

# Biologic Medicine

A biologic medicine is any medicinal product manufactured in, extracted from, or synthesised in part from biological sources. Biologics can be composed of sugars, proteins, or nucleic acids; they may be complex combinations of sugars, proteins, or nucleic acids; or they may be living cells or tissues. Some of the oldest forms of biologics are extracted from the bodies of animals and other humans – such as whole blood and blood components.

Some traditional biologics are now produced in the laboratory rather than from living tissue – for example, tissue for transplants, antibodies for passive immunisation, and insulin. Different from chemically synthesized pharmaceuticals, they include vaccines, blood or blood components, gene therapies, and living cells used in cell therapy.