

Understand Your Risk for Nasopharyngeal, Head and Neck Cancers

Cancer refers to the uncontrolled division and growth of cells in the human body. The growth, or tumour, can be caused by mutations in a person's DNA. These mutations can also be passed down from parents to children.

Nasopharyngeal, head and neck cancers are hereditary. Therefore, genetic screening is recommended for people:

- with a family history of nasopharyngeal, head and neck cancers;
- with a previous or current diagnosis for Epstein-Barr virus infection;
- with increased risks related to lifestyle: heavy drinkers, smokers and those exposed to occupational inhalants.

From the Dtect NPC+ results, your doctor could recommend regular health monitoring if you receive a positive result.

Benefits of Dtect NPC+

→ Validated Technology

Dtect NPC+ is conducted on one of the most accurate genetic profiling platforms available. It screens for disease risks by analysing genetic variants across relevant genetic markers.

→ Comprehensive Results

The results are reported in a precise and concise format, allowing you to easily interpret the analysis. The Dtect NPC+ report highlights the risk factors, and helps doctors to prescribe more suitable and effective monitoring and treatment options.

→ Affordable Pricing

Dtect NPC+ provides you with a quality genetic analysis at an affordable price.

Limitations

Genetic screening can indicate whether an individual has a predisposition, or is at an increased likelihood, of having an inherited condition or disorder. However, it cannot indicate if the individual will show symptoms, how severe the symptoms will be, or whether the condition or disorder will progress over time. A negative test result does not mean that an individual will not get the inherited condition or disorder because Dtect tests are designed to screen for only highly significant genetic markers which have been documented during medical research. Environmental and lifestyle factors also play a role in the development of inherited conditions and disorders.

Other Products

Dtect BRCA+: Screens for risk of breast and ovarian cancers.

Dtect Cardio & Metabolic: Evaluates markers associated with cardiovascular and metabolic diseases.

Dtect Carrier: Screens your carrier status for rare genetic disorders.

Dtect Child: Detects inherited genetic illnesses/developmental disorders in children.

Dtect Colon+: Screens for risk of colorectal cancer, using ACMG guidelines.

Dtect Derma: Screens for traits or conditions that affect the skin.

Dtect Fertility: Screens for genetic causes of infertility.

Dtect Immune Health: Screens for risk of COVID-19 susceptibility and severity.

Dtect Neuro: Screens for risks of various types of neurological conditions.

Dtect NPC+: Screens for risk of nasopharyngeal and head and neck cancers.

Dtect Onco: Screens for risk of familial cancers.

Dtect PGx: Screens for risk of adverse drug reactions and drug responses.

Dtect Prostate+: Screens for risk of prostate cancer, using ACMG guidelines.

Dtect Wellness: Screens for traits or conditions that affect health and wellness.

- Please visit www.dtect.com for new product updates -

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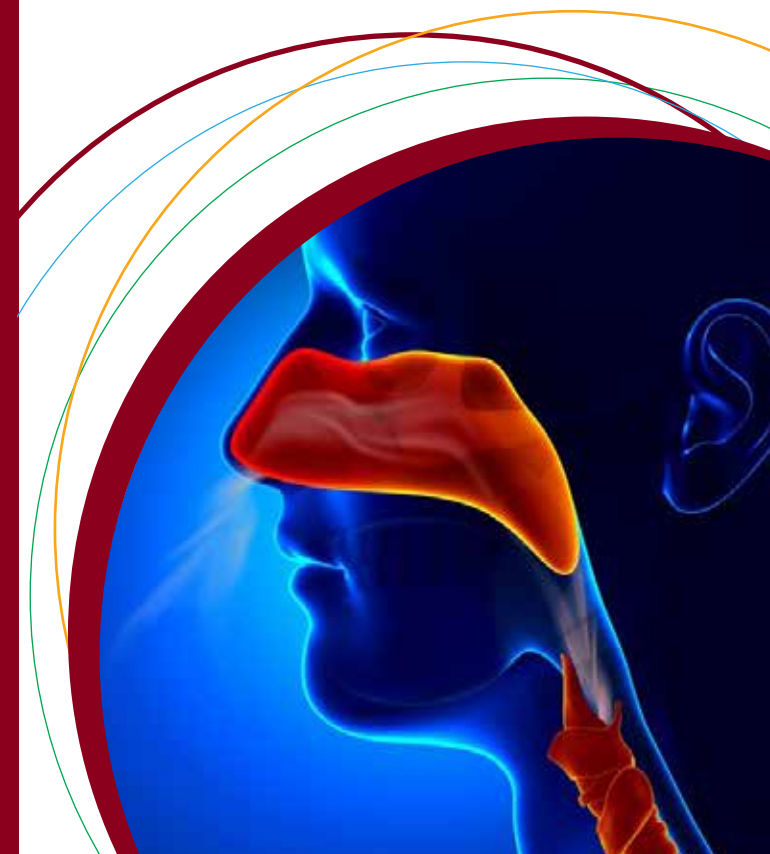
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DNA



Genetic Screening for Nasopharyngeal, Head and Neck Cancers

**Your First Step Towards
Total Health and Vitality**

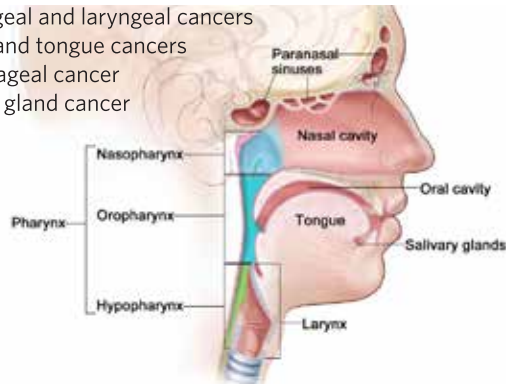


Manage Your Health With Dtect NPC+

Dtect NPC+ is a genetic screening test. This test screens your DNA for markers that are linked to inherited risk factors for common head and neck cancers (HNCs). The markers serve as 'red flags' in your DNA and can indicate if you are predisposed to these cancers.

Other than nasopharyngeal cancer, common HNCs include:

- > pharyngeal and laryngeal cancers
- > mouth and tongue cancers
- > oesophageal cancer
- > salivary gland cancer



DID YOU KNOW?

HNCs are closely associated with lifestyle, environmental factors, genetic factors, and Epstein-Barr virus infection. Nasopharyngeal cancer (NPC) is most common in southern China (including Hong Kong), Singapore, Vietnam, Malaysia, and the Philippines, where the incident rate is close to 25 cases per 1000 population.

If **detected early**, people with early stage disease have up to **95% chance of cure** with local therapy. The good prognosis is a result of effective preventive strategies which use genetic and molecular screening to identify and monitor people with increased risk of developing NPC and HNCs.

Please email us at
enquiries@dtect.com
or consult your doctor
for more information.

Risk Factors

Head and neck cancers (HNCs) cover a broad category of diverse tumour types arising from various parts of the craniofacial bones, soft tissues, salivary glands, skin, and mucosal membranes. The vast majority (more than 90%) are squamous cell carcinomas, such that the term HNCs is often called head and neck squamous cell carcinoma. The most important risk factors for HNCs are age, gender, ethnicity, infections, inherited genetic markers, and lifestyle (which includes diet and habits).

Age and Gender

The highest incidence is observed in the 50 age range. Males are affected more than females, with a ratio ranging from 2:1 to 4:1.

Ethnicity

Nasopharyngeal cancer (NPC) is more prevalent in the South East Asian region; mouth and tongue cancers are more common in the Indian subcontinent; pharyngeal and laryngeal cancers affect central-eastern Asian populations; and oesophageal cancer is more common in north-eastern regions of Asia.

Infections

Epstein-Barr virus (EBV) infection has been strongly linked to the development of NPC. Almost all patients with NPC carry molecular evidence of EBV presence.

Your Dtect NPC+ test results can assist and support your doctor's medical diagnosis, and help with the management of genetic diseases across the family. Markers for disease risks are likely to be shared by first-degree relatives (siblings, children, parents). Your doctor could advise clinically asymptomatic relatives of patients to undergo screening. More importantly, your doctor could advise you on treatment decisions for nasopharyngeal, head and neck cancers sooner, or you can be better prepared to make lifestyle and dietary changes to mitigate your health risks for nasopharyngeal, head and neck cancers by screening for your genetic predisposition.

Genetic

Multiple genetic factors and pathways are known to contribute to an increase in the risk of head and neck cancers. These factors may interact with other known risk factors including metabolic polymorphisms that influence exposure to the carcinogens in tobacco smoke, DNA repair gene polymorphisms, and variations in other pathways contributing to carcinogenesis.

Lifestyle

- > High consumption of preserved or fermented foods, including meats, eggs, fruits, and vegetables, which contain high levels of nitrosamines, bacterial mutagens, and direct genotoxins;
- > Smoking, which increases risk of HNCs up to 25-fold; and
- > High alcohol consumption, which increases the risk of cancer in the upper aerodigestive tract, although it is often difficult to separate the effects of smoking and alcohol in studies.

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