Was it the Platelets?

Conventional platelet products present the most significant infectious risk in transfusion medicine today.¹
Bacterial Infection: Under-recognized and Under-reported

**Conventional Platelet Issues:**

- **Susceptible to bacterial contamination**
  - Room temperature storage facilitates bacterial growth
  - Sensitivity of primary bacterial culture is only 26-44% \(^2-4\)
  - Utility of secondary bacterial testing is constrained by its limit of detection\(^5,a\)

- **Sepsis and infections** attributed to platelets are under-reported due to passive surveillance.\(^6\)

- **Hospital-acquired infections** are associated with platelet transfusions.\(^7\)

- **Colonized central lines** can be caused by contaminated platelets.\(^8\)

Reduce your patient’s risk of transfusion-associated sepsis
Emerging Pathogens: Is a Reactive Approach Enough?

Conventional Testing Issues:

- **Not proactive.** Tests take a long time to develop once the pathogen has been identified.\(^9\)\(^{10}\)

- **New pathogens** threaten blood safety due to evolution, travel, migration, and environmental changes.\(^9\)\(^{11}\)\(^{12}\)

- **Mosquito and tick-borne pathogens**, existing or emerging, are on the rise.\(^13\)\(^{14}\)

- **Availability of commercially-approved screening tests** is limited or non-existent.\(^12\)\(^{15}\)

Be proactive, not reactive, against emerging pathogens
INTERCEPT Platelets:

- Proven to reduce the risk of sepsis\(^6\text{-}18\) and offer safety beyond bacteria by proactively targeting viruses, protozoans, leukocytes.\(^19\)

- Delivered to hospitals transfusion-ready, potentially with longer shelf life than conventional platelets\(^20\) due to elimination of certain tests and procedures.

Proven efficacy against over 40 clinically-relevant pathogens\(^19\)
**Mechanism of Action:**

Amotosalen:
A photoactive psoralen-derivative targets nucleic acids and docks between the base pairs.

Exposure to UVA light activates amotosalen to form covalent bond crosslinks to DNA and RNA.

Crosslinks render pathogens inactive by inhibiting transcription, translation, and replication of DNA and RNA.

Choose Transfusion-Ready Platelets. Today.
**Proven Safety and Efficacy in Routine Use for Over 15 Years**

Zero cases of bacterial septic transfusion reactions (STR) and deaths reported in national hemovigilance data with INTERCEPT Blood System pathogen reduced platelets\textsuperscript{16-18*}

<table>
<thead>
<tr>
<th>HV Program\textsuperscript{b}</th>
<th>Conventional Platelets STRs (Deaths) Years Studied</th>
<th>INTERCEPT Platelets STRs (Deaths) Years Studied</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>53 (9) 2006-2017</td>
<td>0 (0) 2006-2016</td>
</tr>
<tr>
<td>Switzerland</td>
<td>16 (3) 2005-2018</td>
<td>0 (0) 2011-2017</td>
</tr>
<tr>
<td>Belgium</td>
<td>7 (0) 2009-2016</td>
<td>0 (0) 2009-2015</td>
</tr>
</tbody>
</table>

\textsuperscript{b} 2005-2018 French, Swiss and Belgian hemovigilance data, over 3 million conventional and >800K INTERCEPT platelet units transfused to patients of all ages.

**Pediatric Experience:** >1300 neonate and pediatric patients in 11 countries have been transfused with >9000 INTERCEPT Platelets with no unexpected AEs.\textsuperscript{25-27}
## INTERCEPT PRT in Transfusion Safety

### Redefining the Standard of Care for Blood Safety

INTERCEPT is an integral part of US blood policy

<table>
<thead>
<tr>
<th>RISK</th>
<th>GUIDANCE OR STANDARD</th>
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| **Bacterial Contamination** | FDA Draft Guidance: Recommends PR or ‘enhanced’ bacterial testing.  
1, 21 PRT eliminates the need for primary and secondary testing, including rapid testing.  
AABB Standard 5.1.5.2:  
Requires methods to detect bacteria or use PRT in platelet components.  
PRT can be used as in place of bacterial detection. |
| **Zika Virus and Babesia TTI** | FDA Guidance for Zika lists PRT as an option for mitigating Zika TTI risk.  
FDA Guidance for Babesia: Recommends testing, import or PR in active Babesia areas.  
PR can be used in place of Zika or Babesia testing for platelet and plasma components.  
AABB Standard 5.19.2:  
Policy requires to reduce the risk of CMV  
INTERCEPT PRT fulfills AABB Standard 5.19.2. |
| **CMV TTI** | PRT is FDA approved as an alternative to gamma irradiation for prevention of TA-GVHD.  
AABB Standard 5.19.3.1:  
Requires either irradiation or PRT to reduce the risk of TA-GVHD. |

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a Transfusion-Transmitted Infection  
b Data for pathogen reduction of ZIKA by the INTERCEPT Blood System, pathogen reduction system, have not been submitted for FDA review.  
c Transfusion-Associated Graft versus Host Disease
You can reduce the risk of transfusion-transmitted infection for your patients.

✓ FDA approved, CE marked

✓ Over 15 years in routine use in >200 blood centers and >30 countries

✓ Kits sold to produce >6 million INTERCEPT treated units

✓ Zero cases of transfusion-transmitted sepsis or TA-GVHD in over 800,000 monitored transfusions\(^{16-18,25,28-30}\)

✓ No increase in TRALI or adverse events\(^{28,30}\)

✓ Proactive strategy against known and unknown pathogens\(^{31}\)

✓ No increase in utilization of platelets or RBCs\(^{28}\)

✓ No patient/population restrictions\(^{19}\)

INTERCEPT® Blood System for Platelets, Pathogen Reduction System
"I had a very personal motivation to found Cerus. In 1982 we had an epidemic of HIV in San Francisco. We had no tests; we had not even isolated the virus yet. I had 300 patients who acquired HIV infections from blood transfusions that I personally had ordered for them. That was my motivating commitment to try to do something to improve the safety of blood transfusion."

Cerus Founder: Laurence Corash, MD

Listen to Dr. Corash describe the journey to improve blood safety.
http://bit.ly/2FgWjPs
*Rx only. There is no pathogen inactivation process that has been shown to eliminate all pathogens. Certain non-enveloped viruses (e.g., HAV, HEV, B19 and poliovirus) and Bacillus cereus spores have demonstrated resistance to the INTERCEPT process.

** 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, PRECAUTIONS and CONTRAINDICATIONS, see package insert included with this material or visit the website link below to view and download current package inserts and additional resources.

INTERCEPT-USA.com/resources
or http://bit.ly/2Fgc6hm

The INTERCEPT® Blood System for Platelets Pathogen Reduction System
FOOTNOTES and REFERENCES:

a) Minimum of 1000 bacterial colony forming units/mL.


5. Platelet PGD® Test [Package Insert], April, 2017, Verax Biomedical: Marlborough, MA.


19. INTERCEPT Blood System for Platelets [Package Insert], July 17, 2018, Cerus Corporation: Concord, CA.


Reduce Risk for Your Patients with the INTERCEPT® Blood System for Pathogen Reduced Platelets

Cerus is your partner in proactive blood safety.

Contact us to learn how your patients can receive INTERCEPT Platelets today.