Immunotherapy for recurrent or metastatic HNSCC: What are the practical considerations?

Disclaimer

- *Unapproved products or unapproved uses of approved products may be discussed by the faculty; these situations may reflect the approval status in one or more jurisdictions*
- *The presenting faculty have been advised by USF Health and touchIME® to ensure that they disclose any such references made to unlabelled or unapproved use*
- *No endorsement by USF Health and touchIME® of any unapproved products or unapproved uses is either made or implied by mention of these products or uses in USF Health and touchIME® activities*
- *USF Health and touchIME® accept no responsibility for errors or omissions*

touch ONCOLOGY®

Expert panel

Prof. Kevin Harrington

Professor of Biological Cancer Therapies
The Institute of Cancer Research
London, UK

Prof. Barbara Burtness

Professor of Medicine
Yale Cancer Center
New Haven, CT, USA

Prof. Jean-Pascal Machiels

Head
Department of Medical Oncology
Cliniques Universitaire St-Luc
Brussels, Belgium

touch ONCOLOGY®

Agenda

Immune checkpoint inhibitors in the treatment of recurrent/metastatic HNSCC: How do we apply the trial data to clinical practice?

What factors can be used to guide the use of immune checkpoint inhibitors in clinical practice?

How can we identify and manage possible immune-related adverse events in patients with HNSCC?

HNSCC, head and neck squamous cell carcinoma.

touch ONCOLOGY®

Immune checkpoint inhibitors in the treatment of recurrent/metastatic HNSCC: How do we apply the trial data to clinical practice?

Prof. Kevin Harrington
Professor of Biological Cancer Therapies
The Institute of Cancer Research
London, UK

touch ONCOLOGY®

Licenced indications for immune checkpoint inhibitors to treat unresectable recurrent or metastatic HNSCC

Pembrolizumab

First line[1]
- Combination therapy with platinum and 5-FU (all-comers)
- Monotherapy where tumour expresses PD-L1 (CPS ≥1)*

Second line[1]
- Monotherapy following disease progression on or after platinum-containing therapy

First line
- Monotherapy or in combination with platinum and 5-FU where tumours express PD-L1 (CPS ≥1)[2†]
- NICE (UK) recommends monotherapy only (PD-L1 CPS ≥1)[3]

Second line[2]
- Monotherapy following disease progression on or after platinum-containing therapy where tumours express PD-L1 (TPS ≥50%)

Nivolumab

Second line[4]
- Monotherapy following disease progression on or after platinum-based therapy

Second line[5]
- Monotherapy following disease progression on or after platinum-based therapy

*FDA-approved test. †Test not specified.
5-FU, fluorouracil; CPS, combined positive score; HNSCC, head and neck squamous cell carcinoma; NICE, National Institute for Health and Care Excellence; PD-L1, programmed death-ligand 1; PI, prescribing information; SmPC, summary of product characteristics; TPS, tumour proportion score.

1. Pembrolizumab. PI. Available at: www.accessdata.fda.gov/drugsatfda_docs/label/2021/125514s096lbl.pdf (accessed 20 December 2021);
2. Pembrolizumab. SmPC. Available at: www.ema.europa.eu/en/documents/product-information/keytruda-epar-product-information_en.pdf (accessed 20 December 2021);
3. NICE. TA661. Available at: www.nice.org.uk/guidance/ta661 (accessed 20 December 2021);
4. Nivolumab. PI. Available at: www.accessdata.fda.gov/drugsatfda_docs/label/2021/125554s091lbl.pdf (accessed 20 December 2021);
5. Nivolumab. SmPC. Available at: www.ema.europa.eu/en/documents/product-information/opdivo-epar-product-information_en.pdf (accessed 20 December 2021).

touch ONCOLOGY®

What factors can be used to guide the use of immune checkpoint inhibitors in clinical practice?

Prof. Kevin Harrington
Professor of Biological Cancer Therapies
The Institute of Cancer Research
London, UK

touch ONCOLOGY®

Variables to be balanced when treating patients with R/M HNSCC[1–4]

Tumour evaluation

- Location
- Clinical staging
  - T-stage
  - N-stage
  - M-stage
- Platinum-sensitivity/resistance
- Kinetics of disease progression

Clinical evaluation

- Physiological age
- Performance status (ECOG PS)
- Symptom burden
- Comorbidities
- Cardiopulmonary, renal and hepatic function
- Psychological and social status
- Personal preference

With the exception of platinum-sensitivity/resistance, treatment decision-making factors are continuous variables; they should be considered conjointly, while respecting patient autonomy and local resources[1]

ECOG PS, Eastern Cooperative Oncology Group Performance Status; R/M HNSCC, recurrent/metastatic head and neck squamous cell carcinoma.

1. Szturz P, Vermorken JB. *Ann Transl Med*. 2020;8:975; 2. Machiels J-P, et al. *Ann Oncol*. 2020;31:1462–75; 3. National Comprehensive Cancer Network. Head and neck cancers. Version 1.2022. Available at: www.nccn.org/professionals/physician_gls/pdf/head-and-neck.pdf (accessed 20 December 2021); 4. Mesia R, et al. *Clin Transl Oncol*. 2021;23:913–21.

Current and emerging biomarkers to support treatment decisions in R/M HNSCC

Current predictive markers[1,2]

PD-L1
1< CPS ≥1
No ICI | Yes ICI

Test
TPS vs CPS

HPV-status and/or P16

Investigational predictive markers[1]

Oral microbiota

Genetic signature (TMB/MSI)

CTC/ctDNA

Molecular biomarkers support:[3]

- Diagnosis
- Monitoring disease progression
- Predicting response to treatment

Potential tools to support the use of novel biomarkers in the clinic:[4]

- Immunogram
- Nomogram

CPS, combined positive score; CTC, circulating tumour cells; ctDNA, circulating tumour DNA; HPV, human papillomavirus; ICI, immune checkpoint inhibitor; MSI, microsatellite instability; PD-L1, programmed death-ligand 1; R/M HNSCC, recurrent/metastatic head and neck squamous cell carcinoma; TMB, tumour mutational burden; TPS, tumour proportion score.

1. Wang H-C, et al. *Int J Mol Sci*. 2020;21:7621; 2. De Keukeleire SJ, et al. *Cancers*. 2021;13:1714; 3. Veigas F, et al. *Cancers*. 2021;13:1018; 4. Blank CU, et al. *Science*. 2016;352:658–60.

touch ONCOLOGY®

How can we identify and manage possible immune-related adverse events in patients with HNSCC?

Prof. Kevin Harrington
Professor of Biological Cancer Therapies
The Institute of Cancer Research
London, UK

touch ONCOLOGY®

Overview of potential immune-related adverse events

Common toxicities

- **Fatigue**
- **Infusion-related reactions**
- **Gastrointestinal:** nausea, diarrhoea, colitis, hepatitis
- **Skin:** rash, pruritus
- **Musculoskeletal:** arthralgia, myalgia
- **Ophthalmological:** dry eye, uveitis
- **Endocrine:** hypo-/hyperthyroidism
- **Pulmonary:** pneumonitis
- **Renal:** tubulointerstitial nephritis, AKI

Rare (life-threatening) toxicities

- **Skin:** pemphigus, pemphigoid, lichenoid rash, SJS/TEN
- **Endocrine:** hypophysitis
- **Neurological:** myasthenia gravis, Guillain–Barré syndrome
- **Haematological:** thrombocytopenia, haemolytic anaemia
- **Cardiovascular:** myocarditis
- **Musculoskeletal:** myositis

AKI, acute kidney injury; SJS/TEN, Stevens–Johnson syndrome/toxic epidermal necrolysis.

Brahmer JR, et al. *J Immunother Cancer*. 2021;9:e002435.