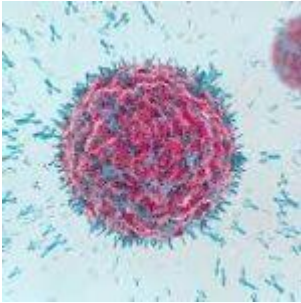


# Specific B cell targeting to treat lupus



According to a recent study, age-associated B cells, or ABCs, are an immune cell type that play a significant role in the development of lupus. By targeting these cells in a rodent model, researchers were able to decrease the severity of the illness and suggest potential novel treatments.

When it comes to distinguishing between healthy bodily parts and possible dangers like bacterial or viral infections, the immune system typically does a good job. B cells produce antibodies in response to disease exposure, aiding the body in identifying and neutralising the danger. In contrast, B cells that are unusually stimulated in autoimmune diseases like lupus start attacking the patient's own tissues, such as the kidneys, lungs, and epidermis.

Age-associated B cells, also known as ABCs, are a subcategory of B cells that were initially found to be more prevalent in elderly people than in younger people. Researchers soon realised that people with certain autoimmune illnesses, such as lupus, and during some chronic infections, such as malaria and HIV, also had higher concentrations of these cells.

The most significant discovery was the clear demonstration that ABCs are the cause of disease in this lupus model by showing that decreasing the number of ABCs by eliminating them as soon as they develop slowed or decreased disease progression in the kidneys in mice. [Narrowly focused](#)

[treatments](#) that concentrate on getting rid of the bad cells may be helpful if ABCs are the B cells that cause disease in lupus.

**Journal article: Nickerson., K.M., et al., 2023. [Age-associated B cells are heterogeneous and dynamic drivers of autoimmunity in mice](#). *Journal of Experimental Medicine*.**

*Summary by Stefan Botha*