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Mirasol-treated Allogeneic Platelets

National Cancer Institute

Source

National Cancer Institute. *Mirasol-treated Allogeneic Platelets*. NCI Thesaurus. Code C134620.

A preparation of allogeneic platelets that have been treated with Mirasol, a proprietary pathogen reduction technology (PRT) system, and can potentially be used to improve symptoms associated with thrombocytopenia. Upon apheresis, platelets are treated with the patented PRT system, which includes treatment of the platelets with riboflavin (vitamin B2) and broad-spectrum ultraviolet (UV) light. The treatment causes irreversible changes to the RNA and DNA of a broad range of pathogens, including viruses, bacteria, parasites and white blood cells (WBCs), which prevents them from replicating and causing disease. After ex vivo treatment and upon transfusion, the Mirasol-treated allogeneic platelets may reduce thrombocytopenia and prevent bleeding. By preventing the replication of contaminating pathogens, Mirasol treatment improves transfusion safety. Inactivation of WBCs may reduce transfusion reactions and immunological complications in patients.