

## Endovascular Chemotherapy of Head, Neck, and CNS Tumors

1. There is concordance among studies of head and neck carcinoma to catheterize external carotid branches selectively for delivering chemotherapy (Class II).
2. There is concordance among studies of head and neck carcinoma to administer intravenous neutralization when delivering intra-arterial cisplatin (Class II).
3. There is concordance among studies of chemotherapy for retinoblastoma to catheterize the ophthalmic artery selectively for delivering therapeutic agents (Class II).
4. There is concordance among studies of intra-axial CNS chemotherapy to use mannitol as an optional adjuvant for blood-brain barrier disruption when delivering intra-arterial chemotherapy to the brain (Class II).
5. Based on an overall evaluation of intra-arterial head and neck chemotherapy, there are several outcome variables that should be monitored and reported when designing future trials. These outcome variables can be categorized into 'Procedure-related', 'Disease control' and 'Survival' (Class II).
6. Based on an overall evaluation of intra-arterial head and neck chemotherapy, there are a number of complications that should be monitored and reported when designing trials. These may be categorized into the following: access site, neurologic/cerebrovascular, head and neck/gastrointestinal, ocular, hematologic and systemic. Specific definitions of the type and scope of complications should follow the National Cancer Institute Common Terminology Criteria for Adverse Events (Class II).
7. Evaluation of tumor response should use objective scoring systems that are reproducible across studies. The MacDonald criteria represent a widely recognized standard for evaluating treatment response of intra-axial tumors (Class III).
8. There is increasing variability in chemotherapy drug regimens, adjunctive medications, and adjunctive local therapies used in patients undergoing intra-arterial chemotherapy for intra-axial, ophthalmic and head/neck tumors. Details of these treatment parameters should be reported to facilitate an understanding of outcome differences between trials (Class III).
9. Given the increased vulnerability of children with retinoblastoma to the carcinogenic effects of ionizing radiation, fluoroscopic time and total Dose Area Product (DAP) should be reported for all ophthalmic artery chemoinfusion procedures (Class III).

### [REFERENCE LINK:](#)

Fraser JF et al. "Reporting standards for endovascular chemotherapy of head, neck and CNS tumors" *Journal of NeuroInterventional Surgery*. 2013; 5:396-99.