

IN-XXXX

Rev. mm/yy

**Rx only**

# **TAXOTERE**<sup>®</sup> (*docetaxel*)

**for Injection Concentrate****WARNING**

TAXOTERE<sup>®</sup> (docetaxel) for Injection Concentrate should be administered under the supervision of a qualified physician experienced in the use of antineoplastic agents. Appropriate management of complications is possible only when adequate diagnostic and treatment facilities are readily available.

The incidence of treatment-related mortality associated with TAXOTERE therapy is increased in patients with abnormal liver function, in patients receiving higher doses, and in patients with non-small cell lung carcinoma and a history of prior treatment with platinum-based chemotherapy who receive TAXOTERE at a dose of 100 mg/m<sup>2</sup> (see

**WARNINGS**).

TAXOTERE should generally not be given to patients with bilirubin > upper limit of normal (ULN), or to patients with SGOT and/or SGPT >1.5 x ULN concomitant with alkaline phosphatase > 2.5 x ULN. Patients with elevations of bilirubin or abnormalities of transaminase concurrent with alkaline phosphatase are at increased risk for the development of grade 4 neutropenia, febrile neutropenia, infections, severe thrombocytopenia, severe stomatitis, severe skin toxicity, and toxic death. Patients with isolated elevations of transaminase > 1.5 x ULN also had a higher rate of febrile neutropenia grade 4 but did not have an increased incidence of toxic death. Bilirubin, SGOT or SGPT, and alkaline phosphatase values should be obtained prior to each cycle of TAXOTERE therapy and reviewed by the treating physician.

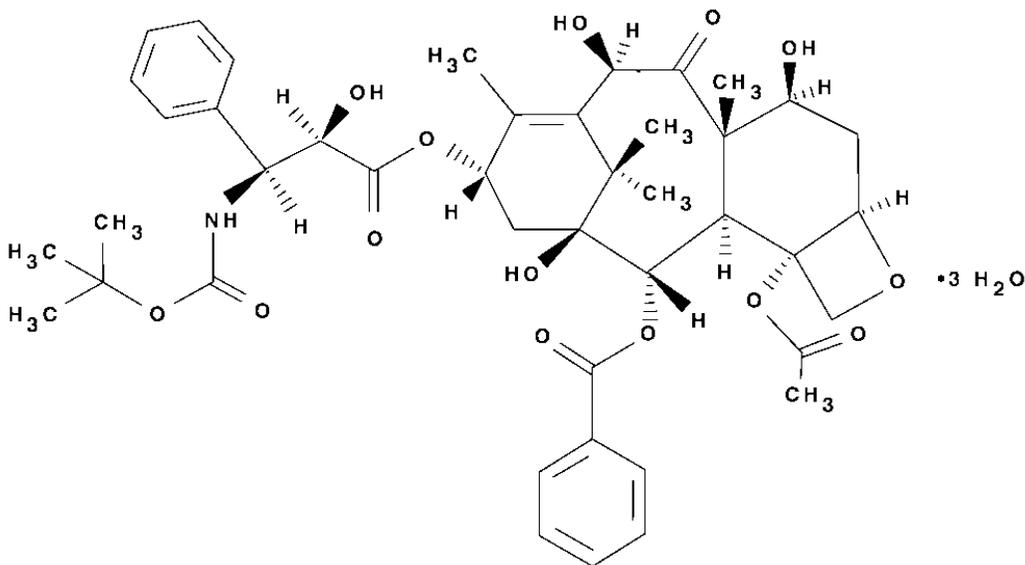
TAXOTERE therapy should not be given to patients with neutrophil counts of < 1500 cells/mm<sup>3</sup>. In order to monitor the occurrence of neutropenia, which may be severe and result in infection, frequent blood cell counts should be performed on all patients receiving TAXOTERE.

Severe hypersensitivity reactions characterized by hypotension and/or bronchospasm, or generalized rash/erythema occurred in 2.2% (2/92) of patients who received the recommended 3-day dexamethasone premedication. Hypersensitivity reactions requiring discontinuation of the TAXOTERE infusion were reported in five patients who did not receive premedication. These reactions resolved after discontinuation of the infusion and the administration of appropriate therapy. TAXOTERE must not be given to patients who have a history of severe hypersensitivity reactions to TAXOTERE or to other drugs formulated with polysorbate 80 (see **WARNINGS**).

Severe fluid retention occurred in 6.5% (6/92) of patients despite use of a 3-day dexamethasone premedication regimen. It was characterized by one or more of the following events: poorly tolerated peripheral edema, generalized edema, pleural effusion requiring urgent drainage, dyspnea at rest, cardiac tamponade, or pronounced abdominal distention (due to ascites) (see **PRECAUTIONS**).

## DESCRIPTION

Docetaxel is an antineoplastic agent belonging to the taxoid family. It is prepared by semisynthesis beginning with a precursor extracted from the renewable needle biomass of yew plants. The chemical name for docetaxel is (2R,3S)-N-carboxy-3-phenylisoserine, N-*tert*-butyl ester, 13-ester with 5 $\beta$ -20-epoxy-1,2 $\alpha$ ,4,7 $\beta$ ,10 $\beta$ ,13 $\alpha$ -hexahydroxytax-11-en-9-one 4-acetate 2-benzoate, trihydrate. Docetaxel has the following structural formula:



Docetaxel is a white to almost-white powder with an empirical formula of  $C_{43}H_{53}NO_{14} \cdot 3H_2O$ , and a molecular weight of 861.9. It is highly lipophilic and practically insoluble in water. TAXOTERE (docetaxel) for Injection Concentrate is a clear yellow to brownish-yellow viscous solution. TAXOTERE is sterile, non-pyrogenic, and is available in single-dose vials containing 20 mg (0.5 mL) or 80 mg (2.0 mL) docetaxel (anhydrous). Each mL contains 40 mg docetaxel (anhydrous) and 1040 mg polysorbate 80.

TAXOTERE for Injection Concentrate requires dilution prior to use. A sterile, non-pyrogenic, single-dose diluent is supplied for that purpose. The diluent for TAXOTERE contains 13% ethanol in Water for Injection, and is supplied in 1.5 mL (to be used with 20 mg TAXOTERE for Injection Concentrate) and 6.0 mL (to be used with 80 mg TAXOTERE for Injection Concentrate) vials.

### **CLINICAL PHARMACOLOGY**

Docetaxel is an antineoplastic agent that acts by disrupting the microtubular network in cells that is essential for mitotic and interphase cellular functions. Docetaxel binds to free tubulin and promotes the assembly of tubulin into stable microtubules while simultaneously inhibiting their disassembly. This leads to the production of microtubule bundles without normal function and to the stabilization of microtubules, which results in the inhibition of mitosis in cells. Docetaxel's binding to microtubules does not alter the number of protofilaments in the bound microtubules, a feature which differs from most spindle poisons currently in clinical use.

### **HUMAN PHARMACOKINETICS**

The pharmacokinetics of docetaxel have been evaluated in cancer patients after administration of 20-115 mg/m<sup>2</sup> in phase I studies. The area under the curve (AUC) was dose proportional following doses of 70-115 mg/m<sup>2</sup> with infusion times of 1 to 2 hours. Docetaxel's pharmacokinetic profile is consistent with a three-compartment pharmacokinetic model, with half-lives for the  $\alpha$ ,  $\beta$ , and  $\gamma$  phases of 4 min, 36 min, and 11.1 hr, respectively. The initial rapid decline represents distribution to the peripheral compartments and the late (terminal) phase is due, in part, to a relatively slow efflux of docetaxel from the peripheral compartment. Mean values for total body clearance and steady state volume of distribution were 21 L/h/m<sup>2</sup> and 113 L, respectively. Mean total body clearance for Japanese patients dosed at the range of 10-90 mg/m<sup>2</sup> was similar to that of European/American populations dosed at 100 mg/m<sup>2</sup>, suggesting no significant difference in the elimination of docetaxel in the two populations.

A study of <sup>14</sup>C-docetaxel was conducted in three cancer patients. Docetaxel was eliminated in both the urine and feces following oxidative metabolism of the *tert*-butyl ester group, but fecal excretion was the main elimination route. Within 7 days, urinary and fecal excretion accounted for approximately 6% and 75% of the administered radioactivity, respectively. About 80% of the radioactivity recovered in feces is excreted during the first 48 hours as 1 major and 3 minor metabolites with very small amounts (less than 8%) of unchanged drug.

A population pharmacokinetic analysis was carried out after TAXOTERE treatment of 535 patients dosed at 100 mg/m<sup>2</sup>. Pharmacokinetic parameters estimated by this analysis were very close to those estimated from phase I studies. The pharmacokinetics of docetaxel were not influenced by age or gender and docetaxel total body clearance was not modified by pretreatment with dexamethasone. In patients with clinical chemistry data suggestive of mild to moderate liver function impairment (SGOT and/or SGPT >1.5 times the upper limit of normal [ULN] concomitant with alkaline phosphatase >2.5 times ULN), total body clearance was lowered by an average of 27%, resulting in a 38% increase in systemic

exposure (AUC). This average, however, includes a substantial range and there is, at present, no measurement that would allow recommendation for dose adjustment in such patients. Patients with combined abnormalities of transaminase and alkaline phosphatase should, in general, not be treated with TAXOTERE.

*In vitro* studies showed that docetaxel is about 94% protein bound, mainly to  $\alpha_1$ -acid glycoprotein, albumin, and lipoproteins. In three cancer patients, the *in vitro* binding to plasma proteins was found to be approximately 97%. Dexamethasone does not affect the protein binding of docetaxel.

*In vitro* drug interaction studies revealed that docetaxel is metabolized by the CYP3A4 isoenzyme, and its metabolism can be inhibited by CYP3A4 inhibitors, such as ketoconazole, erythromycin, troleandomycin, and nifedipine. Based on *in vitro* findings, it is likely that CYP3A4 inhibitors and/or substrates may lead to substantial increases in docetaxel blood concentrations. No clinical studies have been performed to evaluate this finding (see PRECAUTIONS).

## CLINICAL STUDIES

**Breast Cancer:** The efficacy and safety of TAXOTERE have been evaluated in locally advanced or metastatic breast cancer after failure of previous chemotherapy (alkylating agent-containing regimens or anthracycline-containing regimens), primarily at a dose of 100 mg/m<sup>2</sup> given as a 1-hour infusion every 3 weeks, but with some experience at 60 mg/m<sup>2</sup>, in two large randomized trials and a number of smaller single arm studies.

**Randomized Trials:** In one randomized trial, patients with a history of prior treatment with an anthracycline-containing regimen were assigned to treatment with TAXOTERE or the combination of mitomycin (12 mg/m<sup>2</sup> every 6 weeks) and vinblastine (6 mg/m<sup>2</sup> every 3 weeks). 203 patients were randomized to TAXOTERE and 189 to the comparator arm. Most patients had received prior chemotherapy for metastatic disease; only 27 patients on the TAXOTERE arm and 33 patients on the comparator arm entered the study following relapse after adjuvant therapy. Three-quarters of patients had measurable, visceral metastases. The primary endpoint was time to progression. The following table summarizes the study results:

### Efficacy of TAXOTERE in the Treatment of Breast Cancer Patients Previously Treated with an Anthracycline-Containing Regimen (Intent-to-Treat Analysis)

Efficacy Parameter	Docetaxel (N=203)	Mitomycin/ Vinblastine (N=189)	p-value
Median Survival	11.4 months	8.7 months	
Risk Ratio*, Mortality (Docetaxel:Control)	0.73		p=0.01
			Log Rank

Taxotere for Injection Concentrate

95% CI (Risk Ratio)	0.58-0.93		
Median Time to Progression	4.3 months	2.5 months	
Risk Ratio*, Progression (Docetaxel:Control)	0.75		p=0.01 Log Rank
95% CI (Risk Factor)	0.61-0.94		
Overall Response Rate	28.1%	9.5%	p<0.0001
Complete Response Rate	3.4%	1.6%	Chi Square

\*For the risk ratio, a value less than 1.00 favors docetaxel.

In a second randomized trial, patients previously treated with an alkylating-containing regimen were assigned to treatment with TAXOTERE or doxorubicin (75 mg/m<sup>2</sup> every 3 weeks). 161 patients were randomized to TAXOTERE and 165 patients to doxorubicin. Approximately one-half of patients had received prior chemotherapy for metastatic disease, and one-half entered the study following relapse after adjuvant therapy. Three-quarters of patients had measurable, visceral metastases. The primary endpoint was time to progression. The study results are summarized below:

**Efficacy of TAXOTERE in the Treatment of Breast Cancer Patients  
Previously Treated with an Alkylating-Containing Regimen  
(Intent-to-Treat Analysis)**

<b>Efficacy Parameter</b>	<b>Docetaxel (N=161)</b>	<b>Doxorubicin (165)</b>	<b>p-value</b>
Median Survival	14.7 months	14.3 months	
Risk Ratio*, Mortality (Docetaxel:Control)	0.89		p=0.39 Log Rank
95% CI (Risk Ratio)	0.68-1.16		
Median Time to Progression	6.5 months	5.3 months	
Risk Ratio*, Progression (Docetaxel:Control)	0.93		p=0.45 Log Rank
95% CI (Risk Ratio)	0.71-1.16		
Overall Response Rate	45.3%	29.7%	p=0.004
Complete Response Rate	6.8%	4.2%	Chi Square

\*For the risk ratio, a value less than 1.00 favors docetaxel.

**Single Arm Studies:** TAXOTERE at a dose of 100 mg/m<sup>2</sup> was studied in six single arm studies involving a total of 309 patients with metastatic breast cancer in whom previous chemotherapy had failed. Among these, 190 patients had anthracycline-resistant breast

cancer, defined as progression during an anthracycline-containing chemotherapy regimen for metastatic disease, or relapse during an anthracycline-containing adjuvant regimen. In anthracycline-resistant patients, the overall response rate was 37.9% (72/190; 95% C.I.: 31.0-44.8) and the complete response rate was 2.1%.

TAXOTERE was also studied in three single arm Japanese studies at a dose of 60 mg/m<sup>2</sup>, in 174 patients who had received prior chemotherapy for locally advanced or metastatic breast cancer. Among 26 patients whose best response to an anthracycline had been progression, the response rate was 34.6% (95% C.I.: 17.2-55.7), similar to the response rate in single arm studies of 100 mg/m<sup>2</sup>.

**Hematologic and Other Toxicity: Relation to dose and baseline liver chemistry abnormalities.** Hematologic and other toxicity is increased at higher doses and in patients with elevated baseline liver function tests (LFTs). In the following tables, adverse drug reactions are compared for three populations: 730 patients with normal LFTs given TAXOTERE at 100 mg/m<sup>2</sup> in the randomized and single arm studies of metastatic breast cancer after failure of previous chemotherapy; 18 patients in these studies who had abnormal baseline LFTs (defined as SGOT and/or SGPT > 1.5 times ULN concurrent with alkaline phosphatase > 2.5 times ULN); and 174 patients in Japanese studies given TAXOTERE at 60 mg/m<sup>2</sup> who had normal LFTs.

**Hematologic Adverse Events in Breast Cancer Patients  
Previously Treated with Chemotherapy**

**Treated at TAXOTERE 100 mg/m<sup>2</sup> with Normal or Elevated Liver  
Function Tests or 60 mg/m<sup>2</sup> with Normal Liver Function Tests**

	TAXOTERE		TAXOTERE
	100 mg/m <sup>2</sup>		60 mg/m <sup>2</sup>
	Normal LFTs*	Elevated LFTs**	Normal LFTs*
<b>Adverse Event</b>	<b>n=730</b>	<b>n=18</b>	<b>n=174</b>
	<b>%</b>	<b>%</b>	<b>%</b>
Neutropenia			
Any <2000 cells/mm <sup>3</sup>	98.4	100	95.4
Grade 4 <500 cells/mm <sup>3</sup>	84.4	93.8	74.9
Thrombocytopenia			
Any <100,000 cells/mm <sup>3</sup>	10.8	44.4	14.4
Grade 4 <20,000 cells/mm <sup>3</sup>	0.6	16.7	1.1
Anemia <11 g/dL	94.6	94.4	64.9
Infection***			
Any	22.5	38.9	1.1
Grade 3 and 4	7.1	33.3	0
Febrile Neutropenia****			
By Patient	11.8	33.3	0
By Course	2.4	8.6	0

Taxotere for Injection Concentrate

Septic Death	1.5	5.6	1.1
Non-Septic Death	1.1	11.1	0

**\*Normal Baseline LFTs: Transaminases  $\leq$  1.5 times ULN or alkaline phosphatase  $\leq$  2.5 times ULN or isolated elevations of transaminases or alkaline phosphatase up to 5 times ULN**

**\*\*Elevated Baseline LFTs: SGOT and/or SGPT  $>1.5$  times ULN concurrent with alkaline phosphatase  $>2.5$  times ULN**

**\*\*\*Incidence of infection requiring hospitalization and/or intravenous antibiotics was 8.5% (n=62) among the 730 patients with normal LFTs at baseline; 7 patients had concurrent grade 3 neutropenia, and 46 patients had grade 4 neutropenia.**

**\*\*\*\*Febrile Neutropenia: For 100 mg/m<sup>2</sup>, ANC grade 4 and fever  $> 38^{\circ}$  C with IV antibiotics and/or hospitalization; for 60 mg/m<sup>2</sup>, ANC grade 3/4 and fever  $> 38.1^{\circ}$  C**

**Non-Hematologic Adverse Events in Breast Cancer Patients  
Previously Treated with Chemotherapy  
Treated at TAXOTERE 100 mg/m<sup>2</sup> with Normal or Elevated Liver  
Function Tests or 60 mg/m<sup>2</sup> with Normal Liver Function Tests**

Adverse Event	TAXOTERE 100 mg/m <sup>2</sup>		TAXOTERE 60 mg/m <sup>2</sup>
	Normal LFTs* n=730 %	Elevated LFTs** n=18 %	Normal LFTs* n=174 %
Acute Hypersensitivity Reaction Regardless of Premedication			
Any	13.0	5.6	0.6
Severe	1.2	0	0
Fluid Retention*** Regardless of Premedication			
Any	56.2	61.1	12.6
Severe	7.9	16.7	0
Neurosensory			
Any	56.8	50	19.5
Severe	5.8	0	0
Myalgia	22.7	33.3	3.4
Cutaneous			
Any	44.8	61.1	30.5
Severe	4.8	16.7	0
Asthenia			
Any	65.2	44.4	65.5
Severe	16.6	22.2	0
Diarrhea			
Any	42.2	27.8	NA
Severe	6.3	11.1	
Stomatitis			
Any	53.3	66.7	19.0
Severe	7.8	38.9	0.6

**\*Normal Baseline LFTs: Transaminases  $\leq$  1.5 times ULN or alkaline phosphatase  $\leq$  2.5 times ULN or isolated elevations of transaminases or alkaline phosphatase up to 5 times ULN**

**\*\* Elevated Baseline Liver Function: SGOT and/or SGPT >1.5 times ULN concurrent with alkaline phosphatase >2.5 times ULN**

**\*\*\*Fluid Retention includes (by COSTART): edema (peripheral, localized, generalized, lymphedema, pulmonary edema, and edema otherwise not specified) and effusion (pleural, pericardial, and ascites); no premedication given with the 60 mg/m<sup>2</sup> dose**

**NA = not available**

### **Non-Small Cell Lung Cancer (NSCLC):**

The efficacy and safety of TAXOTERE in non-small cell lung cancer have been evaluated in patients with locally advanced or metastatic disease and a history of prior treatment with a platinum-based chemotherapy regimen. Two randomized, controlled trials established that a TAXOTERE dose of 75 mg/m<sup>2</sup> was tolerable and yielded a favorable outcome (see below). TAXOTERE at a dose of 100 mg/m<sup>2</sup>, however, was associated with unacceptable hematologic toxicity, infections, and treatment-related mortality and this dose should not be used (see BOXED WARNING, WARNINGS, and DOSAGE AND ADMINISTRATION sections).

One trial (TAX317), randomized patients with locally advanced or metastatic non-small cell lung cancer, a history of prior platinum-based chemotherapy, no history of taxane exposure, and an ECOG performance status ≤2 to TAXOTERE or best supportive care. The primary endpoint of the study was survival. Patients were initially randomized to TAXOTERE 100 mg/m<sup>2</sup> or best supportive care, but early toxic deaths at this dose led to a dose reduction to TAXOTERE 75 mg/m<sup>2</sup>. A total of 104 patients were randomized in this amended study to either TAXOTERE 75 mg/m<sup>2</sup> or best supportive care.

In a second randomized trial (TAX320), 373 patients with locally advanced or metastatic non-small cell lung cancer, a history of prior platinum-based chemotherapy, and an ECOG performance status ≤2 were randomized to TAXOTERE 75 mg/m<sup>2</sup>, TAXOTERE 100 mg/m<sup>2</sup> and a treatment in which the investigator chose either vinorelbine 30 mg/m<sup>2</sup> days 1, 8, and 15 repeated every 3 weeks **or** ifosfamide 2 g/m<sup>2</sup> days 1-3 repeated every 3 weeks. Forty percent of the patients in this study had a history of prior paclitaxel exposure. The primary endpoint was survival in both trials. The efficacy data for the TAXOTERE 75 mg/m<sup>2</sup> arm and the comparator arms are summarized in the table below and in figures 1 and 2 showing the survival curves for the two studies.

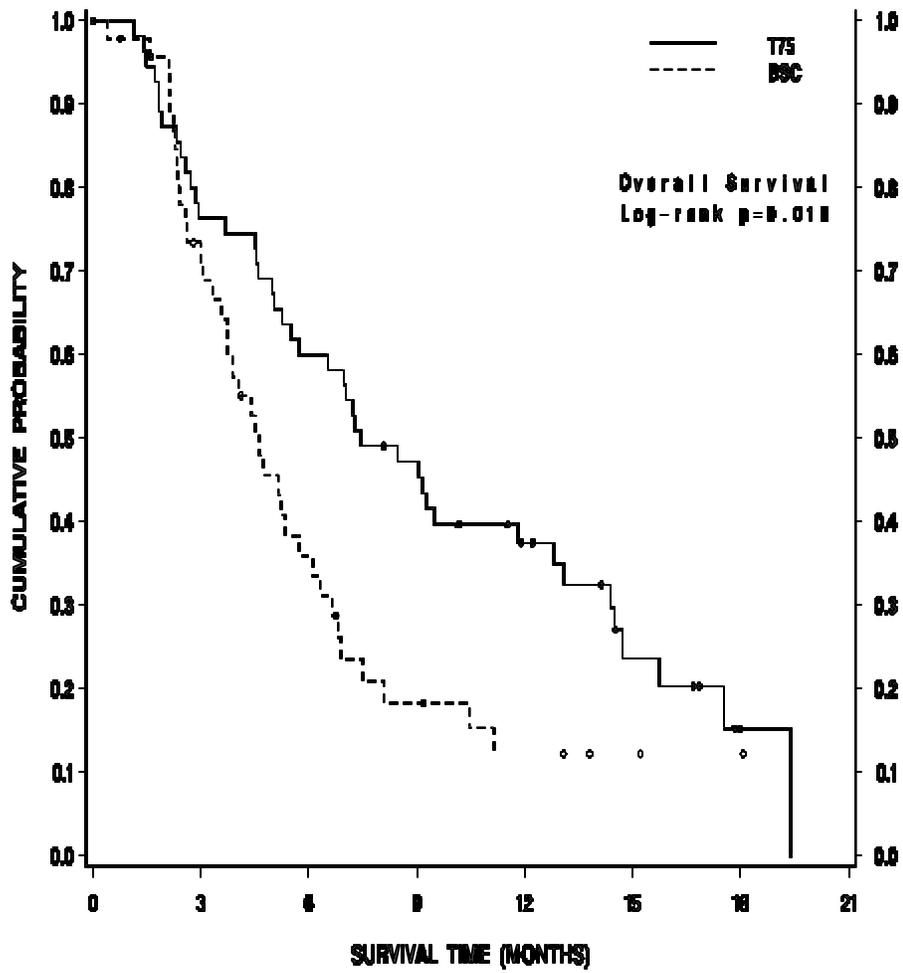
**Efficacy of TAXOTERE in the Treatment of Non-Small Cell Lung Cancer Patients  
Previously Treated with a Platinum-Based Chemotherapy Regimen  
(Intent-to-Treat Analysis)**

	TAX317		TAX 320	
	Docetaxel 75 mg/m <sup>2</sup> N = 55	Best Supportive Care/75 N = 49	Docetaxel 75 mg/m <sup>2</sup> N=125	Control (V/I) N= 123
<b>Overall Survival Log-rank Test</b>	p = 0.01		p = 0.13	
<b>Risk Ratio<sup>#</sup>, Mortality (Docetaxel:Control)</b>	0.56		0.82	
<b>95% CI (Risk Ratio)</b>	(0.35, 0.88)		(0.63, 1.06)	
<b>Median Survival</b>	7.5 months*	4.6 months	5.7 months	5.6 months
<b>95% CI</b>	(5.5, 12.8)	(3.7, 6.1)	(5.1, 7.1)	(4.4, 7.9)
<b>% 1-year Survival</b>	37%* <sup>@</sup>	12%	30%* <sup>@</sup>	20%
<b>95% CI</b>	(24, 50)	(2, 23)	(22, 39)	(13, 27)
<b>Time to Progression</b>	12.3 weeks*	7.0 weeks	8.3 weeks	7.6 weeks
<b>95% CI</b>	(9.0, 18.3)	(6.0, 9.3)	(7.0, 11.7)	(6.7, 10.1)
<b>Response Rate</b>	5.5%	Not Applicable	5.7%	0.8%
<b>95% CI</b>	(1.1, 15.1))		(2.3, 11.3)	(0.0, 4.5)

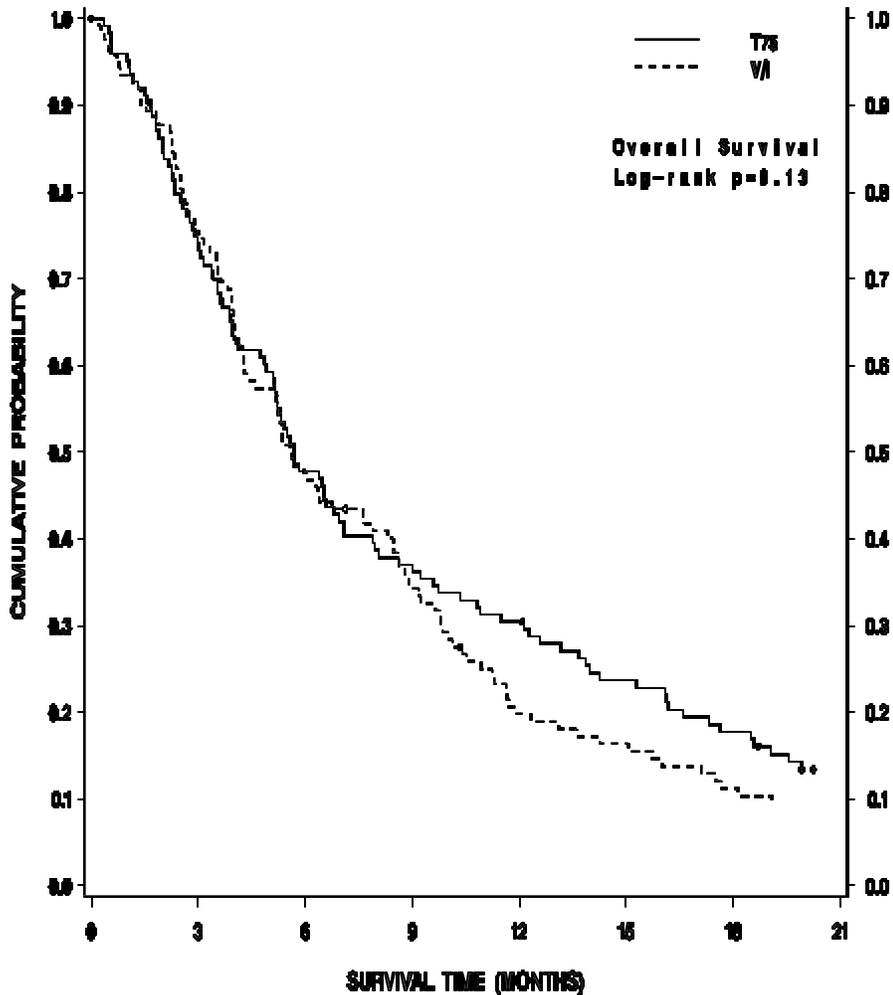
\* p≤0.05; <sup>@</sup> uncorrected for multiple comparisons; <sup>#</sup> a value less than 1.00 favors docetaxel.

Only one of the two trials (TAX317) showed a clear effect on survival, the primary endpoint; that trial also showed an increased rate of survival to one year. In the second study (TAX320) the rate of survival at one year favored TAXOTERE 75 mg/m<sup>2</sup>.

**TAX 317 Survival K-M Curves - Docetaxel 75 mg/m<sup>2</sup> Vs. Best Supportive Care**



**TAX 320 Survival K-M Curves - Docetaxel 75 mg/m<sup>2</sup> Vs. Vinorelbine or Ifosfamide Control**



Patients treated with TAXOTERE at a dose of 75mg/m<sup>2</sup> experienced no deterioration in performance status and body weight relative to the comparator arms used in these trials.

**INDICATIONS AND USAGE**

**Breast Cancer:** TAXOTERE® (docetaxel) for Injection Concentrate is indicated for the treatment of patients with locally advanced or metastatic breast cancer after failure of prior chemotherapy.

**Non-Small Cell Lung Cancer:** TAXOTERE® (docetaxel) for Injection Concentrate is indicated for the treatment of patients with locally advanced or metastatic non-small cell lung cancer after failure of prior platinum-based chemotherapy.

## CONTRAINDICATIONS

TAXOTERE is contraindicated in patients who have a history of severe hypersensitivity reactions to docetaxel or to other drugs formulated with polysorbate 80.

TAXOTERE should not be used in patients with neutrophil counts of  $<1500$  cells/mm<sup>3</sup>.

## WARNINGS

TAXOTERE (docetaxel) for Injection Concentrate should be administered under the supervision of a qualified physician experienced in the use of antineoplastic agents. Appropriate management of complications is possible only when adequate diagnostic and treatment facilities are readily available.

**Toxic Deaths:** Breast Cancer: TAXOTERE administered at 100 mg/m<sup>2</sup> was associated with deaths considered possibly or probably related to treatment in 2.0% (19/965) of metastatic breast cancer patients, both previously treated and untreated, with normal baseline liver function and in 11.5% (7/61) of patients with various tumor types who had abnormal baseline liver function (SGOT and/or SGPT  $> 1.5$  times ULN together with AP  $> 2.5$  times ULN). Among patients dosed at 60 mg/m<sup>2</sup>, mortality related to treatment occurred in 0.6% (3/481) of patients with normal liver function, and in 3 of 7 patients with abnormal liver function. Approximately half of these deaths occurred during the first cycle. Sepsis accounted for the majority of the deaths.

Non-Small Cell Lung Cancer: TAXOTERE administered at a dose of 100 mg/m<sup>2</sup> in patients with locally advanced or metastatic non-small cell lung cancer who had a history of prior platinum-based chemotherapy was associated with increased treatment-related mortality (14% and 5% in two randomized, controlled studies). There were 2.8% treatment-related deaths among the 176 patients treated at the 75 mg/m<sup>2</sup> dose in the randomized trials. Among patients who experienced treatment-related mortality at the 75 mg/m<sup>2</sup> dose level, 3 of 5 patients had a PS of 2 at study entry. See BOXED WARNING, CLINICAL STUDIES, and DOSAGE AND ADMINISTRATION sections).

**Premedication Regimen:** All patients should be premedicated with oral corticosteroids such as dexamethasone 16 mg per day (*e.g.*, 8 mg BID) for 3 days starting 1 day prior to TAXOTERE to reduce the severity of fluid retention and hypersensitivity reactions (see **DOSAGE AND ADMINISTRATION** section). This regimen was evaluated in 92 patients with metastatic breast cancer previously treated with chemotherapy given TAXOTERE at a dose of 100 mg/m<sup>2</sup> every 3 weeks.

**Hypersensitivity Reactions:** Patients should be observed closely for hypersensitivity reactions, especially during the first and second infusions. Severe hypersensitivity reactions characterized by hypotension and/or bronchospasm, or generalized rash/erythema occurred in 2.2% of the 92 patients premedicated with 3-day corticosteroids. Hypersensitivity reactions requiring discontinuation of the TAXOTERE infusion were reported in 5 out of 1260 patients with various tumor types who did not receive premedication, but in 0/92 patients premedicated with 3-day corticosteroids. Patients with a history of severe hypersensitivity reactions should not be rechallenged with TAXOTERE.

**Hematologic Effects:** Neutropenia ( $< 2000$  neutrophils/mm<sup>3</sup>) occurs in virtually all patients given 60-100 mg/m<sup>2</sup> of TAXOTERE and grade 4 neutropenia ( $< 500$  cells/mm<sup>3</sup>) occurs in 85% of patients given 100 mg/m<sup>2</sup> and 75% of patients given 60 mg/m<sup>2</sup>. Frequent monitoring of blood counts is, therefore, essential so that dose can be adjusted. TAXOTERE should not be administered to patients with neutrophils  $< 1500$  cells/mm<sup>3</sup>.

Febrile neutropenia occurred in about 12% of patients given 100 mg/m<sup>2</sup> but was very uncommon in patients given 60 mg/m<sup>2</sup>. Hematologic responses, febrile reactions and infections, and rates of septic death for different regimens are dose related and are described in **CLINICAL STUDIES**.

Three breast cancer patients with severe liver impairment (bilirubin  $> 1.7$  times ULN) developed fatal gastrointestinal bleeding associated with severe drug-induced thrombocytopenia.

**Hepatic Impairment:** (see **BOXED WARNING**).

**Fluid Retention:** (see **BOXED WARNING**).

**Pregnancy:** TAXOTERE can cause fetal harm when administered to pregnant women. Studies in both rats and rabbits at doses  $\geq 0.3$  and  $0.03$  mg/kg/day, respectively (about 1/50 and 1/300 the daily maximum recommended human dose on a mg/m<sup>2</sup> basis), administered during the period of organogenesis, have shown that TAXOTERE is embryotoxic and fetotoxic (characterized by intrauterine mortality, increased resorption, reduced fetal weight, and fetal ossification delay). The doses indicated above also caused maternal toxicity.

There are no adequate and well-controlled studies in pregnant women using TAXOTERE. If TAXOTERE is used during pregnancy, or if the patient becomes pregnant while receiving this drug, the patient should be apprised of the potential hazard to the fetus or potential risk for loss of the pregnancy. Women of childbearing potential should be advised to avoid becoming pregnant during therapy with TAXOTERE.

## **PRECAUTIONS**

**General:** Responding patients may not experience an improvement in performance status on therapy and may experience worsening. The relationship between changes in performance status, response to therapy, and treatment-related side effects has not been established.

**Hematologic Effects:** In order to monitor the occurrence of myelotoxicity, it is recommended that frequent peripheral blood cell counts be performed on all patients receiving TAXOTERE. Patients should not be retreated with subsequent cycles of TAXOTERE until neutrophils recover to a level  $> 1500$  cells/mm<sup>3</sup> and platelets recover to a level  $> 100,000$  cells/mm<sup>3</sup>.

A 25% reduction in the dose of TAXOTERE is recommended during subsequent cycles following severe neutropenia ( $< 500$  cells/mm<sup>3</sup>) lasting 7 days or more, febrile neutropenia, or a grade 4 infection in a TAXOTERE® (docetaxel) for Injection Concentrate cycle (see **DOSAGE AND ADMINISTRATION** section).

**Hypersensitivity Reactions:** Hypersensitivity reactions may occur within a few minutes following initiation of a TAXOTERE infusion. If minor reactions such as flushing or localized skin reactions occur, interruption of therapy is not required. More severe reactions, however, require the immediate discontinuation of TAXOTERE and aggressive therapy. All patients should be premedicated with an oral corticosteroid prior to the initiation of the infusion of TAXOTERE (see **BOXED WARNING** and **WARNINGS: Premedication Regimen**).

**Cutaneous:** Localized erythema of the extremities with edema followed by desquamation has been observed. In case of severe skin toxicity, an adjustment in dosage is recommended (see **DOSAGE AND ADMINISTRATION** section). The discontinuation rate due to skin toxicity was 1.6% (15/965) for metastatic breast cancer patients. Among 92 breast cancer patients premedicated with 3-day corticosteroids, there were no cases of severe skin toxicity reported and no patient discontinued TAXOTERE due to skin toxicity.

**Fluid Retention:** Severe fluid retention has been reported following TAXOTERE therapy (see **BOXED WARNING** and **WARNINGS: Premedication Regimen**). Patients should be premedicated with oral corticosteroids prior to each TAXOTERE administration to reduce the incidence and severity of fluid retention (see **DOSAGE AND ADMINISTRATION** section). Patients with pre-existing effusions should be closely monitored from the first dose for the possible exacerbation of the effusions.

When fluid retention occurs, peripheral edema usually starts in the lower extremities and may become generalized with a median weight gain of 2 kg.

Among 92 breast cancer patients premedicated with 3-day corticosteroids, moderate fluid retention occurred in 27.2% and severe fluid retention in 6.5%. The median cumulative dose to onset of moderate or severe fluid retention was 819 mg/m<sup>2</sup>.

9.8% (9/92) of patients discontinued treatment due to fluid retention: 4 patients discontinued with severe fluid retention; the remaining 5 had mild or moderate fluid retention. The median cumulative dose to treatment discontinuation due to fluid retention was 1021 mg/m<sup>2</sup>. Fluid retention was completely, but sometimes slowly, reversible with a median of 16 weeks from the last infusion of TAXOTERE to resolution (range: 0 to 42+ weeks). Patients developing peripheral edema may be treated with standard measures, *e.g.*, salt restriction, oral diuretic(s).

**Neurologic:** Severe neurosensory symptoms (paresthesia, dysesthesia, pain) were observed in 5.5% (53/965) of metastatic breast cancer patients, and resulted in treatment discontinuation in 6.1%. When these symptoms occur, dosage must be adjusted. If symptoms persist, treatment should be discontinued (see **DOSAGE AND ADMINISTRATION** section). Patients who experienced neurotoxicity in clinical trials and for whom follow-up information on the complete resolution of the event was available had spontaneous reversal of symptoms with a median of 9 weeks from onset (range: 0 to 106 weeks). Severe peripheral motor neuropathy mainly manifested as distal extremity weakness occurred in 4.4% (42/965).

**Asthenia:** Severe asthenia has been reported in 14.9% (144/965) of metastatic breast cancer patients but has led to treatment discontinuation in only 1.8%. Symptoms of fatigue

and weakness may last a few days up to several weeks and may be associated with deterioration of performance status in patients with progressive disease.

**Information for Patients:** For additional information, see the accompanying Patient Information Leaflet.

**Drug Interactions:** There have been no formal clinical studies to evaluate the drug interactions of TAXOTERE with other medications. *In vitro* studies have shown that the metabolism of docetaxel may be modified by the concomitant administration of compounds that induce, inhibit, or are metabolized by cytochrome P450 3A4, such as cyclosporine, terfenadine, ketoconazole, erythromycin, and troleandomycin. Caution should be exercised with these drugs when treating patients receiving TAXOTERE as there is a potential for a significant interaction.

**Carcinogenicity, Mutagenicity, Impairment of Fertility:** No studies have been conducted to assess the carcinogenic potential of TAXOTERE. TAXOTERE has been shown to be clastogenic in the *in vitro* chromosome aberration test in CHO-K<sub>1</sub> cells and in the *in vivo* micronucleus test in the mouse, but it did not induce mutagenicity in the Ames test or the CHO/HGPRT gene mutation assays. TAXOTERE produced no impairment of fertility in rats when administered in multiple IV doses of up to 0.3 mg/kg (about 1/50 the recommended human dose on a mg/m<sup>2</sup> basis), but decreased testicular weights were reported. This correlates with findings of a 10-cycle toxicity study (dosing once every 21 days for 6 months) in rats and dogs in which testicular atrophy or degeneration was observed at IV doses of 5 mg/kg in rats and 0.375 mg/kg in dogs (about 1/3 and 1/15 the recommended human dose on a mg/m<sup>2</sup> basis, respectively). An increased frequency of dosing in rats produced similar effects at lower dose levels.

**Pregnancy:** Pregnancy Category D (see **WARNINGS** section).

**Nursing Mothers:** It is not known whether TAXOTERE is excreted in human milk. Because many drugs are excreted in human milk, and because of the potential for serious adverse reactions in nursing infants from TAXOTERE, mothers should discontinue nursing prior to taking the drug.

**Pediatric Use:** The safety and effectiveness of TAXOTERE in pediatric patients have not been established.

## **ADVERSE REACTIONS**

The adverse reactions are described separately for TAXOTERE 100 mg/m<sup>2</sup>, the maximum dose approved for breast cancer, and 75 mg/m<sup>2</sup>, the dose approved for advanced non-small cell lung carcinoma after prior platinum-based chemotherapy.

TAXOTERE 100 mg/m<sup>2</sup>: Adverse drug reactions occurring in at least 5% of patients are compared for three populations who received TAXOTERE administered at 100 mg/m<sup>2</sup> as a 1-hour infusion every 3 weeks: 2045 patients with various tumor types and normal baseline liver function tests; the subset of 965 patients with locally advanced or metastatic breast cancer, both previously treated and untreated with chemotherapy, who had normal baseline liver function tests; and an additional 61 patients with various tumor types who had

## Taxotere for Injection Concentrate

abnormal liver function tests at baseline. These reactions were described using COSTART terms and were considered possibly or probably related to TAXOTERE. At least 95% of these patients did not receive hematopoietic support. The safety profile is generally similar in patients receiving TAXOTERE for the treatment of breast cancer and in patients with other tumor types.

**Summary of Adverse Events in Patients Receiving  
TAXOTERE at 100 mg/m<sup>2</sup>**

<b>Adverse Event</b>	<b>All Tumor Types Normal LFTs* n=2045 %</b>	<b>All Tumor Types Elevated LFTs** n=61 %</b>	<b>Breast Cancer Normal LFTs* n=965 %</b>
<b>Hematologic</b>			
Neutropenia			
<2000 cells/mm <sup>3</sup>	95.5	96.4	98.5
<500 cells/mm <sup>3</sup>	75.4	87.5	85.9
Leukopenia			
<4000 cells/mm <sup>3</sup>	95.6	98.3	98.6
<1000 cells/mm <sup>3</sup>	31.6	46.6	43.7
Thrombocytopenia			
<100,000 cells/mm <sup>3</sup>	8.0	24.6	9.2
Anemia			
<11 g/dL	90.4	91.8	93.6
<8 g/dL	8.8	31.1	7.7
Febrile Neutropenia***	11.0	26.2	12.3
<b>Septic Death</b>	1.6	4.9	1.4
<b>Non-Septic Death</b>	0.6	6.6	0.6
<b>Infections</b>			
Any	21.6	32.8	22.2
Severe	6.1	16.4	6.4
<b>Fever in Absence of Infection</b>			
Any	31.2	41.0	35.1
Severe	2.1	8.2	2.2
<b>Hypersensitivity Reactions</b>			
Regardless of Premedication			
Any	21.0	19.7	17.6
Severe	4.2	9.8	2.6
With 3-day Premedication			
Any	n=92 15.2	n=3 33.3	n=92 15.2
Severe	2.2	0	2.2
<b>Fluid Retention</b>			

Taxotere for Injection Concentrate

Regardless of Premedication			
Any	47.0	39.3	59.7
Severe	6.9	8.2	8.9
With 3-day Premedication	n=92	n=3	n=92
Any	64.1	66.7	64.1
Severe	6.5	33.3	6.5
<b>Neurosensory</b>			
Any	49.3	34.4	58.3
Severe	4.3	0	5.5
<b>Cutaneous</b>			
Any	47.6	54.1	47.0
Severe	4.8	9.8	5.2
<b>Nail Changes</b>			
Any	30.6	23.0	40.5
Severe	2.5	4.9	3.7
<b>Gastrointestinal</b>			
Nausea	38.8	37.7	42.1
Vomiting	22.3	23.0	23.4
Diarrhea	38.7	32.8	42.6
Severe	4.7	4.9	5.5
<b>Stomatitis</b>			
Any	41.7	49.2	51.7
Severe	5.5	13.0	7.4
<b>Alopecia</b>	75.8	62.3	74.2
<b>Asthenia</b>			
Any	61.8	52.5	66.3
Severe	12.8	24.6	14.9
<b>Myalgia</b>			
Any	18.9	16.4	21.1
Severe	1.5	1.6	1.8
<b>Arthralgia</b>	9.2	6.6	8.2
<b>Infusion Site Reactions</b>	4.4	3.3	4.0

**\*Normal Baseline LFTs: Transaminases  $\leq$  1.5 times ULN or alkaline phosphatase  $\leq$  2.5 times ULN or isolated elevations of transaminases or alkaline phosphatase up to 5 times ULN**

**\*\*Elevated Baseline LFTs: SGOT and/or SGPT > 1.5 times ULN concurrent with alkaline phosphatase > 2.5 times ULN**

**\*\*\*Febrile Neutropenia: ANC grade 4 with fever > 38°C with IV antibiotics and/or hospitalization**

**Hematologic:** (see **WARNINGS**). Reversible marrow suppression was the major dose-limiting toxicity of TAXOTERE. The median time to nadir was 7 days, while the median duration of severe neutropenia (<500 cells/mm<sup>3</sup>) was 7 days. Among

2045 patients with solid tumors and normal baseline LFTs, severe neutropenia occurred in 75.4% and lasted for more than 7 days in 2.9% of cycles.

Febrile neutropenia (<500 cells/mm<sup>3</sup> with fever > 38°C with IV antibiotics and/or hospitalization) occurred in 11% of patients with solid tumors, in 12.3% of patients with metastatic breast cancer, and in 9.8% of 92 breast cancer patients premedicated with 3-day corticosteroids.

Severe infectious episodes occurred in 6.1% of patients with solid tumors, in 6.4% of patients with metastatic breast cancer, and in 5.4% of 92 breast cancer patients premedicated with 3-day corticosteroids.

Thrombocytopenia (<100,000 cells/mm<sup>3</sup>) associated with fatal gastrointestinal hemorrhage has been reported.

**Hypersensitivity Reactions:** Severe hypersensitivity reactions are discussed in the **BOXED WARNING**, **WARNINGS**, and **PRECAUTIONS** sections. Minor events, including flushing, rash with or without pruritus, chest tightness, back pain, dyspnea, drug fever, or chills, have been reported and resolved after discontinuing the infusion and appropriate therapy.

**Fluid Retention:** (see **BOXED WARNING**, **WARNINGS: Premedication Regimen**, and **PRECAUTIONS** sections).

**Cutaneous:** Severe skin toxicity is discussed in **PRECAUTIONS**. Reversible cutaneous reactions characterized by a rash including localized eruptions, mainly on the feet and/or hands, but also on the arms, face, or thorax, usually associated with pruritus, have been observed. Eruptions generally occurred within 1 week after TAXOTERE infusion, recovered before the next infusion, and were not disabling.

Severe nail disorders were characterized by hypo- or hyperpigmentation, and occasionally by onycholysis (in 0.8% of patients with solid tumors) and pain.

**Neurologic:** (see **PRECAUTIONS**).

**Gastrointestinal:** Gastrointestinal reactions (nausea and/or vomiting and/or diarrhea) were generally mild to moderate. Severe reactions occurred in 3-5% of patients with solid tumors and to a similar extent among metastatic breast cancer patients. The incidence of severe reactions was 1% or less for the 92 breast cancer patients premedicated with 3-day corticosteroids.

Severe stomatitis occurred in 5.5% of patients with solid tumors, in 7.4% of patients with metastatic breast cancer, and in 1.1% of the 92 breast cancer patients premedicated with 3-day corticosteroids.

**Cardiovascular:** Hypotension occurred in 2.8% of patients with solid tumors; 1.2% required treatment. Clinically meaningful events such as heart failure, sinus tachycardia, atrial

flutter, dysrhythmia, unstable angina, pulmonary edema, and hypertension occurred rarely. 8.1% (7/86) of metastatic breast cancer patients receiving TAXOTERE 100 mg/m<sup>2</sup> in a randomized trial and who had serial left ventricular ejection fractions assessed developed deterioration of LVEF by  $\geq 10\%$  associated with a drop below the institutional lower limit of normal.

**Infusion Site Reactions:** Infusion site reactions were generally mild and consisted of hyperpigmentation, inflammation, redness or dryness of the skin, phlebitis, extravasation, or swelling of the vein.

**Hepatic:** In patients with normal LFTs at baseline, bilirubin values greater than the ULN occurred in 8.9% of patients. Increases in SGOT or SGPT  $> 1.5$  times the ULN, or alkaline phosphatase  $> 2.5$  times ULN, were observed in 18.9% and 7.3% of patients, respectively. While on TAXOTERE, increases in SGOT and/or SGPT  $> 1.5$  times ULN concomitant with alkaline phosphatase  $> 2.5$  times ULN occurred in 4.3% of patients with normal LFTs at baseline. (Whether these changes were related to the drug or underlying disease has not been established.)

TAXOTERE 75 mg/m<sup>2</sup>: Treatment emergent adverse drug reactions are shown below. Included in this table are safety data for a total of 176 patients with non-small cell lung carcinoma and a history of prior treatment with platinum-based chemotherapy who were treated in two randomized, controlled trials. These reactions were described using NCI Common Toxicity Criteria regardless of relationship to study treatment, except for the hematologic toxicities or otherwise noted.

**Treatment Emergent Adverse Events in Non-Small Cell Lung Cancer Patients  
Receiving Taxotere Regardless of Relationship to Treatment\***

<b>Adverse Event</b>	<b>TAXOTERE 75 mg/m<sup>2</sup> N=176 (%)</b>	<b>Best Supportive Care N=49 (%)</b>	<b>Vinorelbine/Ifosfamide N=119 (%)</b>
<b><u>Neutropenia</u></b>			
Any	148 (85.5)	7 (16.3)	99 (85.3)
Grade 3/4	115 (66.5)	6 (14.0)	68 (58.6)
<b><u>Leukopenia</u></b>			
Any	147 (85.0)	3 (6.8)	106 (91.4)
Grade 3/4	87 (50.0)	0	51 (44.0)
<b><u>Thrombocytopenia</u></b>			
Any	14 (8.0)	0	9 (7.7)
Grade 3/4	5 (2.9)	0	2 (1.7)
<b><u>Anemia</u></b>			
Any	160 (91.4)	27 (61.4)	108 (92.3)
Grade 3/4	16 (9.1)	6 (13.6)	17 (14.5)
<b><u>Febrile Neutropenia**</u></b>	11 (6.3)	NA <sup>ξ</sup>	1 (0.8)
<b><u>Infection</u></b>			
Any	59 (33.5)	14 (28.6)	36 (30.3)
Grade 3/4	18 (10.2)	3 (6.1)	11 (9.2)
<b><u>Treatment Related Mortality</u></b>	5 (2.8)	NA <sup>ξ</sup>	4 (3.4)
<b><u>Hypersensitivity Reactions</u></b>			
Any	10 (5.7)	0	1 (0.8)
Grade 3/4	5 (2.8)	0	0
<b><u>Fluid Retention</u></b>			
Any	59 (33.5)	ND <sup>ψ</sup>	27 (22.7)
Severe	5 (2.8)		4 (3.4)
<b><u>Neurosensory</u></b>			
Any	41 (23.3)	7 (14.3)	34 (28.6)
Grade 3/4	3 (1.7)	3 (6.1)	6 (5.0)

## Taxotere for Injection Concentrate

<b><u>Neuromotor</u></b>			
Any	28 (15.9)	4 (8.2)	12 (10.1)
Grade 3/4	8 (4.5)	3 (6.1)	4 (3.4)
<b><u>Skin</u></b>			
Any	35 (19.8)	3 (6.1)	20 (16.8)
Grade 3/4	1 (0.6)	1 (2.0)	1 (0.8)
<b><u>Gastrointestinal</u></b>			
<b><u>Nausea</u></b>			
Any	59 (33.5)	15 (30.6)	37 (31.1)
Grade 3/4	9 (5.1)	2 (4.1)	9 (7.6)
<b><u>Vomiting</u></b>			
Any	38 (21.6)	13 (26.5)	26 (21.8)
Grade 3/4	5 (2.8)	1 (2.0)	7 (5.9)
<b><u>Diarrhea</u></b>			
Any	40 (22.7)	3 (6.1)	14 (11.8)
Grade 3/4	5 (2.8)	0	5 (4.2)

<b><u>Alopecia</u></b>	99 (56.3)	17 (34.7)	59 (49.6)
<b><u>Asthenia</u></b>			
Any	93 (52.8)	28 (57.1)	64 (53.8)
Severe***	32 (18.2)	19 (38.8)	27 (22.7)
<b><u>Stomatitis</u></b>			
Any	46 (26.1)	3 (6.1)	9 (7.6)
Grade 3/4	3 (1.7)	0	1 (0.8)
<b><u>Pulmonary</u></b>			
Any	72 (40.9)	24 (49.0)	54 (45.4)
Grade 3/4	37 (21.0)	14 (28.6)	22 (18.5)
<b><u>Nail Disorder</u></b>			
Any	20 (11.4)	0	2 (1.7)
Severe***	2 (1.1)	0	0
<b><u>Myalgia</u></b>			
Any	11 (6.3)	0	3 (2.5)
Severe***	0	0	0
<b><u>Arthralgia</u></b>			
Any	6 (3.4)	1 (2.0)	2 (1.7)
Severe***	0	0	1 (0.8)
<b><u>Taste Perversion</u></b>			
Any	10 (5.7)	0	0
Severe***	1 (0.6)	0	0

\*Normal Baseline LFTs: Transaminases  $\leq$  1.5 times ULN or alkaline phosphatase  $\leq$  2.5 times ULN or isolated elevations of transaminases or alkaline phosphatase up to 5 times ULN

**\*\*Febrile Neutropenia: ANC grade 4 with fever > 38°C with IV antibiotics and/or hospitalization**

\*\*\* COSTART term and grading system

✕ **Not Applicable;**   <sup>ψ</sup> Not Done

**Ongoing Evaluation:** The following serious adverse events of uncertain relationship to TAXOTERE have been reported:

Body as a whole: abdominal pain, diffuse pain, chest pain, radiation recall phenomenon

Cardiovascular: atrial fibrillation, deep vein thrombosis, ECG abnormalities, thrombophlebitis, pulmonary embolism, syncope, tachycardia, myocardial infarction

Digestive: constipation, duodenal ulcer, esophagitis, gastrointestinal hemorrhage, intestinal obstruction, ileus, gastrointestinal perforation, neutropenic enterocolitis, dehydration in relation to digestive disorders

Nervous: confusion, seizures

Respiratory: dyspnea, acute pulmonary edema, acute respiratory distress syndrome, interstitial pneumonia

Urogenital: renal insufficiency

## **OVERDOSAGE**

There is no known antidote for TAXOTERE overdose. In case of overdose, the patient should be kept in a specialized unit where vital functions can be closely monitored. Anticipated complications of overdose include: bone marrow suppression, peripheral neurotoxicity, and mucositis. Patients should receive therapeutic G-CSF as soon as possible after discovery of overdose. Other appropriate symptomatic measures should be taken, as needed.

In two reports of overdose, one patient received 150 mg/m<sup>2</sup> and the other received 200 mg/m<sup>2</sup> as 1-hour infusions. Both patients experienced severe neutropenia, mild asthenia, cutaneous reactions, and mild paresthesia, and recovered without incident.

In mice, lethality was observed following single IV doses that were ≥154 mg/kg (about 4.5 times the recommended human dose on a mg/m<sup>2</sup> basis); neurotoxicity associated with paralysis, non-extension of hind limbs, and myelin degeneration was observed in mice at 48 mg/kg (about 1.5 times the recommended human dose on a mg/m<sup>2</sup> basis). In male and female rats, lethality was observed at a dose of 20 mg/kg (comparable to the recommended human dose on a mg/m<sup>2</sup> basis) and was associated with abnormal mitosis and necrosis of multiple organs.

## **DOSAGE AND ADMINISTRATION**

**Breast Cancer:** The recommended dose of TAXOTERE is 60-100 mg/m<sup>2</sup> administered intravenously over 1 hour every 3 weeks.

**Non Small Cell Lung Cancer:** The recommended dose of TAXOTERE is 75 mg/m<sup>2</sup> administered intravenously over 1 hour every 3 weeks. A dose of 100 mg/m<sup>2</sup> in patients previously treated with chemotherapy was associated with increased hematologic toxicity, infection, and treatment-related mortality in randomized, controlled trials (see BOXED WARNING, WARNINGS and CLINICAL STUDIES sections).

**Premedication Regimen:** All patients should be premedicated with oral corticosteroids such as dexamethasone 16 mg per day (*e.g.*, 8 mg BID) for 3 days starting 1 day prior to TAXOTERE administration in order to reduce the incidence and severity of fluid retention as well as the severity of hypersensitivity reactions (see BOXED WARNING, WARNINGS, and PRECAUTIONS sections).

**Dosage Adjustments During Treatment:**

**Breast Cancer.** Patients who are dosed initially at 100 mg/m<sup>2</sup> and who experience either febrile neutropenia, neutrophils < 500 cells/mm<sup>3</sup> for more than 1 week, or severe or cumulative cutaneous reactions during TAXOTERE therapy should have the dosage adjusted from 100 mg/m<sup>2</sup> to 75 mg/m<sup>2</sup>. If the patient continues to experience these reactions, the dosage should either be decreased from 75 mg/m<sup>2</sup> to 55 mg/m<sup>2</sup> or the treatment should be discontinued. Conversely, patients who are dosed initially at 60 mg/m<sup>2</sup> and who do not experience febrile neutropenia, neutrophils <500 cells/mm<sup>3</sup> for more than 1 week, severe or cumulative cutaneous reactions, or severe peripheral neuropathy during TAXOTERE therapy may tolerate higher doses. Patients who develop ≥ grade 3 peripheral neuropathy should have TAXOTERE treatment discontinued entirely.

**Non-Small Cell Lung Cancer.** Patients who are dosed initially at 75 mg/m<sup>2</sup> and who experience either febrile neutropenia, neutrophils <500 cells/mm<sup>3</sup> for more than one week, severe or cumulative cutaneous reactions, or other grade ¾ non-hematological toxicities during TAXOTERE treatment should have treatment withheld until resolution of the toxicity and then resumed at 55 mg/m<sup>2</sup>. Patients who develop ≥ grade 3 peripheral neuropathy should have TAXOTERE treatment discontinued entirely.

**Special Populations:**

Hepatic Impairment: Patients with bilirubin > ULN should generally not receive TAXOTERE. Also, patients with SGOT and/or SGPT > 1.5 x ULN concomitant with alkaline phosphatase > 2.5 x ULN should generally not receive TAXOTERE.

Children: The safety and effectiveness of docetaxel in pediatric patients below the age of 16 years have not been established.

Elderly: No dosage adjustments are required for use in elderly.

**PREPARATION AND ADMINISTRATION PRECAUTIONS<sup>a</sup>**

TAXOTERE is a cytotoxic anticancer drug and, as with other potentially toxic compounds, caution should be exercised when handling and preparing TAXOTERE solutions. The use of gloves is recommended. Please refer to **Handling and Disposal** section.

---

<sup>a</sup> FDA fax 09 August 1999

If TAXOTERE concentrate, initial diluted solution, or final dilution for infusion should come into contact with the skin, immediately and thoroughly wash with soap and water. If TAXOTERE concentrate, initial diluted solution, or final dilution for infusion should come into contact with mucosa, immediately and thoroughly wash with water.

TAXOTERE for Injection Concentrate requires two dilutions prior to administration. Please follow the preparation instructions provided below. **Note:** Both the TAXOTERE for Injection Concentrate and the diluent vials contain an overfill.

#### A. Preparation of the Initial Diluted Solution

1. Remove the appropriate number of vials of TAXOTERE for Injection Concentrate and diluent (13% Ethanol in Water for Injection) from the refrigerator. Allow the vials to stand at room temperature for approximately 5 minutes.
2. Aseptically withdraw the contents of the appropriate diluent vial into a syringe and transfer it to the appropriate vial of TAXOTERE for Injection Concentrate. **If the procedure is followed as described, an initial diluted solution of 10mg docetaxel/mL will result.**
3. Gently rotate the initial diluted solution for approximately 15 seconds to assure full mixture of the concentrate and diluent.
4. The initial diluted TAXOTERE solution (10 mg docetaxel/mL) should be clear; however, there may be some foam on top of the solution due to the polysorbate 80. Allow the solution to stand for a few minutes to allow any foam to dissipate. It is not required that all foam dissipate prior to continuing the preparation process.

#### B. Preparation of the Final Dilution for Infusion

1. Aseptically withdraw the required amount of initial diluted TAXOTERE solution (10 mg docetaxel/mL) with a calibrated syringe and inject into a 250 mL infusion bag or bottle of either 0.9% Sodium Chloride solution or 5% Dextrose solution to produce a final concentration of 0.3 to 0.9 mg/mL.

If a dose greater than 240 mg of TAXOTERE is required, use a larger volume of the infusion vehicle so that a concentration of 0.9 mg/mL TAXOTERE is not exceeded.

2. Thoroughly mix the infusion by manual rotation.
3. As with all parenteral products, TAXOTERE should be inspected visually for particulate matter or discoloration prior to administration whenever the solution and container permit. If the TAXOTERE for Injection initial diluted solution or final dilution for infusion is not clear or appears to have precipitation, these should be discarded.

The final TAXOTERE dilution for infusion should be administered intravenously as a 1-hour infusion under ambient room temperature and lighting conditions.

Contact of the TAXOTERE concentrate with plasticized PVC equipment or devices used to prepare solutions for infusion is not recommended. In order to minimize patient exposure to the plasticizer DEHP (di-2-ethylhexyl phthalate), which may be leached from PVC infusion bags or sets, the final TAXOTERE dilution for infusion should be stored in bottles (glass, polypropylene) or plastic bags (polypropylene, polyolefin) and administered through polyethylene-lined administration sets.

**Stability:** Unopened vials of TAXOTERE are stable until the expiration date indicated on the package when stored refrigerated, 2° to 8°C (36° to 46°F), and protected from bright light. Freezing does not adversely affect the product.

### HOW SUPPLIED

TAXOTERE for Injection Concentrate is supplied in a single-dose vial as a sterile, pyrogen-free, non-aqueous, viscous solution with an accompanying sterile, non-pyrogenic, diluent (13% ethanol in Water for Injection) vial. The following strengths are available:

#### **TAXOTERE 80 MG (NDC 0075-8001-80)**

TAXOTERE (docetaxel) 80 mg Concentrate for Infusion: 80 mg docetaxel in 2 mL polysorbate 80 diluent for TAXOTERE 80 mg. 13% (w/w) ethanol in Water for Injection . Both items are in a blister pack in one carton.

#### **TAXOTERE 20 MG (NDC 0075-8001-20)**

TAXOTERE (docetaxel) 20 mg Concentrate for Infusion: 20 mg docetaxel in 0.5 mL polysorbate 80 and diluent for TAXOTERE 20 mg. 13% (w/w) ethanol in Water for Injection . Both items are in a blister pack in one carton.

**Storage:** Store refrigerated, 2° to 8°C (36° to 46°F). Retain in the original package to protect from bright light.

TAXOTERE premix solution (10 mg TAXOTERE/mL) and fully prepared TAXOTERE infusion solution (in either 0.9% Sodium Chloride solution or 5% Dextrose solution) should be used as soon as possible after preparation. However, the premix solution is stable for 8 hours either at room temperature, 15° to 25°C (59° to 77°F), or stored refrigerated, 2° to 8°C (36° to 46°F).

**Handling and Disposal:** Procedures for proper handling and disposal of anticancer drugs should be considered. Several guidelines on this subject have been published<sup>1-8</sup>. There is no general agreement that all of the procedures recommended in the guidelines are necessary or appropriate.

### REFERENCES

1. OSHA Work-Practice Guidelines for Personnel Dealing with Cytotoxic (Antineoplastic) Drugs. *Am J Hosp Pharm.* 1986; 43(5): 1193-1204
2. American Society of Hospital Pharmacists Technical Assistance Bulletin on Handling Cytotoxic and Hazardous Drugs. *Am J Hosp Pharm.* 1990; 47(95): 1033-1049.
3. AMA Council Report. Guidelines for Handling Parenteral Antineoplastics. *JAMA* 1985; 253 (11): 1590-1592.
4. Oncology Nursing Society Clinical Practice Committee. Cancer Chemotherapy Guidelines. Module II – Recommendations of Nursing Practice in the Acute Care Setting. *ONS* 1988; 2-14.
5. Recommendations for the Safe Handling of Parenteral Antineoplastic Drugs. NIH Publication No. 83-2621. For sale by the Superintendent of Documents, US Government Printing Office, Washington, DC 20402.

Taxotere for Injection Concentrate

6. National Study Commission on Cytotoxic Exposure - Recommendations for Handling Cytotoxic Agents. Available from Louis P. Jeffry, Chairman, National Study Commission on Cytotoxic Exposure. Massachusetts College of Pharmacy and Allied Health Sciences, 179 Longwood Avenue, Boston, MA 02115.
7. Clinical Oncological Society of Australia. Guidelines and Recommendations for Safe Handling of Antineoplastic Agents. *Med J Austr.* 1983; 426-428.
8. Jones, RB, et al. Safe Handling of Chemotherapeutic Agents: A Report from the Mt. Sinai Medical Center. *CA-A Cancer Journal for Clinicians* 1983; Sept/Oct: 258-263.

**RHÔNE-POULENC RORER PHARMACEUTICALS INC.**  
COLLEGEVILLE, PA 19426

IN-5493D

Rev. 7/98

***Patient Information Leaflet***

Detach and give to Patient

IN-5493D

Rev. 7/98

*Patient Information Leaflet*

**Questions and  
Answers About  
Taxotere<sup>®</sup> for**

**Injection Concentrate**

(generic name = docetaxel)

(pronounced as TAX-O-TEER)

---

***What is Taxotere?***

Taxotere is a medication to treat breast cancer and non-small cell lung cancer. It has severe side effects in some patients. This leaflet is designed to help you understand how to use Taxotere and avoid its side effects to the fullest extent possible. The more you understand your treatment, the better you will be able to participate in your care. If you have questions or concerns, be sure to ask your doctor or nurse. They are always your best source of information about your condition and treatment.

---

***What is the most important information about Taxotere?***

- Since this drug, like many other cancer drugs, affects your blood cells, your doctor will ask for routine blood tests. These will include regular checks of your white blood cell counts. About 5% of people with low blood counts have developed life-threatening infections. The earliest sign of infection may be fever, so if you experience a fever, tell your doctor right away.
- Occasionally, serious allergic reactions have occurred with this medicine. If you have any allergies, tell your doctor before receiving this medicine.
- A small number of people who take Taxotere have severe fluid retention, which can be life-threatening. To help avoid this problem, you must take another medication called dexamethasone (DECKS-A-METH-A-SONE) prior to each Taxotere treatment. You must follow the schedule and take the exact dose of dexamethasone prescribed (see schedule at end of brochure). If you forget to take a dose or do not take it on schedule you must tell the doctor or nurse prior to your Taxotere treatment.
- If you are using any other medicines, tell your doctor before receiving your infusions of Taxotere.

---

***How does Taxotere work?***

Taxotere works by attacking cancer cells in your body. Different cancer medications attack cancer cells in different ways.

Here's how Taxotere works: Every cell in your body contains a supporting structure (like a skeleton). If this "skeleton" is damaged, it cannot grow or reproduce. Taxotere makes the "skeleton" in cancer cells very stiff, so that the cells can no longer grow.

---

***How will I receive Taxotere?***

Taxotere is given by an infusion directly into your vein. Your treatment will take about 1 hour. Generally, people receive Taxotere every 3 weeks. The amount of Taxotere and the frequency of your infusions will be determined by your doctor.

As part of your treatment, to reduce side effects your doctor will prescribe another medicine called dexamethasone. Your doctor will tell you how and when to take this medicine. It is important that you take the dexamethasone on the schedule set by your doctor. If you forget to take your medication, or do not take it on schedule, make sure to tell your doctor or nurse **BEFORE** you receive your Taxotere treatment. **Included with this information leaflet is a chart to help you remember when to take your dexamethasone.**

---

***What should be avoided while receiving Taxotere?***

Taxotere can interact with other medicines. Use only medicines that are prescribed for you by your doctor and **be sure** to tell your doctor all the medicines that you use, including nonprescription drugs.

---

***What are the possible side effects of Taxotere?***

**Low Blood Cell Count** – Many cancer medications, including Taxotere, cause a temporary drop in the number of white blood cells. These cells help protect your body from infection. Your doctor will routinely check your blood count and tell you if it is too low. Although most people receiving Taxotere do not have an infection even if they have a low white blood cell count, the risk of infection is increased.

**Fever is often one of the most common and earliest signs of infection. Your doctor will recommend that you take your temperature frequently, especially during the days after treatment with Taxotere. If you have a fever, tell your doctor or nurse immediately.**

**Allergic Reactions** – This type of reaction, which occurs during the infusion of Taxotere, is infrequent. If you feel a warm sensation, a tightness in your chest, or itching during or shortly after your treatment, tell your doctor or nurse immediately.

**Fluid Retention** – This means that your body is holding extra water. If this fluid retention is in the chest or around the heart it can be life-threatening. If you notice swelling in the feet and legs or a slight weight gain, this may be the first warning sign. Fluid retention usually does not start immediately; but, if it occurs, it may start around your 5th treatment. Generally, fluid retention will go away within weeks or months after your treatments are completed.

Dexamethasone tablets may protect patients from significant fluid retention. It is important that you take this medicine on schedule. If you have not taken dexamethasone on schedule, you must tell your doctor or nurse before receiving your next Taxotere treatment.

**Hair Loss** – Loss of hair occurs in most patients taking Taxotere (including the hair on your head, underarm hair, pubic hair, eyebrows, and eyelashes). Hair loss will begin after the first few treatments and varies from patient to patient. Once you have completed all your treatments, hair generally grows back.

Your doctor or nurse can refer you to a store that carries wigs, hairpieces, and turbans for patients with cancer.

**Fatigue** – A number of patients (about 10%) receiving Taxotere feel very tired following their treatments. If you feel tired or weak, allow yourself extra rest before your next treatment. If it is bothersome or lasts for longer than 1 week, inform your doctor or nurse.

**Muscle Pain** – This happens about 20% of the time, but is rarely severe. You may feel pain in your muscles or joints. Tell your doctor or nurse if this happens. They may suggest ways to make you more comfortable.

**Rash** – This side effect occurs commonly but is severe in about 5%. You may develop a rash that looks like a blotchy, hive-like reaction. This usually occurs on the hands and feet but may also appear on the arms, face, or body. Generally, it will appear between treatments and will go away before the next treatment. Inform your doctor or nurse if you experience a rash. They can help you avoid discomfort.

**Odd Sensations** – About half of patients getting Taxotere will feel numbness, tingling, or burning sensations in their hands and feet. If you do experience this, tell your doctor or nurse. Generally, these go away within a few weeks or months after your treatments are completed. About 14% of patients may also develop weakness in their hands and feet.

**Nail Changes** – Color changes to your fingernails or toenails may occur while taking Taxotere. In extreme, but rare, cases nails may fall off. After you have finished Taxotere treatments, your nails will generally grow back.

**Other Possible Side Effects** – Less severe side effects include nausea and vomiting. Severe diarrhea may occasionally occur. If you experience these or any other unusual effects, tell your doctor or nurse.

If you are interested in learning more about this drug, ask your doctor for a copy of the package insert.

IN-5493D

Rev. 7/98

**RHÔNE-POULENC RORER PHARMACEUTICALS INC.**  
COLLEGEVILLE, PA 19426

---

Date \_\_\_\_\_

**Day 1**

Taxotere for Injection Concentrate

Start  
Dexamethasone tablets  
2 times per day  
AM  
PM

Date \_\_\_\_\_

**Day 2**

**Taxotere  
Treatment Day**

Take  
Dexamethasone tablets  
2 times per day  
AM  
PM

Date \_\_\_\_\_

**Day 3**

Take  
Dexamethasone tablets  
2 times per day  
AM  
PM