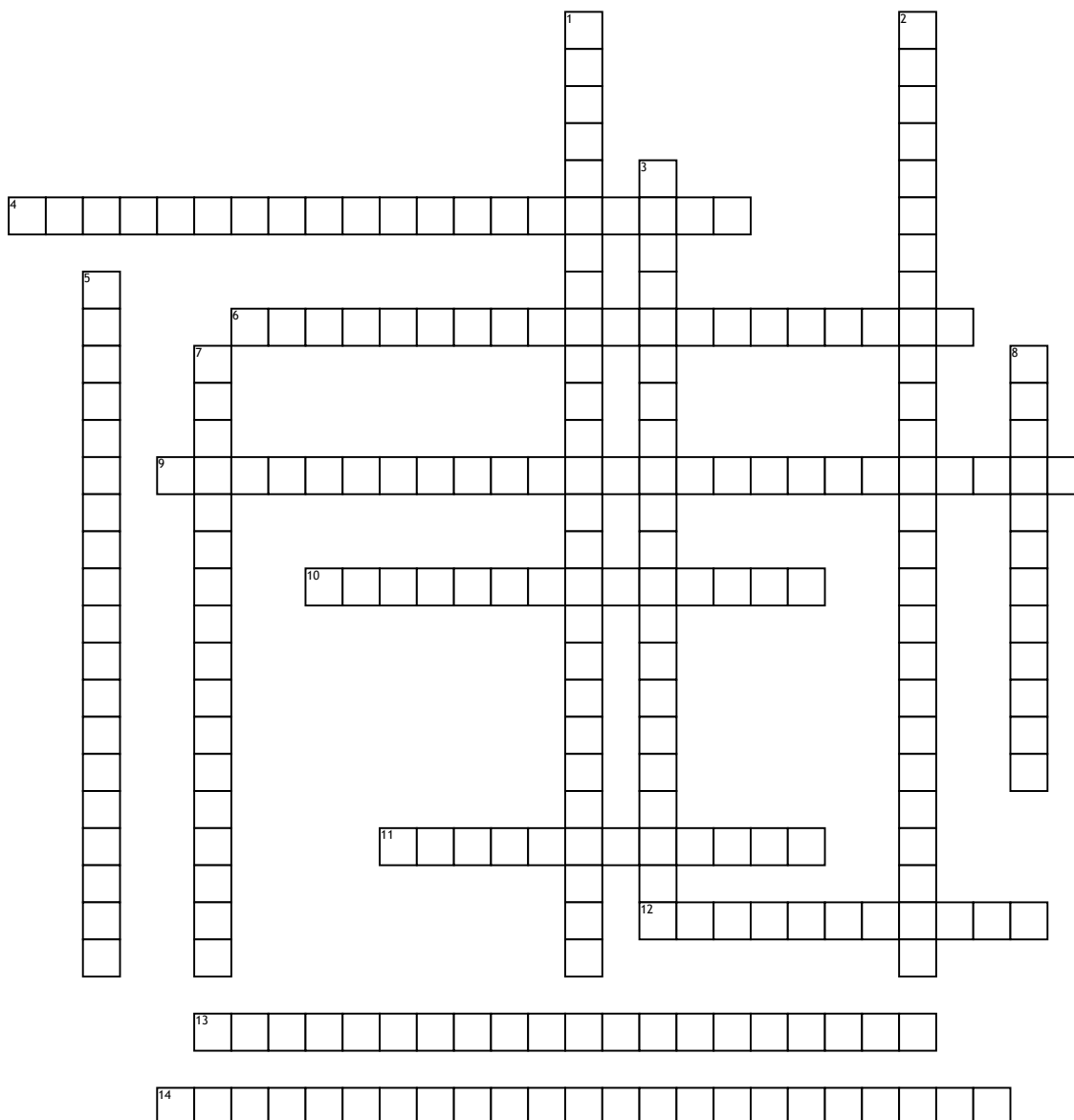


# Systemic Therapies



## Across

4. Refers to giving patients anti-cancer drugs after the primary tumor has been removed and there is no evidence that cancer remains in the body.

6. Treatment that attempts to boost the natural ability of the T cells to fight cancer. Researchers take T cells from the tumor, isolate the T cells that are most active against the cancer and make them better able to find and destroy the cancer cells.

9. Antibodies that work by themselves. There is no drug or radioactive material attached to them.

10. Cancer treatment that slows or stops the growth of cancer that uses hormones to grow.

11. Type of cancer treatment that uses drugs to kill cancer cells.

12. Chemicals that help the body resist virus infections and cancers. The types of IFN are named after the first 3 letters of the Greek alphabet.

13. These are man-made versions of immune system proteins. Can be very useful in treating cancer because they can be designed to attack a very specific part of a cancer cell.

14. The use of two or more drugs together is often a more effective alternative. Different drugs attack cancer cells at varying stages of their growth cycles, making the combination a stronger weapon against cancerous cells. Furthermore, using a combination of drugs may reduce the chance of drug resistance.

## Down

1. These drugs target molecules like PD-1, PD-L1, and CTLA-4, which normally help keep the immune system in check. While these checkpoint proteins are important in stopping the immune system from attacking normal cells, they can also stop it from attacking cancer cells.

2. These drugs basically take the 'brakes' off the immune system, which helps it recognize and attack cancer cells.

3. A germ that doesn't cause serious disease in humans, but it does infect human tissues and helps activate the immune system. One of the earliest immunotherapies used against cancer and is still being used today for early stage bladder cancer and melanoma. (Include the dash as part of the answer)

5. The use of anticancer drugs as the main form of treatment. Can also be used to treat tumors prior to surgery or radiation. Also sometimes called neoadjuvant chemotherapy or induction chemotherapy

7. Treatment that works against cancer by boosting your immune system's response to cancer cells. This vaccine is different from the ones that help prevent disease.

8. A group of cytokines that act as chemical signals between white blood cells.