The point of view of the Market: ready for BabyLux?

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Light-to-Cure
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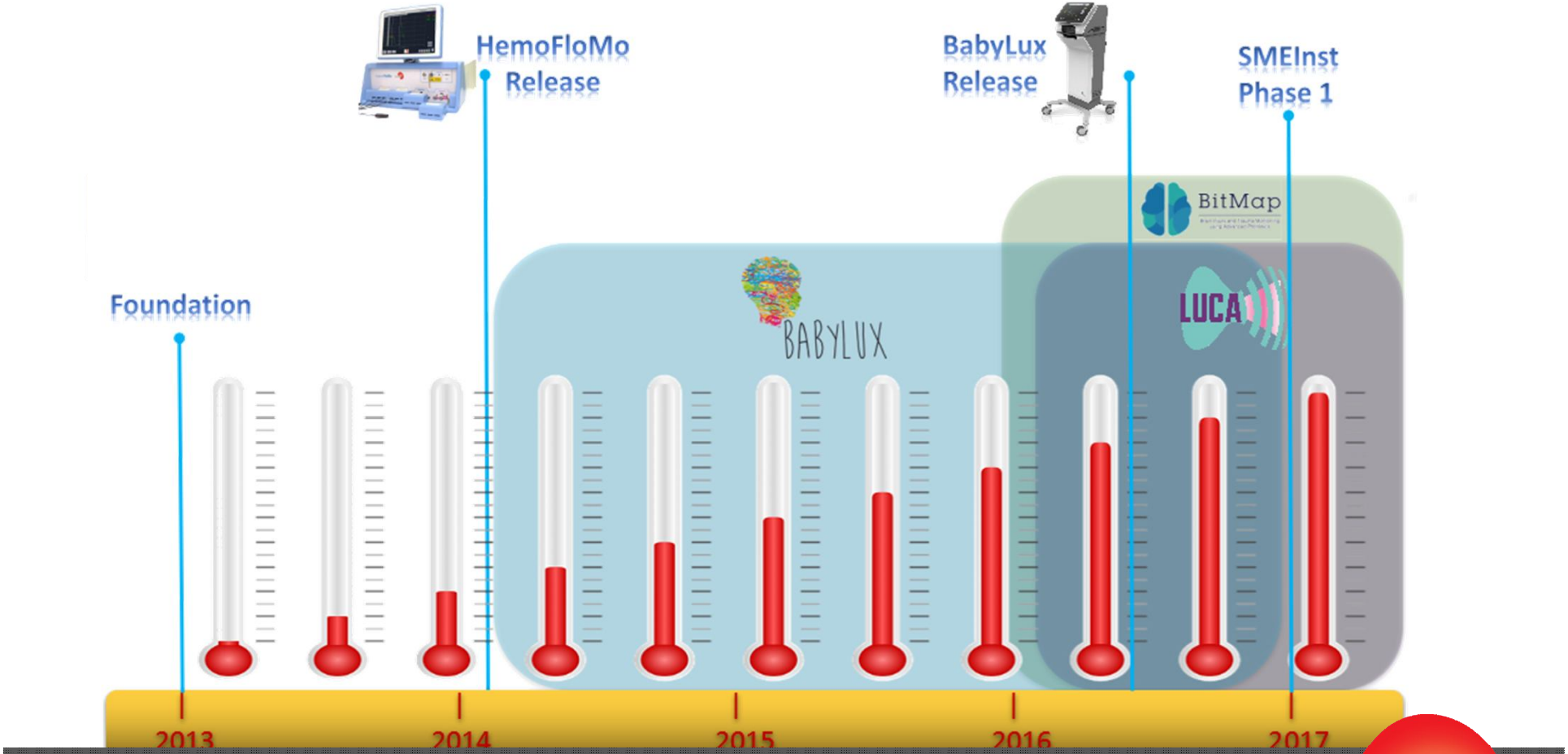
Summary

- HemoPhotonics History & Portfolio
- Brain Monitoring - Market Structure & Trends
- Brain Monitoring - Market Structure & Revenues
- BabyLux - Competing technologies
- BabyLux - Competing devices
- BabyLux Development - Timeline
- BabyLux - SWOT Analysis
- Where BabyLux is ...
- BabyLux - Path to the market

HemoPhotonics History



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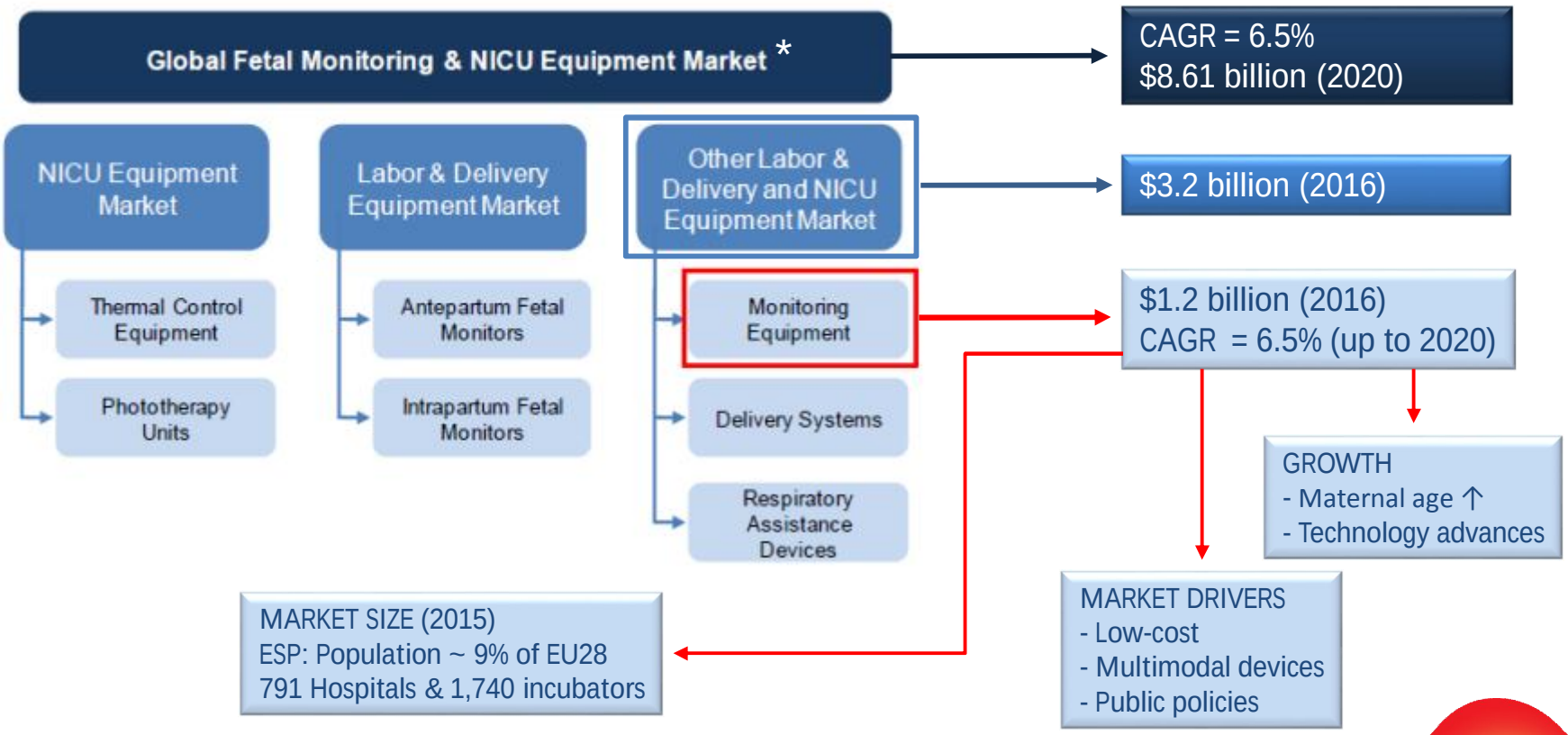
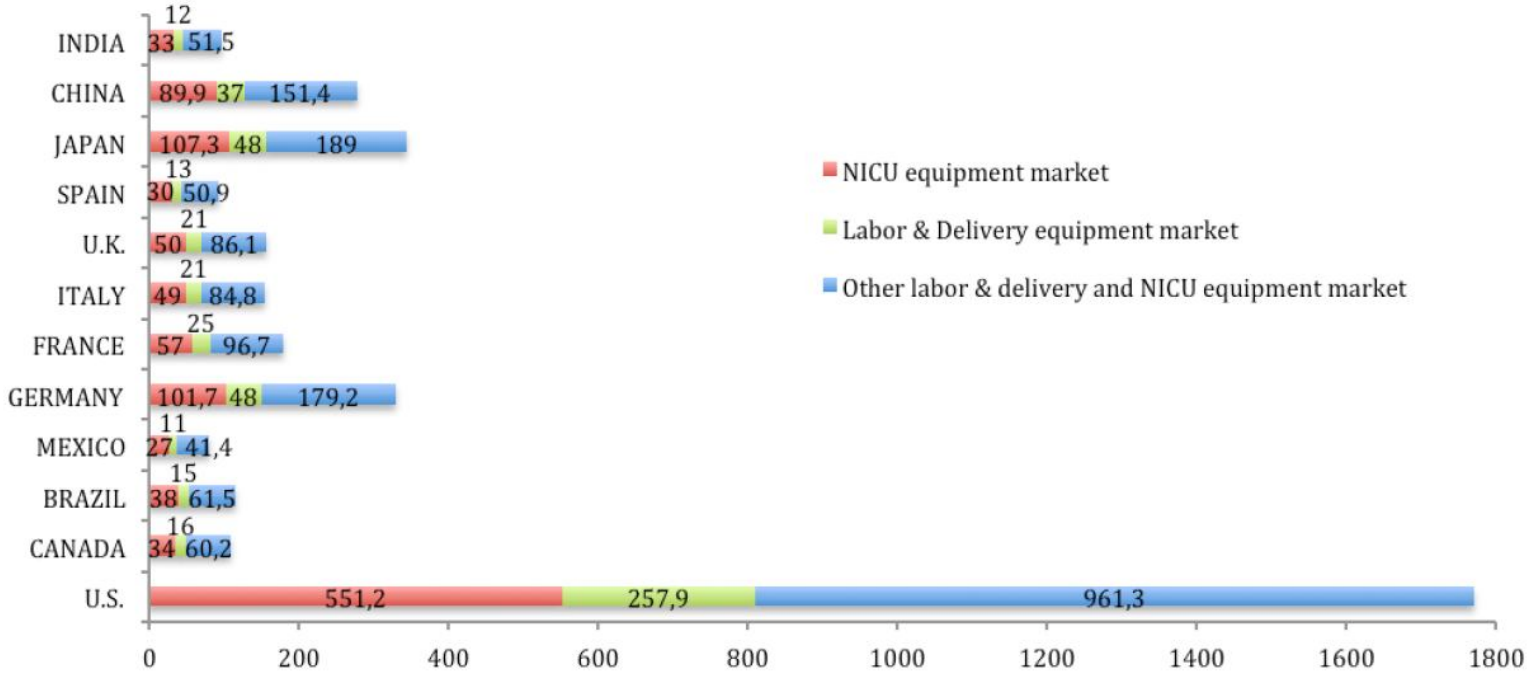
Market Structure



* MarketsandMarkets Analysis, 2011

Worldwide revenues 2016



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Competing technologies

Technology	Blood Flow	Oxygen-ation	Real time monitoring	Portable (bed/cot-side)	Non-invasive	Accuracy	Price
BabyLux (TRS&DCS)	✓	✓	✓	✓	✓	↑	–
CT	✓	✗	✗	✗	✗	↑	–
MRI	✓	✓	✗	✗	✓	↑	↑
FD-NIRS	✗	✓	✓	✓	✓	–	–
CW-NIRS	✗	✓	✓	✓	✓	↓	✓
TRS	✗	✓	✓	✓	✓	↑	–
DCS	✓	✗	✓	✓	✓	↑	–

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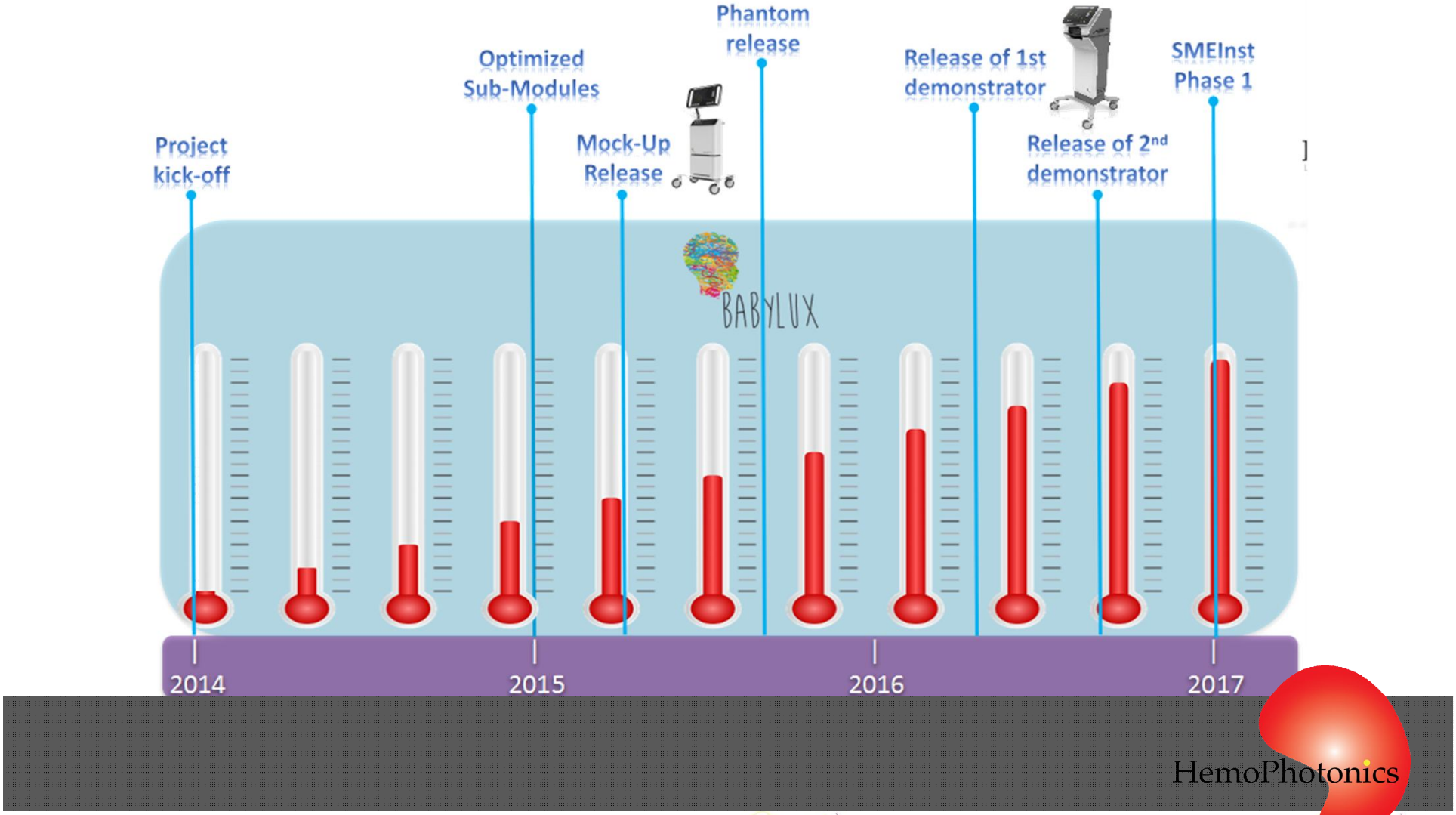
Competing devices

COMPETITOR	COUNTRY (ISO code)	PRODUCT (technology/brand)	RELEVANCE	REVENUES (million USD)
Artinis	NLD	Monitor oxygen supply non-invasively in living tissue both brain and muscle (NIRS)	+	n.d.
Cas Medical Systems	USA	Tissue Oximetry (Fore-sight Elite)	+	35.0 (2015)
Covidien (subsidiary of Medtronic)	IRL	INVOS: cerebral/somatic oximetry	+	28,833 (2016)
Hamamatsu	JPN	Near infrared oxygenation monitor (NIRO)	+	1,004 (2016)
		TRS device (TRS-20)	+	
ISS	USA	Imagent Brain Imagining (Infrared Photons, Diffuse Optical Tomography)	+	n.a.
		MetaOx™	++	
		OxiplexTS, (NIR)	+	
		Oxiplex TS200 (NIR)	+	
Masimo Corporation	USA	Brain function monitoring (SedLine)	+	599 (2016)
Ornim	ISR/USA	c-FLOW™ (UTLight™)	+	n.a.
		CerOx™ (UTLight™)	++	
Techen	USA	Noninvasive optical brain (NIRS).	+	3.37 (2015)

BabyLux Development



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SWOT Analysis

+ Unique know-how in NIRS (TRS & DCS)
+ Experience in the Research Market
+ Technology different from competition
+ Technology aplicable throughout the company's portfolio

- Newcomer
- Limited financial resources
- Dealing with hospitals requires specific marketing and sales experience
- Photonics is a highly dynamic field
- Complex (changing) regulations

Market:
+ growing in value
+ technologically at an infant state
+ space for new players
+ Trend: non-invasive technology
+ High marginality of products

- Big players as competitors
- Late market entrance
- Marketing and sales resources higher than expected
- Fast appearance of new competition
- Expensive regulatory compliance

Where BabyLux is ...

- BabyLux obtained simultaneous, continuous measurements of tissue oxygenation and blood flow index from the heads of term and preterm infants with:

a) acceptable short time variability;
b) qualitatively reasonable dynamic responses.

- Moving BabyLux optode from one site on the head to another results in:

a) less than 5% variability in tissue oxygenation (better than existing commercial devices currently used in the neonatology units).
b) 15-25% variability in blood flow index (comparable to trancranial Doppler ultrasound measures of macrovasculature, Xenon clearance and other modalities).

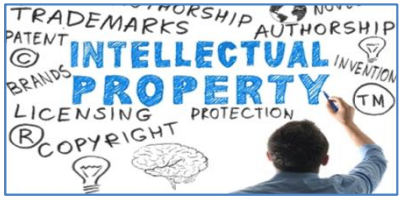
Where BabyLux is ...

- The BabyLux device is safe in terms of acute adverse reactions as we never observed skin marks after measurements.

- Major steps towards industrialization and production were taken, bridging the gap between research products and commercialization.

- Exploitation plans were drawn up.

Path to the Market



Preclincal testing | Research Medical Market | Medical Market

Sources of Funding

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Thanks for
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