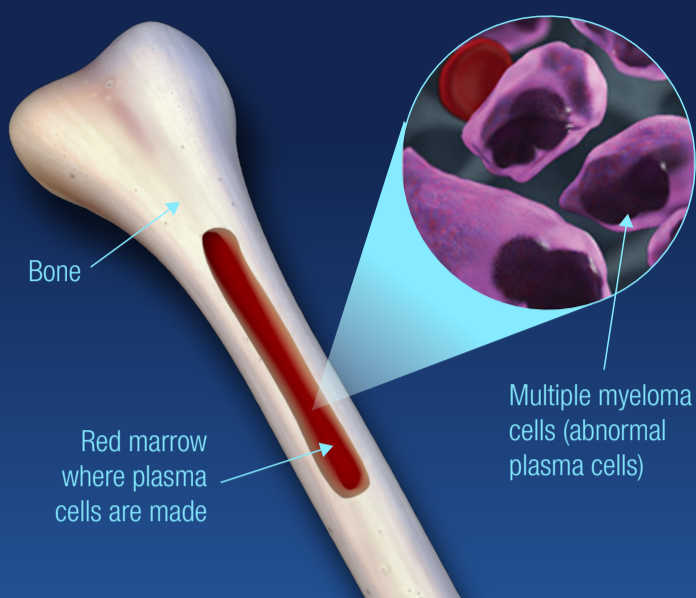


PROTEASOME INHIBITION AT A GLANCE

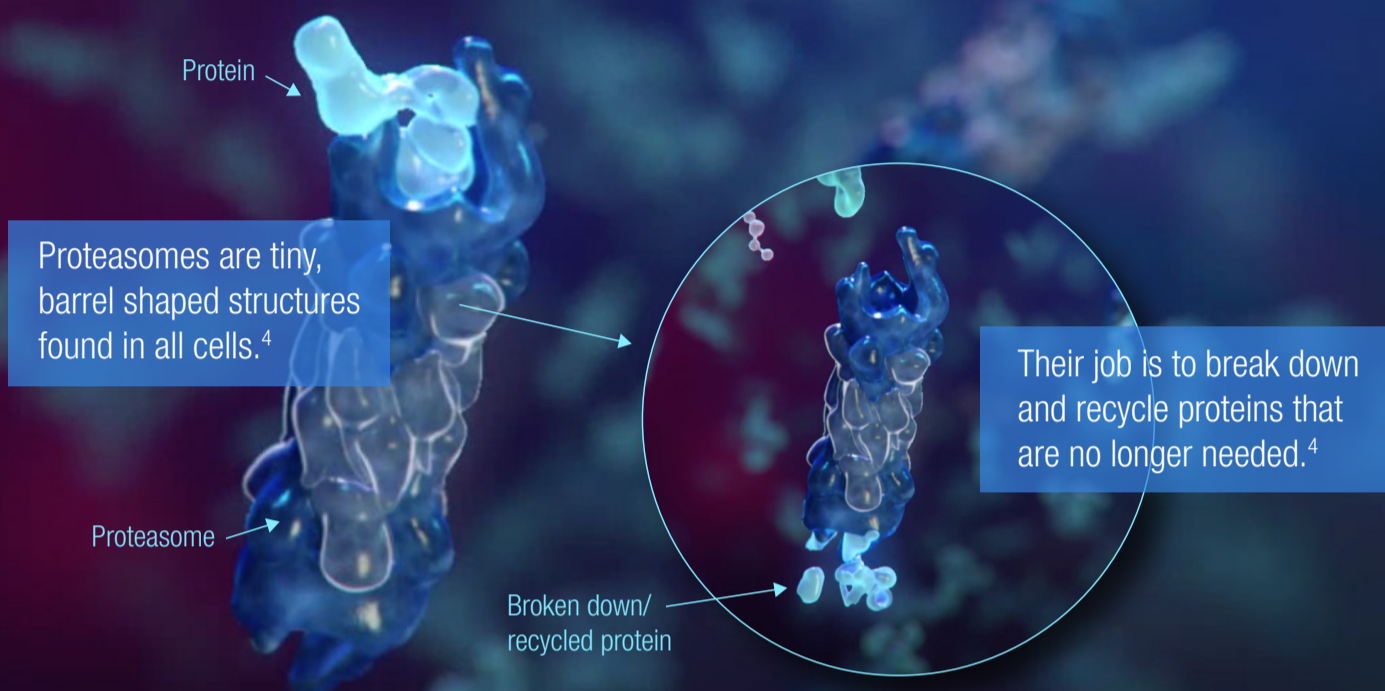
AN ESSENTIAL APPROACH IN THE FIGHT AGAINST MULTIPLE MYELOMA



Multiple myeloma is a rare, aggressive, and complex blood cancer that is formed by malignant plasma cells, which grow out of control and produce tumors in the bone or soft tissue.^{1,2} Multiple myeloma can cause bone pain, renal dysfunction, low blood counts, and infections.²

While incurable, multiple treatment approaches have emerged over the last several years, which are often used in combination to help manage the disease.³ One essential approach is **proteasome inhibition**.

PROTEASOMES AND MULTIPLE MYELOMA



While all cells make proteins, multiple myeloma cells make much larger amounts of non-functional proteins.⁴ For this reason, proteasomal degradation is critical to multiple myeloma cell survival.⁴

PROTEASOME INHIBITION

Proteasome inhibitors are designed to stop the action of proteasomes, causing a buildup of unneeded, non-functional proteins within the cells.⁴

Proteasome Inhibitor

Without proteasome degradation, myeloma cells become overwhelmed by the unneeded proteins, which may lead to cell death.⁴

COMPLEMENTARY MECHANISMS OF ACTION

Multiple myeloma is rarely treated with a single therapy.⁵ Proteasome inhibitors are often used as part of a treatment regimen with:

Immunomodulatory Agents (IMiDs) are designed to work with the body's immune system to fight off cancer cells.^{5,6}

Corticosteroids which can decrease swelling, relieve pain and pressure, and can work with other myeloma treatments.^{5,6}

Proteasome inhibitors are an essential approach to treating multiple myeloma. Talk to your doctor today to see if a proteasome inhibitor might be appropriate for your multiple myeloma treatment regimen.

Sources:

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