GATT Hemostatic Platform

Next generation hemostats stopping complex surgical bleeding

May 2020 | GATT Technologies BV

Objectives of today's discussion

- Review hemostat and sealants markets
- Introduce GATT Technologies' platform and business
- Identify Business Development opportunities in Bay area

Executive Summary

Hemostats and sealants: attractive market, current products not suited to meet the need

- Hemostats and sealants address a surgical need to stop bleeding during surgery where mechanical measures are insufficient
- Substantial global market for hemostats and sealants (~$3B globally), growing (~8% p.a), and continuing to grow as new therapeutic areas are developed
- All existing technologies present in the market have limitations – there is no single solution yet
- Large market players have recognized existing technology limitations, and are investing in innovation and M&A

GATT has a game changing next generation platform addressing unmet need and expanding the market

- Developed activated polyoxazoline polymer synthetic technology platform, protected by strong IP portfolio, that generates superior performance at lower costs
- Technology platform generates ability to be a one stop shop, addressing all types of surgical procedures, and the full needs of surgeons
- GATT's first product, the GATT-Patch, is confirming its benefits compared to competition – faster time to hemostasis, better adhesion, lower COGs
- Surgeons in the US and EU are enthusiastic about GATT-Patch, and have confirmed the potential

GATT is executing on a two-year plan to CE (Q1 2022) and FDA (Q2 2023) approvals

- GATT has 2-year funding from J&JDC (ventures) , Dutch Government OostNL and US PE fund, established experienced team, frozen GATT-Patch design, manufacturing and QMS capabilities
- Full (pre)-clinical plan is in place, and milestones for next 2 years have been set – currently in execution mode
- First in human study expected in Q1 2021

GATT provides appealing investment opportunity

- GATT will likely seek additional funding post Q1 2022 to execute clinical studies required for FDA approval and ramp up to commercialization
- Ongoing discussions with potential strategic partners

GATT has established knowledgeable and experienced management team

Geert van Gansewinkel, MSc, MBA

Chief Executive Officer

Successful life sciences executive

- Experienced entrepreneur and general manager
- 20+ years experience: Accenture, The Boston Consulting Group, Polaris, IQVIA
- Entrepreneurship experience: built Polaris EU/Asia business (software) participated in successful exit
- Experience in strategy, M&A, GM: country and region P&L responsibility, CEO GATT since March 2020

Johan Bender, PharmD

Founder and Chief Technology Officer

Serial entrepreneur and hemostasis expert

- 25 years R&D and general management experience
- Serial entrepreneur; built and sold multiple medical devices, pharma formulation IP, and med testing lab companies
- Founded GATT in 2011, developed GATT platform including patented technology
- CTO since March 2020

Vlad Hogenhuis, MD, MBA

Chief Medical Officer a.i Board member

Medical doctor and senior life sciences executive

- Former Chief Operating Officer Ultragenyx
- SVP and global franchise head GSK Specialty Care
- SVP and General Manager Merck, US and International markets

Rob Lips, MSc

Chief Commercial Officer

Senior medical device product and business development executive

- 30 years of international management experience in medical device industry
- Former global sales and marketing for Philips x-ray systems and Philips Healthcare incubator
- Responsible for GATT commercial activities since 2013

Dr. Rosa Felix, PhD

Chief Operational Officer

Scientific expert surgical sealants and hemostats

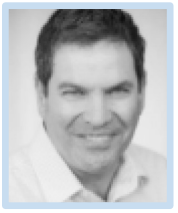
- PhD in development of polymer based surgical sealants and hemostats
- Experienced laboratory technician and researcher (Merck)
- Part of GATT team since 2012, responsible for supply chain (development, supply and production)

Backed by an experienced and senior non-executive board

Jaap Kampinga, MD

Chairman

- CEO Immodulon Therapeutics
- CEO and founder of LaCaMedical
- Former chairman Xenikos, and Cellotec and R&D director of Quadrant Healthcare



Zeev Zehavi

On behalf of investor J&J

- Vice President J&J, JJDC (investments)
- Investment director on the board on behalf of JJDC

Johan de Ruiter

On behalf of investor OostNL

- Chairman Quanta Fluid solutions
- Initiator/founder of Fresenius Medical Care
- Founder of Auxilium GmbH

Sjaak Deckers

On behalf of investor NGI

- Former CEO GTX medical
- Founder, CEO and exit Sapiens Steering Brain Simulation
- Former R&D manager Philips Healthcare

Market potential

GATT Platform

GATT business and progress

GATT investment opportunity

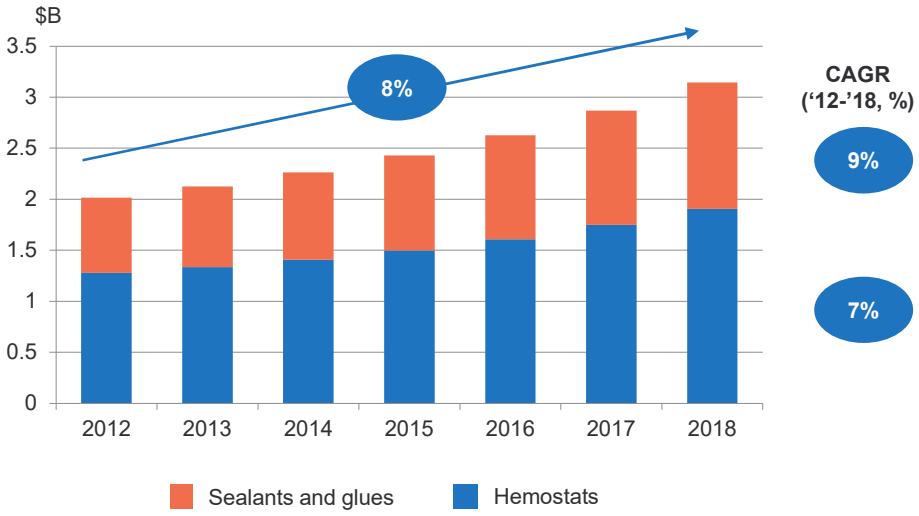
Surgeons need next generation products that are easier to use and more suitable in a broader set of applications

Surgeons on our advisory board tell us that there is a clear need for better, more efficient hemostatic agents:

- For **simple bleeding**, current standards of care such as pressure, cautery, and sutures are usually sufficient to stop the bleeding
- For **complex bleeding** and/or with **anticoagulated** patients, hemostats are often needed
- Existing hemostats are **limited** in functionality (long time to adhesion, limited adhesion, poor performance with anticoagulated blood), often require preparation time, and multiple products are needed in the operating room
  - *Surgeons are looking for products that can cover a broader variety of existing and new surgery challenges*
- Fast, effective hemostats allow the surgeon to continue operating and reduce blood loss and surgery time – **improving patient morbidity and mortality rates**

~$3B global market for hemostats and sealants, growing 8% annually

~$3B market of surgical hemostats, sealants and glues, growing at 8% CAGR



Growth expected to continue

- Rising surgery volumes (particularly in the US)
- Technological advancements (MIS, robotic surgery, etc.)
- Rising numbers of trauma cases and complex surgeries
- Growing prevalence of acute and chronic conditions (cardiovascular, obesity, cancer, etc.)
- Shrinking blood supply/donor pool in many countries
- Increasing healthcare expenditure, drive for efficiency and quicker operating room turnover
- Expanding geriatric population

Source: MedMarket Diligence, LLC, company web sites, GATT research
NOTE: Market numbers being validated; in this analysis numbers adjusted downward, reports exist suggesting a total market size of $5Bn

Existing products have substantial limitations

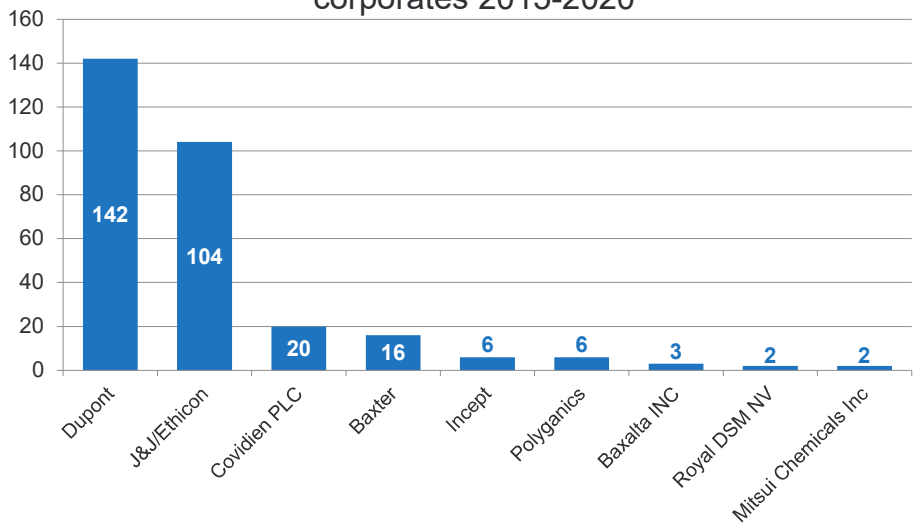
Category/generation	Launched in	Method of action	Limitation	Sample products
Gelatin/Collagen/ORC - blanks	~1970-1990	• Stimulate hemostasis by accelerating the formation of platelets, leading to fibrin clot	• Long time to hemostasis - depends on blood factors to initiate and drive the clotting process • Limited adhesion – can only control minimal bleeding • Foam based products can lead to increased pressure • Often (e.g. flowable matrices) require long (3-5 min) preparation time	• Surgicel • Gelfoam • Surgifoam
Fibrin/thrombin – actives	~1990-2010	• Acting at later stage in the hemostasis cascade, producing more immediate hemostatic results	• Tissue adhesion and time to hemostasis limited • Limited effectiveness in anti-coagulated blood • Relatively expensive (e.g. ~$800-900 for fibrin sealant patch)	• Tisseel, Evicl • Tachosil, Evarrest • Floseal, Surgiflo
Synthetic (NHS-PEG) – actives, synthetic	~2015-2020	• Further driving ability to improve time to hemostasis, but also allowing to seal the bleeding tissue	• Limitation in adhesion points, reducing tissue adhesion strengths, and limitsing the use in other applications (e.g. lung surgery)	• Hemopatch • Veriset

Existing market players have recognized the need to innovate

Market players are investing in related IP

>300 patents filed by corporates in the last 5 years…

# of patents filed in hemostatic/sealant technology by corporates 2015-2020



Source: NLO, European patent and trademark attorneys

…as well as acquiring smaller players

Selected M&A deals

- 2016: Mallinckrodt - $175M purchase of Recothrom, Preveleak, Raplixa
- 2017: Terumo - $1.1B purchase of Angioseal, Femoseal, Vadosheet
- 2018: Stryker - $220M purchase of Hyperbranch, Adherus
- 2019 (canceled 2020): J&J - $400M purchase of Tachosil
- 2020 Baxter - $350 purchase of Seprafilm

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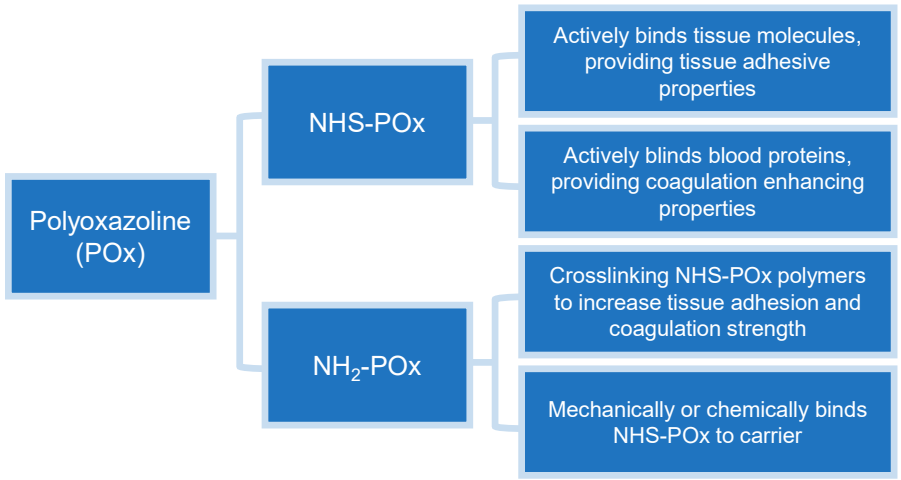
GATT has developed a game changing next generation technology platform protected by a strong IP portfolio

GATT has developed innovative and patented technology platform…

GATT NHS-POx (polyoxazoline) patented technology, enabling stronger wound adhesion compared to NHS-PEG (Veriset):



…protected by a strong IP portfolio

WO 2013/057628 Cross-linked polymers and implants derived from electrophilically activated polyoxazoline	**WO 2016/056901** tissue-adhesive porous hemostatic product
WO 2013/137736 Cross-linked polymers and implants derived from nucleophilically activated polyoxazoline	**WO 2013/103297*** Polyoxazoline polymers and methods for their preparation, conjugates of these polymers and medical uses thereof

* exclusively licensed by GATT

Additional new patents to further cover and strengthening GATT's strategy in pipeline and in process of filing

GATT IP with strong competitive edge

✓ covering full hemostat/sealant product scope

✓ freedom to operate: no blocking technology claims/ownership

GATT Platform has superior benefits

- Shorter **time to hemostasis**
- Short time to strong **adhesion**
- Able to handle stronger/larger, **more complex bleedings**
- Very **stable**: long in-use stability
- **Versatile** – platform of multiple applications: powder for laparoscopic surgery and semipermeable for lungs
- **Non-brittle**, more pliable/flexible, allowing for broader application use
- **Tunable functionality**: variation in dosage possible, creating options for use
- **Less swelling**
- Low **cost of goods**

Preclinical tests confirm superior benefits at lower cost

Category	Metric	Tachosil (Fibrin based)	Veriset (Synthetic, NHS-PEG)	GATT-Patch (Synthetic, NHS-POx)
Clinical efficacy	Time to hemostasis	3-6 minutes	<1 minute (75%)	20-60 seconds [1]
	Adhesion strength	+	++	+++
	Control of problematic bleeding, coagulated blood	+	++	+++
	Irregular tissue adhesion	-	+/-	+++
Safety	Time to absorb in body	12 weeks	4 weeks	4 weeks
	Swelling control	++	--	++
Ease of use	Preparation time (patch)	+++	+++	+++
	Flexibility, pliable, "plug and play" [2]	- (rigid form) + (if wet)	+/-	++
	Laparoscopic use (Y/N)	Y	Y	Y
Cost	US Price	~$600+	$300-350 (only EU)	~$200-250 [3]

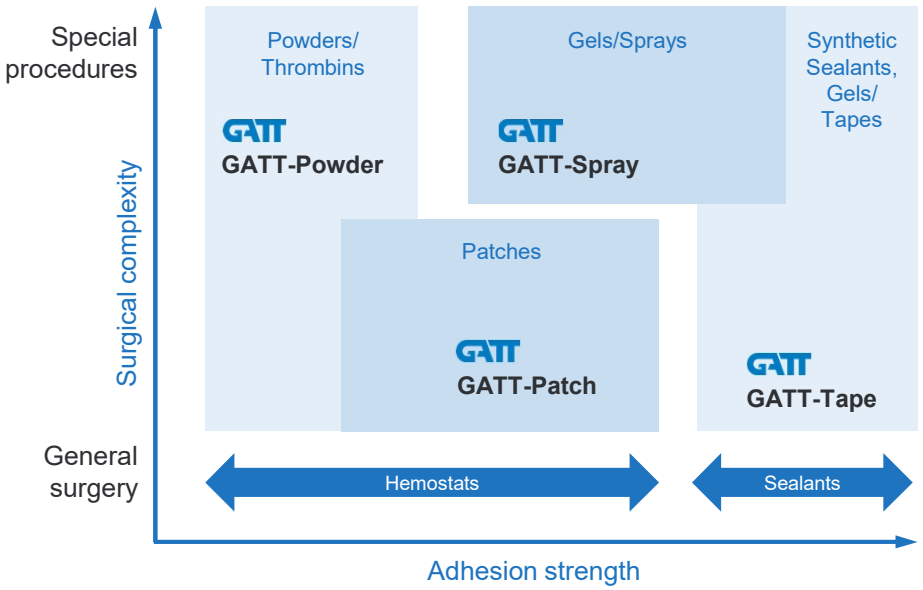
1. 700 GATT–Patch prototypes tested and compared with competing products in the market. Products tested in 25 ex-vivo livers and more than 30 in-vivo pigs of which 8 in-vivo at US corporate strategic partners
2. Also known as "tuft-and-stuff"
3. $200-250 is lowest offer price for GATT that makes sense with a healthy margin, given that GATT is much better Than Tachosil, we can offer at Tachosil's price level ($600) or even go higher, and price for premium performance – allowing high margin

GATT platform provides opportunity to be “one stop shop,” covering all surgical procedures

GATT product pipeline

- **GATT-Patch**: fast hemostatic sealing patch for general (open) surgery *Frozen Product Design*
- **GATT-Powder**: sealing hemostatic powder for general surgery, laparoscopic use *In development*
- **GATT-Spray**: elastic sealant for general surgery and other applications (e.g. lung surgery)
- **GATT-Tape**: for preventing intestinal anastomotic leakage
- **Other** potential applications: bone regeneration, anti-adhesion, vascular, ophthalmology *R&D pipeline*

GATT platform: one stop shop



Surgeons are enthusiastic and confirm the potential of GATT

Surgeon statements after an *in-vivo* porcine study with the GATT-Patch:

"**Fast, robust adhesion**, I can instantly continue with surgery"

"Very **flexible and pliable** for irregular surfaces"

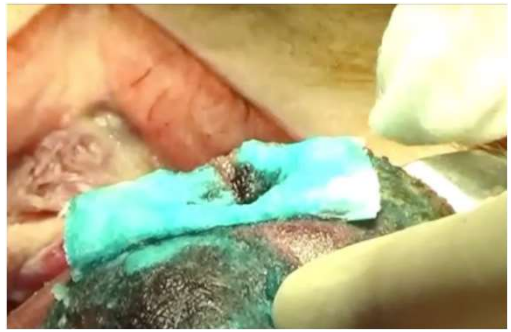
"I have been looking for a solution that is more **pliable, flexible** and can be used without preparation.."

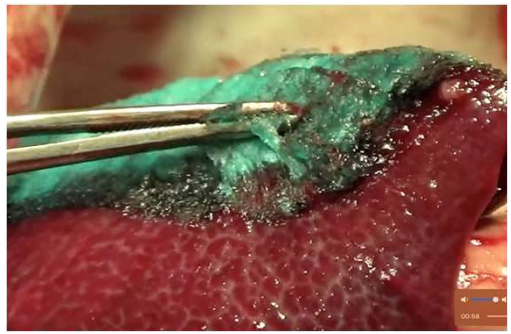
"This [current] generation products works for simple bleedings. We don't have anything yet for **severe bleedings**, and this [GATT-Patch] does…"

"The patch is opening the door for a whole **new set of applications** like liver, lung, and spleen resections…"

"The powder application is going to be a game changer in **laparoscopic surgery**"

"This can be a platform of solutions **simplifying and speeding up** many different types of surgeries, improving patients' well being and saving lives"





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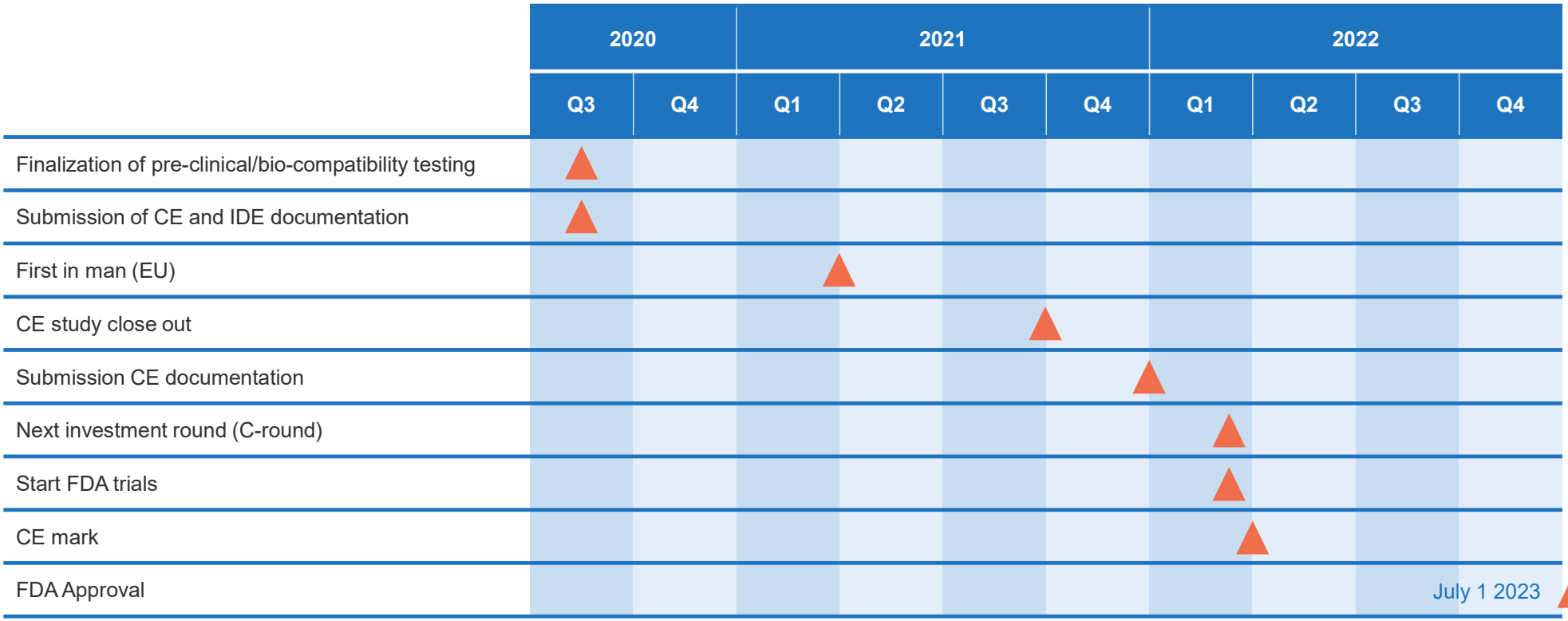
Key business milestones have been defined



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Several avenues exist for short- and long-term value creation

- Through series B round, GATT has secured financing to obtain CE approval end of Q1 2022
  - *Parallel to CE approval, we are starting FDA approval preparations*
- GATT might seek additional investment in the form of a C-series, to fund full execution of FDA and ramp up of commercial model
  - *Considering several options with strategic buyers*
  - *Commercialization could be in the form of distribution model or with partner, considering several options*
- Several parties have shown interest for long term investment
  - *Potential strategic buyers from large strategic partners in the US, EU, China and Japan*
- Attractive deal value, current expectation value ~$200-250M value based on comparable deals for one product
  - *Significantly higher ($300-400M) depending on platform options added*

(1) J&J, CR Bard, Baxter, Medtronic, Takeda
(2) Teijin, Fosun

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