Applying patient and disease characteristics to guide R/M NPC treatment

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Case 1: First-line treatment selection in metastatic NPC

Personal details

Robert

Age: 54 years

Sex: Male

Comorbidities:
- No significant comorbidities

Smoking and alcohol history:
- Smokes three packets a day
- Five units a week

Case history

Presenting symptoms:
- Epistaxis
- Right neck adenopathy
- Nasal congestion
- Cough

Investigations:
- Radiological examination
- Biopsy
- Nasopharyngoscopy

Current consultation

Diagnosis:
- Nasopharyngeal primary tumour
- 14 lung metastases
- Involvement of the retropharyngeal and supraclavicular nodes

Clinical staging:
- IVB, T1N3M1

EBV status:
- Negative

HPV status:
- Negative

Next steps:
- Determining a treatment plan

EBV, Epstein–Barr virus; HPV, human papillomavirus; NPC, nasopharyngeal carcinoma.

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NCCN guideline-recommended treatment[1]

First-line treatment for recurrent, unresectable, oligometastatic or metastatic disease (with no surgery or radiotherapy option)

Cisplatin/gemcitabine + toripalimab (category 1)

NCCN, National Comprehensive Cancer Network.

Case 1 evolution: Managing patient concerns

Current consultation

Treatment suggestion:

- Cisplatin/gemcitabine + toripalimab

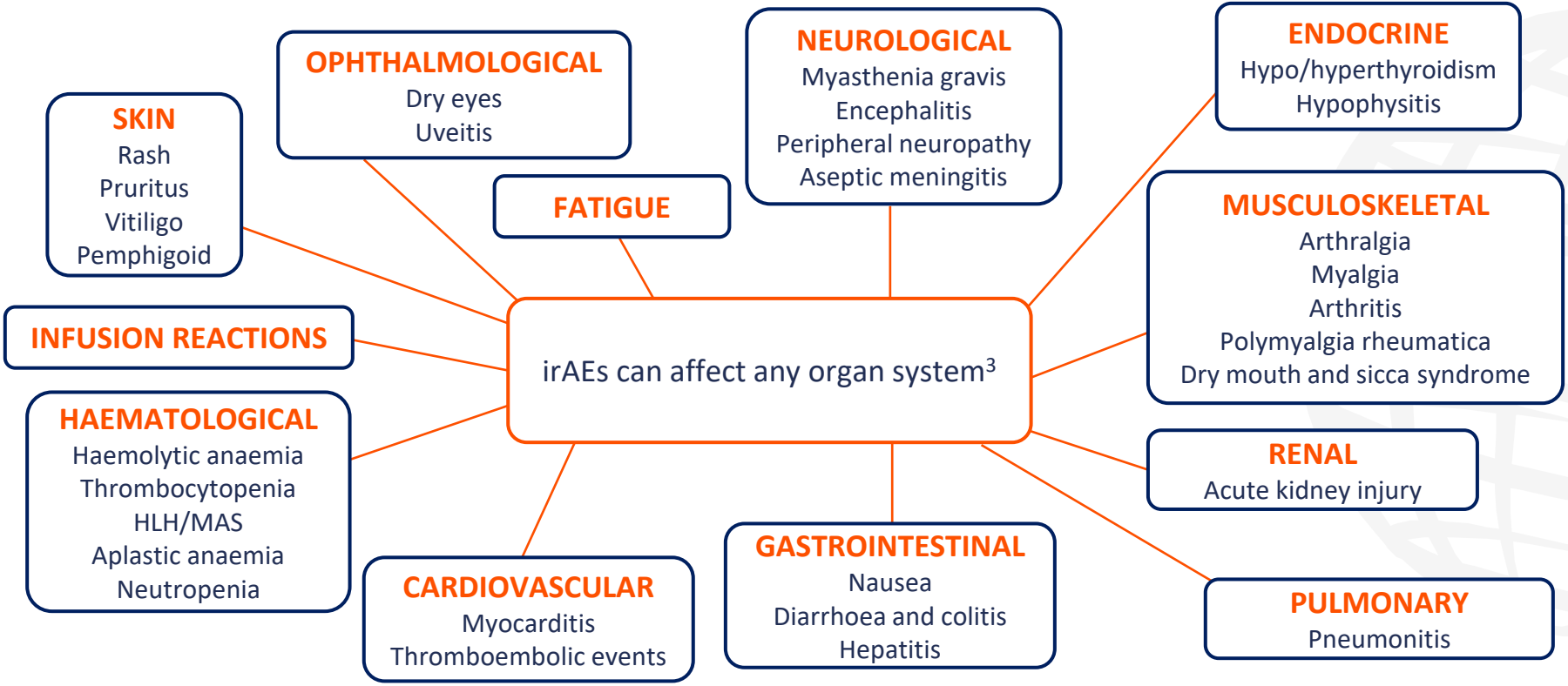
Patient's concerns:

- Robert is worried about the prospect of "messing around with his immune system" and is anxious about the side effects that he might experience on treatment

Next steps:

- How do you discuss the potential side effects of treatment with Robert?

Overview of possible irAEs*[2]



*Excluding irAEs defined by the SITC as rare.

HLH/MAS, haemaphagocytic lymphohistiocytosis/macrophage activation syndrome; irAE, immune-related adverse event; SITC, Society for Immunotherapy of Cancer.

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References

1. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers Version 5.2025 — August 12, 2025. Available at: www.NCCN.org (accessed 19 August 2025).
2. Brahmer JR, et al. *J Immunother Cancer*. 2021;9:e002435.
3. Medina P, et al. *J Pharm Pract*. 2020;33:338–49.

Case 2: Treatment for locally recurrent unresectable disease

Personal details

Jason

Age: 63 years

Sex: Male

Comorbidities:
- Grade 3 hearing loss
- Hypertension

Smoking and alcohol history:
- Non-smoker
- Three units a week

Case history

Disease history:
- Diagnosed with EBV-associated NPC 3 years ago

Prior treatment
- Received carboplatin + RT followed by carboplatin/5-FU

Treatment follow-up:
- After 2 years, Jason started experiencing headaches
- Routine follow-up imaging suggested recurrence of the tumour with further investigations initiated

Current consultation

Diagnosis:
Locally recurrent unresectable NPC

Clinical staging:
- III, T4N2M0

EBV status:
- Positive

HPV status:
- Negative

Next steps:
- Determining a treatment plan

5-FU, fluorouracil; EBV, Epstein–Barr virus; HPV, human papillomavirus; NPC, nasopharyngeal carcinoma; RT, radiotherapy.

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NCCN guideline-recommended ICI-based regimens[1]

First-line treatment for recurrent, unresectable, oligometastatic or metastatic disease (with no surgery or radiotherapy option)

Preferred regimen

Cisplatin/gemcitabine + toripalimab (category 1)

Other recommended ICI-based regimens

- Cisplatin/gemcitabine + other PD-L1 inhibitor* (category 2A)
- Cisplatin or carboplatin/gemcitabine + penpulimab (non-keratinizing disease [category 2B])
- Cisplatin/gemcitabine + tislelizumab (category 2B)

Expert perspective

Carboplatin can generally be substituted for cisplatin if the patient is not eligible for cisplatin

*E.g. pembrolizumab or nivolumab.

ICI, immune checkpoint inhibitor; NCCN, National Comprehensive Cancer Network; NPC, nasopharyngeal carcinoma; PD-L1, programmed death ligand 1.

Case 2: Case evolution, progression on first-line therapy

Current consultation

First-line treatment:
Carboplatin/gemcitabine + an ICI

Outcomes at follow-up:
- After an initial response, follow-up imaging shows progression of disease

Next steps:
- Determining a treatment plan

Reference

1. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers Version 5.2025 — August 12, 2025. Available at: www.NCCN.org (accessed 19 August 2025).

Case 3: Treatment selection with a comorbid autoimmune disease

Personal details

Sandra

Age: 49 years **Sex:** Female

Comorbidities:

- Systemic lupus erythematosus
  - Currently inactive
  - Not required treatment for 2 years
- Type 2 diabetes
  - Managed with metformin

Alcohol and smoking history:

- Used to smoke one packet a day
- Four units a week

Case history

Disease history:

- Diagnosed with metastatic EBV-associated NPC 6 months ago after presenting with left-sided adenopathy and facial numbness

Clinical staging at diagnosis:

- IVB, T3N3M1

Prior treatment:

- Received gemcitabine/cisplatin as first-line treatment

Current consultation

Treatment follow-up:

- Routine testing shows her disease has progressed

PD-L1 expression:

- 5% positive staining

HPV status:

- Positive

Next steps:

- Determining a treatment plan

EBV, Epstein–Barr virus; HPV, human papillomavirus; NPC, nasopharyngeal carcinoma; PD-L1, programmed death ligand 1.

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NCCN guideline-recommended ICI-based treatment options[1]

Subsequent-line options for recurrent, unresectable, oligometastatic or metastatic disease (with no surgery or radiotherapy option)

Preferred regimen

Toripalimab (disease progression on/after PtChT [category 2A])

Other recommended ICI-based regimens

First-line regimens
(if not previously used)

- Cisplatin/gemcitabine + toripalimab (category 1)
- Cisplatin/gemcitabine + other PD-L1 inhibitor* (category 2A)
- Cisplatin or carboplatin/gemcitabine + penpulimab (non-keratinizing [category 2B])
- Cisplatin/gemcitabine + tislelizumab (category 2B)

Single-agent regimens
(all category 2B)

- Nivolumab (R/M non-keratinizing)
- Pembrolizumab (PD-L1+, R/M)
- Penpulimab (non-keratinizing, progression on/after PtChT + ≥1 other prior therapy)
- Tislelizumab

Useful in certain circumstances

- Pembrolizumab for TMB-H tumours (≥10 mutations/Mb [category 2A])

*E.g. pembrolizumab or nivolumab.
ICI, immune checkpoint inhibitor; NCCN, National Comprehensive Cancer Network; PD-L1, programmed death ligand 1; PtChT, platinum-based chemotherapy; R/M recurrent or metastatic; TMB-H, tumour mutation burden – high.

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Reference

1. NCCN Clinical Practice Guidelines in Oncology. Head and Neck Cancers Version 5.2025 — August 12, 2025. Available at: www.NCCN.org (accessed 19 August 2025).