

Healthcare costs of first-line treatment for people with advanced urothelial cancer in the United States

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The full title of this abstract is: Healthcare costs associated with first-line (1L) treatment of patients with locally advanced or metastatic urothelial carcinoma (la/mUC) in the United States (US)

Please note this summary contains information from the scientific abstract



Date of summary: October 2023

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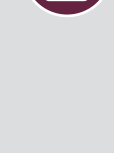
Pronunciations



Medical terms pronunciations

- Avelumab** <a-VEL-yoo-mab>
- Platinum** <PLAT-num>
- Pembrolizumab** <pem-bro-LIZ-zoo-mab>
- Urothelial** <YOOR-oh-THEE-lee-ul>
- Cisplatin** <sis-PLA-tin>
- Enfortumab vedotin** <en-FORT-ue-mab ve-DOE-tin>

Key takeaways



What are the key takeaways from this summary?

- In this analysis, researchers looked at the healthcare costs of the available first-line treatments for people with advanced urothelial cancer in the US, which are:
 - Platinum-based chemotherapy only
 - Platinum-based chemotherapy followed by avelumab (known as avelumab maintenance treatment)
 - Enfortumab vedotin plus pembrolizumab
- Healthcare costs were calculated based on 1 year of treatment per prices in 2023
- In this analysis, researchers found that most people with advanced urothelial cancer would likely be treated with first-line platinum-based chemotherapy followed by avelumab maintenance
- Researchers found large differences in the total healthcare costs of the different first-line treatments
- Total costs were highest for enfortumab vedotin plus pembrolizumab and lowest for platinum-based chemotherapy only
- Researchers also found that the price of the drugs makes up most of the total treatment cost
- Understanding the costs of first-line treatment is one of the factors that may help with deciding which treatment to give to people with advanced urothelial cancer

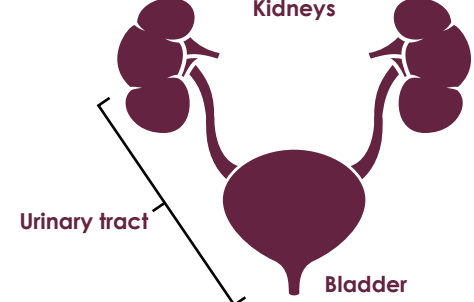
Background



What did this analysis look at?

What is advanced urothelial cancer?

- Urothelial cancer is a cancer that develops in the urinary tract
- The urinary tract contains the parts of the body that move urine from the kidneys to the outside of the body. It includes:
 - The bladder
 - The inner part of the kidneys
 - The tubes that connect the kidneys to the bladder and the bladder to the outside of the body
- Urothelial cancer is called advanced when it has spread outside of the urinary tract
- Urothelial cancer can spread to nearby tissues or other parts of the body such as bones, lungs, and the liver



How are people with advanced urothelial cancer usually treated?

- Platinum-based chemotherapy is often the first treatment given to people with advanced urothelial cancer. This is called first-line treatment
 - Platinum-based means that the treatment includes a drug that contains platinum
 - Cisplatin is the type of platinum-based chemotherapy that most people with advanced urothelial cancer receive
- Although the cancer may get better with chemotherapy at first, it is likely to start growing again after chemotherapy has ended
- If the cancer stops growing or shrinks with first-line chemotherapy, people then receive avelumab maintenance treatment
 - Avelumab maintenance treatment aims to stop the cancer from getting worse or coming back. In other words, it aims to maintain or increase the benefit of first-line chemotherapy
- In the US, if a person is unable to receive first-line cisplatin-based chemotherapy, they may receive enfortumab vedotin plus pembrolizumab

What is avelumab?

- Avelumab is a type of immunotherapy. Immunotherapy can help the body's immune system find and destroy cancer cells. Avelumab is given as a drip (infusion) into a vein for about an hour once every 2 weeks
- Results from a study called JAVELIN Bladder 100 showed that avelumab first-line maintenance treatment can help people with advanced urothelial cancer live longer. A plain language summary of the overall results is available at [this link](#)
- Avelumab is the only approved first-line maintenance treatment available for people with advanced urothelial cancer that stopped growing or shrank with first-line chemotherapy

What are enfortumab vedotin and pembrolizumab?

- Enfortumab vedotin is a medicine that combines a type of protein called an antibody with a chemotherapy to target and destroy cancer cells. When given with pembrolizumab, enfortumab vedotin is given as a drip (infusion) into a vein for about 30 minutes on days 1 and 8 of a 21-day cycle. When given alone, enfortumab vedotin is given on days 1, 8 and 15 of a 28-day cycle
- Pembrolizumab is a type of immunotherapy. When given with enfortumab vedotin, pembrolizumab is given as a drip (infusion) into a vein 30 minutes after enfortumab vedotin on day 1 of a 21-day cycle
- In the US, people with advanced urothelial cancer who cannot receive first-line cisplatin-based chemotherapy can receive enfortumab vedotin plus pembrolizumab instead

What did the researchers want to find out?

Researchers wanted to look at the healthcare costs (based on prices in 2023 in US dollars) of 1 year of first-line treatment for people with advanced urothelial cancer in the US

How was the analysis done?

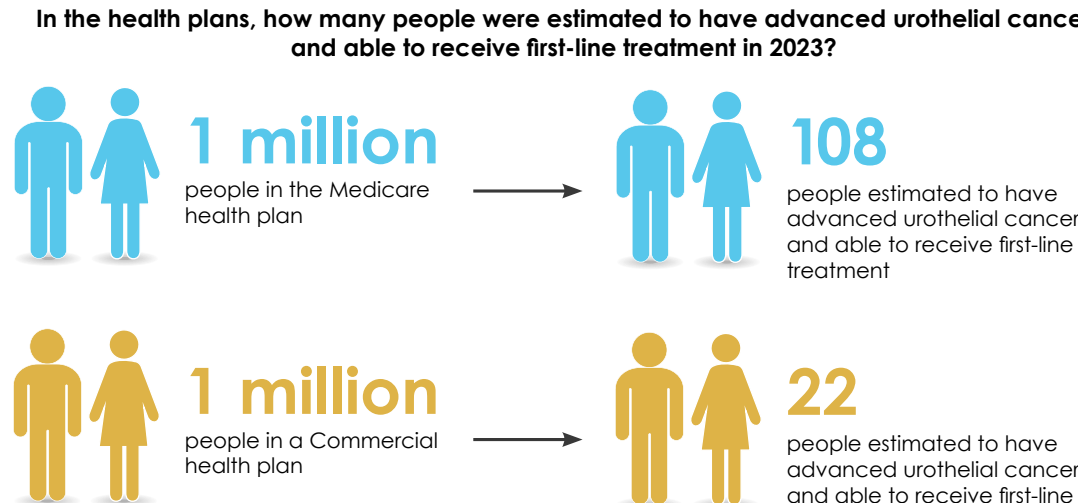
- Researchers made 2 hypothetical US health plans
 - A health plan is a type of insurance that people buy to pay for the cost of medical treatment if they are ill or injured
 - "Hypothetical" means the plans were made up for testing purposes, but they were based on facts about urothelial cancer and treatment plans in the US
- The plans were based on 2 different sources
 - Medicare (government health plans)
 - Commercial (private health plans)
- Each plan had 1 million people
- The researchers estimated how many of those people would have advanced urothelial cancer and what first-line treatments they would receive
- Healthcare costs were calculated based on 1 year of treatment per prices in 2023

What did the researchers look at?

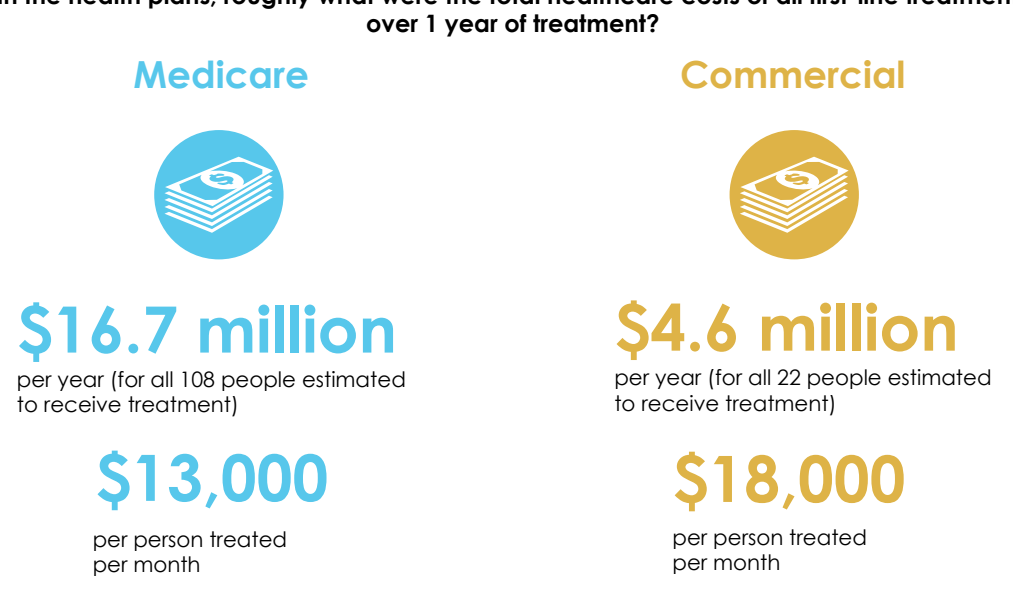
- The types of first-line treatments people with advanced urothelial cancer would receive
- The healthcare costs related to the price of the drugs for first-line treatment and giving these drugs to people (for example, costs related to preparing a drip)
- The costs of treating side effects during first-line treatment
- The costs of disease management
 - Disease management includes medical appointments, monitoring of disease (for example by scans), and organization of treatment
- The costs related to the price of drugs that are used after first-line treatment

What were the results of this analysis?

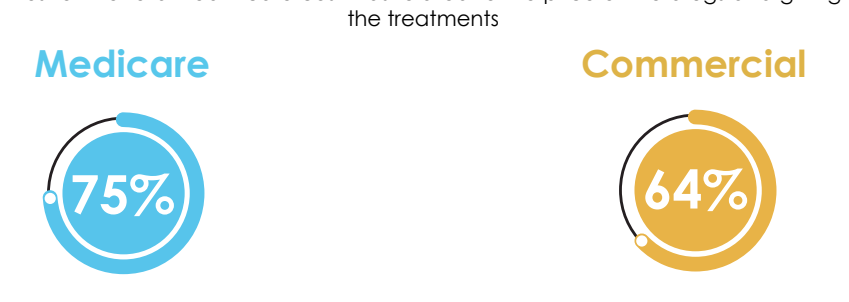
In the health plans, how many people were estimated to have advanced urothelial cancer and able to receive first-line treatment in 2023?



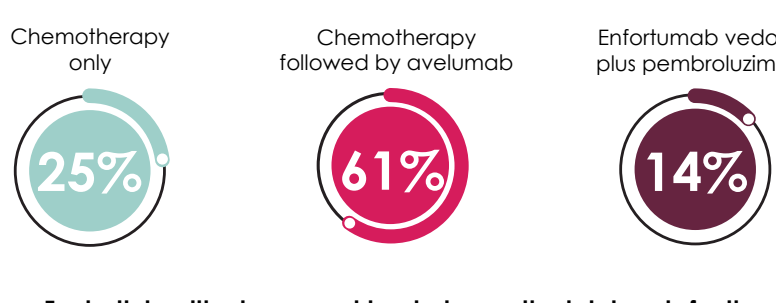
In the health plans, roughly what were the total healthcare costs of all first-line treatments over 1 year of treatment?



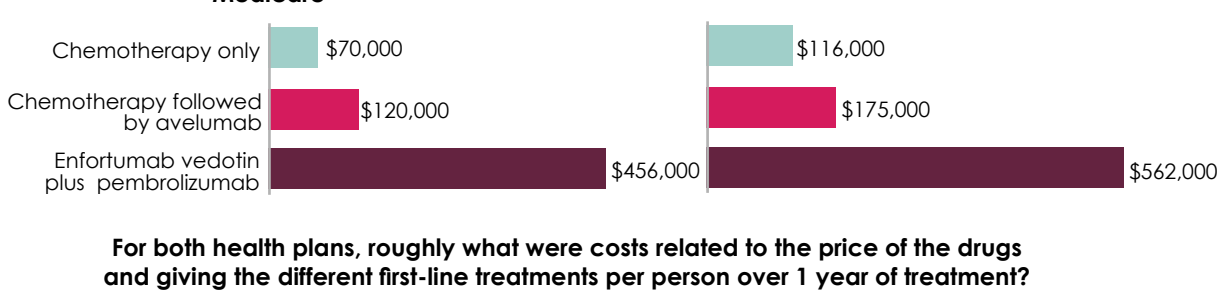
For both health plans, what part of treatment cost the most over 1 year of treatment?



For both health plans combined, how many people with advanced urothelial cancer were expected to receive each available first-line treatment in 2023?



For both health plans, roughly what were the total costs for the different first-line treatments per person over 1 year of treatment?



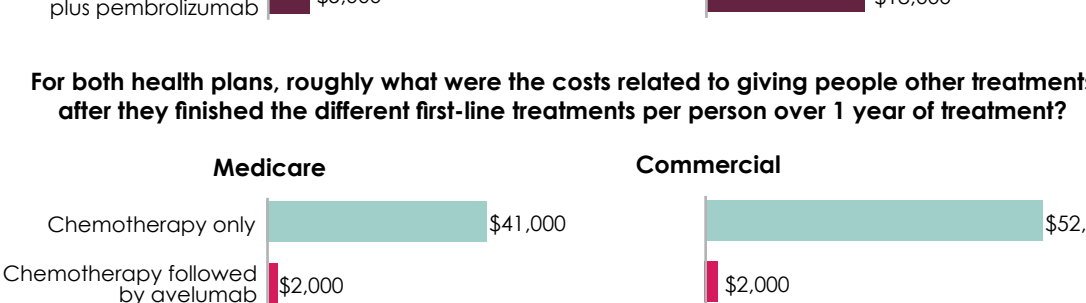
For both health plans, roughly what were costs related to giving people other treatments after they finished the different first-line treatments per person over 1 year of treatment?



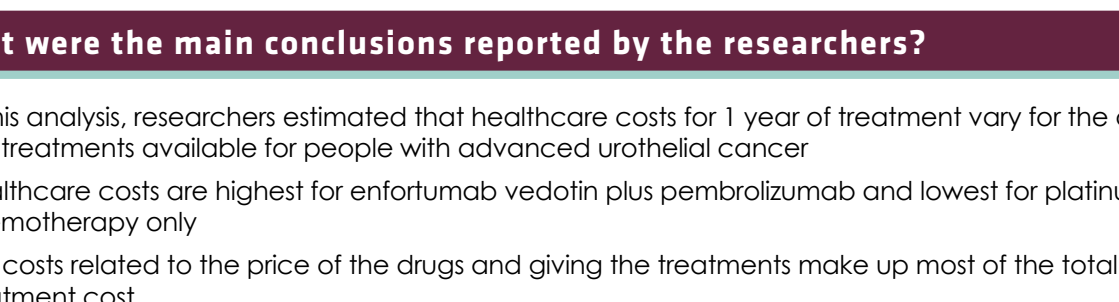
For both health plans, roughly what were the costs of treating side effects for the different first-line treatments per person over 1 year of treatment?



For both health plans, roughly what were the costs of disease management with the different first-line treatments per person over 1 year of treatment?



For both health plans, roughly what were the costs related to giving people other treatments after they finished the different first-line treatments per person over 1 year of treatment?



Conclusions



What were the main conclusions reported by the researchers?

- In this analysis, researchers estimated that healthcare costs for 1 year of treatment vary for the different first-line treatments available for people with advanced urothelial cancer
- Healthcare costs are highest for enfortumab vedotin plus pembrolizumab and lowest for platinum-based chemotherapy only
- The costs related to the price of the drugs and giving the treatments make up most of the total treatment cost
- Understanding the costs of first-line treatment is one of the factors that may help with deciding which treatment to give to people with advanced urothelial cancer

Disclaimers

Avelumab, enfortumab vedotin, and pembrolizumab are approved to treat the condition that is discussed in this summary. This summary reports the results of a single analysis. The results of this analysis may differ from those of other analyses. Health professionals should make treatment decisions based on all available evidence, not on the results of a single analysis.

Sponsor



Who sponsored this analysis?

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More information



Where can I find more information?

For more information on this analysis, please visit: [ASCO-QCS 2023 Scientific Abstract](#)

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