

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active.

ELSEVIER

Contents lists available at ScienceDirect

Radiotherapy and Oncology

journal homepage: www.thegreenjournal.com



Letter to the Editor

Response to "Head and neck cancer diagnoses and faster treatment initiation during COVID-19: Correspondence"



To the editor,

We appreciate the ideas shared with us by Dr. Rujittika Mungmunpuntipantip from Thailand and Prof. Dr. Viroj Wiwanitkit from India [1].

By using the word 'incidence', we may have given the impression that we think of a decline in incidence in the sense that less head and neck cancers have developed during the first COVID-19 wave rather than a decrease in the number of diagnosed cases. Although from a societal point of view the 'incidence' does appear lower in terms of less diagnoses and/or necessary treatments in hospitals, we do not think that less persons were affected by head and neck cancer. We agree that the decline in the number of diagnoses during the first wave is likely related to reluctance of patients to visit their general practitioner with tumour-related symptoms and the limited access of care. However, if this could solely be explained by reluctance and limited access, an increase in head and neck cancer diagnoses after the first wave would be expected, a phenomenon we did not observe during the subsequent second half of 2020 as can be observed in Figure 1A of our original article [2]. We think this might partly be explained by excess deaths due to other causes [2].

To support our finding that the number of diagnosed cases was significantly lower than expected, we compared the crude rate (number of cases per 1,000,000 population) in the year 2020 with the crude rates for 2018 and 2019 using the incidence rate ratio. The corresponding p-values can be found in the Supplementary Table 1 of our original article [2]. Part of this table is reproduced in Table 1.

The recently published paper by Stevens et al., mentioned by Mungmunpuntipantip and Wiwanitkit, showed a decline in primary head and neck malignancies, but not in the number of patients presenting with a mucosal squamous cell carcinoma during the first half of 2020 compared to corresponding period in 2019 [3]. This stability in mucosal squamous cell carcinomas could be due to the fact that Stevens et al included data of a single tertiary centre. This centre was never closed during the pandemic while many outside clinics temporarily closed during the first months of this period. This may have resulted in a higher number of patients with suspected head and neck malignancies directly seeking help in the tertiary centre. Furthermore, it was suggested that there were more possibilities for patients to be seen faster [3]. The patients diagnosed in this tertiary centre in 2020 may therefore have been patients that would have been diagnosed elsewhere or later in time. Information on the origin of patients and on future periods, as suggested by the authors, may indeed be very helpful. Our findings are based on the entire population of the Netherlands: a clearly defined area without expected changes in the proportion of inhabitants diagnosed with head and neck cancer in another country.

Table 1Part of Table 1 of the Supplementary information [2] – Detailed information on the overall incidence and *p*-values for the incidence rate ratios.

	Overall incidence (crude rate) per 1,000,000 inhabitants					Overall incidence (absolute numbers (n))		
	2020 (COVID)	2019	2018	p-value 2018 vs. 2020	p-value 2019 vs. 2020	2020 (COVID)	2019	2018
January	14.65	14.06	15.07	0.745	0.648	255	243	259
February	12.46	13.48	12.57	0.929	0.407	217	233	216
March	11.48	12.20	12.85	0.246	0.539	200	211	221
April	9.13	12.71	11.75	0.017	0.001	159	220	202
May	11.94	15.42	15.41	0.006	0.006	208	267	265
June	14.75	13.45	15.28	0.687	0.308	257	233	263
July	15.78	14.83	15.22	0.676	0.475	275	257	262
August	12.85	13.90	13.18	0.786	0.397	224	241	227
September	14.22	12.79	13.57	0.613	0.252	248	222	234
October	13.80	13.63	16.11	0.079	0.895	241	237	278
November	11.79	12.24	15.98	<0.001	0.701	206	213	276
December	14.13	13.33	12.67	0.240	0.521	247	232	219

^{*}DOI of original article: https://doi.org/10.1016/j.radonc.2022.01.023

Conflict of interest

None.

References

- [1] Mungmunpuntipantip R, Wiwanitkit V. Head and neck cancer diagnoses and faster treatment initiation during COVID-19: correspondence. Radiother Oncol 2022
- [2] Schoonbeek RC, de Jel DVC, van Dijk BAC, Willems SM, Bloemena E, Hoebers FJP, et al. Fewer head and neck cancer diagnoses and faster treatment initiation during COVID-19 in 2020: a nationwide population-based analysis. Radiother Oncol 2022;167:42–8. https://doi.org/10.1016/j.radonc.2021.12.005.
- [3] Stevens MN, Patro A, Rahman B, Gao Y, Liu D, Cmelak A, et al. Impact of COVID-19 on presentation, staging, and treatment of head and neck mucosal squamous cell carcinoma. Am J Otolaryngol - Head Neck Med Surg 2022;43.

```
Rosanne C. Schoonbeek a,*,1

Dominique V.C. de Jel b,c,1

Boukje A.C. van Dijk d,e

Stefan M. Willems f

Elisabeth Bloemena g

Frank J.P. Hoebers h

Esther van Meerten i

Berit M. Verbist J
```

Ludi E. Smeele ^{c,k} György B. Halmos ^a

Matthias A.W. Merkx ^{d,l} Sabine Siesling ^{d,m}

Remco De Bree n

Robert P. Takes °, on behalf of the Dutch Head and Neck Society and the COVID and Cancer-NL consortium °

^a University of Groningen, University Medical Center Groningen, Department of Otorhinolaryngology and Head and Neck Surgery, Groningen

^b Dutch Institute for Clinical Auditing, Scientific Bureau, Leiden ^c Netherlands Cancer Institute/Antoni van Leeuwenhoek, Department of Head and Neck Oncology and Surgery, Amsterdam

^d Netherlands Comprehensive Cancer Organisation (IKNL), Department of Research, Utrecht

^e University of Groningen, University Medical Center Groningen, Department of Epidemiology

^f University of Groningen, University Medical Center Groningen, Department of Pathology, Groningen

g Amsterdam University Medical Center, Vrije Universiteit Amsterdam,
Department of Pathology, Amsterdam

^h Maastricht University Medical Centre Department of Radiation Oncology (MAASTRO), GROW – School for Oncology and Developmental Biology, Maastricht

ⁱ Erasmus MC Cancer Institute, Department of Medical Oncology, Rotterdam

^j Leiden University Medical Center, Department of Radiology, Leiden ^k Amsterdam University Medical Center, University of Amsterdam, Department of Oral and Maxillofacial Surgery, Amsterdam

¹Radboud University Medical Center, Department of Oral and Maxillofacial Surgery, Nijmegen

^m University of Twente, Department of Health Technology and Services Research, Technical Medical Centre, Enschede

ⁿ University Medical Center Utrecht, Department of Head and Neck Surgical Oncology, Utrecht

^o Radboud University Medical Center, Department of Otolaryngology/ Head and Neck Surgery, Nijmegen, The Netherlands

* Corresponding author at: Hanzeplein 1, 9700 RB, Groningen, The Netherlands.

E-mail address: r.c.schoonbeek@umcg.nl (R.C. Schoonbeek)

Received 10 January 2022 Accepted 17 January 2022

Available online 29 January 2022

¹ These authors contributed equally to this work.