

אפריל 2021

רופא/ה נכבד/ה,

רוקח/ת נכבד/ה,

חברת נוברטיס ישראל בע"מ מבקשת להודיעכם על עדכון עלון לרופא עבור התכשירים:

שם התכשיר	חומר פעיל וחוזקו	צורת מינון
Pemetrexed Sandoz® 100	Pemetrexed as disodium 100 mg/vial	powder for concentrate for solution for infusion
Pemetrexed Sandoz® 500	Pemetrexed as disodium 500 mg/vial	powder for concentrate for solution for infusion
Pemetrexed Sandoz® 1000	Pemetrexed as disodium 1000 mg/vial	powder for concentrate for solution for infusion

#### ההתוויות המאושרות לתכשיר:

Pemetrexed Sandoz in combination with cisplatin is indicated for the treatment of patients with malignant pleural mesothelioma whose disease is unresectable or who are otherwise not candidates for curatible surgery. Pemetrexed Sandoz in combination with cisplatin is indicated for the first line treatment of patients with locally advanced or metastatic non-small cell lung cancer other than predominantly squamous cell histology. Pemetrexed Sandoz is indicated as monotherapy for the second line treatment of patients with locally advanced or metastatic non-small cell lung cancer other than predominantly squamous cell histology. Pemetrexed Sandoz is indicated as monotherapy for the maintenance treatment of locally advanced or metastatic non-small cell lung cancer other than predominantly squamous cell histology in patients whose disease has not progressed immediately following platinum-based chemotherapy.

בהודעה זו מצויינים רק הסעיפים בהם נעשו החמרות ושינויים בעלון לרופא. ההחמרות הודגשו בצהוב.

העלון לרופא נשלח לפרסום במאגר התרופות באתר משרד הבריאות:

https://data.health.gov.il/drugs/index.html#!/byDrug

כמו כן ניתן לקבלו מודפס על ידי פניה לחברת נוברטיס ישראל בע"מ.

לעדכונכם בברכה,

אבי ילצינדג רוקח ממונה חטיבת סנדוז נוברטיס ישראל בע"מ



- תוספת שאינה החמרה כתב אדום
- טקסט שהוסר מסומן באדום עם קו מחיקה●
- תוספת החמרה כתב אדום המסומן במרקר צהוב

### 4.4 Special warnings and precautions for use

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### **Excipients**

Pemetrexed Sandoz 100 mg powder for concentrate for solution for infusion

This medicinal product contains less than 1 mmol sodium (23 mg) per vial, i.e.that is to say essentially 'sodium-free'.

Pemetrexed Sandoz 500 mg powder for concentrate for solution for infusion

This medicinal product contains 54 mg sodium per vial. To be taken into consideration by patients on a controlled sodium diet., equivalent to 2.7% of the WHO recommended maximum daily intake of 2 g for an adult.

Pemetrexed Sandoz 1000 mg powder for concentrate for solution for infusion

This medicinal product contains 108 mg sodium per vial, equivalent to 5.4% of the WHO recommended maximum daily intake of 2 g for an adult. To be taken into consideration by patients on a controlled sodium diet.

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### 4.6 Fertility, pregnancy and lactation

Women of childbearing potential / Contraception in males and females

Women of childbearing potential must use effective contraception during treatment with pemetrexed. Pemetrexed can have genetically damaging effects. Sexually mature males are advised not to father a child during the treatment, and up to 6 months thereafter. Contraceptive measures or abstinence are recommended.

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#### **Breast-feeding**

It is <u>not un</u>known whether pemetrexed is excreted in human milk, and adverse reactions on the <u>breast-feedingsuckling</u> child cannot be excluded. Breast-feeding must be discontinued during pemetrexed therapy (see section 4.3).

#### 4.5

### 4.7 Effects on ability to drive and use machines

No studies on the effects on the ability to drive and use machines have been performed. Pemetrexed Sandozhas minor influence on the ability to drive and use machines as it However, it has been reported that pemetrexed may cause fatigue. Therefore, patients should be cautioned against driving or operating machines if this event occurs.

#### 4.8 Undesirable effects

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### Summary of the safety profile

The most commonly reported undesirable effects related to pemetrexed, whether used as monotherapy or in combination, are bone marrow suppression manifested as anaemia, neutropenia, leucopenialeukopenia, thrombocytopenia; and gastrointestinal toxicities, manifested as anorexia, nausea, vomiting, diarrhoea, constipation, pharyngitis, mucositis, and stomatitis. Other undesirable effects include renal toxicities, increased aminotransferases, alopecia, fatigue, dehydration, rash, infection/sepsis and neuropathy. Rarely seen events include Stevens-Johnson syndrome and Toxic toxic epidermal necrolysis.

### Tabulated list of adverse reactions

The table 4 lists the adverse drug events regardless of causality associated with pemetrexed used either as a

monotherapy treatment or in combination with cisplatin from the pivotal registration studies (JMCH, JMEI, JMBD, JMEN and PARAMOUNT) and from the post marketing period.

ADRs are listed by MedDRA body system organ class. The following convention has been used for classification of frequency: very common:  $\geq 1/10$ ; common:  $\geq 1/100$  to < 1/10; uncommon:  $\geq 1/10,000$  to < 1/10,000 to < 1/10,000 and not known (cannot be estimated from the available data).

The table below provides the frequency and severity of undesirable effects that have been reported in > 5 % of 168 patients with mesothelioma who were randomised to receive cisplatin and pemetrexed, and 163 patients with mesothelioma randomised to receive single agent cisplatin. In both treatment arms, these chemonaive patients were fully supplemented with folic acid and vitamin B<sub>12</sub>.

Frequency estimate: Very common ( $\geq$  1/10), common ( $\geq$  1/100 to < 1/10), uncommon ( $\geq$  1/1,000 to < 1/1,000), rare ( $\geq$  1/10,000 to < 1/1,000), very rare (< 1/10,000) and not known (cannot be estimated from available data).

Within each frequency grouping, undesirable effects are presented in order of decreasing seriousness.

System organ elass	Frequency	Event*	Pemetrexed (N =	l <del>/ Cisplatin</del> 168)	Cisplatin (N = 163)		
			All grades toxicity (%)	Grade 3-4 toxicity (%)	All- grades toxicity (%)	Grade 3- 4 toxicity (%)	
Blood and lymphatic	<del>Very</del> <del>common</del>	Neutrophils/Granulocytes decreased	<del>56.0</del>	23.2	13.5	3.1	
<del>system</del> disorders		Leucocytes decreased	53.0	<del>14.9</del>	<del>16.6</del>	0.6	
		Haemoglobin decreased	<del>26.2</del>	4.2	10.4	0.0	
		Platelets decreased	23.2	<del>5.4</del>	8.6	0.0	
Metabolism- and nutrition disorders	Common	<del>Dehydration</del>	<del>6.5</del>	4.2	0.6	<del>0.6</del>	
Nervous- system-	<del>Very</del> <del>common</del>	Neuropathy sensory	10.1	0.0	9.8	0.6	
disorders	Common	Taste disturbance	7.7	0.0***	6.1	0.0***	
Eye disorders	Common	Conjunctivitis	5.4	0.0	0.6	0.0	
Gastro-	<del>Very</del>	Diarrhoea	<del>16.7</del>	<del>3.6</del>	8.0	0.0	
<del>intestinal</del> <del>disorders</del>	common	Vomiting	<del>56.5</del>	<del>10.7</del>	<del>49.7</del>	4.3	
		Stomatitis/Pharyngitis	23.2	3.0	6.1	0.0	
		Nausea	82.1	<del>11.9</del>	<del>76.7</del>	<del>5.5</del>	
		Anorexia	<del>20.2</del>	<del>1.2</del>	14.1	0.6	
		Constipation	<del>11.9</del>	0.6	7.4	0.6	
	Common	Dyspepsia	5.4	0.6	0.6	0.0	
Skin and	<del>Very</del>	Rash	<del>16.1</del>	0.6	4.9	0.0	
subcutaneous tissue disorders	common	Alopecia	11.3	0.0***	5.5	0.0***	
Renal and	<del>Very</del>	Creatinine elevation	<del>10.7</del>	0.6	9.8	1.2	

<del>urinary</del> <del>disorders</del>	common	Creatinine clearance decreased**	<del>16.1</del>	0.6	<del>17.8</del>	1.8
General- disorders and administration site conditions	<del>Very</del> <del>common</del>	Fatigue	4 <del>7.6</del>	<del>10.1</del>	4 <del>2.3</del>	<del>9.2</del>

<sup>\*</sup> Refer to National Cancer Institute CTC version 2 for each grade of toxicity except the term "creatinine clearance decreased".

For the purpose of this table a cut off of 5 % was used for inclusion of all events where the reporter considered a possible relationship to pemetrexed and cisplatin.

Clinically relevant CTC toxicities that were reported in  $\geq 1$  % and  $\leq 5$  % of the patients that were randomly-assigned to receive cisplatin and pemetrexed include: renal failure, infection, pyrexia, febrile neutropenia, increased AST, ALT, and GG

## T, urticaria and chest pain.

Clinically relevant CTC toxicities that were reported in < 1 % of the patients that were randomly assigned to receive cisplatin and pemetrexed include arrhythmia and motor neuropathy.

The table below provides the frequency and severity of undesirable effects that have been reported in > 5- %- of 265 patients randomly assigned to receive single-agent pemetrexed with folic acid and vitamin  $B_{12}$  supplementation, and 276 patients randomly assigned to receive single-agent docetaxel. All patients were-diagnosed with locally advanced or metastatic non-small cell-lung cancer and received prior ehemotherapy.

System organ class	Frequency	Event*	Pemet (N =	rexed- 265)	$\frac{\text{Docetaxel}}{(N = 276)}$	
			All- grades- toxicity (%)	Grade 3- 4 toxicity (%)	All- grades- toxicity (%)	Grade 3- 4 toxicity (%)
Blood and lymphatic system disorders	Very common	Neutrophils/ Granulocytes decreased	10.9	<del>5.3</del>	45.3	40.2
		Leucocytes decreased	12.1	4.2	34.1	<del>27.2</del>
		Haemoglobin decreased	<del>19.2</del>	4.2	22.1	4.3
	Common	Platelets decreased	8.3	1.9	1.1	0.4
Gastrointestinal	Very common	<del>Diarrhoea</del>	12.8	0.4	<del>24.3</del>	2.5
disorders		Vomiting	<del>16.2</del>	1.5	12.0	1.1
		Stomatitis/ Pharyngitis	<del>14.7</del>	1.1	<del>17.4</del>	1.1
		Nausea	<del>30.9</del>	2.6	<del>16.7</del>	1.8
		Anorexia	<del>21.9</del>	1.9	<del>23.9</del>	2.5
	Common	Constipation	5.7	0.0	4.0	0.0
Hepatobiliary	Common	SGPT (ALT) elevation	<del>7.9</del>	1.9	1.4	0.0
disorders		SGOT (AST) elevation	6.8	1.1	0.7	0.0

<sup>\*\*</sup> Which is derived from the term "renal/genitourinary other".

<sup>\*\*\*</sup> According to National Cancer Institute CTC (v2.0; NCI 1998), taste disturbance and alopecia should only be reported as Grade 1 or 2.

Skin and	Very common	Rash/ desquamation	14.0	0.0	6.2	0.0
subcutaneous tissue disorders	Common	Pruritus	6.8	0.4	1.8	0.0
		Alopecia	6.4	0.4**	<del>37.7</del>	2.2**
General disorders and administration site conditions	<del>Very common</del>	<del>Fatigue</del>	<del>34.0</del>	<del>5.3</del>	<del>35.9</del>	<del>5.4</del>
	Common	Fever	8.3	0.0	<del>7.6</del>	0.0

\*Refer to National Cancer Institute CTC version 2 for each grade of toxicity.

For the purpose of this table a cut off of 5 % was used for inclusion of all events where the reporter-considered a possible relationship to pemetrexed.

Clinically relevant CTC toxicities that were reported in  $\geq 1$  % and  $\leq 5$  % of the patients that were randomly assigned to pemetrexed include: infection without neutropenia, febrile neutropenia, allergic reaction/hypersensitivity, increased creatinine, motor neuropathy, sensory neuropathy, erythema multiforme, and abdominal pain.

Clinically relevant CTC toxicities that were reported in < 1 % of the patients that were randomly assigned topemetrexed include supraventricular arrhythmias.

Clinically relevant Grade 3 and Grade 4 laboratory toxicities were similar between integrated Phase 2 results from three single agent pemetrexed studies (N = 164) and the Phase 3 single agent pemetrexed study described above, with the exception of neutropenia (12.8 % versus 5.3 %, respectively) and alanine aminotransferase elevation (15.2 % versus 1.9 %, respectively). These differences were likely due to differences in the patient population, since the Phase 2 studies included both chemonaive and heavily pretreated breast cancer patients with pre-existing liver metastases and/or abnormal baseline liver function tests.

The table below provides the frequency and severity of undesirable effects considered possibly related to study drug that have been reported in > 5% of 839 patients with NSCLC who were randomised to receive cisplatin and pemetrexed and 830 patients with NSCLC who were randomised to receive cisplatin and gemeitabine. All-patients received study therapy as initial treatment for locally advanced or metastatic NSCLC and patients in both treatment groups were fully supplemented with folic acid and vitamin  $B_{12}$ .

System organ class	Frequency Event**		Pemetrexed/- Cisplatin- (N = 839)		Gemeitabine/ Cisplatin (N = 830)	
			All-grades-toxicity (%)	Grade 3- 4 toxicity (%)	All grades toxicity (%)	Grade 3-4 toxicity (%)
Blood and lymphatic system disorders	<del>Very-</del> <del>common</del>	Haemoglobin decreased	<del>33.0</del> *	<del>5.6*</del>	4 <del>5.7*</del>	9.9*
		Neutrophils/ Granulocytes decreased	<del>29.0*</del>	<del>15.1*</del>	<del>38.4*</del>	<del>26.7*</del>
		Leucocytes decreased	<del>17.8</del>	4.8*	<del>20.6</del>	<del>7.6*</del>
		Platelets decreased	<del>10.1*</del>	4.1*	<del>26.6*</del>	<del>12.7*</del>
Nervous system	Common	Neuropathy sensory	<del>8.5*</del>	<del>0.0</del> *	<del>12.4*</del>	<del>0.6*</del>

<sup>\*\*</sup>According to National Cancer Institute CTC (v2.0; NCI 1998), alopecia should only be reported as Grade 1-or 2.

disorders		Taste disturbance	8.1	0.0***	<del>8.9</del>	0.0***
Gastrointestinal	<del>Very</del>	Nausea	<del>56.1</del>	<del>7.2*</del>	<del>53.4</del>	<del>3.9*</del>
disorders	common	Vomiting	<del>39.7</del>	6.1	<del>35.5</del>	6.1
		Anorexia	<del>26.6</del>	<del>2.4*</del>	<del>24.2</del>	<del>0.7*</del>
	Stoma Diarrh	Constipation	21.0	0.8	<del>19.5</del>	0.4
		Stomatitis/ Pharyngitis	<del>13.5</del>	0.8	<del>12.4</del>	0.1
		Diarrhoea without colostomy	12.4	1.3	12.8	1.6
	Common	Dyspepsia/ heartburn	<del>5.2</del>	0.1	<del>5.9</del>	0.0
Skin and subcutaneous	<del>Very</del> common	Alopecia	<del>11.9*</del>	0***	<del>21.4*</del>	0.5***
tissue disorders	Common	Rash/ desquamation	6.6	0.1	8.0	0.5
Renal and urinary disorders	<del>Very</del> common	Creatinine elevation	<del>10.1*</del>	0.8	<del>6.9*</del>	0.5
General disorders and administration site conditions	<del>Very</del> <del>common</del>	Fatigue	<del>42.7</del>	<del>6.7</del>	44.9	4 <del>.9</del>

<sup>\*</sup>p values < 0.05 comparing pemetrexed/cisplatin to gemcitabine/cisplatin, using Fisher Exact test.

For the purpose of this table, a cut off of 5 % was used for inclusion of all events where the reporter considered a possible relationship to pemetrexed and cisplatin.

Clinically relevant toxicity that was reported in  $\geq 1$  % and  $\leq 5$  % of the patients that were randomly assigned to receive cisplatin and pemetrexed include: AST increase, ALT increase, infection, febrile neutropenia, renal failure, pyrexia, dehydration, conjunctivitis, and creatinine clearance decrease.

Clinically relevant toxicity that was reported in < 1 % of the patients that were randomly assigned to receive cisplatin and pemetrexed include: GGT increase, chest pain, arrhythmia, and motor neuropathy.

Clinically relevant toxicities with respect to gender were similar to the overall population in patients receiving pemetrexed plus cisplatin.

The table below provides the frequency and severity of undesirable effects considered possibly related to study drug that have been reported in > 5 % of 800 patients randomly assigned to receive single agent pemetrexed and 402 patients randomly assigned to receive placebo in the single agent pemetrexed maintenance (JMEN: N=663) and continuation pemetrexed maintenance (PARAMOUNT: N=539) studies. All patients were diagnosed with Stage IIIB or IV NSCLC and had received prior platinum based chemotherapy. Patients in both study arms were fully supplemented with folic acid and vitamin B<sub>12</sub>.

System organ class	Frequency*	Frequency* Event** Pemetrexed*** Placebo $^3$ (N = 40)				
			All grades toxicity (%)	Grade 3- 4 toxicity (%)	All grades toxicity (%)	Grade 3 - 4 toxicity (%)
Blood and lymphatic system	<del>Very</del> common	Haemoglobin decreased	18.0	4.5	5.2	0.5

<sup>\*\*</sup>Refer to National Cancer Institute CTC (v2.0; NCI 1998) for each Grade of Toxicity.

<sup>\*\*\*</sup>According to National Cancer Institute CTC (v2.0; NCI 1998), taste disturbance and alopecia should only be reported as Grade 1 or 2.

disorders	Common	<del>Leucocytes</del> <del>decreased</del>	<del>5.8</del>	<del>1.9</del>	0.7	0.2
		Neutrophils decreased	8.4	4.4	0.2	0.0
Nervous system disorders	Common	Neuropathy sensory	7.4	0.6	<del>5.0</del>	0.2
Gastrointestinal	<del>Very</del>	Nausea	<del>17.3</del>	0.8	4.0	0.2
disorders	common	Anorexia	12.8	1.1	3.2	0.0
	Common	Vomiting	8.4	0.3	1.5	0.0
		Mucositis/ Stomatitis	6.8	0.8	<del>1.7</del>	0.0
Hepatobiliary disorders	Common	ALT (SGPT) elevation	<del>6.5</del>	0.1	2.2	0.0
		AST (SGOT) elevation	<del>5.9</del>	0.0	1.7	0.0
Skin and- subcutaneous- tissue disorders	Common	Rash/desquamation	8.1	0.1	<del>3.7</del>	0.0
General disorders and administration	<del>Very</del> <del>common</del>	Fatigue	24.1	<del>5.3</del>	<del>10.9</del>	0.7
site conditions	Common	Pain	<del>7.6</del>	0.9	4.5	0.0
		<del>Edema</del>	<del>5.6</del>	0.0	1.5	0.0
Renal Disorders	Common	Renal- disorders****	7.6	0.9	1.7	0.0

Abbreviations: ALT = alanine aminotransferase; AST = aspartate aminotransferase; CTCAE = Common-Terminology Criteria for Adverse Event; NCI = National Cancer Institute; SGOT = serum glutamic

oxaloacetic aminotransferase; SGPT = serum glutamic pyruvic aminotransferase.

- \*Definition of frequency terms: Very common ≥ 10%; Common > 5% and < 10%. For the purpose of this table, a cut off of 5% was used for inclusion of all events where the reporter considered a possible relationship to pemetrexed.
- \*\*Refer to NCI CTCAE Criteria (Version 3.0; NCI 2003) for each grade of toxicity. The reporting rates shown are according to CTCAE version 3.0.
- \*\*\*Integrated adverse reactions table combines the results of the JMEN pemetrexed maintenance (N=663) and PARAMOUNT continuation pemetrexed maintenance (N=539) studies.
- \*\*\*\* Combined term includes increased serum/blood creatinine, decreased glomerular filtration rate, renal-failure and renal/genitourinary other.

Clinically relevant CTC toxicity of any grade that was reported in  $\geq 1$  % and  $\leq 5$  % of the patients that were-randomly assigned to pemetrexed include: febrile neutropenia, infection, decreased platelets, diarrhoea, constipation, alopecia, pruritus/itching, fever (in the absence of neutropenia), ocular surface disease-(including conjunctivitis), increased lacrimation, dizziness and motor neuropathy.

Clinically relevant CTC toxicity that was reported in < 1 % of the patients that were randomly assigned to pemetrexed include: allergic reaction/hypersensitivity, erythema multiforme, supraventricular arrhythmia and pulmonary embolism.

Safety was assessed for patients who were randomised to receive pemetrexed (N=800). The incidence of adverse reactions was evaluated for patients who received  $\leq$  6 cycles of pemetrexed maintenance (N=519), and compared to patients who received > 6 cycles of pemetrexed (N=281). Increases in adverse reactions (all-grades) were observed with longer exposure. A significant increase in the incidence of possibly study-drug-related Grade 3/4 neutropenia was observed with longer exposure to pemetrexed ( $\leq$  6 cycles: 3.3 %, > 6 cycles: 6.4 %: p=0.046). No statistically significant differences in any other individual Grade 3/4/5 adverse-reactions were seen with longer exposure.

Serious cardiovascular and cerebrovascular events, including myocardial infarction, angina pectoris, cerebrovascular accident, and transient ischaemic attack, have been uncommonly reported during clinical studies with pemetrexed, usually when given in combination with another cytotoxic agent. Most of the patients in whom these events have been observed had pre-existing cardiovascular risk factors.

Rare cases of hepatitis, potentially serious, have been reported during clinical studies with pemetrexed.

Pancytopenia has been uncommonly reported during clinical trials with pemetrexed.

In clinical trials, cases of colitis (including intestinal and rectal bleeding, sometimes fatal, intestinal perforation, intestinal necrosis and typhlitis) have been reported uncommonly in patients treated with permetrexed.

In clinical trials, cases of interstitial pneumonitis with respiratory insufficiency, sometimes fatal, have been reported uncommonly in patients treated with pemetrexed.

Uncommon cases of oedema have been reported in patients treated with pemetrexed.

Oesophagitis/radiation oesophagitis has been uncommonly reported during clinical trials with pemetrexed.

Sepsis, sometimes fatal, has been commonly reported during clinical trials with pemetrexed.

During post marketing surveillance, the following adverse reactions have been reported in patients treated with pemetrexed:

Hyperpigmentation has been commonly reported.

Uncommon cases of acute renal failure have been reported with pemetrexed alone or in association with other chemotherapeutic agents (see section 4.4). Nephrogenic diabetes insipidus and renal tubular necrosis-have been reported in post marketing setting with an unknown frequency.

Uncommon cases of radiation pneumonitis have been reported in patients treated with radiation either prior, during or subsequent to their pemetrexed therapy (see section 4.4).

Rare cases of radiation recall have been reported in patients who have received radiotherapy previously (see section 4.4).

Uncommon cases of peripheral ischaemia leading sometimes to extremity necrosis have been reported.

Rare cases of bullous conditions have been reported including Stevens-Johnson syndrome and Toxic epidermal necrolysis which in some cases were fatal.

Rarely, immune mediated haemolytic anaemia has been reported in patients treated with pemetrexed.

Rare cases of anaphylactic shock have been reported.

Erythematous oedema mainly of the lower limbs has been reported with an unknown frequency.

Infectious and non-infectious disorders of the dermis, the hypodermis and/or the subcutaneous tissue have been reported with an unknown frequency (e.g. acute bacterial dermo-hypodermitis, pseudocellulitis, dermatitis).

Table 4. Frequencies of all grades adverse drug events regardless of causality from the pivotal registration studies: JMEI (ALIMTA vs Docetaxel), JMDB (ALIMTA and Cisplatin versus GEMZAR and Cisplatin, JMCH (ALIMTA plus Cisplatin versus Cisplatin), JMEN and

PARAMOUNT (Pemetrexed plus Best Supportive Care versus Placebo plus Best Supportive Care)

and from post-marketing period.

System Very

System	Very	Common	<u>Uncommon</u>	Rare	Very rare	Not known	
Organ Class	common						
(MedDRA)	T C 2	a b			-		$\vdash$
Infections	Infection <sup>a</sup>	Sepsis <sup>b</sup>			<u>Dermo-</u>		
and infestations	<u>Pharyngitis</u>				<u>hypodermitis</u>		
Blood and	Neutropenia	Febrile neutropenia	Pancytopenia	Autoimmune			$\vdash$
lymphatic	Leukopenia Leukopenia	Platelet count	1 ancytopenia	haemolytic			
system	Haemoglobin	decreased		anaemia			
disorders	decreased	<u> </u>					
Immune		Hypersensitivity		Anaphylac-			
<u>System</u>				tic shock			
disorders		~					$\sqsubseteq$
Metabolism		<u>Dehydration</u>					
and nutrition disorders							
Nervous		Taste disorder	Cerebrovascular				H
system		Peripheral motor	accident				
disorders		neuropathy	Ischaemic				
		Peripheral sensory	<u>stroke</u>				
		<u>neuropathy</u>	<u>Haemorrhage</u>				
		<u>Dizziness</u>	<u>intracranial</u>				$\perp$
Eye disorders		Conjunctivitis					
		Dry eye					
		<u>Lacrimation</u> increased					
		Keratoconjunctivitis					
		sicca					
		Eyelid oedema					
		Ocular surface					
		disease					
Cardiac		Cardiac failure	<u>Angina</u>				
disorders		<u>Arrhythmia</u>	Myocardial				
			infarction				

			Coronary artery			
			disease			
			Arrhythmia supraventricular			
Vascular			Peripheral Peripheral			
disorders			<u>ischaemia</u> <sup>c</sup>			
Respiratory,			Pulmonary			
thoracic and mediastinal			embolism Interstitial			
disorders			pneumonitisbd			
Gastrointes-	Stomatitis	<u>Dyspepsia</u>	Rectal			
tinal disorders	Anorexia Vomiting	Constipation Abdominal pain	haemorrhage Gastrointestinal			
	<u>Vointing</u> <u>Diarrhoea</u>	Audommai pam	haemorrhage			
	Nausea		Intestinal			
			perforation			
			Oesophagitis Colitis <sup>e</sup>			
Hepatobiliary		<u>Aalanine</u>		<u>Hepatitis</u>		
disorders		aminotransferase				
		increased Aspartate				
		aminotransferase				
		increased				
Skin and subcutaneous	Rash Skin	Hyperpigmentation Pruritus		<b>Erythema</b>	Stevens- Johnson	
tissue_	exfoliation	Fluittus			syndrome <sup>b</sup>	
disorders		<u>Erythema</u>				
		<u>multiforme</u>			<u>Toxic</u>	
		Alopecia			epidermal necrolysis <sup>b</sup>	
		<u>Urticaria</u>			<u>Heerorysis</u>	
					<u>Pemphigoid</u>	
					Dermatitis bullous	
					<u>bullous</u>	
					<u>Acquired</u>	
					epidermolysis bullosa	
					<u>bullosa</u>	
					Erythema-	
					tous oedema <sup>f</sup>	
					Pseudocellu- litis	
					22020	
					<u>Dermatitis</u>	
					<u>Eczema</u> Prurigo	
Renal and	Creatinine	Renal failure			rungo	Nephrogenic
<u>urinary</u>	clearance	Glomerular				diabetes
disorders	decreased	<u>filtration rate</u>				<u>insipidus</u>
	Blood	decreased				Renal tubular
	creatinine					necrosis
	<u>increased</u> <sup>e</sup>	D :				
General disorders and	<u>Fatigue</u>	<u>Pyrexia</u>				
administration		<u>Pain</u>				

site conditions	<u>Oedema</u>				
	Chest pain				
	Mucosal inflammation				
Investigations	Gamma- glutamyltransferase increased				
Injury, poisoning and procedural complications		Radiation oesophagitis Radiation pneumonitis	Recall phenomenon		

a with and without neutropenia
b in some cases fatal
c sometimes leading to extremity necrosis
d with respiratory insufficiency

e seen only in combination with cisplatin f mainly of the lower limbs