Biological Response Modifiers (BRM)

Printed from https://www.cancerquest.org/patients/treatments/biological-therapies on 11/02/2026

Biological **r**esponse **m**odifiers (BRMs) are compounds that are used to treat cancer by changing or adding to naturally occurring processes within the body. Immunotherapy makes use of BRMs to enhance the activity of the immune system to increase the body's natural defense mechanisms against cancer.

The immune system is made up of cells called white blood cells. There are several different types of white blood cells and each type has a specific job to perform. The immune response that occurs when cells become infected or damaged is the result of interactions between different types of immune cells. When an immune cell recognizes an object or cell as 'foreign' or infected, a series of events occurs that leads to the destruction and removal of the targeted object. This activation is driven by proteins (cytokines) produced by immune cells. Cytokines may exert their effects on other cells as well as the cell that released them. Cytokines can activate, modulate and inhibit immune responses.[1]

Cytokines can boost the activity of immune cells, helping them fight cancer.

The role of cytokines in the body's defenses makes them appealing targets for treating some cancers. Cytokines are normally found in very small amounts. When used as cancer treatments, large amounts are given. The cytokines most frequently used to treat cancer are:

- **Interleukin-2 (IL-2)**
- **Alpha Interferon (IFN)**

Glossary of Biological Response Modifiers An easy to use table of biological treatments including trade name, generic name, and type. With links to more information.

---

1 Goldsby R, Kindt T, Osborne B. Kuby Immunology. 4th ed. WH Freeman & Company, New York: 2000.