

# Sinonasal carcinoma

SMARCB1 (INI-1)-deficient sinonasal carcinoma is a rare type of cancer that develops in the lining of the nasal cavity and paranasal sinuses. It is characterized by the loss of the SMARCB1 (INI-1) gene, which is a tumor suppressor gene responsible for regulating cell growth and division.

The loss of the SMARCB1 (INI-1) gene leads to uncontrolled cell growth and the development of tumors in the nasal cavity and sinuses. This type of cancer typically occurs in adults and can cause symptoms such as nasal congestion, sinus pressure, nosebleeds, facial swelling, and headaches.

The diagnosis of SMARCB1 (INI-1)-deficient sinonasal carcinoma is typically made through a combination of imaging studies, such as CT scans and MRIs, and a biopsy of the affected tissue. Treatment options may include surgery to remove the tumor, radiation therapy, and chemotherapy.

Due to the rarity of this type of cancer, there is limited research on its prognosis and optimal treatment strategies. Therefore, treatment plans are typically developed on a case-by-case basis and may involve a multidisciplinary team of specialists, including oncologists, surgeons, and radiation therapists.

## Case series

Patients were treated from 2014 to 2021 and followed for a median of 22.3 months. The median overall survival (OS) and disease-free survival (DFS) were 31.8 and 9.9 months, respectively. Patients with nasal cavity or maxillary sinus tumors had 84% better disease-specific survival (DSS) (hazard ratio [HR], 0.136; 95% confidence interval [CI], 0.028-0.66;  $p = .005$ ) and 71% better DFS (HR, 0.29; 95% CI, 0.097-0.84;  $p = .041$ ) than patients with other sinonasal sites. Patients who received induction chemotherapy were 76% less likely to die of disease (DSS HR, 0.241; 95% CI, 0.058-1.00;  $p = .047$ ). In the largest single-institution study of SMARCB1-deficient sinonasal carcinoma to date, OS and DFS approached 3 years and 1 year, respectively, but were better for nasal cavity and maxillary sinus tumors. Patients may benefit from induction chemotherapy <sup>1)</sup>.

## Unsorted

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