

RECEPTA *biopharma's* CHALLENGE: DEVELOPMENT OF NEW
TREATMENTS AGAINST CANCER

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RECEPTA *biopharma* is a Brazilian biotechnology company founded using an innovative model based on partnerships with universities, research institutes and hospitals. The company is dedicated to the research and development of monoclonal antibodies (mAb) to be used in the treatment of cancer and to carry out clinical trials with these mAb. Our current portfolio consists of four promising mAb that can be directed towards the treatment of different tumor types. Monoclonal antibodies have the capacity to recognize and attach to specific targets on tumor cells and have already been established as an effective therapeutic option for cancer patients. They are produced in the laboratory starting from B lymphocytes generated in mice whose immune systems have been stimulated by antigens of interest. Although murine antibodies are very similar to human ones, the human immune system can recognize mouse antibodies as foreign, rapidly removing them from circulation and causing systemic inflammatory effects. However, recombinant DNA technology has allowed investigators to 'humanize' antibodies to eliminate the body's anti-mouse antibody immunological reaction. The research into the molecular and cellular biology of humanized antibodies and their development are being conducted at the Butantan Institute, one of the RECEPTA *biopharma* partners. In addition, Butantan Institute is responsible to carry out some clinical trials support experiments.

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