The incorporation of epithelial ovarian cancer treatment options into the WHO Model List of Essential Medicines, and recommend specifically that cisplatin and gemcitabine be added to the core Essential Medicines List.

(1) Does the application adequately address the issue of the public health need for the medicine?
   Yes ☐ No ☐

   Please provide brief details:
   Epithelial ovarian cancer is not rated as one of the most common human malignancies, but it is a major public health concern due to its disproportionate impact on cancer morbidity and mortality. Although there has been a statistically significant improvement in treatment results over the last years, ovarian cancer remains the leading cause of gynecologic cancer mortality – 151,905 ovarian cancer-related deaths were registered in 2012.

(2) Have all important studies that you are aware of been included in the application?
   Yes ☐ No ☐

   Please provide brief comments on any relevant studies that have not been included:

(3) Does the application provide adequate evidence of efficacy/effectiveness of the medicine for the proposed use?
   Yes ☐ No ☐

   Briefly summarise the reported outcomes (e.g. clinical, surrogate, other) and comment, where possible, on the magnitude of clinical benefit associated with use of the medicine:
   First line chemotherapy (paclitaxel/platinum) with or without surgery, results in a high remission rate, though a high relapse rate. Nonetheless, patients treated with first line therapy have a significant prolongation in survival, and 20% or more are long-term survivors. Therefore the benefit of first-line chemotherapy is significant.
   The risk of recurrence in ovarian cancer after first line therapy is approximately 80%. The probability of response to second-line chemotherapy depends on the progression-free interval after the last dose of the preceding line of chemotherapy. Patients with platinum-resistant ovarian cancer comprise a poor prognosis population, characterized by low response rates (<10%) with short expected overall survival.

(4) Is there evidence of efficacy in diverse settings and/or populations?
Yes ☐ No ☐

Please provide brief details:
The application did not clarify this point.

(5) **Has the application adequately considered the safety and adverse effects of the medicine? Are there any adverse effects of concern, or that may require special monitoring?**

Yes ☐ No ☐

Please provide brief details:
Patients receiving treatment for ovarian cancer experience common drug toxicity reactions. Most patients suffer hematological toxicity from the medication combination including neutropenia, thrombocytopenia, and anemia, all of which are typically rapidly reversible upon discontinuation of agents. Paclitaxel can cause hypersensitivity reactions in up to 30% of patients and requires premedication to reduce the risk of these reactions. Paclitaxel frequently causes alopecia and peripheral neuropathy, which is often mild and reversible. Cisplatin and carboplatin can cause severe, potentially dose-limiting nausea and vomiting requiring pretreatment with anti-emetics. In approximately 10-30% of cases, cisplatin causes nephrotoxicity which may result in electrolyte abnormalities, aggressive IV hydration is necessary to reduce this risk.

**ADDITIONAL CONSIDERATIONS:**

(6) **Are there special requirements or training needed for the safe, effective and/or appropriate use of the medicine?**

Yes ☐ No ☐

Please provide brief details:
Anticancer drugs for the treatment of ovarian cancer require peripheral or central venous access. Administration can be performed either in outpatient or in-patient facilities. Antiemetic prophylaxis ideally includes administration of 5HT3-antagonists before the start of chemotherapy. Administration of paclitaxel requires the use of dexamethasone, an H2 blocker, and diphenhydramine to prevent hypersensitivity reaction.

(7) **Are there any issues regarding the registration of the medicine by regulatory authorities?** (e.g., recent registration, new indications, off-label use)

Yes ☐ No ☐

Please provide brief details:
Carboplatin is currently in the WHO Essential Medicines List for Adults (2013, 18th Edition). Next to Carboplatin in the list is a symbol that indicates that the listing of the drug indicates “similar clinical performance within a pharmacological class.

(8) **Is the medicine recommended for use in a current WHO GRC-approved Guideline (i.e., post 2008)?**
Please provide brief details:

(9) Please comment briefly on issues regarding cost and affordability of this medicine.
The application did not clarify this point.

(10) Any additional comments?

(11) Please summarise the action you propose the Expert Committee takes.
Carboplatin is currently in the WHO Essential Medicines List for Adults and can be used as first line treatment as cisplatinum, I could not see a justification to add cisplatinum to the EML.
For gemcitabine, it is a second line treatment; there is no strong justification to add it to EML especially other second-line treatments like doxorubicin and etoposide are present in EML.