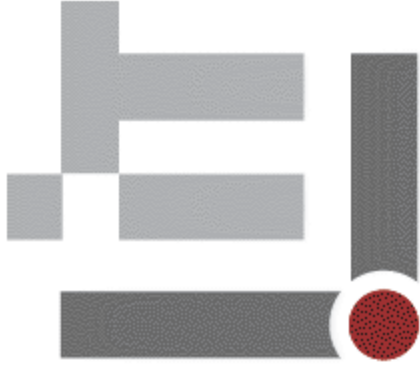




LightIntegra

TECHNOLOGY

Date / September 11, 2009

Presenters / Paul Geyer, P. Eng
/ Elisabeth Maurer, PhD

Platelets save lives. **We save platelets.**

LightIntegra develops a medical device and disposables to measure the quality of platelets before transfusion.



Platelet Transfusions



- Platelets are blood cells required to stop bleeding
- 10 million platelet transfusions per year globally: **\$ 5 billion**
- 17% (1 in 6) platelet transfusions are ineffective
- Platelet transfusions are **not** tested for platelet quality
- **Why?** — Lack of technology and understanding of platelet function

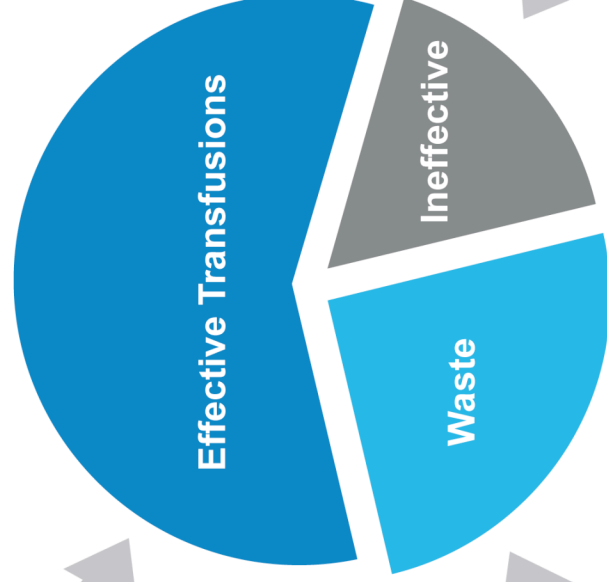


The Problems — LightIntegra's Solution

Avoid ineffective transfusions

Value to Hospitals
 $\$2B - \$0.8B =$
\$1.2B / yr

Save 35,000 lives
per year worldwide.



Shelf Life Extension / Reduce waste

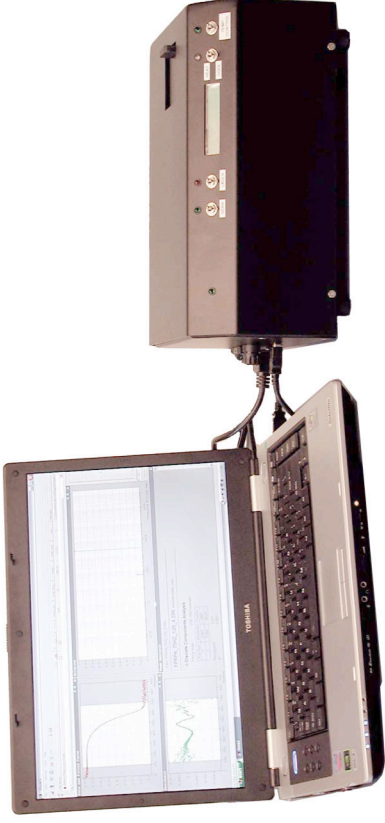
Value to Blood Centers
 $\$1.4B - \$0.2M =$
\$1.2B / yr

Prevent donation of ineffective transfusions

Value to Blood Centers
 $\$1.5B - 0.5B =$
\$1B / yr



ThromboLUX™ Instrument & Disposables



MSRP \$25 – 50,000 per device¹
COG \$5,000



\$25 – 50 per test¹
COG \$3

- Two fully functional ThromboLUX™ Alpha prototypes
- Successful clinical pilot study and in vitro testing of 1,500 samples
- **Quick Regulatory clearance — 3-6 months review time**
 - **Class II, FDA 510(k) market clearance**

¹Sannes & Associates *ThromboLUX Market Study, 2009*



The Technology — Competitive Advantage

Competitors:



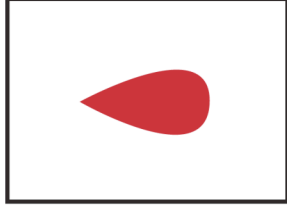
Microparticles



Platelets



ThromboLUX™:



Microparticles
& Platelets

Only **ThromboLUX™** measures:

- Platelets + Microparticles
- Count + Function
- All particles

Only **ThromboLUX™**:

- is non-invasive
- is fast
- is inexpensive
- is simple
- uses a small sample volume
- keeps blood contained



Intellectual Property

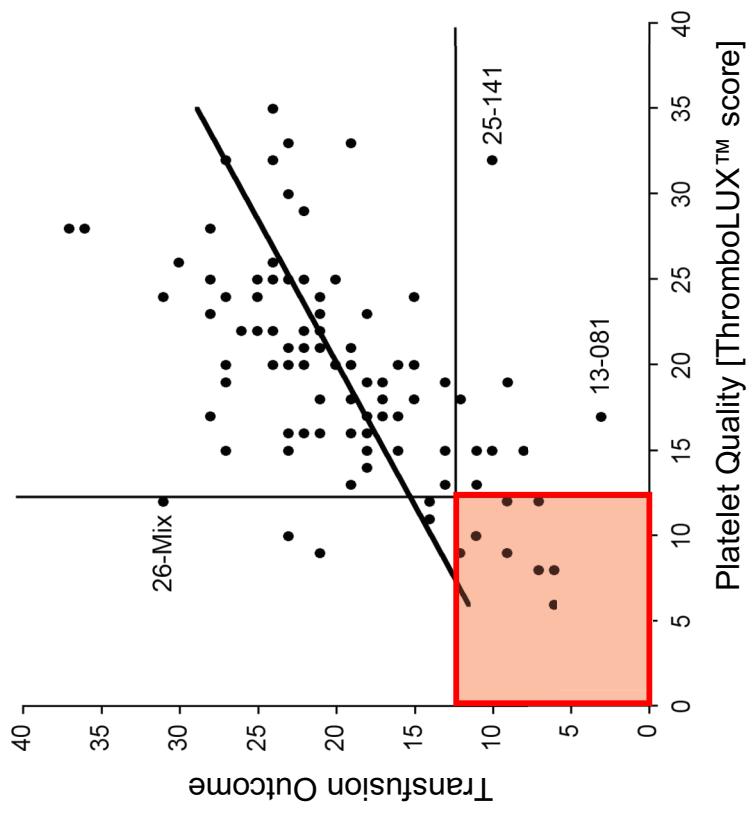
- Worldwide exclusive license for all uses from Canadian Blood Services
- Option to own rights
- No known limitation to freedom to operate

Intellectual Property	Jurisdiction	Status
Platelet Quality Method	US, CA, EU	Issued
Sample Holder	US, CA, EU, India, China	Filed
Improvement combination technology	PCT	In Progress
Improvement disposable	PCT	In Progress
Bacterial Contamination Method	US, CA, EU, India	Filed
Cardiovascular Disease Testing	PCT	Filed



Successful CoDIVO Pilot Study

- 49 patients / 160 transfusion at the Vancouver General Hospital
- Demonstrated value of the ThromboLUX™ score to predict transfusion outcome
- Published in TRANSFUSION
- **Poor platelet quality causes poor transfusion outcome**
- One patient in the study died after 3 poor platelet transfusions



Maurer-Spurej E et al. *Transfusion* 2008; 48(2S):35A.
Maurer-Spurej E et al. *Transfusion* 2009; 49, online



Case Study: Vancouver General Hospital (VGH)

VGH has 900 beds.
7,200 platelet transfusions per year, **1,244 are ineffective.**

Cost of product:	$1,244 \times \$500 = \$612\text{k} / \text{yr}$	} \$2.0M
Added hospital stay:	$1,244 \times \$1,000 = \$1.2\text{M} / \text{yr}$	
Additional cost of care:	$211 \times \$800 = \$169\text{k} / \text{yr}$	

ThromboLUX™
Disposable sampling sets / yr
Technician time

\$	37k
\$	266k
\$	180k
-\$	0.5M

300% ROI in year 1 — Savings

\$ 1.5M/yr

Benefit to the patient, the physician and the hospital.



Global Market Opportunity

Estimated Total Global Market ¹			
Application	ThromboLUX \$37k / device	Disposable Sampling Sets cost / test of \$37	
Pre-transfusion testing	\$534 M	\$281 M / yr	
Donor screening	\$140 M	\$394 M / yr	
Shelf life extension	\$140 M	\$94 M / yr	
TOTAL GLOBAL	\$814 M	\$769 M / yr	
Estimated 5 yr market share	20%	20%	
TOTAL REVENUE	\$163 M	\$154 M / yr	

North American Market is 1/3 of the global market.
Numbers based on communication with William Coenen, COO American Blood Centers
National Blood Collection and Utilization Survey Report, Kalorama Market Research Report



How Do We Realize Profit?

ThromboLUX	\$	%
Revenue per unit (\$25k-50k)	\$37,500	
Cost of Goods	\$5,000	13%
Gross Margin	\$32,500	87%
Distribution/Sales Cost	\$15,000	40%
Net Margin	\$17,500	47%
Sampling Set	\$	%
Revenue per unit (\$25-50)	\$37.50	
Cost of Goods	\$3.00	8%
Gross Margin	\$34.50	92%
Distribution/Sales Cost	\$15.00	40%
Net Margin	\$19.50	52%

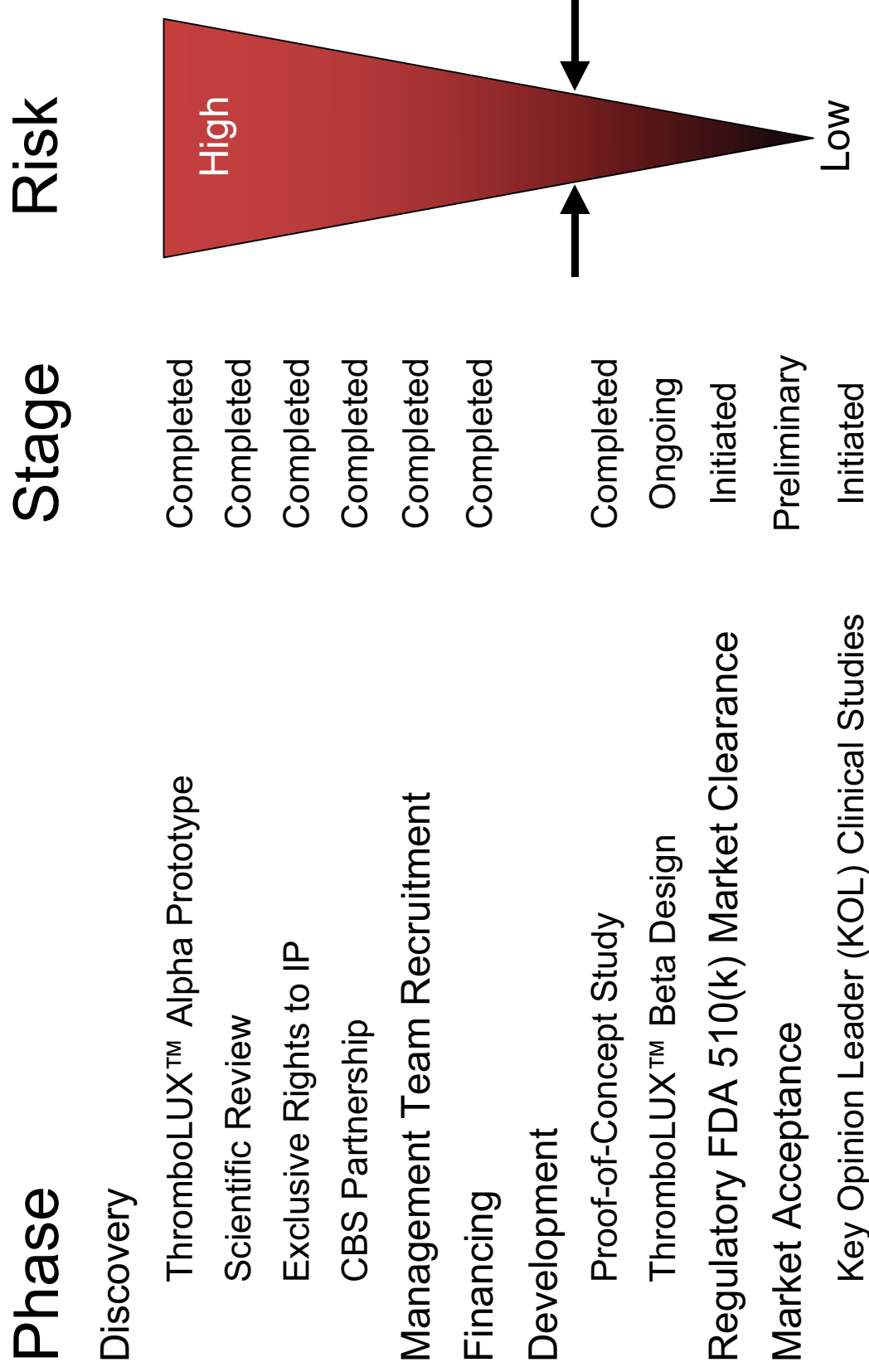


5 Year Revenue Projection

	2010		2011		2014	
	Year 1		Year 2		Year 5	
Gross Revenue	ThromboLUX™	222,000	4,076,000		54,741,000	
	Disposable Sampling Set	29,000	559,000		100,316,000	
COGS	Net Sales	251,000	4,635,000		155,057,000	
	ThromboLUX™	48,840	896,700		12,740,000	
	Disposable Sampling Set	3,900	74,000		13,340,000	
	TOTAL	52,740	970,700		25,380,000	
	Margin	198,260	3,664,300		129,677,000	
Expenses	Sales & Marketing	109,000	568,000		12,095,000	
	Regulatory Approval	106,000	70,000		55,000	
	Product Development	685,000	250,000		262,500	
	Clinical	100,000	150,000		157,500	
	GA	178,000	480,000		800,000	
	Total Expenses	1,178,000	1,518,000		13,370,000	
Net Income		(1,069,740)	2,146,300		116,307,000	



Increasing Value — Decreasing Risk





Financing

	2009 ¹	2010	TOTAL
Investment	\$775,000	\$1,000,000²	\$1,800,000
Management	\$155,000		\$130,000
Grants (CBS, IRAP, SR&ED)	\$210,000	\$250,000	\$460,000
Total Cash Inflow	\$1,140,000	\$1,250,000	\$2,390,000
Sales & Marketing		\$109,000	\$109,000
Regulatory / IP	\$74,000	\$106,000	\$180,000
ER&D	\$386,000	\$685,000	\$1,071,000
Clinical Studies	\$50,000	\$100,000	\$150,000
General Administration	\$80,000	\$178,000	\$258,000
Total Cash Outflow	\$590,000	\$1,178,000	\$1,768,000
Cash Year End	\$550,000	\$622,000	

¹July – December 2009

²September 2010



Key Milestones 2009 — 2010

- Development of disposable and user interface
- Manufacture 5 ThromboLUX **Beta** prototypes
 - under design control for FDA application with contract manufacturer
- Preliminary results from proof-of-correlation studies
 - Puget Sound Blood Center, CBS
- 510(k) filed with FDA
 - Strategy Advice from Hogan & Hartson LLP



Go-to-Market Strategy

- Engage 5 key opinion leaders with beta prototypes in 2010
- Initial market entry with first 25 units in 2011
- Expand labeling claim
 - ThromboLUX score predicts transfusion outcome
- Distribution or acquisition with international partners
 - Targeting companies already selling to blood banks and/or donor centers



Exit

Potential Partners / Acquirers:

Beckman Coulter



Haemonetics



Fresenius Kabi



Caridian BCT



Cerus



CEO

President, CTO

*Senior Engineer
Ventures)*

Regulatory Affairs

Paul Geyer (*Ex-CEO Mitroflow and Neovasc*)

Dr. Elisabeth Maurer (*CBS & UBC Affiliations*)

Gyasi Bourne (*Ex-VP Eng. – Angiometrix, Evasc, Medical*

Daryl Wisdahl, *Wisdahl Consulting Group*

Legal

Keith Spencer / John Swift

Partner

Canadian Blood Services

Scientific Advisors

Dr. Pieter Cullis, *UBC, Centre for Drug Research & Development*

Geof Auchinleck, *CEO Neoteric Technology, Blood Tracking*

Dr. Tanya Petraszko, *Canadian Blood Services*

Business Advisors

Alexei Marko, *CEO Neovasc*

Barry Allen, *CEO Urodynamics, EIR Ventures West*

David Christie, *Former CEO Pyng Medical*

KOL Collaborators

Dr. Sherrill Slichter, *Puget Sound Blood Center Seattle*

Dr. Gary Moroff, *American Red Cross Holland Lab*



ThromboLUX Business Opportunity

Summary:

- \$1.5B global addressable market
- “Razor and Blades” business model
- Ongoing revenue stream with disposables
- Seed round closed with \$ 915k
- Financial leveraging of \$ 500k
- Low burn rate
- Fast regulatory clearance — 510(k) in 2010
- Target product launch in 2011

Platelets save lives.
We save platelets.

Thank You!