# Supplemental Online Content

Lee HI, Lee J, Lee JH, et al. Evaluation of optimal assessment schedules for surveillance after definitive locoregional treatment of locally advanced head and neck cancer: a retrospective cohort study with parametric modeling of event-free survival. *JAMA Otolaryngol Head Neck Surg.* Published online September 29, 2022. doi:10.1001/jamaoto.2022.2561

This supplemental material has been provided by the authors to give readers additional information about their work.

**eTable 1. Recommendations for assessment schedule in head and neck cancer**

| Year | NCCN | AHNS | ESMO | AIRO | BAHNO | SNUH |
|------|------|------|------|------|-------|------|
| 1 | 1–3 months | 1–3 months | 2–3 months | 1–2 months | 1–2 months | 2–3 months |
| 2 | 2–6 months | 2–4 months | 2–3 months | 2–3 months | 1–2 months | 3–5 months |
| 3 | 4–8 months | 3–6 months | 6 months | 4–6 months | 3–6 months | 3–5 months |
| 4 | 4–8 months | 3–6 months | 6 months | 4–6 months | 3–6 months | 6 months |
| 5 | 4–8 months | 3–6 months | 6 months | 4–6 months | 3–6 months | 6 months |
| >5 | 12 months | 12 months | 12 months | 6–12 months | 12 months | – |

Abbreviations: NCCN, National Comprehensive Cancer Network; AHNS, American Head and Neck Society; ESMO, European Society for Medical Oncology; AIRO, Associazione Italiana Radioterapia Oncologica; BAHNO, British Association of Head and Neck Oncologists; SNUH, Seoul National University Hospital; mo, months.

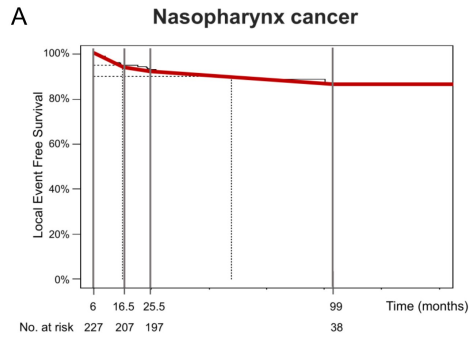**eTable 2. The overall incidence of event, progression, and 2nd primary malignancies in five subgroups.**

| | Nasopharynx (n=227) | HPV-positive oropharynx (n=237) | HPV-negative oropharynx (n=47) | Hypopharynx (n=65) | Larynx (n=97) |
|---|---|---|---|---|---|
| Total events | 43 (18.9%) | 35 (14.8%) | 17 (36.2%) | 29 (44.6%) | 30 (30.9%) |
| Local events | 24 (10.6%) | 22 (9.3%) | 11 (23.4%) | 20 (30.8%) | 19 (19.6%) |
| Distant events | 29 (12.8%) | 20 (8.4%) | 10 (21.3%) | 16 (24.6%) | 18 (18.6%) |
| Total progression | 39 (17.2%) | 30 (12.7%) | 15 (31.9%) | 29 (44.6%) | 21 (21.7%) |
| Local progression | 23 (10.1%) | 21 (8.9%) | 11 (23.4%) | 20 (30.8%) | 19 (19.6%) |
| Distant progression | 26 (11.5%) | 14 (5.9%) | 8 (17.0%) | 16 (24.6%) | 9 (9.3%) |
| 2nd primary malignancies | 5 (2.2%) | 7 (3.0%) | 2 (4.3%) | 1 (1.5%) | 9 (9.3%) |

**eFigure 1. Parametric modeling of total events in (A) Nasopharynx Cancer, (B) HPV-Positive Oropharynx Cancer, (C) HPV-Negative Oropharynx Cancer, (D) Hypopharynx Cancer, and (E) Larynx Cancer**
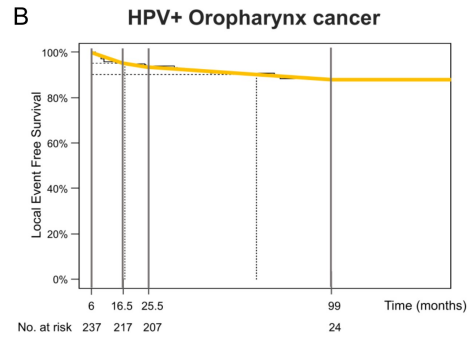
The total event-free survival curves were converted to standardized curves and divided into three phases for regular follow-up (1st phase, 6.0–16.5 months; 2nd phase, 16.5–25.0 months; 3rd phase 25.0–99.0 months). Recommended follow-up intervals of each phase are presented in the table below.
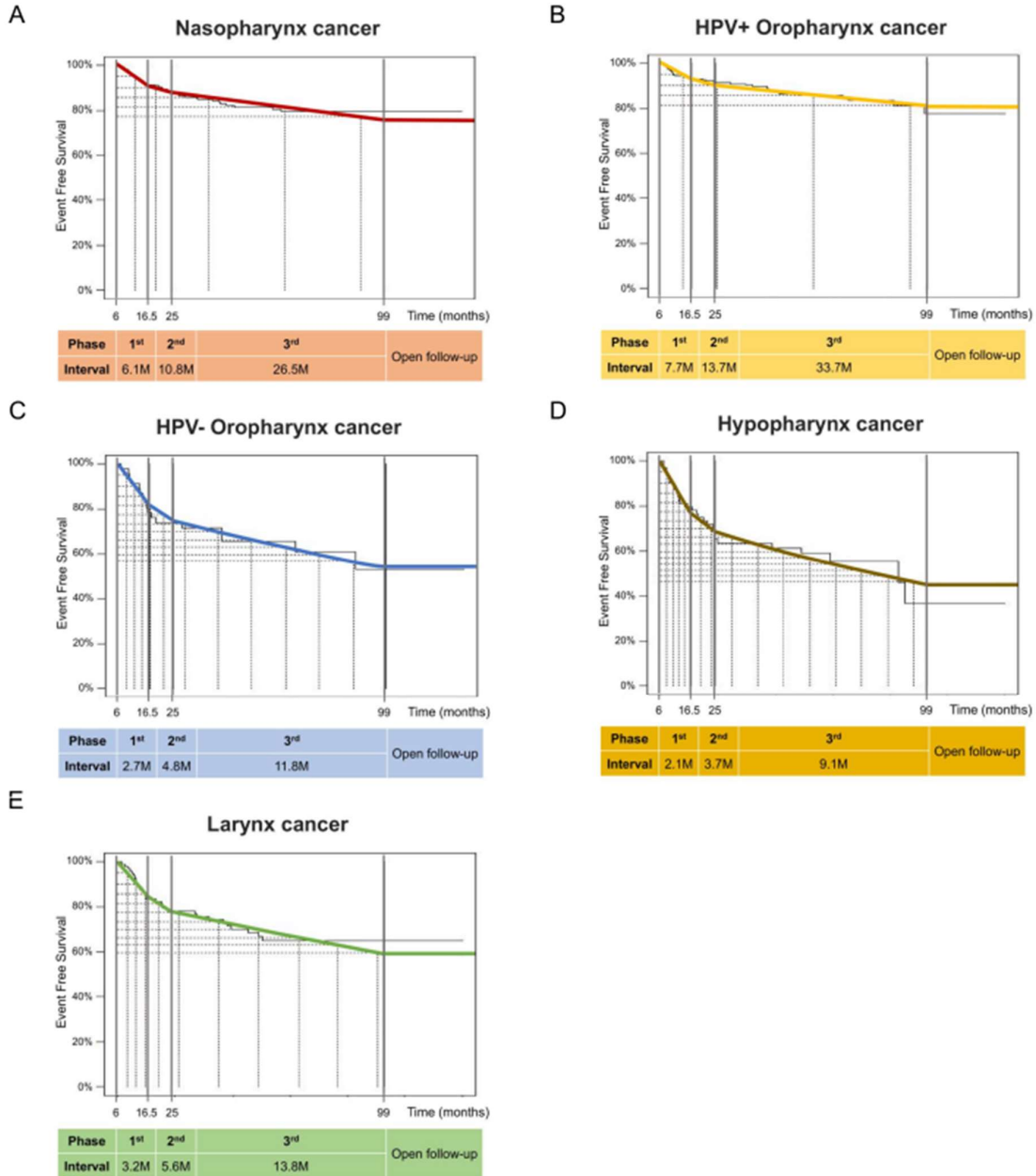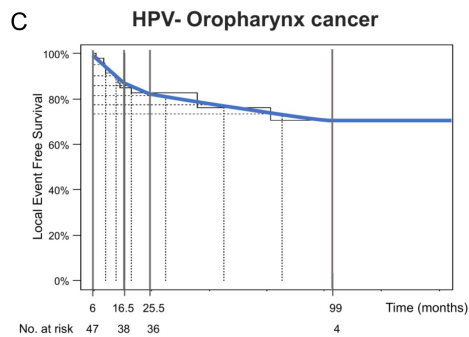
**eFigure 2. Parametric modeling of local events in (A) nasopharynx cancer, (B) HPV+ oropharynx cancer, (C) HPV- oropharynx cancer, (D) hypopharynx cancer, and (E) larynx cancer.** The local event-free survival curves were divided into three phases (1st phase, 6.0–16.5 months; 2nd phase, 16.5–25.5 months; 3rd phase 25.5–99.0 months). Recommended follow-up intervals of each phase are presented in the table below.
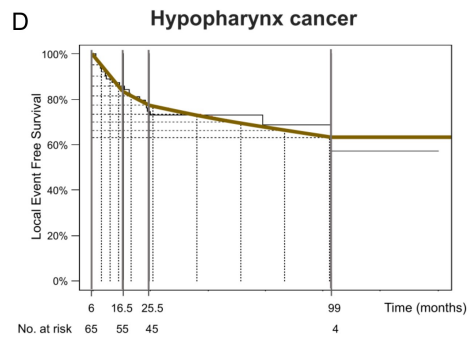
**eFigure 3. Parametric modeling of distant events in (A) nasopharynx cancer, (B) HPV+ oropharynx cancer, (C) HPV- oropharynx cancer, (D) hypopharynx cancer, and (E) larynx cancer.** The distant event-free survival curves were divided into two phases (1st phase, 6.0–27.5 months; 2nd phase, 27.5–99.0 months). Recommended follow-up intervals of each phase are presented in the table below.



A Nasopharynx cancer

| Phase | 1st | 2nd | Open follow-up |
|---|---|---|---|
| Interval | 13.8M | 36.7M | |

No. at risk 227 193 38

B HPV+ Oropharynx cancer

| Phase | 1st | 2nd | Open follow-up |
|---|---|---|---|
| Interval | 20.4M | 54.2M | |

No. at risk 237 203 23

C HPV- Oropharynx cancer

| Phase | 1st | 2nd | Open follow-up |
|---|---|---|---|
| Interval | 6.8M | 18.2M | |

No. at risk 47 33 4

D Hypopharynx cancer

| Phase | 1st | 2nd | Open follow-up |
|---|---|---|---|
| Interval | 5.8M | 15.4M | |

No. at risk 65 44 5

E Larynx cancer

| Phase | 1st | 2nd | Open follow-up |
|---|---|---|---|
| Interval | 8.0M | 21.2M | |

No. at risk 97 75 6