

## 9. Nasopharynx

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### Emerging Prognostic Factors for Clinical Care

There are increasing reports that the following factors could aid in refining prognostication; however, they are AJCC Level of Evidence III and no consistent consensus yet exists on the demarcation criteria. These factors should be re-evaluated in the coming years as the evidence base grows.

- Histological type (Nonkeratinizing versus keratinizing carcinoma)
- Age
- Gross tumor volume
- Lactic dehydrogenase (LDH)
- Circulating DNA of Epstein-Barr virus (EBV-DNA)

### Risk Assessment Models

The AJCC recently established guidelines that will be used to evaluate published statistical prediction models for the purpose of granting endorsement for clinical use.<sup>1</sup> Although this is a monumental step toward the goal of precision medicine, this work was published only very recently. Therefore, the existing models that have been published or may be in clinical use have not yet been evaluated for this cancer site by the Precision Medicine Core of the AJCC. In the future, the statistical prediction models for this cancer site will be evaluated, and those that meet all AJCC criteria will be endorsed.

### Recommendations for Clinical Trial Stratification

As TNM staging remains the most important prognostic factor for NPC, it is recommended that clinical trials should at least be stratified by stage group.

### Bibliography

1. Kattan MW, Hess KR, Amin MB, et al. American Joint Committee on Cancer acceptance criteria for inclusion of risk models for individualized prognosis in the practice of precision medicine. *CA: a cancer journal for clinicians*. 2016.