates for cisplatin

Significantly higher risk of progression with TP
No significant difference in overall survival

Increased Probability of a Response with Bevacizumab
- Significantly higher response rate
  - With bevacizumab: 48%
  - Without bevacizumab: 36%
  - Relative probability of a response: 1.35; 95% CI 1.08-1.68; P=0.008, two-sided test

Higher toxicity with bevacizumab:
- GI fistulas: 3%
- Hypertension: 25%
- Thromboembolic events: 8%

Quality of Life
- Not associated with a statistically significant decrease in patient-reported quality of life (P = .27)

Other Agents
- Vaccine therapies (Therapeutic HPV DNA vaccines) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials
Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; P = 0.002).

Increased Probability of a Response with Bevacizumab
- Significantly higher response rate
  - With bevacizumab: 48%
  - Without bevacizumab: 36%
- Relative probability of a response: 1.35; 95% CI: 1.08 - 1.68; P=0.008, two-sided test.

TP not superior to CP
- TP may be considered as an alternative in patients who are not candidates for cisplatin.
- No significant difference in overall survival.

Higher toxicity with bevacizumab:
- GI fistulas: 13%
- Hypertension: 25%
- Thromboembolic events: 8%

Quality of Life
- Not associated with a statistically significant decrease in patient-reported quality of life (P = .27).

Other Agents
- Vaccine therapies (therapeutic HPV DNA vaccines) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial.
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials.
Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; \( P = 0.002 \))


TP not superior to CP

TP may be considered as an alternative in patients who are not candidates for cisplatin.

Significantly higher risk of progression with TP

No significant difference in overall survival


Increased Probability of a Response with Bevacizumab

- Significantly higher response rate
- With bevacizumab: 48%
  vs. without bevacizumab: 36%
- Relative probability of response: 1.35; 95% CI 1.08 - 1.68; \( P=0.008 \), two-sided test


Higher toxicity with bevacizumab:

- GI fistulas: 13%
- Hypertension: 35%
- Thromboembolic events: 8%


Quality of Life

- Not associated with a statistically significant decrease in patient-reported quality of life \( (P = .27) \)

Penson RT et al. Lancet Oncol 2015

Other Agents

- Vaccine therapies (Therapeutic HPV DNA vaccines) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials

Penson RT et al. Lancet Oncol 2015
Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; P = 0.002)


TP not superior to CP
TP may be considered as an alternative in patients who are not candidates for cisplatin

Significantly higher risk of progression with TP
No significant difference in overall survival


Increased Probability of a Response with Bevacizumab

- Significantly higher response rate
- With bevacizumab: 48%
  vs. without bevacizumab: 36%
- Relative probability of a response: 1.35; 95% CI 1.08 - 1.68; P=0.008, two-sided test


Higher toxicity with bevacizumab:
- GI fistulas: 13%
- Hypertension: 25%
- Thromboembolic events: 8%


Quality of Life

- Not associated with a statistically significant decrease in patient reported quality of life (P = .27)

Penson RT et al. Lancet Oncol 2015

Other Agents

- Vaccine therapies (Therapeutic HPV DNA vaccines) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials

Penson RT et al. Lancet Oncol 2015
Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; \( P = 0.002 \))

\[ \text{Increased Probability of a Response with Bevacizumab} \]
- Significantly higher response rate
  - With bevacizumab: 48%
  - Without bevacizumab: 36%
  - Relative probability of a response: 1.35; 95% CI 1.08 - 1.68; \( P = 0.008 \), two-sided test

\[ \text{Quality of Life} \]
- Not associated with a statistically significant decrease in patient-reported quality of life \(( P = 0.27 )\)

\[ \text{Higher Toxicity with Bevacizumab:} \]
- GI fistulas: 3%
- Hypertension: 25%
- Thromboembolic events: 8%

\[ \text{Other Agents} \]
- Vaccine therapies (Therapeutic HPV DNA vaccines) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials
Significant improvements in progression-free survival with bevacizumab of 3.7 months (8.2 months vs. 5.9 months; P = 0.002)

Increased Probability of a Response with Bevacizumab
- Significantly higher response rate
  - With bevacizumab: 48%
  - Without bevacizumab: 36%
  - Relative probability of response: 1.35; 95% CI 1.08 - 1.68; P=0.008, two-sided test

Quality of Life
- Not associated with a statistically significant decrease in patient-reported quality of life (P = 0.27)

Other Agents
- Vaccine therapies (Therapeutic HPV DNA vaccine) currently have no established role in the treatment of cervical cancer at the present time, except in the setting of a clinical trial
- Targeted therapy (using small molecules or monoclonal antibodies) is currently used in various clinical trials
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH
- First used Bevacizumab for cervical cancer in 2014
- Bevacizumab has been used with chemotherapy in 6 patients
- 2 patients had 1 dose of chem+bevacizumab
  - 1 discontinued due to tumour haemorrhage
  - 1 decided not for further treatment for Ca cervix
- 1 patient had 3 doses of chemo+bevacizumab, discontinued due to intestinal obstruction
- 3 patients had 6 cycles of chemo+bevacizumab: all CR

Case Sharing
- F/64, G4P4, Good past health
- Present with postmenopausal bleeding and vulval mass
- No cervical screening
- PE:
  - Right labial tumour 4cm x 2cm, left labial tumour 3cm x 1cm
  - Whole vagina and fornices involved by tumour
  - Cervix completely replaced by tumour, normal cervix not seen
  - Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
  - Uterus 12 weeks sized

Investigations
- Cervical and right vulval biopsy: GS squamous cell carcinoma
- SCC: 6 (raised)
- CXR: Multiple soft tissue nodules 1-2cm in both lungs
- PET-CT: Cervical tumour 5.2cm x 4.8cm with metastasis to vagina, vulva, pelvic and para-aortic lymph nodes and lung, hydrometra
- Diagnosis: Cervical carcinoma stage IV

Management
- Palliative RT 30Gy/10Fr for haemostasis
- Discussed option of chemotherapy (carbo/taxol) vs chemotherapy + bevacizumab (DDP/taxol + bevacizumab)
- Aim of chemotherapy is to prolong PFS, response rate ~30%
- Add Bevacizumab – increase response rate by ~10% and prolong OS by few months
- Given Cisplatin 75mg/m², Paclitaxel 175mg/m², Bevacizumab 15mg/kg for 4 cycles

Follow up
- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis. Tiny non specific RUL lung nodule, otherwise no definite pulmonary nodule.
- SCC 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Post follow up with symptoms, physical examination, tumour marker and smear, repeat CT thorax in 6 months.
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH

- First used Bevacizumab for cervical cancer in 2014
- Bevacizumab has been used with chemotherapy in 6 patients
- 2 patients had 1 dose of chemotherapy + Bevacizumab
- 1 discontinued due to tumour haemorrhage
- 1 decided not for further treatment for cervical cancer
- 1 patient had 3 doses of chemotherapy + Bevacizumab, discontinued due to intestinal obstruction
- 3 patients had 4 cycles of chemotherapy + Bevacizumab, all CR

Case Sharing

- F/64, G4P4, Good past health
- Present with postmenopausal bleeding and vulvar mass
- No cervical screening
- PE:
  - Right labial tumour 4cm x 2cm, left labial tumour 3cm x 1cm
  - Whole vagina and fornices involved by tumour
  - Cervix completely replaced by tumour, normal cervix not seen
  - Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
- Uterus 12 weeks sized

Investigations

- Cervical and right vulval biopsy: G2 squamous cell carcinoma
- SCC: 6 (raised)
- CXR: Multiple soft tissue nodules 1-2cm in both lungs
- PET CT: Cervical tumour 5.2cm x 4.8cm with metastasis to vagina, vulva, pelvic and para-aortic lymph nodes and lung, hydrometra
- Diagnosis: Cervical carcinoma stage IV

Management

- Palliative RT 30Gy/10Fr for haemorrhage
- Discussed option of chemotherapy (carbo/taxol) vs chemotherapy + Bevacizumab (DDP/taxol + Bevacizumab)
- Aim of chemotherapy is to prolong PFS, response rate ~30%
- Add Bevacizumab – increase response rate by ~10% and prolong OS by few months
- Given: Cisplatin 75mg/m², Paclitaxel 175mg/m², Bevacizumab 15mg/kg for 6 cycles

Follow up

- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis, tiny non-specific 5mm lung nodules, otherwise no definite pulmonary nodule
- SCC 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Plan follow up with symptoms, physical examination, tumour marker and smear. Repeat CT thorax in 6 months.
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH

- First used Bevacizumab for cervical cancer in 2014
- Bevacizumab has been used with chemotherapy in 6 patients
  - 2 patients had 1 dose of chemotherapy + Bevacizumab
  - 1 discontinued due to tumour haemorrhage
  - 1 decided not for further treatment for Ca cervix
  - 1 patient had 3 doses of chemotherapy + Bevacizumab, discontinued due to intestinal obstruction
  - 3 patients had 4 cycles of chemotherapy + Bevacizumab at 3-weekly intervals

Case Sharing

- F/64, G4P4, Good past health
- Presented with postmenopausal bleeding and vulval mass
- No cervical screening
- PE:
  - Right labial tumour 4 cm x 2 cm, left labial tumour 3 cm x 1 cm
  - Whole vagina and fornices involved by tumour
  - Cervix completely replaced by tumour, normal cervix not seen
  - Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
  - Ultrasound 12 weeks later

Investigations

- Cervical and right vulval biopsy: G2 squamous cell carcinoma
- SCC: 6 (raised)
- CXR: Multiple soft tissue nodules 1-2 cm in both lungs
- PET-CT: Cervical tumour 5.2 cm x 4.8 cm with metastasis to vagina, vulva, pelvic and para-aortic lymph nodes and lung, hydrometra
- Diagnosis: Cervical carcinoma stage IV

Management

- Palliative RT 30 Gy/10 Fr for haemostasis
- Discussed option of chemotherapy [carboplatin + taxol] vs chemotherapy + Bevacizumab (DDP + taxol + Bevacizumab)
- Aim of chemotherapy is to prolong PFS, response rate ~30%
- Add Bevacizumab – increase response rate by ~10% and prolong OS by few months
- Given Cisplatin 75 mg/m², Paclitaxel 175 mg/m², Bevacizumab 15 mg/kg for 4 cycles

Follow up

- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis. Tiny non-specific left lung nodule, otherwise no definite pulmonary nodule
- SCC 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Plan follow-up with symptoms, physical examination, tumour marker and smear. Repeat CT thorax in 6 months.
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH

- First used Bevacizumab for cervical cancer end 2014
- Bevacizumab has been used with chemotherapy in 6 patients
- 2 patients had 1 dose of chemo+bevacizumab
- 1 discontinued due to tumor haemorrhage
- 1 decided not for further treatment for Ca cervix
- 1 patient had 3 doses of chemo+bevacizumab, discontinued due to intestinal obstruction
- 3 patients had 6 cycles of chemo+bevacizumab all CR

Case Sharing

- F/64, G4P4, Good past health
- Present with postmenopausal bleeding and vulval mass
- No cervical screening
- PE:
  - Right labial tumour 4cm x 2cm, left labial tumour 3cm x 1cm
  - Whole vagina and fornices involved by tumour
  - Cervix completely replaced by tumour, normal cervix not seen
  - Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
  - Uterus 12 weeks sized

Investigations

- Cervical and right vulval biopsy: GS squamous cell carcinoma
- SCC: 6 (raised)
- PET CT: Cervical tumour 5.2cm x 4.8cm with metastasis to vagina, vulva, pelvic and para-aortic lymph nodes and lung, hydrometra
- Diagnosis: Cervical carcinoma stage IV

Management

- Palliative RT 30Gy/10Fr for haemostasis
- Discussed option of chemotherapy (carbo/taxol) vs chemotherapy + Bevacizumab (DDP/taxol + Bevacizumab)
- Aim of chemotherapy is to prolong PFS, response rate ~30%
- Add Bevacizumab – increase response rate by ~10%, and prolong OS by few months
- Given Cisplatin 75mg/m², Paclitaxel 175mg/m², Bevacizumab 15mg/kg for 6 cycles

Follow up

- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis, Thy non specific RUL lung nodule, otherwise no definite pulmonary nodule
- SCC 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Post follow up with symptoms, physical examination, tumour marker and smear. Repeat CT thorax in 4 months.
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH

- First used Bevacizumab for cervical cancer end 2014
- Bevacizumab has been used with chemotherapy in 6 patients
- 2 patients had 1 dose of chem+bevacizumab
  - 1 discontinued due to tumour haemorrhage
  - 1 decided not for further treatment for Ca cervix
- 1 patient had 3 doses of chemo+bevacizumab: discontinued due to intestinal obstruction
- 3 patients had 6 cycles of chem+bevacizumab: all CR

Case Sharing

F/64, G4P4, Good past health
Presented with postmenopausal bleeding and vulval mass
No cervical screening
PE:
- Right labial tumour 4cm x 2cm, left labial tumour 3cm x 1cm
- Whole vagina and fornices involved by tumour
- Cervix completely replaced by tumour, normal cervix not seen
- Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
- Uterus 12 weeks sized

Investigations
- Cervical and right vulval biopsy: G2 squamous cell carcinoma
- SCC: 6 (raised)
- CXR: Multiple soft tissue nodules 1-2cm in both lungs
- PET CT: Cervical tumour 5.2cm x 4.8cm with metastases to vagina, vulva, pelvic, para-aortic lymph nodes and lung, hydrometra

Diagnosis: Cervical carcinoma stage IV

Management

- Palliative RT 30Gy/10Fr for haemorrhage
- Discussed option of chemotherapy (carboplatin) vs chemotherapy + bevacizumab (DDP/ taxol/ bevacizumab)
- Aim of chemotherapy is to prolong PFS; response rate ~30%
- Add Bevacizumab - increase response rate by ~10% and prolong OS by few months
- Given Cisplatin 75mg/m², Paclitaxel 175mg/m², Bevacizumab 15mg/kg for 6 cycles

Follow up

- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis, Tiny non-specific 1cm lung nodule, otherwise no definite pulmonary nodule
- SCC 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Plan follow up with symptoms, physical examination, tumour marker and smear, Repeat CT thorax in 6 months.
Post-treatment Follow-up

Follow-up Procedures
- History
- Physical examination
- Vaginal smear
- Serum SCC levels (first 3 years)

Time Schedule for Follow-up
- First 2 years: Every 3-4 months
- 3-5 years: Every 6 months
- 5-10 years: Yearly follow-up
- > 10 years: No further follow-up except for special circumstances

Bevacizumab in QMH

- First used Bevacizumab for cervical cancer end 2014
- Bevacizumab has been used with chemotherapy in 6 patients
- 2 patients had 1 dose of chem+bevacizumab
  - 1 discontinued due to tumour haemorrhage
  - 1 decided not for further treatment for Ca cervix
- 1 patient had 3 doses of chemo+bevacizumab; discontinued due to intestinal obstruction
- 3 patients had 4 cycles of chem+bevacizumab: all CR

Case Sharing

F/64, G4P4, Good past health
- Presented with postmenopausal bleeding and vulval mass
- No cervical screening
- PE:
  - Right labial tumour 4cm x 2cm, left labial tumour 3cm x 1cm
  - Whole vagina and fornices involved by tumour
  - Cervix completely replaced by tumour, normal cervix not seen
  - Left parametrium involved to pelvic side wall, right parametrium involved but not to side wall
  - Ultrasound 12 weeks later

Investigations
- Cervical and right vulval biopsy: G2 squamous cell carcinoma
- SCC: 6 (raised)
- CXR: Multiple soft tissue nodules 1-2cm in both lungs
- PET-CT: Cervical tumour 5.2cm x 4.8cm, with metastasis to vagina, vulva, pelvic and para-aortic lymph nodes and lung, hydrometra
- Diagnosis: Cervical carcinoma stage IV

Management
- Palliative RT 30Gy/10Fr for haemostasis
- Discussed option of chemotherapy (carbo/taxol) vs chemotherapy + bevacizumab (DDP/taxol/bevacizumab)
- Aim of chemotherapy is to prolong PFS; response rate ~30%
- Add bevacizumab – increase response rate by ~10% and prolong OS by few months
- Given Cisplatin 75mg/m², Paclitaxel 175mg/m², Bevacizumab 15mg/kg for 4 cycles

Follow up
- CT thorax, abdomen, pelvis: Good treatment response, no discernible cervical tumour or pelvic metastasis. No new specific 1cm lung nodule, otherwise no definite pulmonary nodule.
- SCC: 0.6 (normal)
- No evidence on the use of maintenance Bevacizumab after complete response
- Plan follow up with symptoms, physical examination, tumour marker and smear. Repeat CT thorax in 6 months.
Thank you