Real-world data of patients with recurrent and/or metastatic squamous cell carcinoma of the head and neck, including first-line population, treated with nivolumab in Germany

680P

Christine Langer,[1] Eyck von der Heyde,[2] Dennis Hahn,[3] Boris Kubuschok,[4] Ulrike Bockmühl,[5] Harald Müller-Huesmann,[6] Gunther Klautke,[7] Jens von der Grün,[8] Dirk Beutner,[9] Jens Büntzel,[10] Chia-Jung Busch,[11] Bálint Tamaskovics,[12] Jorge Riera-Knorrenschild,[13] Kerstin Gutsche,[14] Manfred Welslau,[15] Thomas Gauler,[16] Daniela Waldenberger,[17] Andreas Dietz[18]

[1]Klinik für Hals-Nasen- und Ohrenheilkunde, Kopf-Halschirurgie und plastische Operationen, Universitätsklinikum Gießen und Marburg, Giessen, Germany; [2]Onkologische Praxis am Raschplatz, Hannover, Germany; [3]Klinik für Hämatologie, Onkologie, Stammzelltransplantation und Palliativmedizin, Klinikum der Landeshauptstadt Stuttgart, Stuttgart, Germany; [4]II. Medizinische Klinik und Interdisziplinäres Cancer Center, Universitätsklinikum Augsburg, Augsburg, Germany; [5]Klinik für Hals-Nasen-Ohrenheilkunde, Klinikum Kassel, Kassel, Germany; [6]Klinik für Hämatologie und Onkologie, Brüderkrankenhaus St. Josef Paderborn, Paderborn, Germany; [7]Klinikum Chemnitz gGmbH, Chemnitz, Germany; [8]Klinik für Strahlentherapie, Universitätsklinikum Frankfurt, Frankfurt, Germany; [9]Klinik und Poliklinik für Hals-Nasen-Ohrenheilkunde, Universitätsmedizin Göttingen, Göttingen, Germany; [10]Klinik für Hals-, Nasen- und Ohrenheilkunde, Südharz Klinikum Nordhausen gGmbH, Nordhausen, Germany; [11]Klinik und Poliklinik für Hals-, Nasen- und Ohrenheilkunde, Universitätsmedizin Greifswald, Greifswald, Germany; [12]Department of Radiation Oncology, Medical Faculty and University Hospital Düsseldorf, Heinrich Heine University, Düsseldorf, Germany; [13]Klinik für Hämatologie, Onkologie und Immunologie, Philipps-Universität Marburg, Marburg, Germany; [14]Onkologische Zentrum, Carl-Thiem-Klinikum Cottbus gGmbH, Cottbus, Germany; [15]Hämato-Onkologische Schwerpunktpraxis, Klinikum Aschaffenburg, Aschaffenburg, Germany; [16]Klinik für Strahlentherapie, Universitätsklinikum Essen, Essen, Germany; [17]Medizinische Abteilung, Bristol Myers Squibb, München, Germany; [18]Klinik und Poliklinik für Hals-, Nasen-, Ohrenheilkunde, Universitätsklinikum Leipzig, Leipzig, Germany

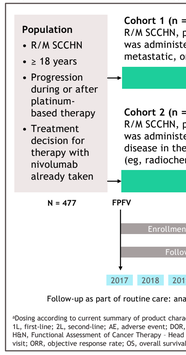
Introduction

- Patients with recurrent and/or metastatic squamous cell carcinoma of the head and neck (R/M SCCHN) have poor long-term prognosis and limited treatment options[1]
- In 2016, nivolumab, a checkpoint-blocking human IgG4 monoclonal antibody targeting programmed death-1, was approved in the United States for the treatment of this patient population, with European approval following in 2017[1-4]
- The pivotal CheckMate 141 (NCT02105636) trial evaluated the efficacy, safety, and patient-reported quality of life (QoL) of nivolumab monotherapy versus therapy of investigator's choice (cetuximab, methotrexate, docetaxel) in patients with platinum-refractory R/M SCCHN[1,5]
  - However, real-world data for patients with R/M SCCHN receiving nivolumab are rare, particularly in the first-line (1L) setting
- Furthermore, the assessment of QoL in oncology clinical studies is becoming increasingly important to better understand treatment benefit from the patient's perspective
- Here, we present updated real-world data from the observational study HANNA conducted in Germany describing the effectiveness, safety, and QoL in patients with R/M SCCHN initiating nivolumab, including the 1L population

Methods

- HANNA (NCT03114163) is a German, prospective, observational, multicenter cohort study in adult patients diagnosed with SCCHN progressing on or after platinum-based therapy (in either the primary, adjuvant, or R/M setting) who start a new systemic therapy with nivolumab for the first time and are treated within the market authorization according to the label approved in Germany (**Figure 1**)

Figure 1. HANNA study design



Follow-up as part of routine care: analysis for day 0; week 6; and months 3, 6, 9, 12, 18, 24, 36, 48, and 60

[a]Dosing according to current summary of product characteristics[4]: 240 mg intravenously every 2 weeks.
1L, first-line; 2L, second-line; AE, adverse event; DOR, duration of response; DOT, duration of treatment; EQ-5D, EuroQoL-5 Dimensions; FACT H&N, Functional Assessment of Cancer Therapy – Head & Neck; FPFV, first patient first visit; LPFV, last patient first visit; LPLV, last patient last visit; ORR, objective response rate; OS, overall survival; PFS, progression-free survival; TTR, time to response.

- Subanalyses were conducted in the patient population who received nivolumab as 1L therapy, including those who were platinum-sensitive or platinum-refractory (progressed > 6 or ≤ 6 months after platinum-based therapy, respectively)
- The primary objective of OS was estimated and plotted using the Kaplan-Meier method for ≤ 5 years of follow-up
- Secondary objectives included PFS, ORR, treatment patterns (eg, DOT), safety, and health-related QoL
  - Patient-reported outcomes and QoL were assessed by the EQ-5D visual analog scale (VAS), and by the FACT H&N questionnaire
    - EQ-5D consists of 2 systems: the descriptive system addressing 5 domains (mobility, self-care, usual activities, pain/discomfort, anxiety/depression), each divided into 3 levels, and the EQ-5D VAS, providing a self-rating of overall health[6]
    - FACT H&N version 4 consists of 27 questions in 4 domains—physical (7), social/family (7), emotional (6), and functional (7)—supplemented by a head and neck cancer-specific domain of 12 questions[7]

Overall survival

- At the time of the interim analysis, the median OS was 10.8 months (95% CI, 9.2–12.2) with a survival probability of 46% (95% CI, 35%–55%) at 12 months, 26% (95% CI, 17%–37%) at 24 months, and 18% (95% CI, 8%–30%) at 36 months (**Figure 2**)
- In the 1L subset, the median OS was 11.7 months (95% CI, 9.5–13.7) with a survival probability of 47% (95% CI, 39%–55%) at 12 months, 27% (95% CI, 19%–36%) at 24 months, and 22% (95% CI, 14%–32%) at 36 months (**Figure 3**)
- For the 1L population, similar OS benefit was observed in platinum-sensitive and platinum-refractory patients (ie, progressed > 6 or ≤ 6 months after platinum-based therapy, respectively) (**Figure 4**)
  - Of the 222 patients, 61 patients (27%) received subsequent therapies, among which cetuximab was the most common (n = 33; 54%)

Figure 2. OS (N = 477)

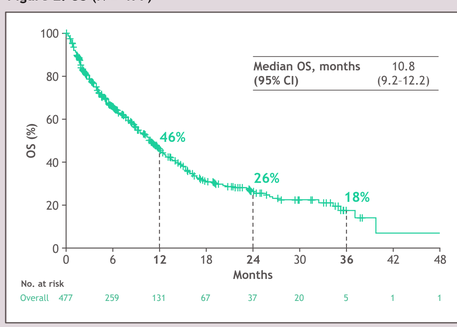


Figure 3. OS in 1L subset (n = 222)

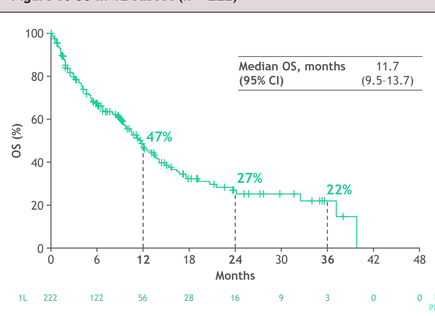
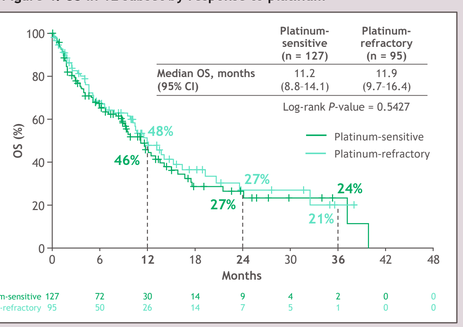


Figure 4. OS in 1L subset by response to platinum



Results

Patient and clinical characteristics

- This interim analysis (January 2022) represents data from 477 patients enrolled between May 2017 and July 2021; the median follow-up was 32.9 months
- Patients in the overall population (N = 477) had a median age of 64 years at baseline (start of nivolumab treatment) and were predominantly male (81%), and most had a history of tobacco consumption (74%) (**Table 1**)
- The primary tumor was located at the oropharynx in 38% of patients, the oral cavity in 22%, the hypopharynx in 19%, and the larynx in 15%; in 38% of patients, the location of metastases at baseline was the lung (**Table 2**)
- More than half of patients (56%) progressed ≤ 6 months after the platinum-based therapy and 59% had an Eastern Cooperative Oncology Group performance status (ECOG PS) score of 0 or 1
- In the 1L subset (n = 222), baseline patient and clinical characteristics were similar to the overall population (**Tables 1** and **2**)

Table 1. Baseline patient characteristics

	Overall (N = 477)	1L subset (n = 222)
Age at nivolumab initiation, median (range), years	64 (30–86)	64 (36–83)
Age group at nivolumab initiation, n (%)		
< 70 years	361 (76)	165 (74)
≥ 70 years	116 (24)	57 (26)
Male, n (%)	387 (81)	173 (78)
Smoking status, n (%)		
History of smoking	354 (74)	162 (73)
No history of smoking	113 (24)	54 (24)
Unknown	10 (2)	6 (3)

Table 2. Baseline clinical characteristics

	Overall (N = 477)	1L subset (n = 222)
Location of primary tumor, n (%)		
Oropharynx	180 (38)	86 (39)
Oral cavity	106 (22)	50 (23)
Hypopharynx	91 (19)	39 (18)
Larynx	70 (15)	31 (14)
Nasopharynx/paranasal sinus	20 (4)	11 (5)
Nasal cavity/pharynx	5 (1)	3 (1)
Salivary gland	4 (1)	1 (< 1)
Unknown/other	1 (< 1)	1 (< 1)
Location of metastases,[a] n (%)		
Lung	182 (38)	77 (35)
Neck	72 (15)	38 (17)
Liver	58 (12)	20 (9)
Bone	54 (11)	19 (9)
Brain	11 (2)	2 (1)
Other	144 (30)	58 (26)
No metastases	133 (28)	75 (34)
Time of progression following platinum-based therapy, n (%)		
≤ 6 months	265 (56)	95 (43)
> 6 months	212 (44)	127 (57)
Baseline ECOG PS,[b] n (%)		
0	67 (14)	31 (14)
1	214 (45)	100 (45)
2	118 (25)	55 (25)
3	28 (6)	15 (7)
Unknown/other	50 (10)	21 (9)

[a]If a patient has > 1 metastasis location, the patient is counted in all those locations; [b]ECOG PS 0 = fully active, able to carry on all pre-disease performance without restriction; ECOG PS 1 = restricted in physically strenuous activity but ambulatory; ECOG PS 2 = ambulatory and capable of all self-care but unable to carry out any work activities; ECOG PS 3 = capable of only limited self-care, confined to bed or chair > 50% of waking hours.

DOT and time to next treatment

- The overall median DOT was 5.4 months (95% CI, 4.1–5.8)
  - The median DOT was 5.7 months (95% CI, 4.1–6.0), 5.3 months (95% CI, 3.2–5.8), and 4.6 months (95% CI, 2.5–6.2) for patients with 1L, 2L, and 3L therapy
- The median time to next treatment was 9.5 days (range, 1.0–563.0) in the overall population and 15.0 days (1.0–563.0) in the 1L subset

Safety

- A total of 31% of patients experienced ≥ 1 treatment-related/immune-related AE (TRAE/IRAE) of any grade; these ranged from grade 1 (17%) to grade 4 (3%) events, with 3 (< 1%) grade 5 events observed (**Table 3**)

Table 3. TRAEs/IMAEs

Grade, n (%)	Patients with ≥ 1 TRAE/IRAE, (N = 477)
Any grade	147 (31)
1 (mild)	80 (17)
2 (moderate)	78 (16)
3 (severe)	38 (8)
4 (very severe)	16 (3)
5 (fatal)	3[a] (< 1)

[a]Causes of death: respiratory failure with anemia and leukocytosis (n = 1), progressive disease with brain metastases (n = 1), and liver failure due to immune-related hepatitis (n = 1).

QoL

- EQ-5D VAS was completed at follow-up by 72% of patients at month 12 and 60% at month 24
- Completion rates for FACT H&N were ≥ 60% at both time points
- Similar to the month 12 observations, health-related QoL, measured with EQ-5D VAS and FACT H&N, remained stable until month 24 (**Figures 5** and **6**)

Figure 5. Changes from baseline in QoL at month 12 by EQ-5D VAS and FACT H&N

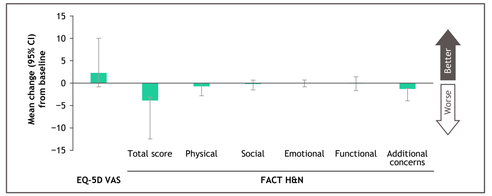
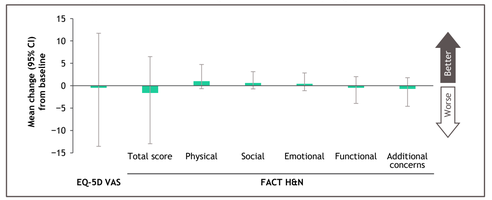


Figure 6. Changes from baseline in QoL at month 24 by EQ-5D VAS and FACT H&N



Conclusions

- In this interim analysis of the real-world study HANNA, the median OS was similar between the overall population and 1L subset (10.9 and 11.7 months, respectively)
  - In the 1L subpopulation, no difference in OS benefit was observed between platinum-sensitive and platinum-refractory patients
- Median DOT was similar between the overall population and 1L subset (5.4 and 5.7 months, respectively)
- The treatment was well tolerated: most TRAEs/IRAEs were grade 1 or 2, with 3 grade 5 TRAEs/IRAEs reported
- Overall health status and QoL remained stable under therapy
- Taken together, these findings show that nivolumab is safe and effective, with long-term stability in a broad patient population, including those receiving 1L treatment
- These real-world data contribute to the overall understanding of the role of nivolumab in the treatment of patients with R/M SCCHN who received prior platinum-based therapy, and they corroborate the outcomes of the pivotal phase 3 CheckMate 141 study[1,5]

References

1. Ferris RL, et al. *Oral Oncol* 2018;81:45-51.
2. Postow MA, et al. *J Clin Oncol* 2015;33:1974-1982.
3. OPDIVO® (nivolumab) [prescribing information]. Princeton, NJ: Bristol Myers Squibb; July 2022.
4. OPDIVO® (nivolumab) [summary of product characteristics]. Uxbridge, UK: Bristol Myers Squibb; July 2022.
5. Ferris RL, et al. *N Engl J Med* 2016;375:1856-1867.
6. Rabin R, et al. *Ann Med* 2001;33:337-343.
7. Ringash J, et al. *Qual Life Res* 2004;13:725-733.

Acknowledgments

- The patients and their families who made this study possible
- The investigators and clinical study teams who participated
- We would like to acknowledge the CORDS-Team and Tobias Bluhmki (Bristol Myers Squibb, Munich, Germany) for data evaluation
- Bristol Myers Squibb (Princeton, NJ) and Ono Pharmaceutical Co., Ltd (Osaka, Japan)
- The study was supported by Bristol Myers Squibb Germany
- All authors contributed to and approved the presentation; writing and editorial assistance was provided by Thai Cao, MS, of Evidence Scientific Solutions Inc., funded by Bristol Myers Squibb Germany

Disclosures

Dr C. Langer: Consulting or advisory role fees from Bristol Myers Squibb, Merck KGaA, Merck Sharp and Dohme Corp, and Sanofi; participation in speaker bureaus for Bristol Myers Squibb, Merck KGaA, and Merck Sharp and Dohme Corp.

Scientific Content on Demand

To request a copy of this poster:

Scan QR code via a barcode reader application

QR codes are valid for 180 days after the congress presentation date.

Presented at the European Society for Medical Oncology (ESMO) Congress, September 9-13, 2022, Paris, France

Email: christine.langer@hno.med.uni-giessen.de