

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Adverse Event	Grade				
	1	2	3	4	5
Constipation	Occasional or intermittent symptoms; occasional use of stool softeners, laxatives, dietary modification, or enema	Persistent symptoms with regular use of laxatives or enemas; limiting instrumental ADL	Obstipation with manual evacuation indicated; limiting self-care ADL	Life-threatening consequences; urgent intervention indicated	Death
Diarrhea	Increase of <4 stools per day over baseline; mild increase in ostomy output compared to baseline	Increase of 4 - 6 stools per day over baseline; moderate increase in ostomy output compared to baseline	Increase of ≥ 7 stools per day over baseline; incontinence; hospitalization indicated; severe increase in ostomy output compared to baseline; limiting self-care ADL	Life-threatening consequences; urgent intervention indicated	Death
Gastritis/stomatitis	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Symptomatic; altered GI function; medical intervention indicated	Severely altered eating or gastric function; TPN or hospitalization indicated	Life-threatening consequences; urgent operative intervention indicated	Death
Dysgeusia	Altered taste but no change in diet	Altered taste with change in diet (e.g., oral supplements); noxious or unpleasant taste; loss of taste	–	–	–
Oral Mucositis	Asymptomatic or mild symptoms; intervention not indicated	Moderate pain; not interfering with oral intake; modified diet indicated	Severe pain; interfering with oral intake	Life-threatening consequences; urgent intervention indicated	Death

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Anal mucositis	Asymptomatic or mild symptoms; intervention not indicated	Symptomatic; medical intervention indicated; limiting instrumental ADL	Severe symptoms; limiting self care ADL	Life-threatening consequences; urgent intervention indicated	Death
Nausea	Loss of appetite without alteration in eating habits	Oral intake decreased without significant weight loss, dehydration or malnutrition	Inadequate oral caloric or fluid intake; tube feeding, TPN, or hospitalization indicated		

Vomiting	1 - 2 episodes (separated by 5 minutes) in 24 hrs	3 - 5 episodes (separated by 5 minutes) in 24 hrs	>=6 episodes (separated by 5 minutes) in 24 hrs; tube feeding, TPN or hospitalization indicated	Life-threatening consequences; urgent intervention indicated	Death
Skin hyperpigmentation	Hyperpigmentation covering <10% BSA; no psychosocial impact	Hyperpigmentation covering >10% BSA; associated psychosocial impact	–	–	–
Allergic reaction	Transient flushing or rash, drug fever <38 degrees C (<100.4 degrees F); intervention not indicated	Intervention or infusion interruption indicated; responds promptly to symptomatic treatment (e.g., antihistamines, NSAIDS, narcotics); prophylactic medications indicated for <=24 hrs	Prolonged (e.g., not rapidly responsive to symptomatic medication and/or brief interruption of infusion); recurrence of symptoms following initial improvement; hospitalization indicated for clinical sequelae (e.g., renal impairment, pulmonary infiltrates)	Life-threatening consequences; urgent intervention indicated	Death

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

	camouflage	impact			
Fatigue	Fatigue relieved by rest	Fatigue not relieved by rest; limiting instrumental ADL	Fatigue not relieved by rest, limiting self care ADL	–	–
Peripheral motor neuropathy	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	Moderate symptoms; limiting instrumental ADL	Severe symptoms; limiting self care ADL; assistive device indicated	Life-threatening consequences; urgent intervention indicated	Death
Peripheral sensory neuropathy	Asymptomatic; loss of deep tendon reflexes or paresthesia	Moderate symptoms; limiting instrumental ADL	Severe symptoms; limiting self care ADL	Life-threatening consequences; urgent intervention indicated	Death
Paresthesia	Mild symptoms	Moderate symptoms; limiting instrumental ADL	Severe symptoms; limiting self care ADL	–	–
Epistaxis	Mild symptoms; intervention not indicated	Moderate symptoms; medical intervention indicated (e.g., nasal packing, cauterization; topical vasoconstrictors)	Transfusion, radiologic, endoscopic, or operative intervention indicated (e.g., hemostasis of bleeding site)	Life-threatening consequences; urgent intervention indicated	Death

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Edema limbs	5 - 10% inter-limb discrepancy in volume or circumference at point of greatest visible difference; swelling or obscuration of anatomic architecture on close inspection	>10 - 30% inter-limb discrepancy in volume or circumference at point of greatest visible difference; readily apparent obscuration of anatomic architecture; obliteration of skin folds; readily apparent deviation from normal anatomic contour; limiting instrumental ADL	>30% inter-limb discrepancy in volume; gross deviation from normal anatomic contour; limiting self-care ADL		
Thromboembolic event	Venous thrombosis (e.g., superficial thrombosis)	Venous thrombosis (e.g., uncomplicated deep vein thrombosis), medical intervention indicated	Thrombosis (e.g., uncomplicated pulmonary embolism [venous], non-embolic cardiac mural [arterial] thrombus), medical intervention indicated	Life-threatening (e.g., pulmonary embolism, cerebrovascular event, arterial insufficiency); hemodynamic or neurologic instability; urgent intervention indicated	Death
Alanine aminotransferase increased	>ULN - 3.0 x ULN	>3.0 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Aspartate aminotransferase increased	>ULN - 3.0 x ULN	>3.0 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Creatinine increased	>1 - 1.5 x baseline; >ULN - 1.5 x ULN	>1.5 - 3.0 x baseline; >1.5 - 3.0 x ULN	>3.0 baseline; >3.0 - 6.0 x ULN	>6.0 x ULN	-
Alkaline phosphatase increased	>ULN - 2.5x ULN	>2.5 - 5.0 x ULN	>5.0 - 20.0 x ULN	>20.0 x ULN	-
Lymphocyte count decreased	<LLN - 800/mm ³	<800 - 500/mm ³	<500 - 200/mm ³	<200/mm ³	-

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Neutrophil count decreased	<LLN - 1500/mm ³	<1500 - 1000/mm ³	<1000 - 500/mm ³	<500/mm ³	-
Platelet count decreased	<LLN - 75,000/mm ³	<75,000 - 50,000/mm ³	<50,000 - 25,000/mm ³	<25,000/mm ³	-
White blood cell decreased	<LLN - 3000/mm ³	<3000 - 2000/mm ³	<2000 - 1000/mm ³	<1000/mm ³	-
Anemia	Hemoglobin (Hgb) <LLN - 10.0 g/dL; <LLN - 6.2 mmol/L; <LLN - 100 g/L	Hgb <10.0 - 8.0 g/dL; <6.2 - 4.9 mmol/L; <100 - 80g/L	Hgb <8.0 g/dL; <4.9 mmol/L; <80 g/L; transfusion indicated	Life-threatening consequences; urgent intervention indicated	Death
Febrile neutropenia	-	-	ANC <1000/mm ³ with a single temperature of >38.3 degrees C (101 degrees F) or a sustained temperature of >=38 degrees C (100.4 degrees F) for more than one hour.	Life-threatening consequences; urgent intervention indicated	Death
Hypotension	Asymptomatic, intervention not indicated	Non-urgent medical intervention indicated	Medical intervention or hospitalization indicated	Life-threatening and urgent intervention indicated	Death
Palmar-plantar erythrodysesthesia syndrome	Minimal skin changes or dermatitis (e.g., erythema, edema, or hyperkeratosis) without pain	Skin changes (e.g., peeling, blisters, bleeding, edema, or hyperkeratosis) with pain; limiting instrumental ADL	Severe skin changes (e.g., peeling, blisters, bleeding, edema, or hyperkeratosis) with pain; limiting self care ADL	-	-
Nail discoloration	Asymptomatic; clinical or diagnostic observations only; intervention not indicated	-	-	-	-

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Lung infection	–	Moderate symptoms; oral intervention indicated (e.g., antibiotic, antifungal, antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic, endoscopic, or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Meningitis	–	–	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative	Life-threatening consequences; urgent intervention indicated	Death

			intervention indicated; focal neurologic deficit		
Skin infection	Localized, local intervention indicated	Oral intervention indicated (e.g., antibiotic, antifungal, antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Mucosal infection	Localized, local intervention indicated	Oral intervention indicated (e.g., antibiotic, antifungal, antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Upper gastrointestinal hemorrhage	Mild; intervention not indicated	Moderate symptoms; medical intervention or minor cauterization indicated	Transfusion, radiologic, endoscopic, or elective operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Soft tissue infection	–	Localized; local intervention indicated (e.g., topical antibiotic, antifungal, or antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death

**Supplementary material 1:-National Cancer Institute Common Terminology
Criteria for Adverse Events (CTCAE) Version 4.03: for safety/toxicity
assessment**

Upper respiratory infection	–	Moderate symptoms; oral intervention indicated (e.g., antibiotic, antifungal, antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic, endoscopic, or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Tooth infection	–	Localized; local intervention indicated (e.g., topical antibiotic, antifungal, or antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Urinary tract infection	–	Localized; local intervention indicated (e.g., topical antibiotic, antifungal, or antiviral)	IV antibiotic, antifungal, or antiviral intervention indicated; radiologic or operative intervention indicated	Life-threatening consequences; urgent intervention indicated	Death
Dry mouth	Symptomatic (e.g., dry or thick	Moderate symptoms; oral	Inability to adequately	–	–
	saliva) without significant dietary alteration; unstimulated saliva flow >0.2 ml/min	intake alterations (e.g., copious water, other lubricants, diet limited to purees and/or soft, moist foods); unstimulated saliva 0.1 to 0.2 ml/min	orally; tube feeding or TPN indicated; unstimulated saliva <0.1 ml/min		
Myalgia	Mild pain	Moderate pain; limiting instrumental ADL	Severe pain; limiting self care ADL	–	–
Arthralgia	Mild pain	Moderate pain; limiting instrumental ADL	Severe pain; limiting self care ADL	–	–

ADL=activities of daily living; ANC=absolute neutrophil count; LLN=lower limit of normal; ULN=upper limit of normal; TPN = Total Parenteral Nutrition.

Supplementary material 2 (For table 4): Clinical characteristics and socio-demographic variables entered into stepwise linear regression to determine their effects on QoL.

Variables entered into the model were age (continuous variable), Body Mass Index (continuous variable), Body Surface Area (continuous variable), all baseline laboratory values (continuous variable) such as baseline Aspartate/Alanine aminotransferase (AST/ALT), Alkaline Phosphatase (ALP), Serum Creatinine (SCr), Hemoglobin (Hgb), White Blood Cell counts (WBC), Absolute Neutrophil Count (ANC) and lymphocyte counts, chemotherapy cycles (cycle 4/6 reference category vs cycle 8), tumor stage (stage 1/2 reference category vs 3/4), comorbidity (Yes vs No reference category), marital status ((having spouse(Yes) vs No spouse reference category)), educational status (illiterate reference category vs literate), having children (Yes vs No reference category), regimen (AC reference category vs AC-T) and came from (from/around capital city reference category vs from distant).

Supplementary material 3 (For table 5): Variables entered into stepwise linear regression model to determine the effect of chemotherapy toxicities on each dimension of QoL.

Variables entered in to the model were dysgeusia (Grade 0/1 reference category vs Grade 2), (Grade 0/1 reference category vs Grade ≥ 2), diarrhea (Grade 0/1 reference category vs Grade ≥ 2), gastritis (Grade 0/1 reference category vs Grade ≥ 2), oral mucositis (Grade 0/1 reference category vs Grade ≥ 2), nausea (Grade 0/1 reference category vs Grade ≥ 2), vomiting (Grade 0/1 reference category vs Grade ≥ 2), fatigue (Grade 0/1 reference category vs Grade ≥ 2), arthralgia/myalgia (Grade 0/1 reference category vs Grade ≥ 2), peripheral neuropathy (Grade 0/1 reference category vs Grade ≥ 2), dry mouth (Grade 0/1 reference category vs Grade ≥ 2), leukopenia (Grade 0/1 reference category vs Grade ≥ 2), neutropenia (Grade 0/1 reference category vs Grade ≥ 2), anemia (Grade 0/1 reference category vs Grade ≥ 2), lymphopenia (Grade 0/1 reference category vs Grade ≥ 2), serum creatinine elevation (Grade 0 reference category vs Grade ≥ 1), alkaline phosphatase elevation (Grade 0 reference category vs Grade ≥ 1), alanine/aspartate transferase elevation (Grade 0 reference category vs Grade ≥ 1), baseline quality of life score, significant corresponding socio-demographic and clinical data.