

**Supplemental Material S3.** The numbers and types of chemotherapy treatment modifications by study arm and participant. Toxicities resulting in a deviation from prescribed chemotherapy regimen were reported in the patient's medical records. In some instances, there were multiple toxicities leading to a change in chemotherapy. A change in treatment was categorized in four ways: (1) dose = change in cisplatin dose from the prescribed cisplatin dose, (2) drug = change in drug from cisplatin to carboplatin, (3) withheld = withholding or postponing a dose of cisplatin, or (4) stop = cessation of the drug treatment before all prescribed doses were administered. A total of 26 patients had modifications to their prescribed chemotherapy regimen, 16 in the A-OM arm and 10 in the UC arm. In addition, 7 patients had multiple instances where the treatment deviated from prescribed regimen. Also see Figure 7 in the main text.

Participant No.	Tumor Location	Indicator of treatment change	Type of treatment deviation
<b>A-OM Arm</b>			
105	Head/Neck	Ototoxicity	Dose
138	Head/Neck	Other*	Dose
141	Head/Neck	Low WBC	Stop
109	Lung	Nephrotoxicity	Drug
119	Lung	Gastrointestinal	Dose
130	Lung	Low WBC Low WBC Patient request	Withheld Withheld Stop
100	Oropharyngeal	Gastrointestinal	Dose
117	Oropharyngeal	Nephrotoxicity Gastrointestinal	Dose Stop
122	Oropharyngeal	Low WBC	Stop
126	Oropharyngeal	Nephrotoxicity Patient Request	Dose Withheld
128	Oropharyngeal	Other*	Stop
133	Oropharyngeal	Nephrotoxicity	Dose
136	Oropharyngeal	Nephrotoxicity	Drug
139	Oropharyngeal	Other*	Withheld
147	Oropharyngeal	Low WBC	Stop
149	Oropharyngeal	Nephrotoxicity	Dose
<b>UC Arm</b>			
127	Bladder	Other*	Stop
111	Head/Neck	Other*	Stop
104	Lung	Low WBC	Withheld
107	Lung	Patient Request	Stop
132	Lung	Ototoxicity	Dose

108	Oropharyngeal	Low WBC Low Platelet, Low WBC	Withheld Stop
118	Oropharyngeal	Other*	Stop
134	Oropharyngeal	Nephrotoxicity Gastrointestinal, Other*	Withheld Stop
137	Oropharyngeal	Low WBC Nephrotoxicity Low WBC	Withheld Dose Stop
142	Oropharyngeal	Low RBC, Low WBC Other* Low WBC	Withheld Withheld Stop

*Note.* WBC = white blood cell count; RBC = red blood cell count. \*Other: Participant number 111 = stopped treatment for nutritional concerns; 118 = stopped treatment due to admission to ICU for hypoxic respiratory failure and aspiration pneumonia; 127 = stopped treatment because the disease was re-staged and tumor was resected; 128 = stopped treatment due to multiple mild cytopenias; 134 = stopped treatment admitted to hospital for neutropenic fever, nausea and constipation; 138 = reduced dose due to nutritional concerns and patient fatigue; 139 = withheld a dose as unmanaged diabetes caused nutritional concerns; 142 = withheld a dose due to dehydration, cognition changes and fever.