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## Problem: Uncontrolled Bleeding



Military & Civilian Trauma

Surgery

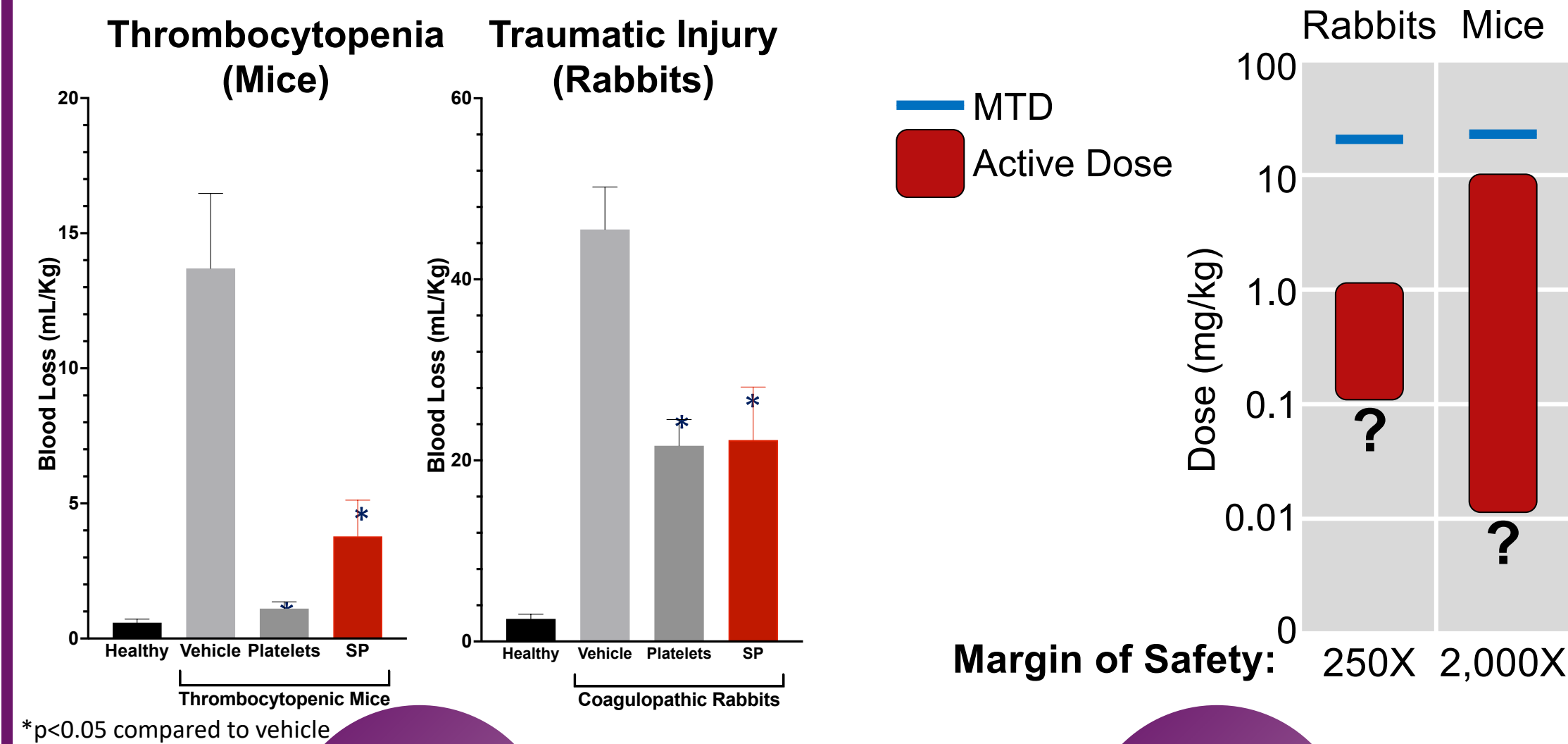
Thrombocytopenia

Traumatic hemorrhage is a significant issue often managed effectively by transfusion of blood products. Timely intervention with blood products significantly reduces mortality.

20% of the 3M trauma patients require hemostatic intervention  
 ~20-40% of trauma related deaths are considered potentially preventable  
 A 'synthetic platelet surrogate' that can mimic the hemostatic mechanisms of platelets, while allowing large-scale production, long-term storage at various temperatures, ease of portability, and is rapidly reconstitutable for on-demand IV/IO dosing is needed

Almost 500,000 Spinal Surgeries per year  
 40% of surgeries require hemostatic intervention (Over 1.4 M/year)  
 >2.2 M units of platelets used to mitigate or treat bleeding each year

## SynthoPlate Reduces Bleeding



\*p<0.05 compared to vehicle

>50%

>250X

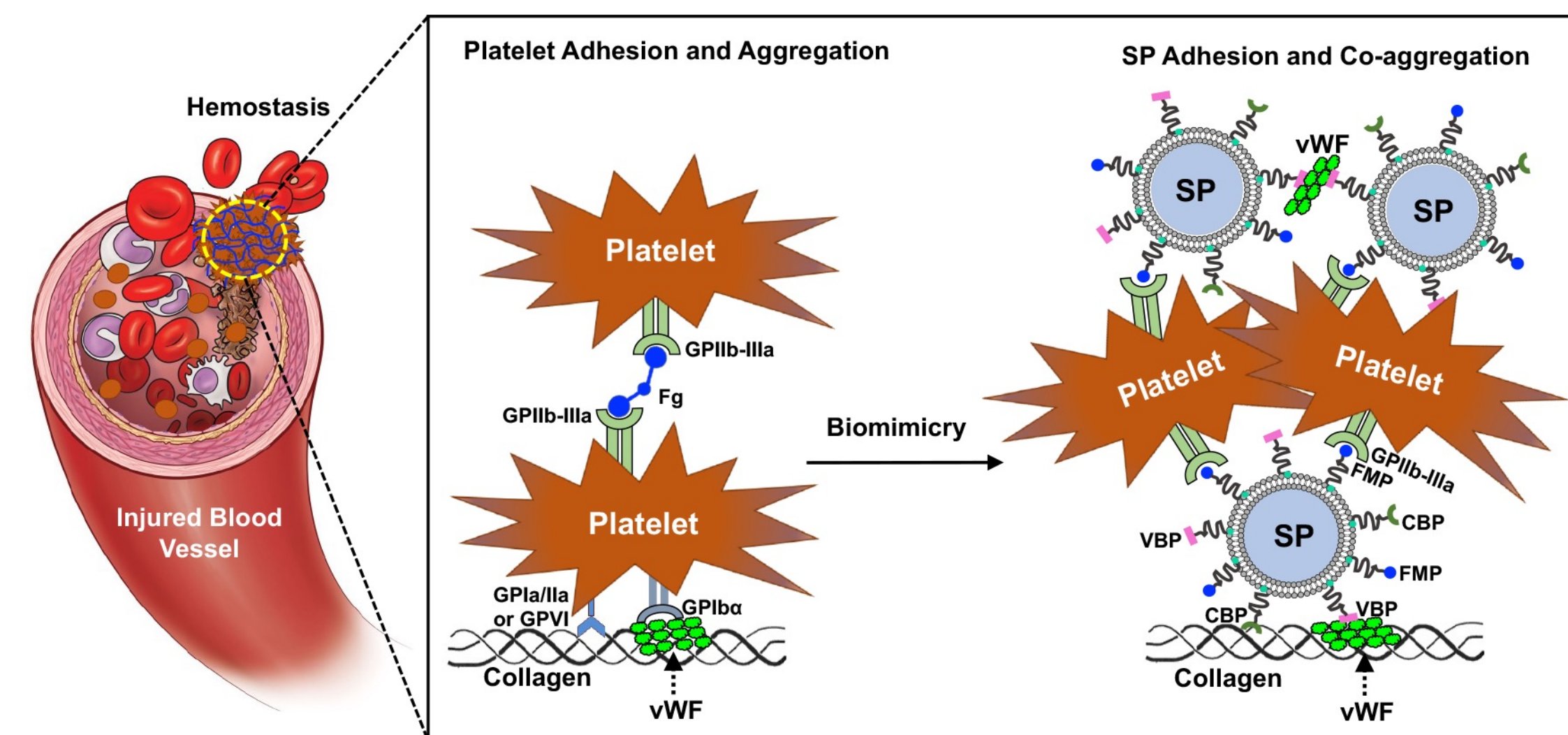
### Reduction in Blood Loss in

- Trauma mouse, rat, and rabbit models
- Thrombocytopenic mice
- VWD mice
- \*All External Validation

### Margin of Safety

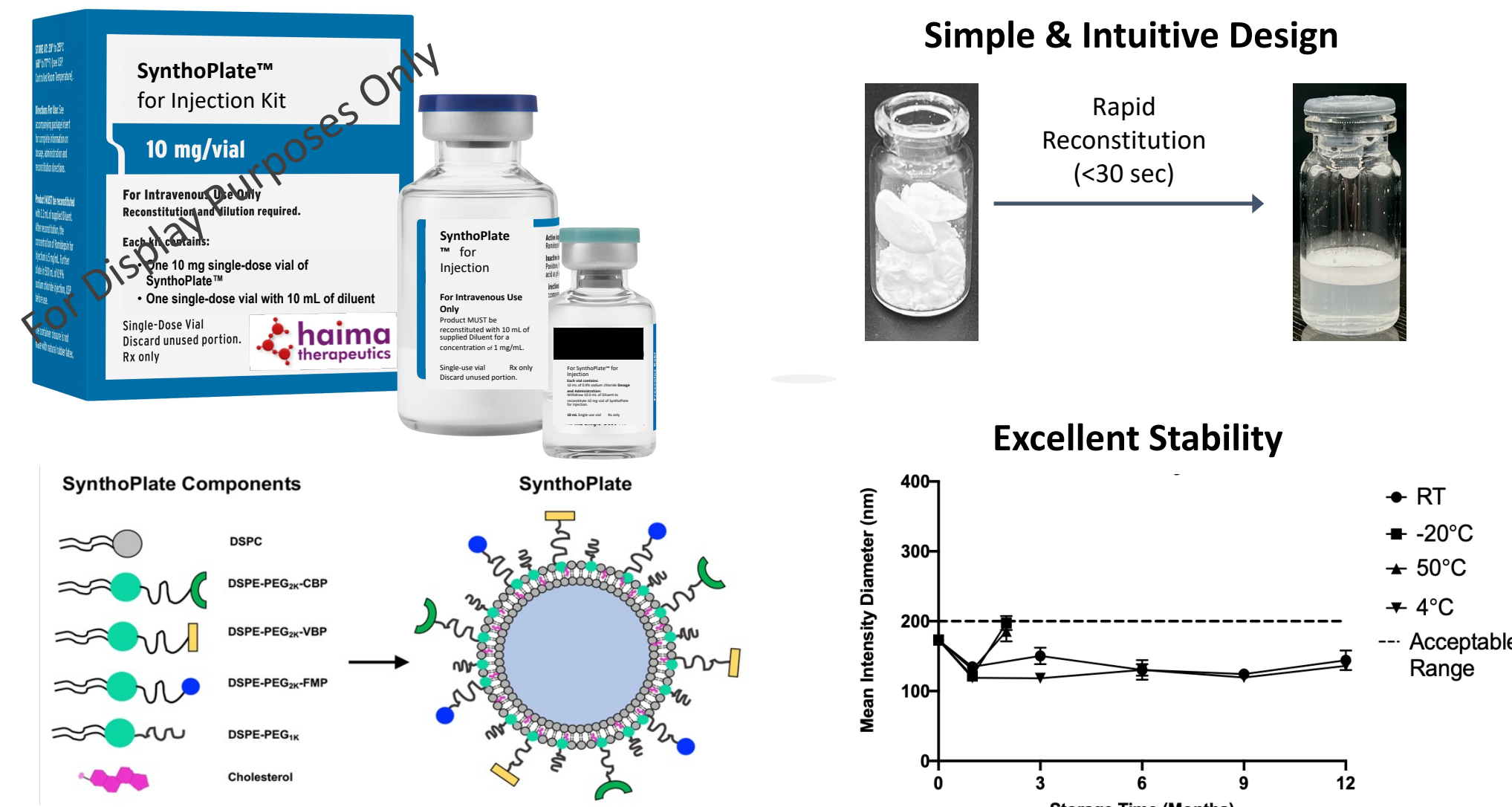
- (i.e. therapeutic window) NOAEL / Min Effective Dose in rabbits & mice
- FDA agrees with our nonclinical IND-enabling plan

## SynthoPlate for Hemorrhage Control



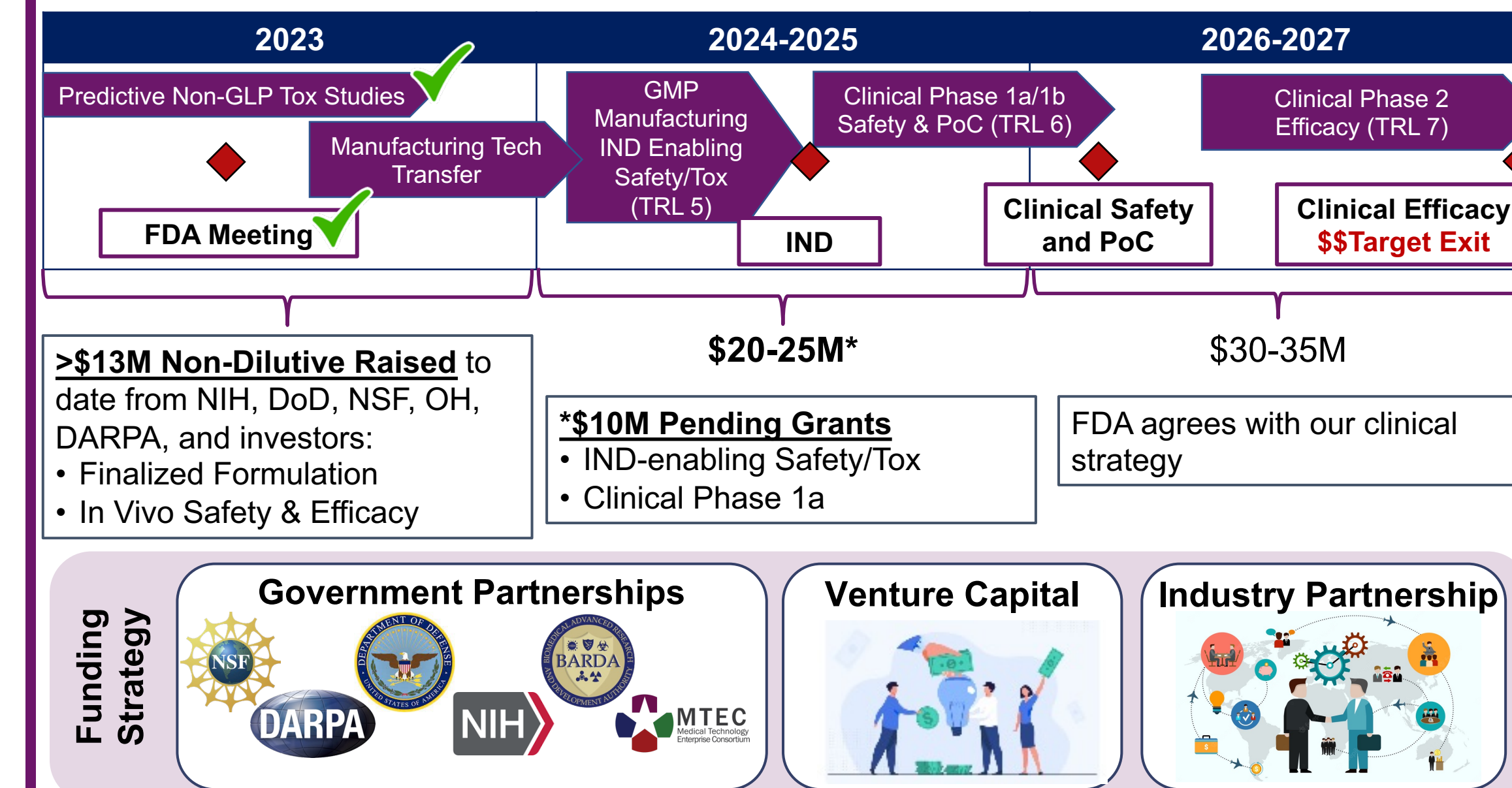
**SynthoPlate™ (SP)** is designed by decorating lipid nanoparticles with a combination of vWF-binding peptide (**VBP**), collagen-binding peptide (**CBP**) and fibrinogen (**Fg**)-mimetic peptide (**FMP**) to mimic platelet adhesion and aggregation. TRL = 4/5.

## Scalable Manufacturing & Stability

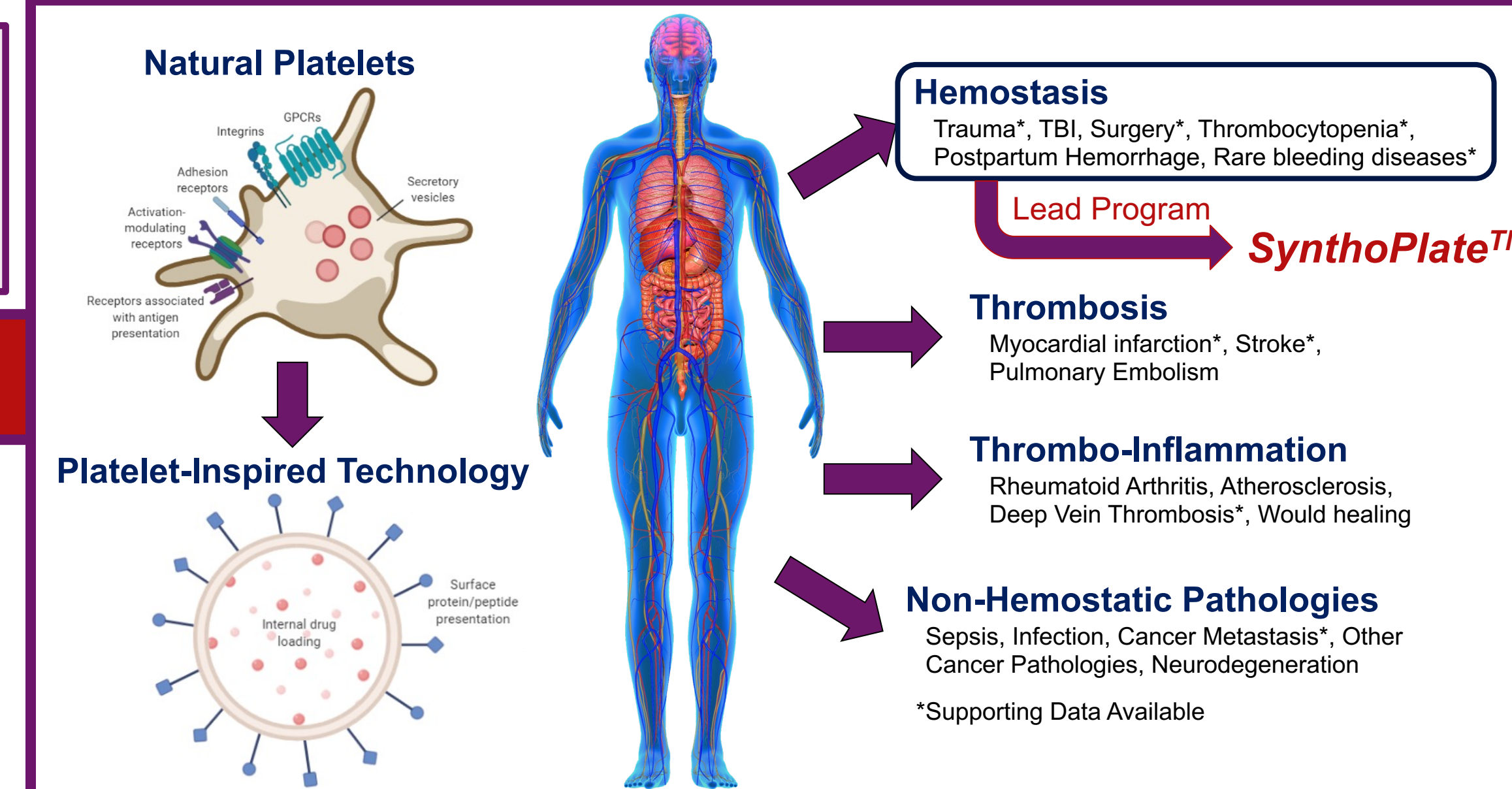


- Scalable manufacturing process under GMP can meet market demand
- Stable for at least 1 year at RT/4°C
- Stable for at least 2 months at -20°C / 50°C
- FDA agrees with our CMC strategy, definition of API, DS, DP, etc.

## Roadmap & Financing/Exit Strategy



## Platelet-Inspired Platform



## Partnering Opportunity

<p><b>BUSINESS PARTNERING</b></p> <ul style="list-style-type: none"> <li>Solves major clinical need</li> <li>Large market opportunity</li> <li>Established partnership interest</li> <li>Established government partnerships</li> <li>World renowned SAB</li> </ul>	<p><b>TECHNOLOGY</b></p> <ul style="list-style-type: none"> <li><b>SynthoPlate</b> – First-In-Class Hemostatic drug mitigates bleeding</li> <li><b>Five Issued &amp; 3 Pending Patents</b></li> <li>Platform expansion potential</li> </ul>	<p><b>FINANCIAL PARTNERING</b></p> <ul style="list-style-type: none"> <li>\$13M non-dilutive funding raised to de-risk technology</li> <li>\$10M submitted grants</li> <li>Seeking future Gov't support</li> <li>Seeking \$25M Series A – IND-enabling studies &amp; Phase 1 a/b safety &amp; PoC</li> </ul>
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