

NASOPHARYNGEAL CANCER

What is Nasopharyngeal Cancer?

Nasopharyngeal cancer (NPC) is a type of head and neck cancer which occurs in cells located in the nasopharynx, or the upper part of the throat, behind the nose.¹ NPC begins in the nasopharynx, and many individuals first notice a lump in the neck.²

NPC can quickly spread to nearby lymph nodes in the neck – and has the highest metastatic potential of all head and neck cancers.³ As it progresses untreated, it may spread to other areas in proximity such as the skull, eye, salivary glands, or other areas of the body.⁴

Who Does NPC Affect?

In Western countries, NPC is a **rare disease**, but it is common in parts of South Asia, the Middle East, and North Africa.⁵ In 2020, China accounted for **46.8 percent** of the worldwide incidence of NPC, with an estimated 62,555 new cases.⁶

NPC is 2-3x more common in men than in women, for most populations. ⁴	The median overall survival is about 20 months in metastatic NPC. ^{3,6}
 In the high-risk China population, NPC incidence peaks between 45 and 54 years old, declining in older age.^{4,7} About half of the people with NPC in the United States are younger than 55 years old.⁵ 	 Some of the major risk factors for NPC are genetic predisposition, Epstein-Barr virus (EBV) infection, and consumption of salt-preserved food.^{4,6} Additionally, occupational exposures to formaldehyde or smoke particles from coal, wood, and other materials have been shown to increase risk of NPC. There may be other risk factors for NPC not mentioned here.^{4,7}

Immuno-Oncology Approaches to Treating NPC

- 15–60% of patients with NPC fail treatment due to distant metastases and approximately one third of patients present with disseminated disease at Stage IVb primary diagnosis. Most recurrent cases are not amenable to salvage therapy with surgery and/or radiotherapy with or without concurrent chemotherapy⁸⁻¹⁰
- PD-1/PD-L1 inhibitor monotherapy has demonstrated anti-tumor activity in NPC. However, some patients do not initially respond to treatment or experience relapse¹¹



 Increased understanding of resistance mechanisms to PD-1 pathway blockade and strategies to overcome primary and secondary resistance are needed to advance the treatment of NPC⁹

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