

Exploring Cancer Medicines

Explore the use of medicines in treating cancer and take your first steps towards becoming a science writer.

If your students are completing the whole of this course online, then they can complete useful and engaging activities, or a test based on the content covered.

You can choose for your students to complete individual tasks by themselves or encourage group work. Though you may have your own ideas about what your students can do with the course content, we've made things easy for you by suggesting some activities that you can submit to your students below. Choose whichever suits your students and needs.

Each task has student-facing instructions you can use (found later in this pack).

Individual student tasks taken from the course

Reflection: Students write a 500-word reflection on what they learned from the course, including anything they might do differently now as a result of their learning and anything additional they found out from their own reading around the topic. They will submit this reflection as a written essay, podcast or video.

Research task 1: Students find out the history of cancer medicines (Step 1.4) and submit a timeline in a format of their choice to you.

Activity: Students complete the article interpretation task on Step 1.8 and submit to you a summary of what they learned about different publication types.

Research task 2: Students find out how cancer medicines are portrayed in the media (Step 1.7) and submit a summary in a format of their choice to you.

Group tasks based on the course

Research task: Allocate students to a group of your choosing or allow them to choose their own group of no more than three people. Students work together to research how cancer medicines are portrayed in the media and collate a bank of example articles with analyses. They submit their presentation to you alongside a summary of how they worked together as a team.

Test

You can use the test questions listed in the student instructions below as a short assessment to enable your students to demonstrate what they have learned on the course. The assessment has 15 marks in total.

The questions have been designed to be flexible and open. The questions indicate which steps the answers can be found on. The marks available reflect the likely length and complexity of the answer expected, and how many points they are likely to make. For example, a 5-mark question might reflect a longer, more complex question, or one where they have asked to describe or explain a number of elements. Depending on the level and ability of your students, you can decide how you wish to award the marks, so they are appropriate for your class.

Each question suggests which steps the students may wish to return to answer the questions. You can decide if you want to include this information when you share the assessment with your students.

Additional support

You can use the <u>How to use Futurelearn guide</u> with your students to get started. If you have any more questions, please refer to the <u>FAQ</u> section.

Student instructions

Reflection

Write a 500-word reflection on what you have learned from the course. It should include anything you might do differently now because of what you learned and anything additional you found out in your reading around the topic. Submit this reflection to your teacher as a written essay, podcast or video.

Research task 1

Use the sources of information listed in Step 1.3 of the course to find out the history of cancer medicines (Step 1.4). Your research should cover these questions:

- How were cancer medicines developed?
- How was cancer chemotherapy discovered?
- What was the biggest breakthrough?
- Who was involved in the research?

Create a timeline of the development of cancer medicines based on your findings and submit this to your teacher. Your timeline can be in any format your choose – a poster, a slideshow, a word document, an image or a video.

Activity

Complete the article interpretation task on Step 1.8 of the course. Then write a short summary of what you learned about the different types of publication and submit this to your teacher.

Research task 2

How are cancer medicines are portrayed in the media?

Find two news articles about cancer medicines and write a short summary (no more than 500 words) to answer these questions:

- 1. What is the angle of the article?
- 2. Do you trust the information provided?
- 3. Who is the article aimed at? Who is the perceived audience?

Your summary can be in any format you choose – a poster, a slideshow, a written essay or a video. Submit your file to your teacher.

Group research task

Work together as a group to research how cancer medicines are portrayed in the media. Your team will need to collect a set of example articles, each with a brief analysis about how reliable it is. Your group should create a presentation of your findings which ends with your own personal conclusion.

You should also provide a brief summary of how your team worked together on the presentation – who contributed to which parts and how you reviewed each other's work.

Submit your presentation and summary to your teacher.

Test

Complete the assessment questions below to demonstrate your understanding of the course. You can refer back to the course to find the answers or more detail as you need to. You should not however share your answers with other students.

Your answers should be written in full sentences and be appropriately detailed. Make sure you read the questions carefully before starting to answer. Each question shows how many marks are available – use this to guide how much detail or how many points you need to include.

The questions also indicate where you can start to look to find the answer. You can also include information from other steps if that is relevant.

1.	What is Cisplatin and what does it do? (3 marks) [Step 1.2]
2.	Describe the history of cancer chemotherapeutics. (5 marks) [Step 1.5]
3.	What are kinase inhibitors? (3 marks) [Step 2.2]
4.	How do molecular targeted therapeutics work? (4 marks) [Step 2.4]