INTERCEPT® Blood System for Platelets Pathogen Reduction System

Targeting DNA and RNA to Prevent Pathogen Proliferation.

A proactive approach to blood safety through reduction of a broad range of pathogens

The INTERCEPT System uses amotosalen - a well characterized photoactive compound that specifically targets DNA and RNA - and UVA illumination to irreversibly cross-link nucleic acids. In doing so, the INTERCEPT treatment blocks replication of viruses, bacteria, and parasites, rendering them inactive.

1. Intercalates into Regions of DNA and RNA

2. Crosslinks upon UVA Illumination

3. Blocks Replication, Transcription and Translation

Amotosalen targets nucleic acids, and intercalates or “docks” between nucleic acid base pairs.

UVA illumination activates amotosalen, initiating permanent cross-links between the helical strands.

Cross-linking prevents further replication and inactivates the pathogen and/or leukocyte.
Broad Spectrum Pathogen Reduction

The INTERCEPT Blood System is a proactive approach to reducing transfusion-transmitted infectious (TTI) risk through the broad spectrum inactivation of viruses, bacteria, parasites, and leukocytes that can be found in platelet components. Robust inactivation is achieved, with ≥4 log reduction for most clinically relevant pathogens when using the INTERCEPT System.2

References


Contraindications2

Contraindicated for preparation of platelet components intended for patients with a history of hypersensitivity reaction to amotosalen or other psoralens. Contraindicated for preparation of platelet components intended for neonatal patients treated with phototherapy devices that emit a peak energy wavelength less than 425 nm, or have a lower bound of the emission bandwidth <375 nm, due to the potential for erythema resulting from interaction between ultraviolet light and amotosalen.

Warnings and Precautions2

Only INTERCEPT Processing Sets for platelets are approved for use in the INTERCEPT Blood System. Use only the INT100 Illuminator for UVA illumination of amotosalen-treated platelet components. No other source of UVA light may be used. Please refer to the Operator’s Manual for the INT100 Illuminator. Discard any platelet components not exposed to the complete INT100 illumination process. Tubing components and container ports of the INTERCEPT Blood System for Platelets contain polyvinyl chloride (PVC). Di(2-ethylhexyl)phthalate (DEHP) is known to be released from PVC medical devices, and increased leaching can occur with extended storage or increased surface area contact. Blood components will be in contact with PVC for a brief period of time (approx. 15 minutes) during processing. The risks associated with DEHP released into the blood components must be weighed against the benefits of therapeutic transfusion. PLATELETS: Pulmonary events: Acute Respiratory Distress Syndrome (ARDS) INTERCEPT processed platelets may cause the following adverse reaction: Acute Respiratory Distress Syndrome (ARDS) An increased incidence of ARDS was reported in a randomized trial for recipients of INTERCEPT processed platelets, 5/318 (1.6%), compared to recipients of conventional platelet components (0/327). Monitor patients for signs and symptoms of ARDS.

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