



# INTERCEPT Blood System Effective and Reliable Pathogen Inactivation

# Broad Spectrum of Inactivation Against Known and Emerging Pathogens

A broad spectrum of viruses, gram-positive and gramnegative bacteria, spirochetes, parasites and leukocytes are inactivated by the INTERCEPT System. Robust inactivation is achieved with a >4 log reduction for most pathogens. Examples include established agents such as HIV, HBV, HCV and WNV, as well as emerging infectious agents, such as Chikungunya, Babesia, and Plasmodium parasites.

## Log Inactivation of Viruses and Parasites Identified as Priority Agents for Blood Transfusion<sup>1</sup>

	Dengue <sup>2</sup>	Babesia	Chikungunya	St. Louis Encephalitis <sup>3</sup>	Leishmania	Plasmodium <sup>4</sup>	T.cruzi
Type of pathogen	Virus	Parasite	Virus	Virus	Parasite	Parasite	Parasite
Log reduction (platelets)	> 4.3	> 5.3	> 6.4	> 6.0	> 5.0	≥ 6.0	> 5.3
Log reduction (plasma)	NT	> 5.3	≥ 7.6	≥ 5.4	NT	≥ 6.9	> 5.0

AABB identified 68 emerging agents with actual or potential risk of transfusion transmission. Of these, 7 viruses and parasites were identified as priority pathogens.

**NT** = Not Tested. **1.** Stramer, et al. Transfusion 2009;49:35S. **2.** Lam S, et al. Transfusion 2007;47:134A. **3.** Based on inactivation data for bovine viral diarrhea virus (BVDV), a model virus for the family Flaviviridae. **4.** Data reflects Plasmodium falciparum

# INTERCEPT Blood Broad Spectrum of Inactivation

### Against Known and Emerging Pathogens



#### **Enveloped viruses**

HIV-1 DHBV
HIV-2 BVDV
HBV CMV
HCV WNV
HTVL-I SARS
HTLV-II Vaccinia¹
Chikungunya

Dengue<sup>2</sup>
Influenza A



#### Leukocytes

T-cells



#### **Spirochetes**

Treponema pallidum Borrelia burgdorferi



#### Non-enveloped viruses

Bluetongue virus, type 11 Feline calicivirus Parvovirus B19 Human adenovirus 5



#### **Gram-positive bacteria**

Staphylococcus epidermidis
Staphylococcus aureus
(including methicillin-resistant<sup>4</sup>)
Streptococcus pyogenes
Listeria monocytogenes
Corynebacterium minutissimum
Bacillus cereus (vegetative)
Lactobacillus sp.
Bifi dobacterium adolescentis
Propionibacterium acnes



#### **Gram-negative bacteria**

Klebsiella pneumoniae Yersinia enterocolitica Escherichia coli Pseudomonas aeruginosa Salmonella choleraesuis Enterobacter cloacae Serratia marcescens Anaplasma phagocytophilum Orientia tsutsugamushi<sup>3</sup>



#### **Protozoa**

Trypanosoma cruzi Plasmodium falciparum Leishmania sp. Babesia microti

Clostridium perfringens

Detailed inactivation data is included in the INTERCEPT technical data sheet available from www.interceptbloodsystem.com.

- 1. Sampson-Johannes A, et al. Transfusion. 2003;43:83A. 2. Lam S, et al. Transfusion 2007;47:134A.
- 3. Rentas F, et al. Transfusion 2004;44:104A. 4. Data on file.

## cerus 🕲 Anti-HO nti-H pos HIV neg Pos 3 HIV HΙV Pos 2 Pos 1 neg © 2019 Cerus Corporation. Cerus, INTERCEPTTM Blood Syst INTERCEPTTM are trademarks of Cerus Corporation. MKT-E **European Headquarters** Cerus Europe B.V. Stationsstraat 79-D 3811 MH Amersfoort The Netherlands +31 33 496 0600 Use of INTERCEPT™ Plasma or Platelets is Email: customer\_services@cerus.com contraindicated in patients with a history of allergic response to amotosalen or psoralens. interceptbloodsystem.com Consult instructions for use for indications, cerus.com contraindications, warnings, and precautions.