The active ingredient, cisplatin, is a yellow to orange crystalline powder with the molecular formula PtCl$_2$(NH$_3$)$_2$ and a melting point of 207°C. It is soluble in water and nearly insoluble in organic solvents. Cisplatin has two active components: chloride atoms and two ammonia molecules in the cis position. It is composed of 90% platinum, 6.4% chlorine, and 3.6% nitrogen. Platinum concentrations in plasma are generally lower than the concentrations in the organs where the drug is biotransformed. The total body platinum content is distributed among various organs and varies with the route of administration. The renal clearance of free (ultrafilterable) platinum also exceeds the glomerular filtration rate by 100% or more. The major route of excretion is the kidney, and about 90% of the administered dose is excreted in the urine within 24 hours. Platinum-containing species are also excreted in the urine. Plasma levels of anticonvulsant agents may become subtherapeutic during cisplatin therapy. Serum levels of anticonvulsant agents should be monitored during cisplatin therapy. Cisplatin injection should not breast-feed. Cisplatin injection cannot be used in patients with hearing impairment. Cisplatin injection can commonly cause ototoxicity which is cumulative and irreversible. Audiometric testing should be performed prior to initiating therapy and prior to each subsequent dose of cisplatin injection. Anaphylactic-like reactions to Cisplatin injection have been reported. These reactions are life-threatening and require immediate medical attention. Cisplatin injection can also cause severe nausea and vomiting. Other serious reactions include neutropenia, thrombocytopenia, and an increased risk of ototoxicity in children treated with cisplatin. Cisplatin injection should not be used in patients with preexisting renal impairment. Because elderly patients may be more susceptible to myelosuppression, infectious complications, and nephrotoxicity than younger patients, other reported clinical experience suggests that elderly patients may be more susceptible to myelotoxicity, infectious complications, and nephrotoxicity than younger patients. Cisplatin injection is contraindicated in patients with hearing impairment. Cisplatin injection can be used in patients with hearing impairment. Cisplatin injection should be administered with aseptic technique. Cisplatin injection should be stored at controlled room temperature with a minimum of 24% relative humidity and at temperatures not to exceed 30°C. Cisplatin injection is indicated as a single agent for patients with transitional cell carcinoma of the bladder or as a component of combination chemotherapy for advanced ovarian carcinoma, 1484 patients received cisplatin either in combination with cyclophosphamide or paclitaxel. Of these, 420 (25%) were older than 60 years. In these trials, age was not used as a prognostic factor for survival. In a later meta-analysis for one of these trials, elderly patients were found to have shorter survival compared with younger patients. In all four trials, elderly patients experienced the same degree of myelosuppression and nephrotoxicity as younger patients, although not all cisplatin-containing treatment arms. In one trial, elderly patients who were 75 years or older had a non-significant increase in peripheral neuropathy than younger patients. Other reported clinical experience suggests that elderly patients may be more susceptible to myelotoxicity, infectious complications, and nephrotoxicity than younger patients. Cisplatin injection is not recommended for use during pregnancy. The drug should be used only if, in the opinion of the physician, its beneficial effects outweigh the potential hazard to the fetus. Exposure to the drug during pregnancy should be avoided. Cisplatin injection should not be used in patients with preexisting renal impairment. Because elderly patients may be more susceptible to myelosuppression, infectious complications, and nephrotoxicity than younger patients, other reported clinical experience suggests that elderly patients may be more susceptible to myelotoxicity, infectious complications, and nephrotoxicity than younger patients. Cisplatin injection can be used in patients with hearing impairment. Cisplatin injection can be used in patients with hearing impairment. Cisplatin injection can be used in patients with hearing impairment. Cisplatin injection can be used in patients with hearing impairment. Cisplatin injection can be used in patients with hearing impairment.
The usual Cisplatin injection dose for the treatment of metastatic ovarian carcinoma is 75 mg/m² given as an 18-hour treatment. The duration of treatment may be extended to 24 hours if necessary. The drug is then diluted in 2 liters of Dextrose Injection. Adequate hydration and urinary output must be maintained during the following 24 hours. A repeat course should not be given until circulating blood elements are at an acceptable level (platelets ≥100,000/mm³, WBC ≥4000/mm³). In general, normal serum electrolyte levels are restored by administering equipment and medication should be available to treat such a complication.

DOSAGE AND ADMINISTRATION
Cisplatin injection is administered by slow intravenous infusion. CISPLATIN IV per cycle once every four weeks.

The usual cisplatin injection dose for the treatment of testicular cancer in combination with other approved chemotherapeutic agents is 20 mg/m². In combination therapy, Cisplatin injection and cyclophosphamide are recommended. The reactions consist of facial edema, wheezing, urticaria, angioedema, dyspnea, cough, hypotension, tachycardia, and tachypnea. Hypomagnesemia, hypocalcemia, hyponatremia, hypokalemia, and hyperuricemia have been reported to be associated with Cisplatin injection administration at recommended doses. The only finding on funduscopic exam is irregular retinal pigmentation of the macula.

Gastrointestinal
Anemia (decrease of 2 g hemoglobin/100 mL) may also be reported. In these reports, Cisplatin injection was generally given in combination with other antineoplastic agents. The events are clinically significant and may be so severe that the drug must be discontinued.

Vascular toxicities coincident with the use of Cisplatin injection in combination with other antineoplastic agents have been reported. There is no evidence that Cisplatin injection administration is associated with an increased risk of cardiovascular diseases in patients treated with cisplatin.

Leukopenia and thrombocytopenia. Fever and infection have also been reported in patients with neutropenia. Potential fatalities due to infection (secondary to myelosuppression) have been reported. Elderly patients may be more susceptible to myelosuppression (see PRECAUTIONS: Geriatric Use).

Note: Needles or intravenous sets containing aluminum parts that may come in contact with cisplatin injection should not be used for preparation and administration. Requirements for safe handling of hazardous drugs should be followed. It is mandatory to handle hazardous drugs with caution and use appropriate safety precautions.

In combination therapy, Cisplatin injection and cyclophosphamide are administered sequentially.

The usual Cisplatin injection dose for the treatment of metastatic ovarian carcinoma in combination with other approved chemotherapeutic agents is 20 mg/m² IV per cycle once every four weeks.