

SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each ml solution contains:

Active substance:

Paclitaxel 6 mg

Excipient(s) with known effect:

Anhydrous ethanol 394.7 mg Macrogolglycerol ricinoleate 527.3 mg For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Concentrate for solution for infusion. Clear, colorless to pale yellow, slightly viscous concentrated solution for injection.

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

Ovarian Carcinoma:

ATAXIL is indicated in:

- The first-line treatment of advanced or metastatic ovarian cancer in combination with a platinum-containing medicine,
- The second-line treatment of advanced or metastatic ovarian cancer.

Breast Carcinoma:

In the early stage adjuvant treatment:

- ATAXIL is indicated for adjuvant treatment of node-positive breast cancer following anthracycline and cyclophosphamide therapy.

In the first-line treatment:

- ATAXIL is indicated for the first-line treatment of advanced or metastatic breast cancer as either

- In combination with an anthracycline in patients for whom anthracycline therapy is suitable,

or

- As a single agent in patients for whom anthracycline therapy is not suitable, or

- In combination with trastuzumab, in patients whose HER-2 is strong positive (3 positive or

positive by FISH technique) as determined by immunohistochemistry method.

In the second-line treatment:

- ATAXIL is indicated for the second-line treatment of metastatic breast cancer after failure of

DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion combination chemotherapy. Prior first-line treatment should have included an anthracycline unless it is not clinically contraindicated.

Non-small cell lung carcinoma (NSCLC):

ATAXIL is indicated for the first-line treatment of non-small cell lung cancer, in combination with a platinum compound, in patients who are not candidates for curative surgical intervention and/or radiation therapy.

Kaposi's sarcoma:

It is indicated for the second-line treatment of AIDS-related Kaposi's sarcoma.

4.2 Posology and method of administration

Posology/frequency and duration of administration All patients must be premedicated prior to ATAXIL administration to reduce risk of severe hypersensitivity reactions. Such pre-medication may consist of 20 mg dexamethasone (or its

equivalent) orally approximately 6 and 12 hours or IV 30 to 60 minutes before ATAXIL

administration, 50 mg IV diphenhydramine (or its equivalent) 30 to 60 minutes before ATAXIL administration, and 300 mg cimetidine or 50 mg IV ranitidine 30 to 60 minutes before ATAXIL administration. In patients with solid tumors, doses of ATAXIL should not be repeated until the neutrophil count is >1500 cells/mm³ and the platelet count is $>100,000$ cells/mm³ (neutrophil count is <1000 cells/mm³ in patients with Kaposi's sarcoma). Patients who experience severe neutropenia (<500 cells/mm³) or severe peripheral neuropathy should have dosage reduced by 20% for subsequent courses of

drug. The incidence of neurotoxicity and the severity of neutropenia increase with dose.

Advanced or metastatic ovarian carcinoma

Combination treatment:

The dose of 175 mg/m² is administered by a 3-hour IV infusion every 3 weeks in untreated patients. Alternatively, more myelosuppressive dose of 135 mg/m² can be administered by a 24-hour IV infusion every 3 weeks. ATAXIL should be given before a platinum compound when it is given in combination with a platinum compound.

Single agent treatment:

In patients previously treated with chemotherapy, the recommended schedule is 175 mg/m² administered intravenously over 3 hours every 3 weeks. Breast carcinoma

Adjuvant treatment:

ATAXIL is administered at a dose of 175 mg/m² intravenously over 3 hours every 3 weeks for 4 courses following anthracycline and cyclophosphamide (AC) therapy. First-line combination treatment of advanced or metastatic breast carcinoma: When used in combination with doxorubicin (50 mg/m²), ATAXIL should be administered 24 hours after doxorubicin. The recommended dose of ATAXIL is 220 mg/m² administered intravenously over 3 hours every 3 weeks. When used in combination with trastuzumab, the recommended dose of ATAXIL is 175 mg/m² administered intravenously over 3 hours, with a 3-week interval between courses. ATAXIL infusion DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml

Concentrate for Solution for IV Infusion may be started the day following the first dose of trastuzumab or immediately after the subsequent doses of trastuzumab if the preceding dose of trastuzumab was well tolerated.

Single agent treatment of metastatic breast carcinoma:

The dose of 175 mg/m² is administered intravenously over 3 hours every 3 weeks. Weekly dosage: Medicines containing paclitaxel can be administered at a dose of 80-100 mg/m² weekly. Premedicate with IV dexamethasone sodium phosphate injection (8 mg dexamethasone) and ranitidine hydrochloride injection (50 mg ranitidine) or famotidine injection (20 mg famotidine), and diphenhydramine hydrochloride tablet (50 mg diphenhydramine hydrochloride) 30 minutes before ATAXIL administration. Initial dose of dexamethasone is 8 mg. If no clinically significant hypersensitivity reaction has been reported until the subsequent administration, the dose of dexamethasone is reduced by half of the previous dose (4 mg) in the following week. If no clinically significant hypersensitivity reaction has been reported in the following weeks, the dose is reduced by half of the previous dose until the minimum dose of 1 mg is reached. Non-small cell lung carcinoma

Combination treatment:

The dose of 175 mg/m² is administered by a 3-hour IV infusion every 3 weeks in untreated patients. Alternatively, more myelosuppressive dose of 135 mg/m² can be administered by a 24-hour IV infusion every 3 weeks. ATAXIL should be given before a platinum compound when it is given in combination with a platinum compound.

Single agent therapy:

ATAXIL is administered at a dose of 175-225 mg/m² by a 3-hour IV infusion every 3 weeks. AIDS-related Kaposi's sarcoma

Second-line treatment:

ATAXIL 135 mg/m² is administered intravenously over 3 hours with a 3-week interval between courses or ATAXIL 100 mg/m² is administered intravenously over 3 hours with a 2-week interval between courses (dose intensity is 45-50 mg/m²/week). Based upon the immunosuppression observed in patients with advanced HIV disease, the following

modifications are recommended in these patients:

1. The dose of dexamethasone as one of the three premedication drugs should be reduced to 10 mg

orally.

2. Treatment with ATAXIL should be initiated or repeated only if the neutrophil count is at least

1000 cells/mm³.

3. The dose of subsequent courses of ATAXIL should be reduced by 20% for those patients who

experience severe neutropenia (<500 cell/mm³ for a week or longer).

4. Concomitant hematopoietic growth factor (G-CSF) should be initiated as clinically indicated.

Method of administration ATAXIL is administered as IV infusion. ATAXIL should be administered through an in-line filter with a microporous membrane $\leq 0.22 \mu\text{m}$ (see section 6.6). DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion Additional information on special populations Renal/Hepatic impairment Patients with hepatic impairment may be at increased risk of toxicity (particularly grade III-IV myelosuppression). Recommendations for dosage adjustment are given in the below table for both 3- and 24-hour infusions. Patients should be monitored closely for the development of profound myelosuppression. Dosage Recommendations in Patients with Hepatic Impairment Degree of Hepatic Impairment Transaminase Levels Bilirubin Levels^a Recommended ATAXIL Dose^b 24-hour infusion <2×ULN and $\leq 1.5 \text{ mg/dl}$ 135 mg/m²

2 to <10×ULN and $\leq 1.5 \text{ mg/dl}$ 100 mg/m²

<10×ULN and 1.6 – 7.5 mg/dl 50 mg/m² $\geq 10\times\text{ULN}$ or >7.5 mg/dl Not recommended 3-hour infusion <10×ULN and $\leq 1.25\times\text{ULN}$ 175 mg/m² <10×ULN and 1.26 – 2.0×ULN 135 mg/m² <10×ULN and 2.01 – 5.0×ULN 90 mg/m² $\geq 10\times\text{ULN}$ or >5.0×ULN Not recommended a Differences in criteria for bilirubin levels between the 3- and 24-hour infusion are due to differences in clinical trial design. b Dosage recommendations are for the first course of therapy; further dose reduction in

subsequent courses should be based on individual tolerance. ULN= Upper Limit of Normal Pediatric population The safety and efficacy of ATAXIL in children and adolescents below 18 years of age has not been established. Geriatric population There are limited data on the use of ATAXIL in the elderly (see section 4.4).

4.3 Contraindications

Paclitaxel is contraindicated in patients with hypersensitivity to paclitaxel or to any of the excipients, especially macrogolglycerol ricinoleate. ATAXIL is contraindicated during pregnancy and lactation (see section 4.6). Additionally, it is contraindicated in patients with solid tumors with baseline neutrophil counts of less than 1500 cells/mm³ and in patients with AIDS-related Kaposi's sarcoma with baseline or subsequent neutrophil counts of less than 1000 cells/mm³. In Kaposi's sarcoma; it is contraindicated in patients with concurrent, serious and uncontrolled infections.

4.4 Special warnings and precautions for use

ATAXIL should be administered under supervision of physician experienced in the use of cancer chemotherapy agents. Since significant hypersensitivity reactions may occur, appropriate supportive equipment should be available. DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion ATAXIL should be administered as a diluted infusion. Patients must be pre-treated with corticosteroids, antihistamines and H₂ antagonists before treatment with ATAXIL (see section 4.2). ATAXIL should be given before cisplatin when used in combination with cisplatin. Anaphylaxis and Hypersensitivity Reactions Anaphylaxis and severe hypersensitivity reactions have been commonly observed in patients given

ATAXIL. These reactions possibly associate with histamine. Fatal reactions have rarely occurred in

patients despite pre-medication. All patients should be pre-treated with corticosteroids, antihistamines, H₂ antagonists. In the case of severe hypersensitivity reactions, ATAXIL infusion should be discontinued immediately and patients should not be rechallenged with ATAXIL. Hypersensitivity reactions such as flushing, skin reactions, tachycardia, dyspnea and hypotension may not require interruption of treatment with ATAXIL; however, caution should be exercised.

Hematologic Toxicity Bone marrow suppression (primarily neutropenia) is dose- and administration schedule-dependent and a dose-limiting toxicity. Frequent monitoring of blood cell counts should be performed during ATAXIL treatment. ATAXIL should not be administered in patients who have baseline neutrophil count is less than 1500 cells/mm³ (less than 100,000 cells/mm³ in patients with Kaposi's sarcoma). If there is severe neutropenia during a course of treatment with ATAXIL (less than 500 cells/mm³), the dose in subsequent cycles should be reduced by 20%. Severe cardiac conduction abnormalities Severe cardiac conduction abnormalities have been reported rarely during treatment. If patients develop significant conduction abnormalities during ATAXIL administration, appropriate therapy should be administered and continuous electrocardiographic monitoring should be performed during subsequent therapy with ATAXIL. Cardiovascular toxicity Hypotension, hypertension, and bradycardia have been observed during ATAXIL administration; patients are usually asymptomatic and generally do not require treatment. In severe cases, ATAXIL infusion may need to be interrupted or discontinued at the discretion of the physician. Frequent monitoring of vital signs, particularly during the first hour of ATAXIL infusion is recommended. Continuous electrocardiographic monitoring is not required except for patients with serious conduction abnormalities. When ATAXIL is used in combination with doxorubicin or trastuzumab for initial treatment of metastatic breast cancer, monitoring of cardiac functions is recommended (see section 4.8). When patients are candidates for treatment with ATAXIL in these combinations, they should undergo baseline cardiac assessment including history, physical examination, ECG, echocardiogram, and/or MUGA scan. Cardiac function should be monitored during treatment every three months. Monitoring may help to identify patients who develop cardiac dysfunction. Treating physicians should carefully assess the cumulative dose (mg/m²) of anthracycline administered when making decisions regarding frequency of ventricular function assessment. When testing indicates deterioration in cardiac function, even asymptomatic, treating physicians should carefully assess the clinical benefits of further therapy against the potential for producing cardiac damage, including potentially irreversible damage. If further treatment is decided to be continued, cardiac function should be more frequently monitored (e.g. every 1-2 cycles). DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml

Concentrate for Solution for IV Infusion Nervous System Although the incidence of peripheral neuropathy is frequent, the development of severe symptoms is rare. In severe cases, a dose reduction of 20% for all subsequent courses of ATAXIL is recommended. ATAXIL contains anhydrous ethanol, and consideration should be given to possible central nervous system (CNS) and other effects of ethanol in all patients. For instance, children may be more sensitive than adults to the effects of ethanol (see Pediatric Use in Special warnings and precautions for use). Injection Site Reactions Injection site reactions, including reactions secondary to extravasation, were usually mild and consisted of erythema, tenderness, skin discoloration, or swelling at the injection site. These reactions have been observed more frequently with the 24-hour infusion than with the 3-hour

infusion. Recurrence of skin reactions at a site of previous extravasation following administration of

ATAXIL at a different site, i.e. “recall”, has been reported rarely. Rare reports of more severe events such as phlebitis, cellulitis, induration, skin exfoliation, necrosis and fibrosis have been reported in study of ATAXIL safety. In some cases the onset of the injection site reaction either occurred during a prolonged infusion or was delayed by a week to ten days. A specific treatment for extravasation reactions is unknown at this time. Given the possibility of extravasation, close monitoring of the infusion site for possible infiltration during administration of the medicine is recommended. Hepatic Impairment Patients with hepatic impairment may be at increased risk of toxicity (particularly Grade 3-4 myelosuppression). Recommended dose adjustment for 3-and-24-hour infusions is given in table in section “Posology and Method of Administration”. Patients should be monitored closely for the development of profound myelosuppression. A combination of pulmonary radiotherapy and ATAXIL treatment may promote the development of interstitial pneumonitis as irrespectively of the chronologic order of the treatments. In KS patients, severe mucositis is rare. If severe reactions occur, the paclitaxel dose should be reduced by 25%. Pseudomembranous colitis has been rarely reported including cases in patients who have not been concomitantly treated with antibiotic. This reaction should be considered in the differential diagnosis of cases of severe or persistent diarrhea occurring during or shortly after treatment with paclitaxel.

Pediatric Use The safety and efficacy of ATAXIL in pediatric patients has not been established. There have been reports of CNS toxicity (rarely associated with death) in a clinical trial which ATAXIL was infused intravenously over 3 hours at doses ranging from 350 mg/m² to 420 mg/m². The toxicity is most likely attributable to the high dose of the ethanol component of the ATAXIL vehicle given over a short infusion time. The use of concomitant antihistamines may intensify this effect. Although a direct effect of the paclitaxel itself cannot be discounted, the high doses used in this study (over twice the recommended adult dosage) must be considered in assessing the safety of paclitaxel for use in this population.

Geriatric Use Of 2228 patients who received paclitaxel in eight clinical studies evaluating its safety and efficacy in the treatment of advanced ovarian cancer, breast carcinoma, or NSCLC, and 1570 patients who DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion were randomized to receive paclitaxel in the adjuvant breast cancer study, 649 patients (17%) were 65 years or older and 49 patients (1%) were 75 years or older. In most studies, severe myelosuppression was more frequent in elderly patients; in some studies, severe neuropathy was more common in elderly patients. In two clinical studies in NSCLC, the elderly patients treated with paclitaxel had a higher incidence of cardiovascular events. Estimates of efficacy appeared similar in elderly patients and in younger patients; however, comparative efficacy cannot be determined with confidence due to the small number of elderly patients studied. In a study of treatment of ovarian cancer, elderly patients had a lower median survival than younger patients, but no other efficacy parameters favored the younger group. ATAXIL contains alcohol- ATAXIL contains 0.395 g alcohol per ml. 300 mg/50 ml dose of ATAXIL contains approximately 20 g alcohol (equivalent to 450 ml beer or 175 ml wine). This medicine may be harmful to patients suffering from alcoholism. To be taken into account in pregnant or breast feeding women, children and high-risk groups such as patients with liver disease or epilepsy. One of the ingredients of this medicine, macrogolglycerol ricinoleate (polyoxyl castor oil), can cause severe allergic reactions.

4.5 Interaction with other medicinal products and other forms of interaction

Effects of other medicines on ATAXIL:

Cisplatin When compared to administration of paclitaxel BEFORE cisplatin in clinical combination studies; when paclitaxel was given AFTER cisplatin, a more profound myelosuppression and an approximately 33% decrease in paclitaxel clearance was demonstrated.

Cytochrome P450 2C8 and 3A4 Substrates, Inducers and Inhibitors The metabolism of ATAXIL is catalyzed by cytochrome P450 isoenzymes, CYP2C8 and CYP3A4. Caution should be exercised when administering ATAXIL concomitantly with known substrates, inhibitors (e.g. erythromycin, fluoxetine, gemfibrozil) or inducers (e.g. rifampicin, carbamazepine, phenytoin, phenobarbital, efavirenz, nevirapine) of the cytochrome P450 isoenzymes CYP2C8 and CYP3A4. In vitro, the metabolism of paclitaxel to 6 α -hydroxypaclitaxel was inhibited by a number of agents (ketoconazole, verapamil, diazepam, quinidine, dexamethasone, cyclosporin, teniposide, etoposide, and vincristine), but the concentrations used exceeded those found in vivo following normal therapeutic doses. Testosterone, 17 α -ethinyl estradiol, retinoic acid, and quercetin, a specific inhibitor of CYP2C8, also inhibited the formation of 6 α -hydroxypaclitaxel in vitro. The pharmacokinetics of paclitaxel may also be altered in vivo as a result of interactions with compounds that are substrates, inducers, or inhibitors of CYP2C8 and/or CYP3A4.

Cimetidine The clearance of paclitaxel was not affected by cimetidine pre-treatment.

Effects of ATAXIL on other medicines:

Doxorubicin Sequence effects characterized by more profound neutropenic and stomatitis episodes, have been observed with combination use of paclitaxel and doxorubicin when paclitaxel was administered BEFORE doxorubicin and using longer than recommended infusion times (paclitaxel administered DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion over 24 hours; doxorubicin administered over 48 hours). Plasma levels of doxorubicin (and its active metabolite doxorubicinol) may be increased when paclitaxel and doxorubicin are used in combination. However, data from a trial using bolus doxorubicin and 3-hour paclitaxel infusion

found no sequence effects on the pattern of toxicity. Since the elimination of doxorubicin and its active metabolites can be reduced when paclitaxel and doxorubicin are given closer in time, ATAXIL for initial treatment of metastatic breast cancer should be administered 24 hours after doxorubicin. Epirubicin Reports in literature suggest that plasma levels of epirubicinol, metabolites of epirubicin, may be increased when paclitaxel and epirubicin are used in combination. The clinical significance of increased epirubicinol plasma levels is unknown. Additional information for special populations Additional information is not available in reference documents. Pediatric population Additional information is not available in reference documents.

4.6 Fertility, pregnancy and lactation

General principles Pregnancy category is D. Women with child-bearing potential/Contraception Paclitaxel has harmful pharmacological effects on pregnancy and/or fetus/neonate. ATAXIL should not be used in pregnancy period unless necessary. Women with child bearing potential should be warned against becoming pregnant during their treatment with ATAXIL. The patient should be informed about possible the hazards of using ATAXIL during pregnancy or becoming pregnant during administration of this medicine. Female and male patients of fertile age, and/or their partners should use contraception for at least 6 months after treatment with paclitaxel. Male patients should seek advice regarding cryoconservation of sperm prior to treatment with paclitaxel because of the possibility of infertility. Pregnancy ATAXIL may cause fetal harm when administered to pregnant women. ATAXIL has been shown to be both embryotoxic and fetotoxic in rabbits and to reduce fertility in rats. No study has been performed with pregnant women. Breastfeeding It is not known whether paclitaxel is excreted in human milk. Breast-feeding should be discontinued for the duration of therapy with paclitaxel. Fertility ATAXIL has been shown to induce fertility in rats.

4.7 Effects on ability to drive and use machines

Possible effects and other effects of ATAXIL on CNS should be taken into consideration as it contains ethanol. Possible effects of pre-medications on CNS used to reduce risk of severe DEVA HOLDING A.S. Property-Strictly Confidential

ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion hypersensitivity reactions should be taken into consideration. Patients should be advised to be careful about these matters while driving or using machines.

4.8 Undesirable effects

The frequency and severity of undesirable effects are generally similar between patients receiving ATAXIL for the treatment of ovarian, breast, or non-small cell lung cancer or Kaposi's sarcoma. But patients with AIDS-related Kaposi's Sarcoma may have more frequent and severe hematologic toxicity, infections (including opportunistic infections*), and febrile neutropenia. These patients require a lower dose intensity and supportive care. Elevated liver function tests or renal toxicity have a higher incidence in KS patients with Kaposi's sarcoma as compared to patients with solid tumors. *Cytomegalo virus, Herpes simplex, Pneumocystis carinii, M. avium intracellulare, esophageal candidiasis, cryptosporidiosis, cryptococcal meningitis and leukoencephalopathy Undesired Side effects reported in Clinical Trials and Post-marketing Experiences

The following classification of frequency is used:

Very common ($\geq 1/10$); common ($\geq 1/100$, $< 1/10$); uncommon ($\geq 1/1,000$, $< 1/100$); rare ($\geq 1/10,000$, $< 1/1,000$); very rare ($< 1/10,000$), not known (cannot be estimated from the available data).
Infections and infestations
Very common: Infection
Uncommon: Septic shock
Not known: Cryptococcal meningitis, sepsis, leukoencephalopathy, opportunistic infections, cytomegalo virus infection, Pneumocystis carinii infection, Myobacterium avium complex infection, esophageal candidiasis, cryptosporidial gastroenteritis, pneumonia, Herpes simplex, urine tract infection, upper respiratory tract infection, sinusitis, rhinitis
Blood and lymphatic system disorders
Very common: Bone marrow failure, bleeding, neutropenia, anemia, thrombocytopenia, leucopenia
Rare: Febrile neutropenia
Not known: Acute myeloid leukemia, myelodysplastic syndrome, hemotoxicity, reduced number of platelet
Immunity system disorders
Very common: Hypersensitivity reactions, flushing
Uncommon: Respiratory distress, angioedema, generalized urticaria
Not known: Anaphylactic shock, anaphylactic reaction (may result in fatal outcomes)
Metabolism and nutrition disorders
Not known: Anorexia
Psychiatric disorders
Not

known: Confusional state Nervous system disorders Very common: Neurotoxicity, peripheral neuropathy, abnormal visually evoked potentials Not known: Grand mal seizures, autonomic neuropathy, encephalopathy, convulsions, DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion peripheral motor neuropathy, dizziness, coordination abnormalities, hypertony, paresthesia, headache, insomnia Eye disorders Not known: Optic nervous disturbances, flashes in the eye, photopsy, vitreous floaters Ear and labyrinth disorders Not known: Loss of hearing, ototoxicity, vertigo, tinnitus Cardiac disorders Very common: Abnormal electrocardiogram Common: Bradycardia Uncommon: Myocardial infarction, cardiomyopathy, ventricular tachycardia, atrioventricular block and tachycardia Not known: Ventricular failure, heart failure, congestive heart failure, atrial fibrillation, reduction in injection fraction, supra-ventricular tachycardia, conduction disorder, extra-systoles, sinus bradycardia, electrocardiogram repolarisation abnormalities Vascular disorders Very common: Hypotension Uncommon: Thrombosis, hypertension, thrombophlebitis Not known: Shock, phlebitis Respiratory, thoracic and mediastinal disorders Not known: Respiratory failure, pulmonary embolism, pulmonary fibrosis, interstitial lung disease, radiation pneumonia, dyspnea, pleural effusion, nose bleeding, cough Gastrointestinal disorders Very common: Abdominal pain, diarrhea, nausea, vomiting Not known: Bowel obstruction, bowel perforation, mesenteric thrombosis, ischemic colitis, pancreatitis, pseudo-membranous, neutropenic enterocolitis, ascites, esophagitis, mucosal inflammation, constipation Hepatobiliary disorders Common: Increase in aspartate aminotransferase, increase in blood alkali phosphate, liver function test abnormalities. Uncommon: Increase in blood bilirubin Not known: Hepatic necrosis (may be fatal), hepatic encephalopathy (may be fatal) Skin and subcutaneous tissue disorders Very common: Alopecia Common: Skin and nail changes Not known: Stevens-Johnson syndrome, toxic epidermal necrolysis, erythema multiforme, exfoliative dermatitis, urticaria, recall phenomena, skin rash, skin fibrosis, cellulites, pruritus, rash, erythema, onycholysis, acne Musculoskeletal and connective tissue and bone disorders Very common: Arthralgia, myalgia Uncommon: Low back pain DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion Not known: Pain in extremities Renal and urinary disorders Not known: Renal impairment, renal

toxicity. General disorders and administration site conditions Common: Extravasation, injection site reactions, localized edema, pain, induration of tissues, tenderness, skin pigmentation, shaking, injury Not known: Dehydration, pyrexia, edema, chest pain, hyperhidrosis, asthenia, malaise Investigations Not known: Increase in blood creatinine level Collaborative Analysis of Adverse Event Experiences in Single-agent Studies Unless otherwise noted, the following discussion refers to the overall safety database of 812 patients with solid tumors treated with single-agent paclitaxel (with 135 or 175 mg/m² dose, and in

3 or 24-hour administration) in clinical studies.

Hematologic toxicity Bone marrow suppression was the major dose-limiting toxicity of paclitaxel. Neutropenia, the most important hematologic toxicity, was dose and schedule dependent and was generally rapidly

reversible. Severe neutropenia (<500 cells/mm³) was more frequent with the 24-hour than with the

3-hour infusion; infusion duration had a greater impact on myelosuppression than dose. Neutropenia did not appear to increase with cumulative exposure and did appear to be neither more frequent nor more severe for patients previously treated with radiation therapy. Infectious episodes were observed Very commonly; and were fatal in 1% of all patients, and included sepsis, pneumonia and peritonitis. Urinary tract infections and upper respiratory tract infections were the most frequently reported infectious complications. In the immunosuppressed patient population with advanced HIV disease and poor-risk AIDS-related Kaposi's sarcoma, 61% of the patients reported at least one opportunistic infection. The use of supportive therapy, including G-CSF, is recommended for patients who have experienced severe neutropenia. Twenty percent of the patients experienced a drop in their platelet count below 100,000 cells/mm³ at least once while on treatment; 7% had a platelet count <50,000 cells/mm³ at the time of their worst nadir. Bleeding episodes were reported in 4% of all courses and by 14% of all patients, but most of the hemorrhagic episodes were localized and the frequency of these events was unrelated to the paclitaxel dose and schedule. Neurologic In general, the frequency and severity of neurologic manifestations were dose-dependent in patients receiving

single-agent paclitaxel. The frequency of peripheral neuropathy increased with cumulative dose. In general, paresthesia occurs as hyperesthesia. Peripheral neuropathy was the cause of paclitaxel discontinuation in 1% of all patients. Sensory symptoms have usually improved or resolved within several months of paclitaxel discontinuation. Pre-existing neuropathies resulting from prior therapies are not a contraindication for paclitaxel therapy. Reports in the literature of abnormal visual evoked potentials in patients have suggested persistent optic nerve damage.

Hypersensitivity Reactions (HSRs) All patients received premedication prior to paclitaxel. The frequency and severity of HSRs were DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion not affected by the dose or schedule of paclitaxel. The most frequent symptoms observed during these severe reactions were dyspnea, flushing, chest pain, and tachycardia. In addition, abdominal pain, pain in the extremities, diaphoresis, and hypertension were also noted. The minor hypersensitivity reactions particularly flushing and rash did not require therapeutic intervention or discontinuation of paclitaxel treatment.

Injection Site Reactions Injection site reactions were usually mild and revealed as localized edema, pain, erythema, tenderness and induration. Sometimes extravasation may result in cellulites. Sometimes skin exfoliation and peeling depending on extravasation has been reported. Additionally, skin discoloration can be observed. In some cases the onset of the injection site reaction either occurred during a prolonged infusion or was delayed by a week to 10 days.

Cardiovascular Hypotension, during the first 3 hours of infusion, occurred in 12% of all patients and 3% of all courses administered. **Bradycardia**, during the first 3 hours of infusion, occurred in 3% of all patients and 1% of all courses. The reported ECG modifications were repolarization abnormalities, sinus bradycardia, sinus tachycardia, and premature beats in clinical trials. Severe cardiac conduction abnormalities have been reported in <1% of patients during paclitaxel treatment. If patients develop significant conduction abnormalities, appropriate medication should be applied and continuous electro cardiogram monitoring should be performed during paclitaxel treatment.

Gastrointestinal (GI) Toxicity Nausea/vomiting, diarrhea, and mucositis were reported Very commonly by all patients. Mucositis was schedule dependent and occurred more frequently with the 24-hour than with the 3-hour infusion.

Neutropenic enterocolitis (typhlitis), despite the co-administration of G-CSF, was observed in patients treated with paclitaxel alone and in combination with other chemotherapeutic agents. The adverse effects reported in administration of single-agent paclitaxel (clinically treated 812 patients in trials) or post-marketing experiences with paclitaxel are given below. The following classification of frequency is used: Very common ($\geq 1/10$); common ($\geq 1/100$, $< 1/10$); uncommon ($\geq 1/1,000$, $< 1/100$); rare ($\geq 1/10,000$, $< 1/1,000$); very rare ($< 1/10,000$), not known (cannot be estimated from the available data).

Infections and infestations Very common: Infections Uncommon: Septic shock Not known: Pneumonia, sepsis

Blood and lymphatic system disorders Very common: Myelosuppression, neutropenia, anemia, thrombocytopenia, leucopenia, fever, bleeding Rare: Febrile neutropenia Not known: Acute myeloid leukemia, myelodysplastic syndrome

Immunity system disorders Very common: Minor hypersensitivity reactions (mostly flushing and rash) Uncommon: Hypersensitivity reaction states requiring treatment (e.g. hypotension, angioneurotic edema)

DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion edema, difficult breathing, general urticaria, edema, low back pain, shaking) Rare: Anaphylactic reaction (fatal outcomes) Very rare: Anaphylactic shock

Metabolism and nutrition disorders Very rare: Anorexia

Psychiatric disorders Very rare: Confusional state

Nervous system disorders Very common: Neurotoxicity (generally peripheral neuropathy) Rare: Motor neuropathy (resulting in minor distal weakness) Very rare: Autonomic neuropathy (resulting in paralytic ileus and orthostatic hypotension), Grand mal attacks, convulsions, encephalopathy, dizziness, headache, ataxia

Eye disorders Very rare: Reversible optic nervous and/or visual disturbances (scintillating scotoma), photops and visual floaters especially at higher doses than recommended

Ear and labyrinth disorders Very rare: Loss of hearing, vertigo, tinnitus, ototoxicity

Cardiac disorders Very common: Abnormal ECG Common: Bradycardia Uncommon: Cardiomyopathy, asymptomatic ventricular tachycardia, bigeminal tachycardia, AV block and syncope, myocardial infarcts Very rare: Atrial fibrillation, supraventricular tachycardia

Vascular disorders Very common: Hypotension Uncommon: Hypertension, thrombosis, thrombophlebitis Not known: Shock

Respiratory, thoracic and mediastinal disorders Very common: Dyspnea, pleural effusion, respiratory failure, intestinal pneumonia, lung fibrosis, pulmonary embolism

Gastrointestinal disorders Very common: Nausea, vomiting, diarrhea, mucosal inflammation Rare: Bowel obstruction, intestinal perforation, ischemic colitis, pancreatitis Very rare: Mesenteric thrombosis, pseudo-membranous colitis, esophagitis, constipation, ascites Hepatobiliary disorders Very rare: Hepatitis necrosis (can be fatal), hepatic encephalopathy (can be fatal) DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion Skin and subcutaneous tissue disorders Very common: Alopecia Common: Temporal slight skin and nail changes Rare: Pruritus, skin rash, erythema, phlebitis, cellulites, skin eruption, necrosis and fibrosis, radiation recall Very rare: Stevens-Johnson syndrome, epidermal necrolysis, erythema multiforme, exfoliative dermatitis, urticaria, onycholysis (patients receiving treatment should use suntan lotion on hand and foot) Not known: Scleroderma Musculoskeletal and connective tissue disorders Very common: Arthralgia, myalgia General disorders and administration site conditions Common: Injection site reactions (localized edema, pain, erythema, induration of tissues may rarely result in extravasation cellulites) Rare: Asthenia, malaise, pyrexia, dehydration, edema Investigations Common: Severe elevation in AST (SGOT), severe elevation in alkaline phosphatase Uncommon: Severe elevation in bilirubin Rare: Increase in blood creatinine Side Effect Experiences of Combination Treatment Studies The following discussion refers to untreated patients with ovarian carcinoma or NSCLS who receives paclitaxel in combination with cisplatin, patients with NSCLC receiving single-agent paclitaxel with the Best Supportive Care with whom operation cannot be performed, or patients with breast cancer who received paclitaxel after doxorubicin/cyclophosphamide in the adjuvant setting, or patients with metastatic breast cancer and AIDS-associated Kaposi's sarcoma that receive trastuzumab with paclitaxel as first-line treatment. In addition, rare events reported from post-marketing experiences or in other clinical studies. Paclitaxel with cisplatin When administered as a three hour infusion for the first-line chemotherapy of ovarian cancer, neurotoxicity, arthralgia/myalgia, and hypersensitivity were reported as more frequent and severe by patients treated with paclitaxel followed by cisplatin than patients treated with cyclophosphamide followed by cisplatin. Myelosuppression appeared to be less frequent and severe with paclitaxel as a three hour infusion followed by cisplatin compared with cyclophosphamide followed by

cisplatin. Cross-study comparison of neurotoxicity in CA139-209 and CA139-022 trials suggests that when paclitaxel is given in combinations with cisplatin 75 mg/m², the incidence of severe neurotoxicity is more common at a paclitaxel dose of 175 mg/m² given by 3-hour infusion (21%) than at a dose of 135 mg/m² given by 24-hour infusion (3%). Patients treated with paclitaxel and cisplatin may have an increased risk of renal failure as compared to cisplatin alone in gynecological cancers.

Paclitaxel with trastuzumab:

When paclitaxel was administered as a 3-hour infusion in combination with trastuzumab for the first-line treatment of metastatic breast cancer, the following events (regardless of relationship to DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion paclitaxel or trastuzumab) were reported more frequently than with single-agent paclitaxel: heart failure, infection, chills, fever, cough, rash, arthralgia, tachycardia, diarrhea, hypertonia, epistaxis, acne, herpes simplex, accidental injury, insomnia, rhinitis, sinusitis, and injection site reaction. Some of these frequency differences may be due to the increased number and duration of treatments with paclitaxel/trastuzumab combination vs. single-agent paclitaxel. Severe events were reported at similar rates for paclitaxel/trastuzumab and single-agent paclitaxel. Administration of trastuzumab in combination with paclitaxel in patients previously treated with anthracyclines resulted in an increased frequency and severity of cardiac dysfunction in comparison with patients treated with paclitaxel single agent and rarely has been associated with death. In all but these rare cases, patients responded to appropriate medical treatment.

Paclitaxel with doxorubicin:

Congestive heart failure has been reported in combination treatment with paclitaxel and doxorubicin in patients who were not previously treated and received chemotherapy in metastatic breast carcinoma. Cases of myocardial infarction have been reported rarely. Cardiac dysfunction and

reduction of left ventricular ejection fraction or ventricular failure have been reported typically in patients receiving paclitaxel treatment and have received chemotherapy, notably anthracyclines.

Paclitaxel with radiotherapy:

Radiation pneumonia has been reported in patients receiving concurrent radiotherapy. Reporting of suspected adverse reactions Reporting suspected adverse reactions after authorization of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Healthcare professionals are asked to report any suspected adverse reactions to Turkey Pharmacovigilance Centre (TÜFAM). (www.titck.gov.tr; e-mail: tufam@titck.gov.tr; phone number: 0 800 314 00 08; fax: 0 312 218 35 99)

4.9 Overdose and its treatment

There is no known antidote of ATAXIL overdose. The main complications are bone marrow suppression, peripheral neurotoxicity and mucositis. The treatment is symptomatic. Overdose in pediatric patients can be associated with acute ethanol toxicity (see section 4.4).

4.9 Overdose

Not provided in the source SmPC.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antineoplastic agents ATC code: L01CD01

Mechanism of action:

Paclitaxel, active substance of ATAXIL, is an agent with anti-tumor activity. Paclitaxel is a novel antimicrotubule agent that promotes the assembly of microtubules from tubulin dimers and stabilizes microtubules by preventing depolymerisation. This stability results in the inhibition of normal dynamic reorganization of the microtubule network that is essential for vital interphase and mitotic cellular functions. In addition, paclitaxel induces abnormal arrays or

bundles of microtubules throughout the cell cycle and multiple asters of microtubules during mitosis.

5.2 Pharmacokinetic properties

DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion General properties The pharmacokinetics of paclitaxel have been evaluated over a wide range doses, up to 300 mg/m², and infusion schedules, ranging from 3 to 24 hours. The pharmacokinetics of paclitaxel have been shown to be non-linear and saturable. There is a disproportionately increase in C_{max} and AUC with increasing dose. Total body clearance appeared to decrease with higher plasma concentration of paclitaxel. The initial rapid decline represents distribution to peripheral compartment and elimination of the

medicine. The later phase is due to slow transferring of paclitaxel from peripheral compartment.

Variability in systemic paclitaxel exposure, as measured by AUC(0-4) for successive treatment courses was minimal; there was no evidence of accumulation of paclitaxel with multiple treatment courses.

Absorption:

Administered intravenously. Following intravenous administration, paclitaxel plasma concentrations declined in a biphasic manner. In doses of 135 and 175 mg/m² given as 3- and 24-hour infusions, mean terminal half-life has ranged from 13.1 to 52.7 hours, and total body clearance has ranged from 12.2 to 23.8 L/h/m².

Distribution:

On average, 89% of drug is bound to serum proteins; the presence of cimetidine, ranitidine, dexamethasone, or diphenhydramine does not affect protein binding of paclitaxel. Mean steady state volume of distribution has ranged from 198 to 688 L/m², indicating extensive extravascular distribution and/or tissue binding.

Biotransformation:

In vitro studies with human liver microsomes and tissue slices showed that paclitaxel was metabolized primarily to 6 α -hydroxypaclitaxel by the cytochrome P450 isozyme CYP2C8; and to 2 minor metabolites, 3'-p-hydroxypaclitaxel and 6 α ,

3'-pdihydroxypaclitaxel, by CYP3A4. In vitro, the metabolism of paclitaxel to 6 α -hydroxypaclitaxel was inhibited by a number of agents (see section 4.5).

Elimination:

Hepatic metabolism and biliary clearance may be the principal mechanism for disposition of

paclitaxel. Paclitaxel is considered to be metabolized by mainly cytochrome P450 enzymes. After

intravenous administration of 15 to 275 mg/m² doses of paclitaxel as 1-, 6-, or 24-hour infusions, mean values for cumulative urinary recovery of unchanged drug ranged from 1.3% to 12.6% of the dose, indicating extensive non-renal clearance. In 5 patients administered a 225 or 250 mg/m² dose of radiolabeled paclitaxel as a 3-hour infusion, a mean of 71% of the radioactivity was excreted in the feces in 120 hours, and 14% was recovered in the urine. Total recovery of radioactivity ranged from 56% to 101% of the dose. Paclitaxel represented a mean of 5% of the administered radioactivity recovered in the feces, while metabolites, primarily 6 α -hydroxypaclitaxel, accounted for the balance.

Linearity/ non-linearity:

Dose increases associated with the 3-hour infusion resulted in non-linear pharmacokinetics. When the dose increased by 30% from 135 mg/m² to 175 mg/m², the maximum plasma concentration

(C_{max}) increased by 75% and the area under the plasma concentration time curve (AUC_{0-∞}) by 81%.

There has been no significant differences in responses given by treated patients to systemic DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion paclitaxel, there is no proof regarding accumulation of paclitaxel in multi treatment courses. Characteristics in patients

Renal impairment:

The effect of renal dysfunction on the disposition of paclitaxel has not been investigated. Hepatic impairment The disposition and toxicity of paclitaxel 3-hour infusion were evaluated in 35 patients with varying degrees of hepatic function.

Relative to patients with normal bilirubin, plasma paclitaxel exposure in patients with abnormal serum bilirubin ≤ 2 times upper limit of normal (ULN) administered 175 mg/m² was increased, but with no apparent significant increase in the frequency or severity of

toxicity. In 5 patients with serum total bilirubin > 2 times ULN, there was a statistically non-

significant higher incidence of severe myelosuppression, even at a reduced dose (110 mg/m²), but no observed increase in plasma exposure (see section Posology and route of administration- hepatic impairment and Special warnings and precautions for use- Liver impairment).

5.3 Preclinical safety data

The carcinogenic potential of paclitaxel has not been studied. Paclitaxel has been shown to be clastogenic in vitro (chromosome aberrations in human lymphocytes) and in vivo (micronucleus test in mice). Paclitaxel was not mutagenic in the Ames test or the CHO/HGPRT gene mutation assay. Decreased fertility and decreased numbers of implantations and live fetuses occurred in rats receiving paclitaxel. Paclitaxel has also been shown to be embryotoxic and fetotoxic in rabbits receiving the drug during organogenesis.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Anhydrous ethanol Macrogolglycerol ricinoleate Citric acid

6.2 Incompatibilities

Macrogolglycerol ricinoleate can result in DEHP (di-(2-ethylhexyl) phthalate) leaching from plasticized polyvinyl chloride (PVC) containers, at levels, which increase with time and

concentration. Consequently, the preparation, storage and dilution of paclitaxel should be carried

out using non-PVC-containing equipment.

6.3 Shelf life

24 months

6.4 Special precautions for storage

Store unopened vials at room temperature below 30°C and in its original package. Diluted solution should not be stored in a refrigerator. When stored at 25°C room temperature, it should be used within 27 hours; throw away any unused product after this period of time.

6.5 Nature and contents of container

Vial containing ATAXIL 30 mg/5 ml concentrate for solution for IV infusion in packages of 1 multiple dose of vial. DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion

6.6 Special precautions for disposal and other handling

ATAXIL is a cytotoxic anticancer drug and caution should be exercised in handling. Protective gloves should always be worn when handling vials containing paclitaxel. Dilution should be performed under aseptic conditions by responsible person in a designated area. Measures should be taken to avoid contact with skin and mucosa membranes. In the event of contact of ATAXIL with the skin, wash your skin with soap and water. In the event of contact with the mucous membranes, flush thoroughly with water. Following topical exposure, tingling, burning and redness have been

observed. Upon inhalation, dyspnea, chest pain, burning eyes, burning throat and nausea have been

reported. Given the possibility of extravasation, it is advisable to closely monitor the infusion site for possible infiltration during administration of the medicinal product. ATAXIL should be administered through an in-line filter with microporous membrane $\leq 22 \mu\text{m}$. Use of filter devices which incorporate short inlet and outlet PVC-coated tubing has not resulted in significant leaching of DEHP. Prior to infusion, ATAXIL should be diluted using aseptic techniques in 0.9% sodium chloride injection, 5% dextrose injection, 5% dextrose and 0.9% sodium chloride injection, or 5% dextrose in Ringer's solution, to a final concentration of 0.3 to 1.2 mg/ml. Upon preparation, solutions may show haziness, which is attributed to the

formulation vehicle. It should be administered through an in-line filter with a microporous membrane $\leq 22 \mu\text{m}$. No significant losses in potency have been noted following simulated delivery of the solution through IV tubing containing an in-line filter. ATAXIL solutions should be prepared and stored in glass, polypropylene, or polyolefin containers. Non-PVC containing administration sets, such as those which are polyethylene-lined, should be used. The solutions are physically and chemically stable for up to 27 hours at room temperature (approximately 25°C) and room lighting conditions; infusion should be completed within this time. There have been rare reports of precipitation with longer than the recommended 3-hour infusion schedules. Excessive agitation, vibration or shaking may induce precipitation and should be avoided. Infusion sets should be flushed thoroughly with a compatible diluent before use.

The Chemo-Dispensing Pin device or similar devices with spikes should not be used since they can cause the vial stopper to collapse, resulting in loss of sterile integrity. Procedures for proper handling and disposal of anticancer drugs should be considered. To minimize the risk of dermal exposure, always wear impervious gloves when handling vials containing ATAXIL injection. This includes all handling activities in clinical settings, pharmacies, storerooms, and home healthcare settings, including during unpacking and inspection, transport within a facility, and dose preparation and administration. Any unused material should be disposed according to local disposal regulations. DEVA HOLDING A.S. Property-Strictly Confidential ATAXIL 30 mg/5 ml Concentrate for Solution for IV Infusion

7. MARKETING AUTHORISATION HOLDER

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8. MARKETING AUTHORIZATION NUMBER(S)

H2025/CTD9325/15460

9. DATE OF FIRST AUTHORIZATION/ RENEWAL OF THE AUTHORIZATION

2025 November 03

10. DATE OF REVISION OF THE TEXT

2025 November 03