WEEKLY TAXOL (Paclitaxel)  
Relapsed Ovarian Cancer

**Background:** Single-agent paclitaxel is recommended as an option for the second-line (or subsequent) treatment of women with platinum-refractory or platinum-resistant advanced ovarian cancer, and for women who are allergic to platinum-based compound (NICE TA 91). Giving Paclitaxel weekly is an alternative dose schedule which minimises toxicity for patients who would otherwise not be able to tolerate the 3-weekly schedule.

**Patient Group:** 2\(^{nd}\) line in metastatic carcinoma of the ovary after failure of standard platinum based therapy as an alternative to 3-weekly Paclitaxel. PS ≥2

**Pre-treatment Assessment:**  
Weight, FBC, U&E, LFTs CA-125 and Creatinine clearance

**Treatment Threshold**  
ANC ≥ 1 x 10\(^9\)/L  
Platelets ≥ 75 x 10\(^9\)/L  
Bilirubin < 1.25 x ULN and transaminase < 10 x ULN

**Pre-Meds:** To be administered 30 minutes prior to paclitaxel  
Dexamethasone 8mg IV bolus over 3-5 minutes  
Ranitidine 50mg IV in 50mL sodium chloride 0.9% infused over 20 minutes.  
Chlorphenamine 10mg IV bolus over 3-5 minutes

**Regimen Details:**

**Day 1**

**Paclitaxel 80mg/m\(^2\)** In 250mL Sodium Chloride 0.9% infused over 1 hour through non-PVC giving set and a 0.22 micron in-line filter.

**Repeat every 7 days for up to 16 cycles**
Administration:

- Administered through a non-PVC giving set with a 0.22 micron in-line filter
- Hypersensitivity reactions: dyspnoea and hypotension requiring treatment, angioedema, and generalised urticaria have occurred in <1% of patients receiving paclitaxel after adequate premedication. These reactions are probably histamine-mediated. In the case of severe hypersensitivity reactions, paclitaxel infusion should be discontinued immediately, symptomatic therapy should be initiated and the patient should not be re-challenged with paclitaxel.
- Blood pressure and pulse rate monitoring during infusion, cardiac monitoring with prior arrhythmia

**Anti-emetics:** Domperidone 10-20mg QDS PRN. Additional dexamethasone may be required for one day only.

**Additional Medication:** N/A

**Monitoring and Assessment:**
Clinical assessment
FBC – weekly prior to each dose
U&E, LFT and CA-125 - monthly

**Dose Modifications:**
If ANC < 1 x 10^9/L or platelets < 75 x 10^9/L the dose should be omitted not delayed.
Patients who experience severe neutropenia (neutrophil count <0.5 x 10^9/L) or severe peripheral neuropathy, should receive a dose reduction of 20% for subsequent courses.

**Renal Impairment**
No dose reductions necessary.

**Hepatic Impairment**
Paclitaxel not recommended in severe hepatic impairment

<table>
<thead>
<tr>
<th>Bilirubin (µmol/L)</th>
<th>Paclitaxel Dose (mg/m²)</th>
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<tbody>
<tr>
<td>22 – 26</td>
<td>Give 75 – 80%</td>
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<tr>
<td>27 – 51</td>
<td>Give 40 – 45%</td>
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<tr>
<td>&gt; 51</td>
<td>Give 30%</td>
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**Pharmaceutical Care:**
- Final paclitaxel concentration should be in the range 0.3 – 1.2mg/mL
- Caution should be exercised when administering paclitaxel concomitantly with medicines known to inhibit (e.g. erythromycin, fluoxetine, gemfibrozil) or induce (e.g. rifampicin, carbamazepine, phenytoin, phenobarbital, efavirenz, nevirapine) either CYP2C8 or 3A4.

**Most Common Toxicities:**
- Myelosuppression ± infection (may be severe)
- Neurotoxicity
- Skin and nails (may be severe)
- Mucositis
- Fever
- Fatigue
- Nausea and vomiting
- Hypersensitivity reactions (may be severe)
- Myalgia and arthralgia
- Increases in LFTs
- Alopecia

**References:**