Personalised mRNA vaccine cuts melanoma recurrence risk

LEVEL C1


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I. WARM-UP

1. What do you think makes a treatment truly personalised?
2. How do clinical trials help doctors trust new medicines?
3. When should regulators approve a treatment early, and why?

II. KEY VOCABULARY

melanoma
A serious type of skin cancer that can spread to other parts of the body.

recurrence
The return of a disease after a period with no signs of it.

personalised
Designed for one person based on their unique medical information.

immunotherapy
A treatment that helps the immune system find and attack disease.

mutation
A change in a gene that can alter how cells behave.

phase
A stage in clinical testing used to check a treatment's safety and benefit.

regulator
An official body that approves or controls how medicines are used.

congress
A large formal meeting of specialists, often held annually.

III. READING

An Australian-led phase III trial has reported strong results for a personalised mRNA vaccine for melanoma, called intismeran. The study enrolled 1,137 patients whose melanoma had been removed but who faced a high risk of recurrence.

Everyone received the immunotherapy drug pembrolizumab for twelve months; some also received intismeran. After two years, the combination reduced the risk of recurrence or death by 42% compared with pembrolizumab alone.

In the same period, 82% on the combination were alive and recurrence-free, versus 70% on immunotherapy alone. Researchers say the vaccine is tailored to target up to 34 tumour mutations in each patient.

Results are to be presented at the European Society for Medical Oncology's congress in Madrid and have been accepted by the New England Journal of Medicine. Prof Georgina Long of the Melanoma Institute Australia called the findings a foundational shift towards more personalised use of the immune system.

Approval would require regulators to review longer-term outcomes; the manufacturers say it is too soon to know whether overall survival improves beyond two years. Even so, the phase III data indicate the combination works better than immunotherapy alone.

Reading text adapted from reporting by **The Guardian***: "'Bespoke' mRNA vaccine significantly...". Original article linked at theenglishwire.com.*

IV. COMPREHENSION QUESTIONS

1. What is the name of the personalised melanoma vaccine?
2. How many patients took part in the phase III trial?
3. What treatment did every participant receive for twelve months?
4. By how much did the combination cut risk at two years?
5. Where are the results to be presented?

V. DISCUSSION

1. Should health systems fund personalised cancer vaccines? Why or why not?
2. How much evidence is enough before regulators approve a new therapy?
3. What ethical issues can arise with bespoke treatments like this?
4. How can countries share trial benefits across populations?

VI. GRAMMAR FOCUS

Be to / be set to for official arrangements

Use be to / be set to for official or scheduled plans and announcements. Form: am/is/are + to + base verb OR am/is/are + set to + base verb. Common in news for timetabled or announced events.

*"Results **are to be presented** at the Madrid congress."*

*"Results **are set to be presented** at the Madrid congress."*

VII. GRAMMAR EXERCISE

Complete with be to / be set to: conjugate the verb in brackets.

1. According to the programme, teams (share) ___ safety data. _____
2. Doctors (begin) ___ a new melanoma study next spring. _____
3. A new skin cancer clinic (open) ___ in the city in May. _____
4. The findings (publish) ___ in a medical journal. _____
5. Nurses (hold) ___ a free skin-check day next week. _____

Teacher's Notes

TEACHERS ONLY

These notes are designed to help you get the most out of this lesson. Please do not share this page with students.


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I. LESSON GUIDE

- Timing: 8–10 minutes warm-up, 10 minutes vocabulary, 12–15 minutes reading and comprehension, 10 minutes grammar, 10–12 minutes discussion.
- Pre-teach: melanoma, recurrence, immunotherapy, mutation. Check students know phase I/II/III and the word regulator.
- Run the reading in two passes (gist then detail). Sensitivity: the story concerns cancer; invite students to speak about the news rather than personal experiences, and allow opt-outs.
- For discussion, use small groups with roles (chair, note-taker). Prompt for reasons, trade-offs, and references to the text's figures.

II. DISCUSSION FACILITATION TIPS

1. Start with a quick show of hands, then pair students with different views to exchange reasons.
2. Elicit concrete thresholds (sample size, years of data) and ask what risks they would accept.
3. List potential issues on the board (cost, access, consent), then have groups rank them.
4. Have groups suggest one sharing mechanism and one challenge, then compare across groups.

III. EXTENSION ACTIVITIES

Writing: In pairs, draft a 90-word press note announcing the trial's key results for the public.

Debate: Split the class: one side argues for immediate funding pilots, the other for waiting for more data; 6 minutes prep, 6 minutes debate.

IV. ANSWER KEY OVERVIEW

Comprehension questions: short factual answers from the text.

Grammar exercise: Be to / be set to for official arrangements

Discussion: open-ended. Accept any reasonable ideas supported by examples and reasoning.

Answer Key

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These answers are for teachers only. Please do not share this page with students.


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IV. COMPREHENSION QUESTIONS

1. What is the name of the personalised melanoma vaccine?
   Intismeran.
2. How many patients took part in the phase III trial?
   1,137 patients.
3. What treatment did every participant receive for twelve months?
   Pembrolizumab, an immunotherapy drug.
4. By how much did the combination cut risk at two years?
   By 42% compared with pembrolizumab alone.
5. Where are the results to be presented?
   At the European Society for Medical Oncology's congress in Madrid.

V. DISCUSSION

Open answers. Accept any reasonable ideas supported by examples and reasoning.

VI. GRAMMAR FOCUS

Key point: Use be to / be set to for official or scheduled plans and announcements. Form: am/is/are + to + base verb OR am/is/are + set to + base verb. Common in news for timetabled or announced events. (Examples constructed.)

> *"Results* **are to be presented** *at the Madrid congress."*
>
> *"Results* **are set to be presented** *at the Madrid congress."*

VII. GRAMMAR EXERCISE

Complete with be to / be set to: conjugate the verb in brackets.

1. According to the programme, teams ___ safety data. **are to share / are set to share**
2. Doctors ___ a new melanoma study next spring. **are to begin / are set to begin**
3. A new skin cancer clinic ___ in the city in May. **is to open / is set to open**
4. The findings ___ in a medical journal. **are to be published / are set to be published**
5. Nurses ___ a free skin-check day next week. **are to hold / are set to hold**