



# 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<br>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



#### **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

Propionibacterium acnes

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.