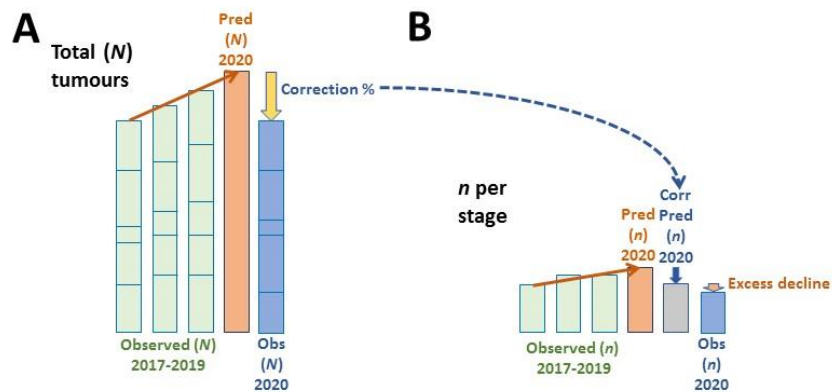


## Supplementary Material

### 1 Supplementary Figures and Tables

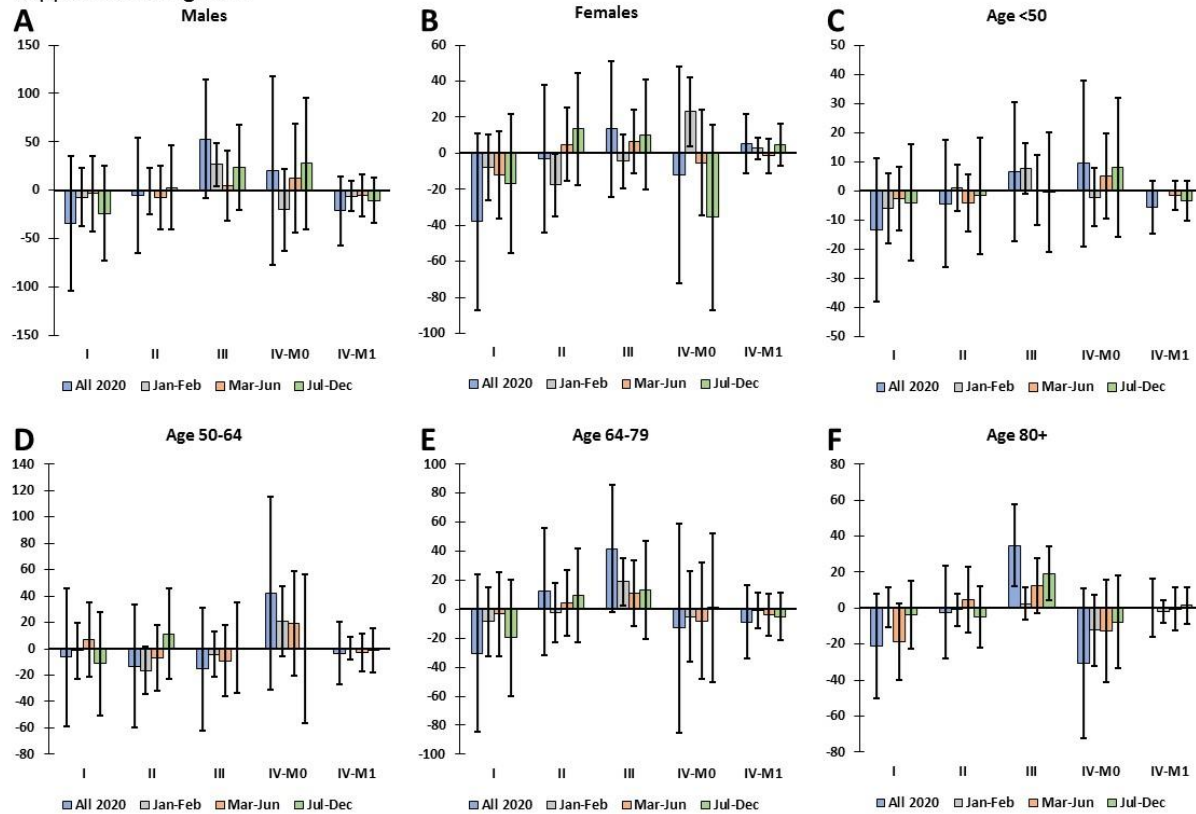
#### 1.1 Supplementary Figures

Supplemental Figure 1



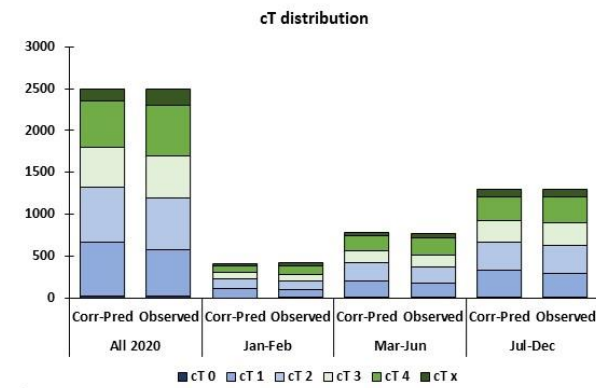
**Supplementary Figure 1. Methodology to calculate predicted incidence and stage shift. (A)** Poisson count model was used to estimate the average yearly change in cancer diagnoses over the period 2015-2019 and extrapolated to 2020. **(B)** For each subgroup, the Poisson count model was applied independently to establish the predicted value for 2020. The predicted value for each subgroup was “corrected” for the percent decline/increase of the total group. Predicted values were compared to observed values for 2020.

Supplemental Figure 2

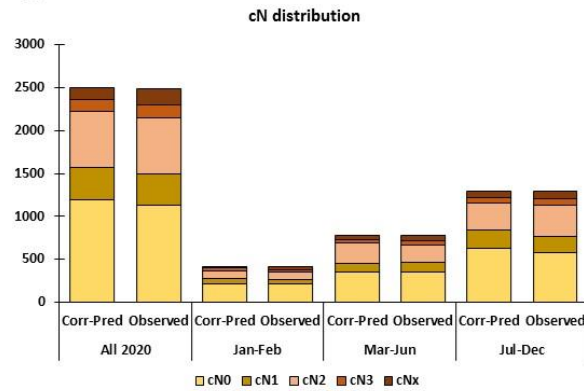


**Supplementary Figure 2. Changes in incidence by clinical stage of head and neck cancer in Belgium in 2020, by sex and age group.** Difference between observed and corrected-predicted incidence in 2020 and by time period for (A) males, (B) females, and patients (C) aged <50, (D) aged 50-64, (E) aged 65-79, and (F) and aged 80+. Difference between predicted-corrected and observed incidence is significant if the 95% confidence interval (error bar) of the difference does not include zero.

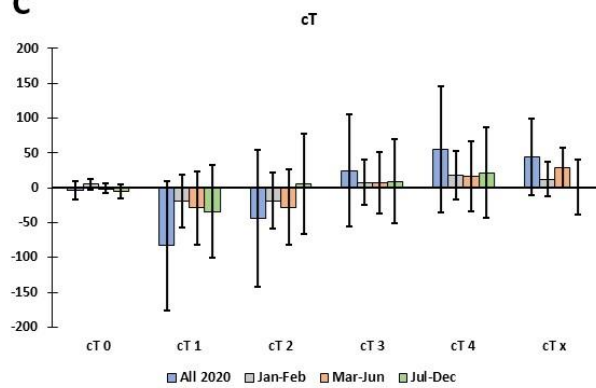
**A** Supplemental Figure 3



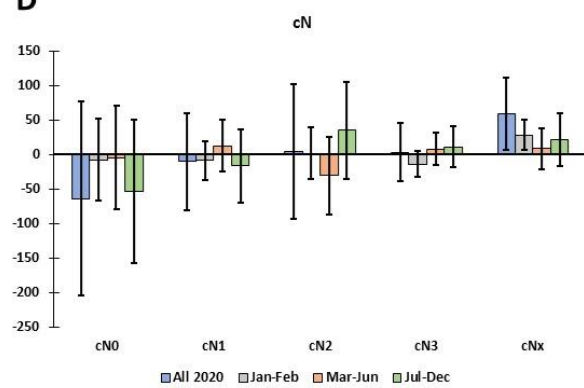
**B**



**C**



**D**



**Supplementary Figure 3. Observed versus corrected-predicted tumor diameter and node involvement.** Clinical (A) T category and (B) N category distribution predictions and observed distributions corrected for incidence decline (Corr-Pred) for head and neck cancer in 2020 and by time period. Difference between observed and corrected-predicted incidence per clinical (C) T category and (D) N category for head and neck cancer in 2020 and by time period. Difference between predicted-corrected and observed incidence is significant if the 95% confidence interval (error bar) of the difference does not include zero.

## 1.2 Supplementary Tables

**Supplementary Table 1. Patient and tumor characteristics.**

	Overall		2017		2018		2019		2020	
	N	%	N	%	N	%	N	%	N	%
<b>Total</b>	<b>10 582</b>		<b>2 671</b>		<b>2 692</b>		<b>2 728</b>		<b>2 491</b>	
<b>Sex</b>										
Male	7 759	73.3	1 977	74.0	1 952	72.5	2 031	74.5	1 799	72.2
Female	2 823	26.7	694	26.0	740	27.5	697	25.5	692	27.8
<b>Mean Age (SD)</b>	<b>65</b>	<b>(11.9)</b>	<b>64</b>	<b>(11.7)</b>	<b>64</b>	<b>(11.6)</b>	<b>65</b>	<b>(11.7)</b>	<b>65</b>	<b>(11.5)</b>
<b>Age group</b>										
<50 years	784	7.4	203	7.6	196	7.3	194	7.1	191	7.7
50-64 years	4 445	42.0	1 179	44.1	1 141	42.4	1 138	41.7	987	39.6
64-79 years	4 161	39.3	988	37.0	1 058	39.3	1 092	40.0	1 023	41.1
80+ years	1 192	11.3	301	11.3	297	11.0	304	11.1	290	11.6
<b>Topography</b>										
Oral cavity	2 796	26.4	670	25.1	704	26.2	761	27.9	661	26.5
Oropharynx	3 057	28.9	787	29.5	789	29.3	762	27.9	719	28.9
Hypopharynx	1 135	10.7	300	11.2	290	10.8	296	10.9	249	10.0
Larynx	2 197	20.8	599	22.4	559	20.8	541	19.8	498	20.0
Other and Unknown	1 397	13.2	315	11.8	350	13.0	368	13.5	364	14.6
<b>Clinical Stage*</b>										
I	1 904	20.8	395	18.2	439	19.0	567	23.6	503	22.3
II	1 514	16.6	332	15.3	379	16.4	406	16.9	397	17.6
III	1 645	18.0	418	19.2	430	18.6	387	16.1	410	18.2
IV-M0	3 586	39.2	925	42.5	930	40.3	907	37.8	824	36.5
IV-M1	490	5.4	105	4.8	130	5.6	134	5.6	121	5.4
X/NA	1 443	13.6	496	18.6	384	14.3	327	12.0	236	9.5

\*Percentages for known clinical stage are computed excluding X/NA