Special Issue

Safety of Platelet Components: Past, Present and Future

Message from the Guest Editors

Blood components are life-saving products produced under good manufacturing practices. Three blood components can be produced from one whole blood collection: plasma, red blood cell concentrates and platelet components (PCs). Within this trio, PCs pose the highest safety risk to transfusion patients, as they must be stored at 20-24 °C in glucose-rich solutions with neutral pH, under agitation, for up to 7 days.These conditions are needed to maintain platelet functionality, but they also provide an ideal environment for the proliferation of any bacteria introduced during blood collection.The predominant PC bacterial contaminants are part of the normal skin flora, although organisms implicated in silent blood donor bacteremia could also be present in the collected blood. Strategies implemented to minimize the risk of transfusing bacterially-contaminated PC include testing with culture-based methods or rapid assays or treatment with pathogen reduction (PR) technologies. This Special Issue aims at providing an overview of the past, current and future status of bacterial contamination in PCs with a focus on providing new insights for transfusion patient safety.

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"Microorganism" merges the idea of the very small with the idea of the evolving reproducing organism is a unifying principle for the discipline of microbiology. Our journal recognizes the broadly diverse yet connected nature of microorganisms and provides an advanced publishing forum for original articles from scientists involved in high-quality basic and applied research on any prokaryotic or eukaryotic microorganism, and for research on the ecology, genomics and evolution of microbial communities as well as that exploring cultured microorganisms in the laboratory.

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