

Oral and Dental Implications of Chemotherapy Drugs Commonly Used to Treat Lung Cancer		Chemotherapy Drugs							
		Cisplatin	Carboplatin	Gemcitabine	Etoposide	Paclitaxel	Docetaxel	Pemetrexed	Vinorelbine
Adverse Effects	Dental Implications	Y	Y	Y	Y	Y	Y	Y	Y
Hematological (Blood Cells)									
Leukopenia (Depressed White Blood Cell Counts)	Decreases ability to fight oral infection, patients may require prophylactic antibiotic coverage for some procedures	✓	✓✓	✓✓	✓✓		✓✓	✓	✓✓
Neutropenia (Depressed Neutrophils)	Decreases ability to fight oral infection, patients may require prophylactic antibiotic coverage for some procedures **		✓✓	✓✓		✓✓	✓✓	✓	

Thrombocytopenia (Low Platelet Counts)	Delays or prevents hemostasis (clotting) Dental treatment that may cause bleeding (i.e. cleaning, extractions or other invasive procedures) must be delivered with careful consideration and planning.	✓	✓✓	✓	✓		✓ ✓	✓	✓
Anemia (Low Hemoglobin)	May cause fatigue and prevent delivery of routine dental care, leading patients to avoid routine dental care due to fatigue and malaise		✓✓	✓✓	✓	✓	✓✓	✓	✓✓
Oral (Mouth)									
Mucositis (Oral Ulcers)	Appearance of ulcers may make delivery of dental care painful, and necessitates delay in dental treatment delivery, may require patient directed change in dietary intake		✓		✓	✓	✓✓		
Stomatitis (Inflammation of the mouth)	Stomatitis is essentially severe mucositis affecting the entire mouth and throat			✓	✓	✓✓			

Dysegeusia (Altered sense of taste)	Makes eating less enjoyable and contributes to loss of weight during treatment		✓				✓	✓	
Xerostomia (Dry mouth)	Prolonged dry mouth leads to very rapid increase in the presence of dental caries (cavities) and ultimately loss of teeth, failure of fixed bridgework. If transient, not a problem. Most chemotherapy causes transient xerostomia that reverses after recovery.	✓	✓	✓	✓	✓	✓	✓	✓
Nausea	Lowers patients tolerance of intra-oral manipulation due to an accentuated gag reflex	✓✓		✓✓	✓	✓✓	✓		✓
Neuromuscular (Sensory nerves and muscles)									
Peripheral Neuropathy	Fine motor control difficult and may alter ability to self care (brushing and flossing) if severe enough	✓	✓		✓	✓✓	✓✓	✓	✓

- ✓ Risk of side effects less than 50%
- ✓✓ Risk of side effects greater than 50%
- Y significant adverse effects related to dental treatment delivery