HEAD AND NECK CANCER CHEMOTHERAPY REGIMENS Part 1 of 2

The selection, dosing, and administration of anti-cancer agents and the management of associated toxicities are complex. Drug dose modifications and schedule and initiation of supportive care interventions are often necessary because of expected toxicities and because of individual patient variability, prior treatment, and comorbidities. Thus, the optimal delivery of anti-cancer agents requires a healthcare delivery team experienced in the use of such agents and the management of associated toxicities in patients with cancer. The chemotherapy regimens below may include both FDA-approved and unapproved uses/regimens and are provided as references only to the latest treatment strategies. Clinicians must choose and verify treatment options based on the individual patient.

GENERAL TREATMENT NOTES

- Squamous Cell Cancers of the head and neck include lip, oral cavity, hypopharynx, glottis larynx, supraglottic larynx, ethmoid sinus, maxillary sinus, occult primary
- Regimens denoted with an * indicate that they are highly recommended based on a high degree of evidence from randomized, controlled clinical trials.[1]
- Regimens denoted with a † indicate that while based on a lower degree of evidence from clinical trials, they have received uniform consensus from the NCCN.[1]

REGIMEN	DOSING
SQUAMOUS CELL CANCERS	
PRIMARY SYSTEMIC THERAPY + CONCURRENT RADIOTHERAPY	
Cisplatin (CDDP; Platinol) + radiotherapy*	**Days 1, 22, and 43:** Cisplatin 100mg/m^2 IV + concurrent radiotherapy 2Gy/d to a total of 70Gy[2,3]
Cetuximab (Erbitux) + radiotherapy*	**Day 1:** Cetuximab 400mg/m^2 loading dose over 120 min, 1 week before radiotherapy, plus **Day 7:** Begin radiotherapy with 7 weekly infusions of cetuximab 250mg/m^2
5-fluorouracil (5-FU) + hydroxyurea†	**Day 1:** Hydroxyurea 1,000mg every 12 hrs orally (11 doses/cycle) and 5-FU 400mg/m^2/day continuous IV infusion, plus **Radiotherapy:** 70Gy, delivered in 35 fractions; 1 fraction delivered daily Monday – Friday. Concurrent radiotherapy and chemotherapy every other week for total treatment duration of 13 weeks[5]
Cisplatin + paclitaxel (Taxol)†	**Day 1:** Paclitaxel 30mg/m^2 IV (begin on Monday), plus **Day 2:** Cisplatin 20mg/m^2 IV (every Tuesday) Repeat cycle every week for 7 cycles, plus **Radiotherapy:** 70Gy, delivered in 35 fractions; 1 fraction delivered daily Monday – Friday[5]
Carboplatin (Paraplatin) + infusional 5-FU†	**Days 1–4:** 5-FU 600mg/m^2/day as continuous IV infusion + carboplatin 70mg/m^2/day IV bolus Repeat cycle every 21 days for 3 cycles given concurrently with radiotherapy[6]
PRIMARY CHEMOTHERAPY WITH POSTOPERATIVE CHEMORADIATION	
Cisplatin*	**Days 1, 22, and 43:** Cisplatin 100mg/m^2 IV plus radiotherapy[7]
INDUCTION CHEMOTHERAPY	
Docetaxel (Taxotere) + cisplatin + 5-FU*	**Day 1:** Docetaxel 75mg/m^2 IV + cisplatin 75mg/m^2 IV, plus **Days 1–5:** 5-FU 750mg/m^2 continuous IV infusion Repeat cycle every 21 days for 3 cycles[8]

(continued

HEAD AND NECK CANCER CHEMOTHERAPY REGIMENS Part 2 of 2

REGIMEN	DOSING
NASOPHARYNX CANCER	
CHEMORADIATION FOLLOWED BY ADJUVANT CHEMOTHERAPY	
Cisplatin + radiotherapy, followed by CDDP and 5-FU*	*Cycles 1–3* **Day 1:** Cisplatin 100mg/m^2 IV in concurrence with radiotherapy Repeat cycle every 21 days, then *Cycles 4–6* **Days 1–4:** Cisplatin 80mg/m^2/day + 5-FU 1,000mg/m^2/day IV (by 96-hr infusion) Repeat cycle every 28 days[9]
RECURRENT, UNRESECTABLE, OR METASTATIC	
Cisplatin or carboplatin + 5-FU + cetuximab* (for non-nasopharyngeal disease)[1]	**Day 1:** Cisplatin 100mg/m^2 IV or carboplatin AUC 5mg/mL/min 1-hr IV infusion, plus **Day 1:** Cetuximab 400mg/m^2 2-hr IV infusion (initial dose), followed by 250mg/m^2 1-hr IV infusion once weekly **Days 1–4:** 5-FU 1,000mg/m^2/day Repeat cycle every 21 days for max 6 cycles[10]
Carboplatin + docetaxel	**Day 1:** Docetaxel 65mg/m^2 1-hr IV infusion followed immediately by carboplatin AUC=6 mg/mL/min IV infusion Repeat cycle every 21 days[11]
Cisplatin + paclitaxel	**Day 1:** Cisplatin 75mg/m^2/day IV + paclitaxel 175mg/m^2 IV over 3 hours Repeat cycle every 21 days for a minimum of 6 cycles[12]
Cisplatin + 5-FU	**Day 1:** Cisplatin 100mg/m^2/day IV **Days 1–4:** 5-FU 1,000mg/m^2/day continuous IV infusion Repeat cycle every 21 days for a minimum of 6 cycles[12]

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