



# EXPEDEON

## Creating and Commercializing Innovation in Life Sciences

9 July, 2019





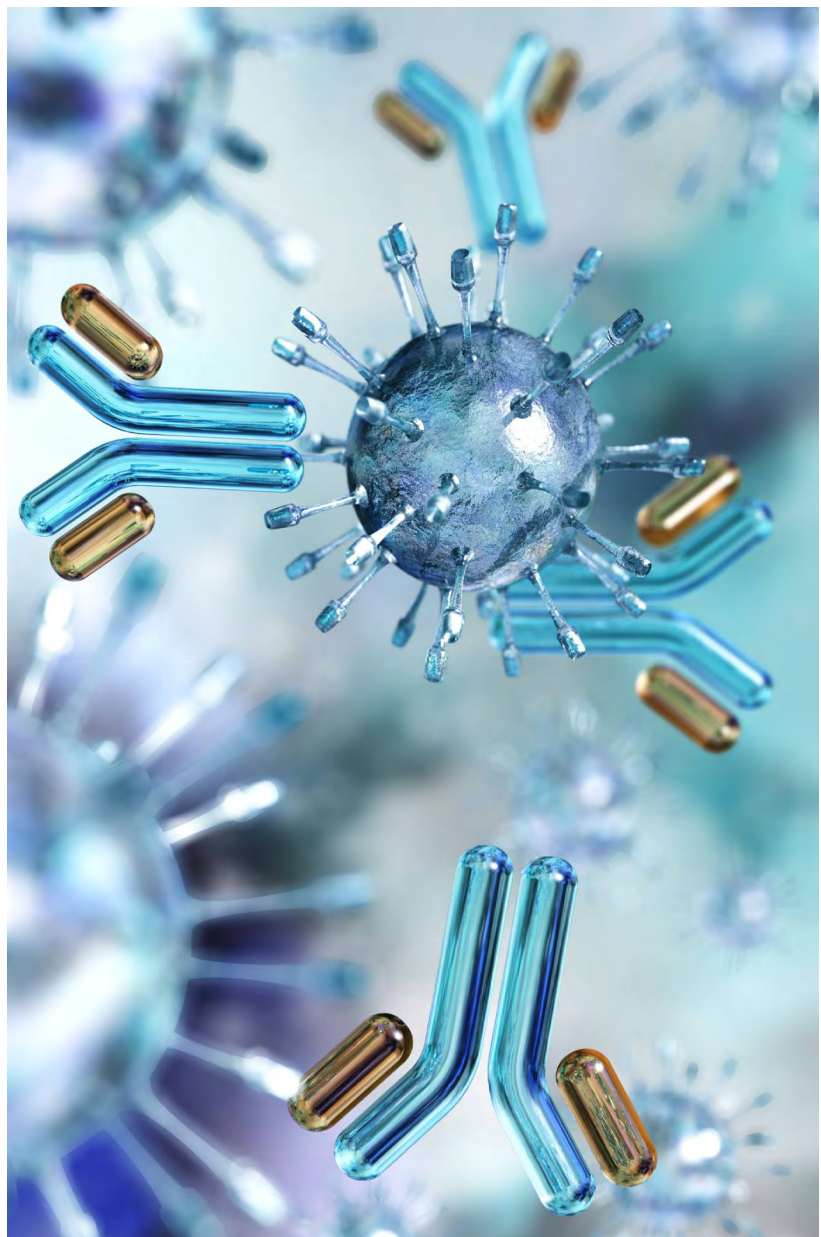
# Disclaimer

This document is intended for prospective investors, partners and media audiences and no statements made here should be considered as claims for the success of our products, which are currently in the development phase. This document also may contain projections and/or estimates about and descriptions of plans and objectives relating to our future operations, products, or services; future financial results; or assumptions underlying or relating to any such statements. These statements are forward-looking and are subject to risks and uncertainties, many of which are beyond our control and are not to be regarded as guarantees of future events.

Actual results could differ materially depending on a number of factors, including the timing and effects of regulatory actions, the results of product tests, the Company's relative success developing and gaining market acceptance for any new products, and the effectiveness of patent protection.

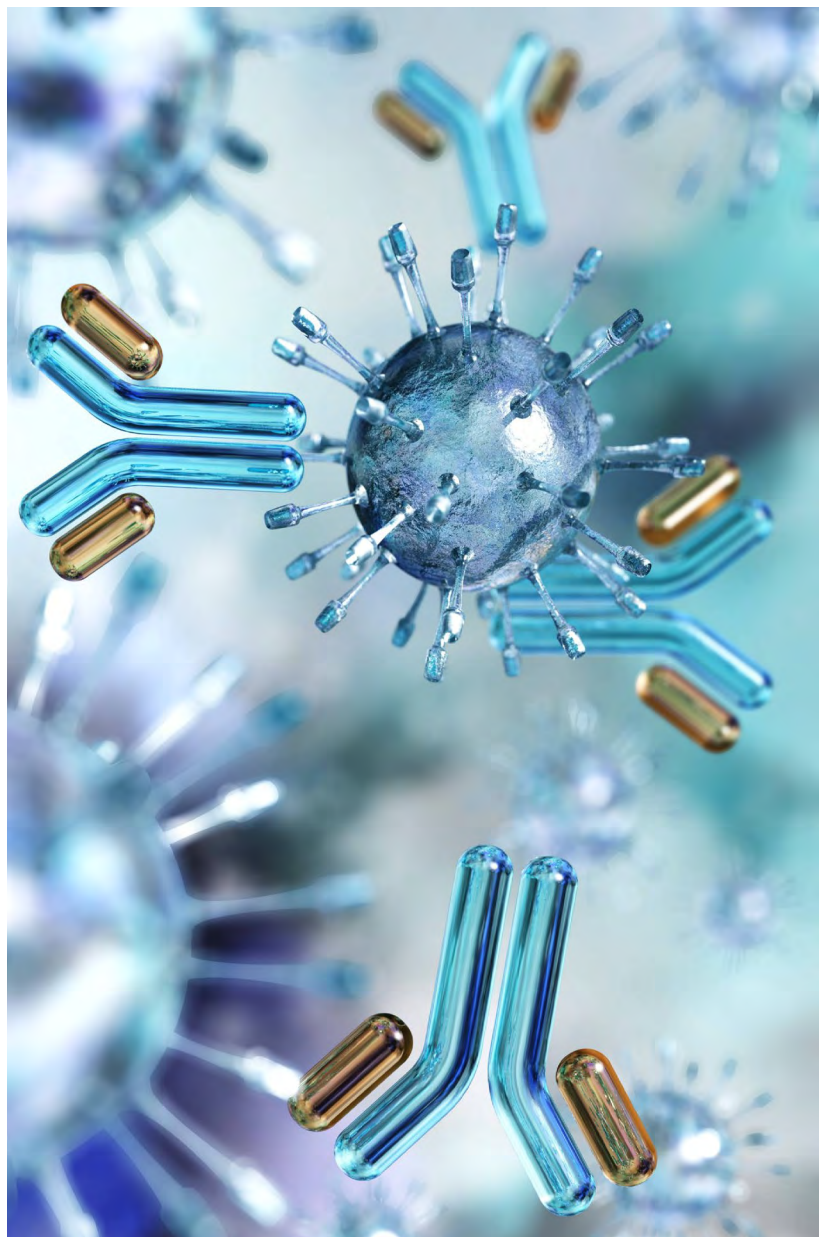
There can be no guarantee regarding the results of the product tests or other on going studies with our products. There can be no guarantee that our products in development will be approved for marketing in a timely manner, if at all.

The Company disclaims any intent or obligation to update these forward-looking statements or the factors that may affect the Company's future results, performance or achievements, even if new information becomes available in the future.



# Agenda

- Company Overview
- Review of 2018
- Key Technologies
- Target Markets
- Emerging Commercial Opportunities
- Report on 2018 Results
- Outlook for 2019
- Corporate Information and Summary

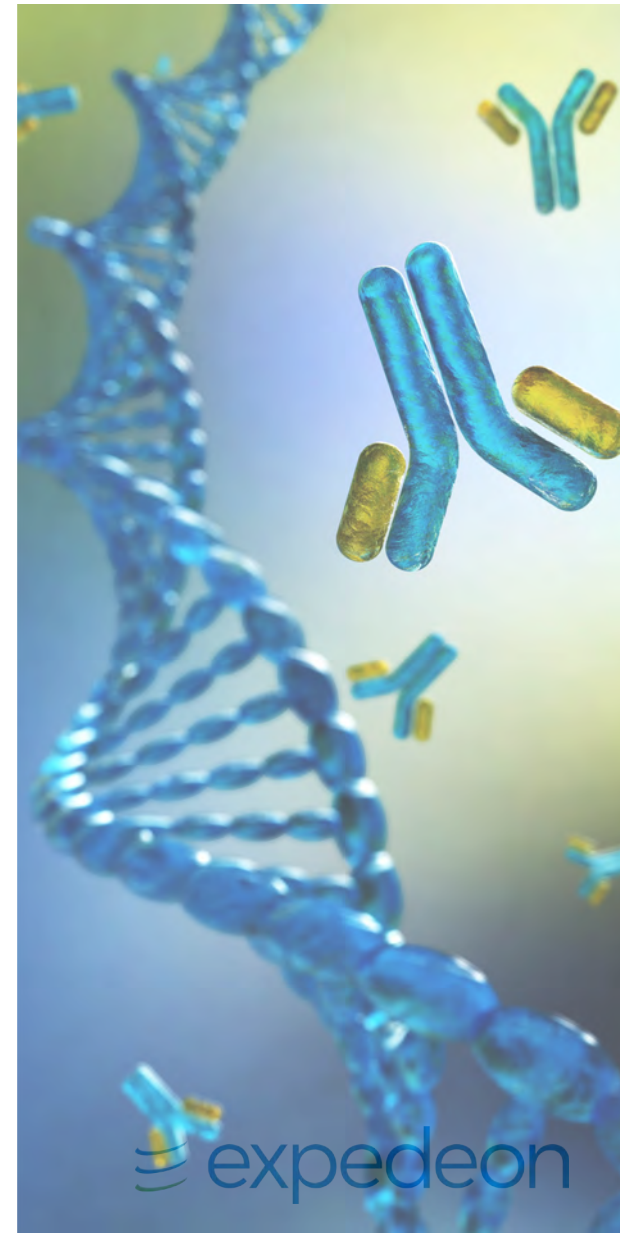


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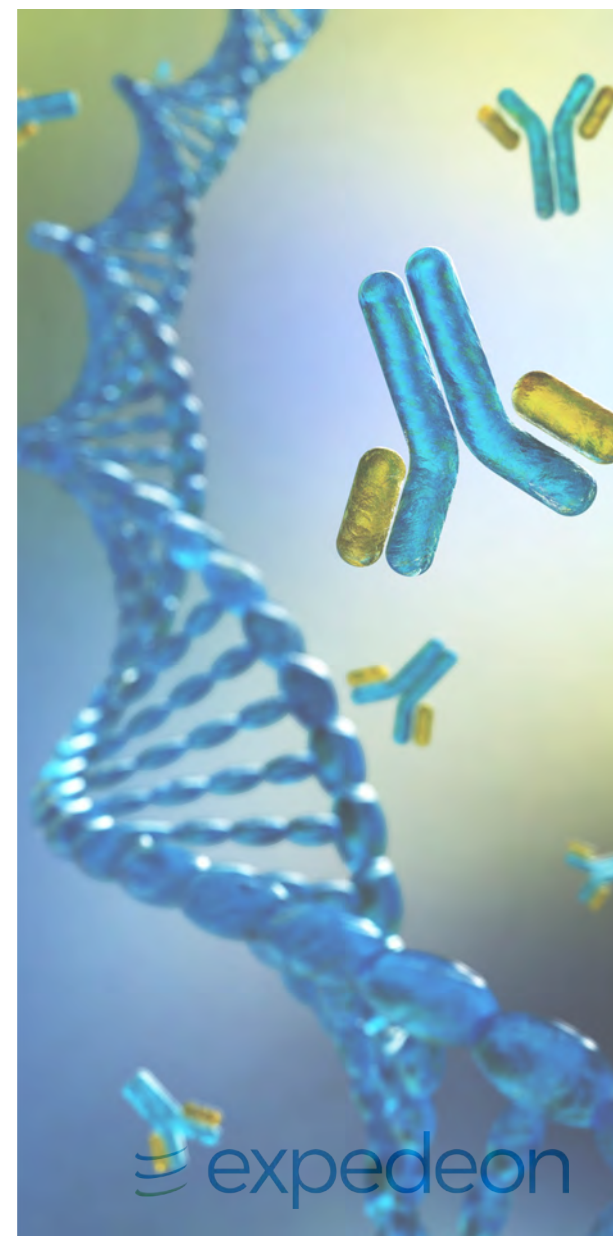
# Company Overview

- Develop, manufacture and sell consumables for use in laboratory workflows across immunology, proteomics and genomics, especially:
  - Biomarker research
  - Drug discovery
  - Clinical diagnostics
- **Our products' USPs:**
  - Make research workflows quicker and easier
  - Simplify manufacturing processes
  - Save time and money in high throughput biomarker screening

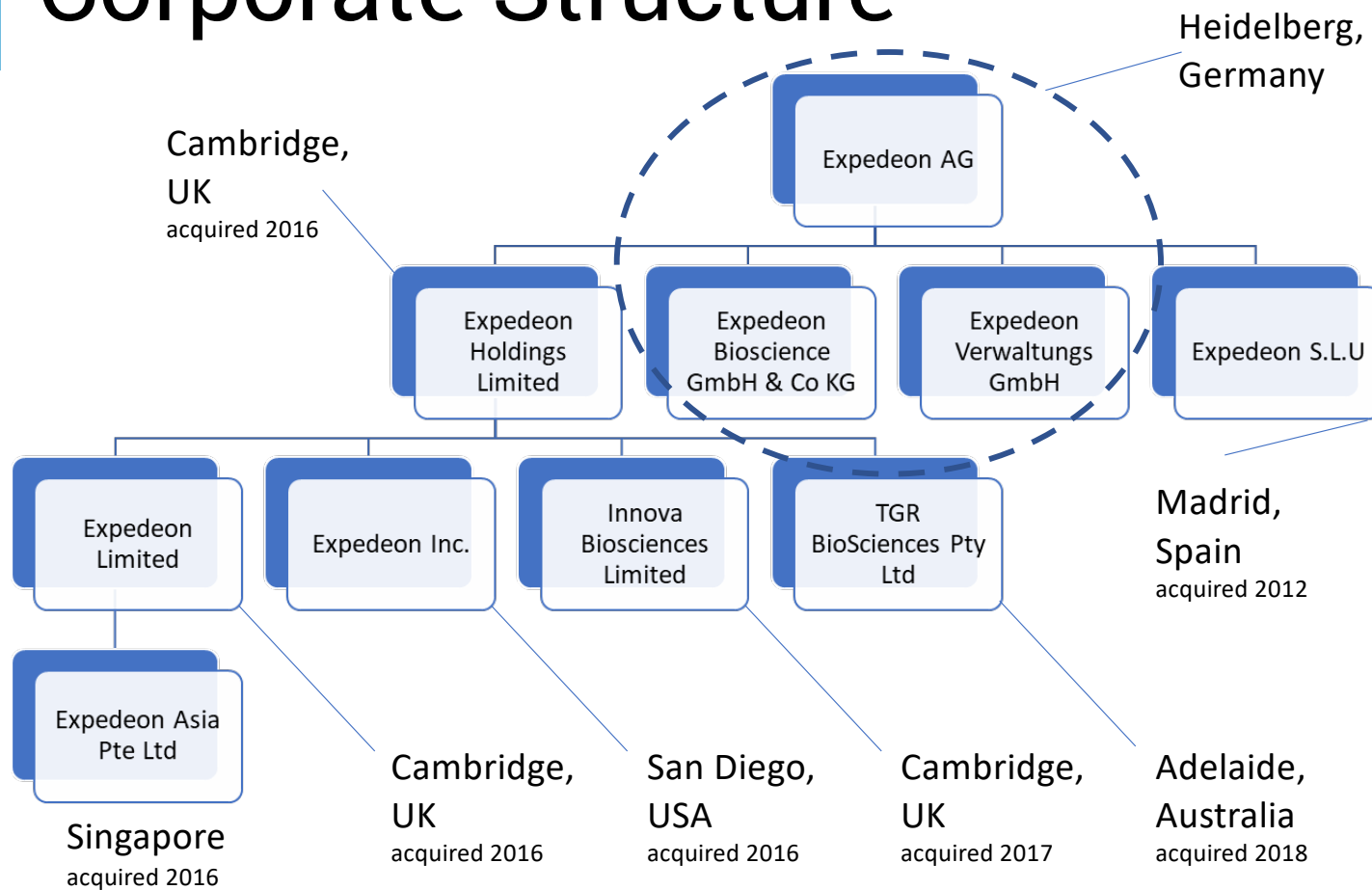


# Our Expertise

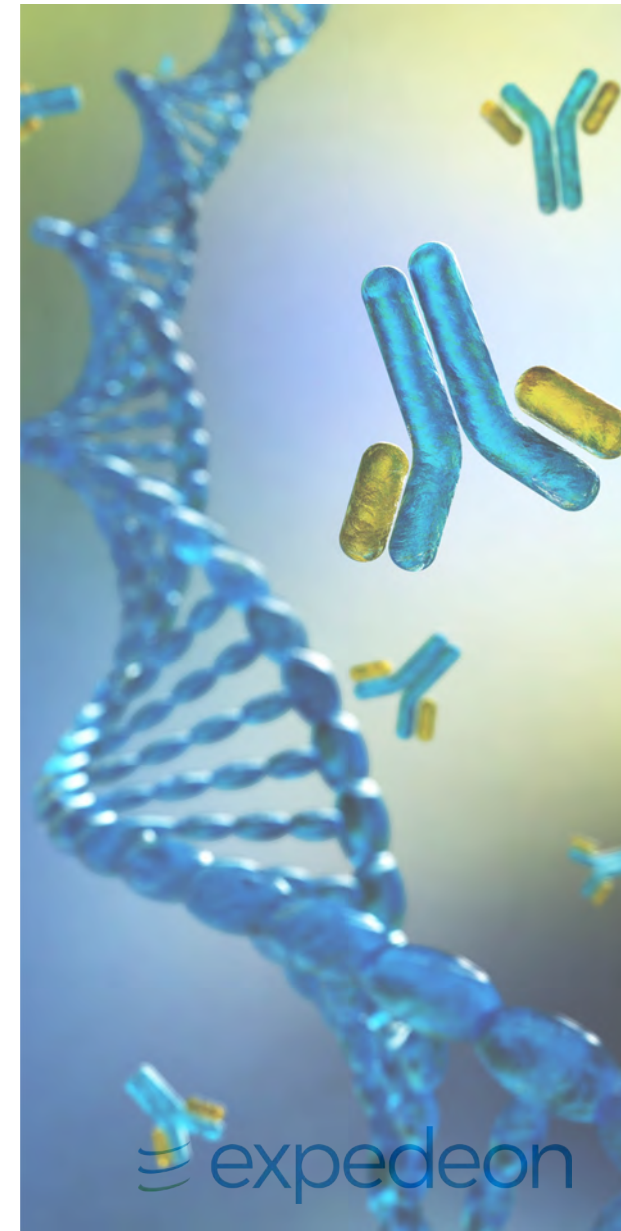
- Bioconjugation:
  - Market leading **immunology** market technologies in:
    - the capture; and
    - labeling of antibodies used for immunology research
- DNA amplification:
  - Market leading **genomics** technology for the replication and manufacture of DNA



# Corporate Structure



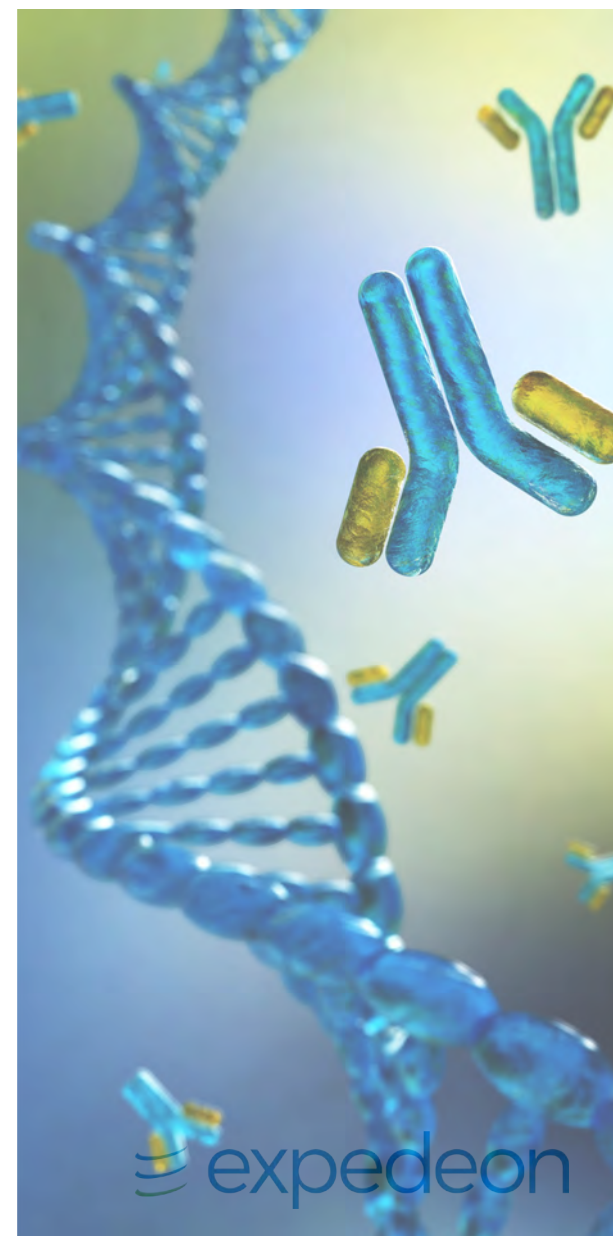
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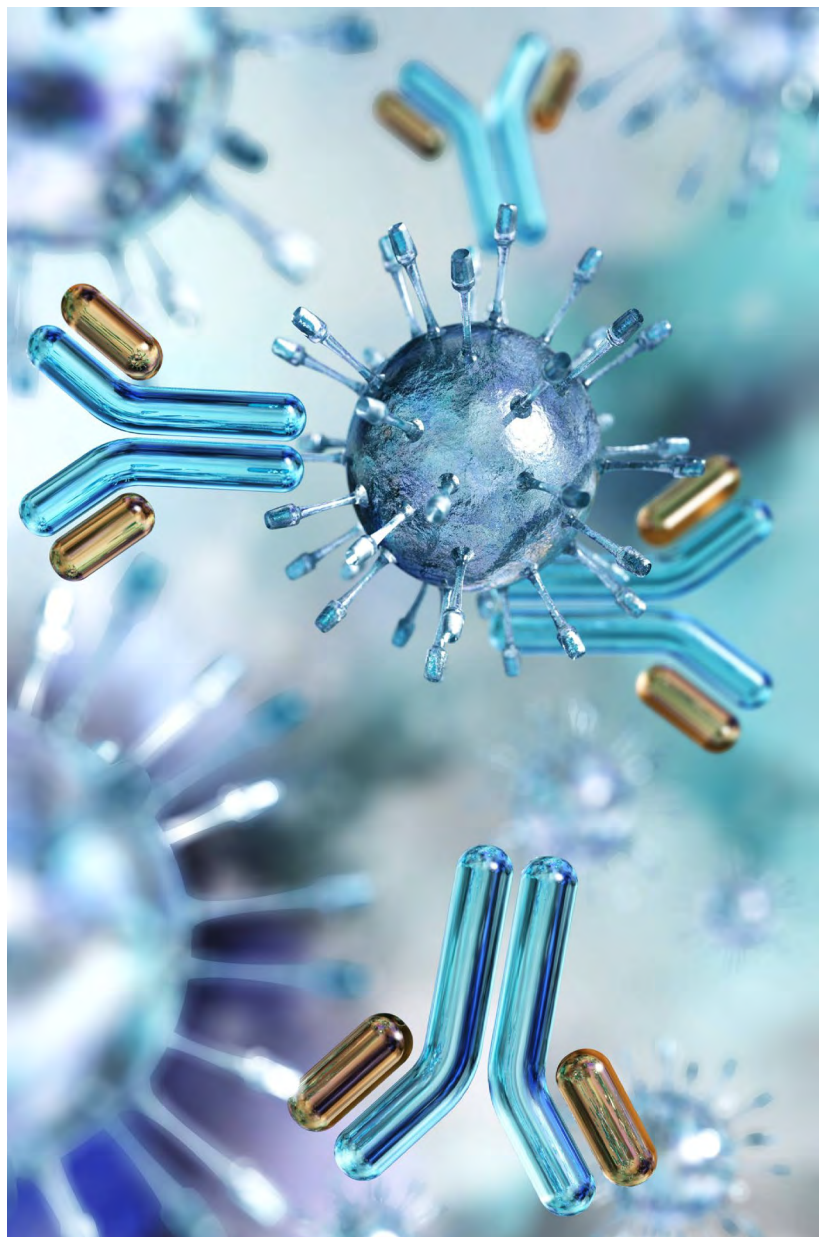


# Operational Structure

	Immunology	Proteomics	Genomics
<b>Sales and Marketing:</b>	UK, USA	UK, USA	UK, USA
<b>Research and Development:</b>	UK, Australia	UK	Spain
<b>Manufacturing:</b>	UK, Australia	UK, USA	Spain

100+ staff across five locations





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# 2018 Overview

- **Corporate Vision:** Become a market leading innovator by developing products and services built on proprietary technology

- **Strategy:** Grow, buy, build:

Innovation driving organic growth:

Develop and sell clever and easy to use products and services that our customers want to use

Scale driving profitability:

Acquire complementary technologies which further enhance growth, economies of scale and profitability



# 2018 Milestones

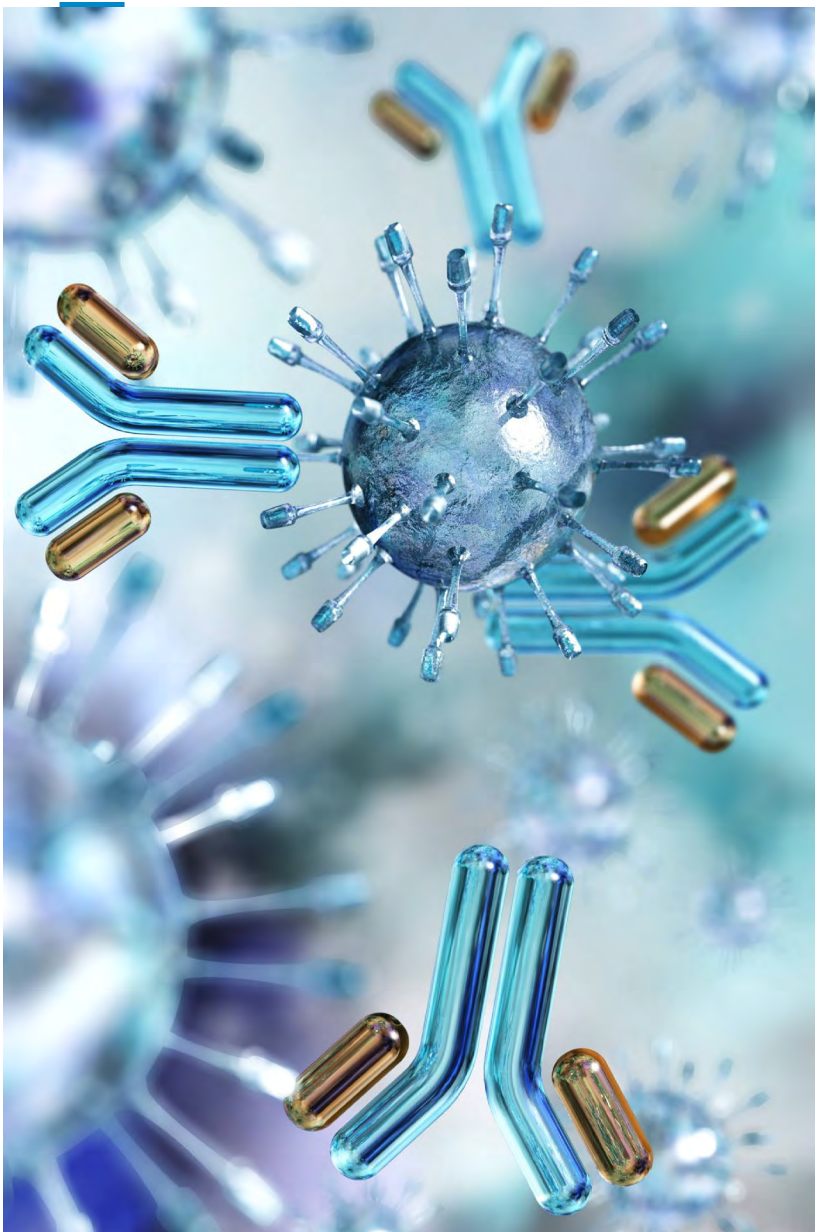
- Acquisition of TGR BioSciences
  - CaptSure™ - universal surface technology
- Financial Performance:
  - First ever operating profit
  - 68% revenue increase
- Capital Measures:
  - Private placement of €4.2 million
  - Mandatory convertible bond of €2 million
  - Debt funding of €5.6 million
- Commercial Transactions:
  - Quanterix
  - Antibody Manufacturer Supply Agreement



# 2018 Seminal Year

- Created a strong commercial platform geared for growth:
  - 100+ staff, including 20 R&D, 30 Sales and Marketing
- Own a portfolio of valuable technologies which will create shareholder value:
  - Lightning-Link®
  - CaptSure™
  - TruePrime™
- No further reliance on the market to fund operative business

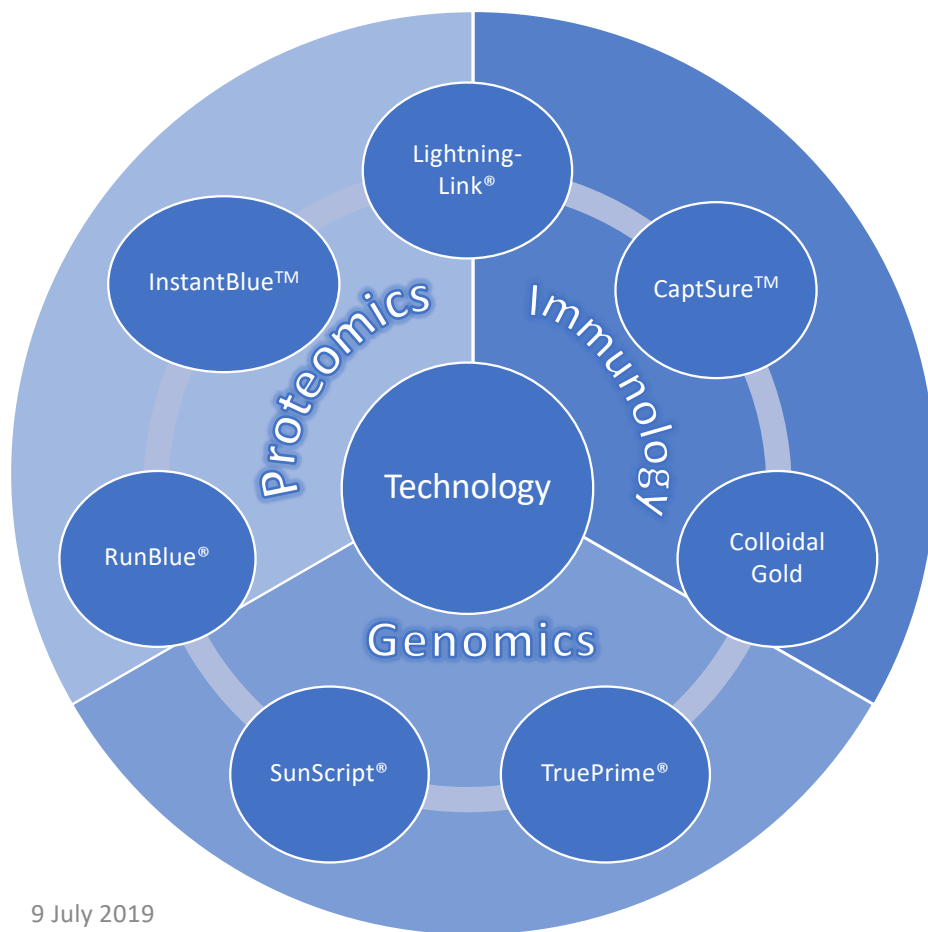




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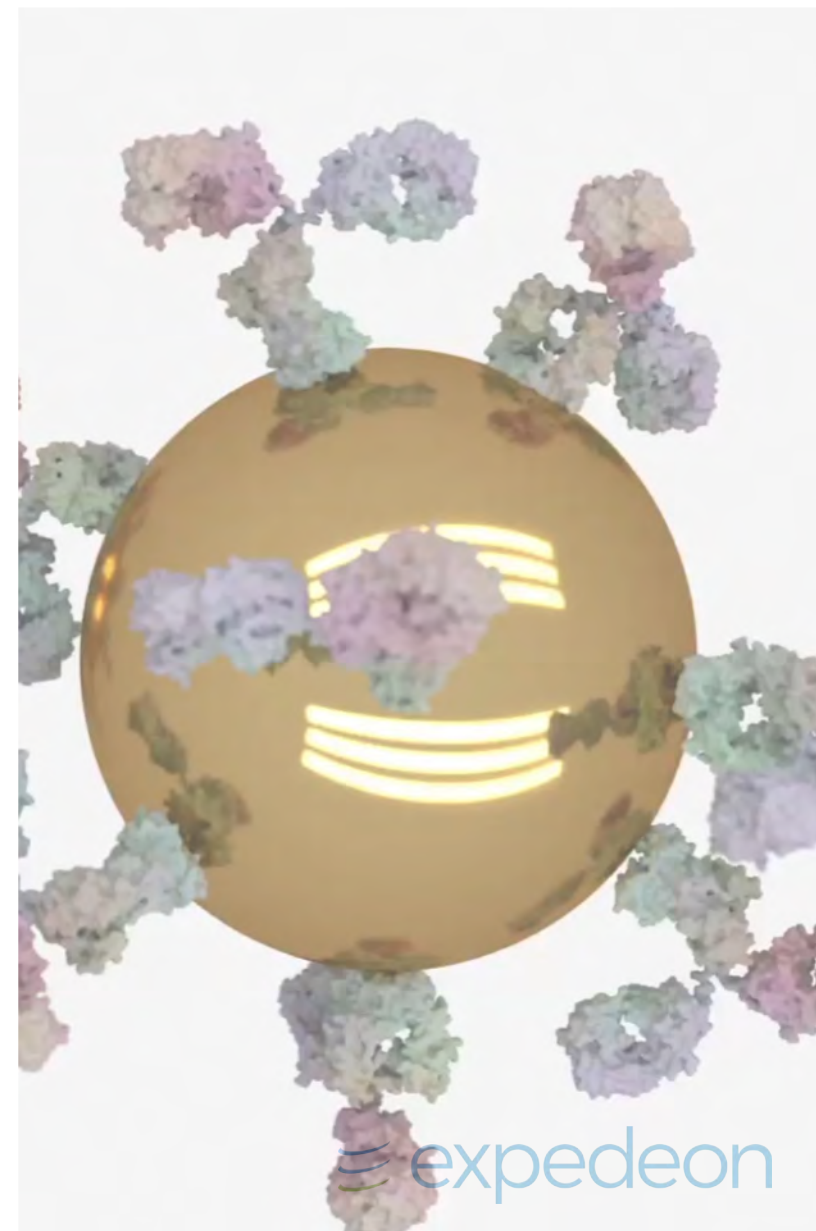
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# Key Technologies

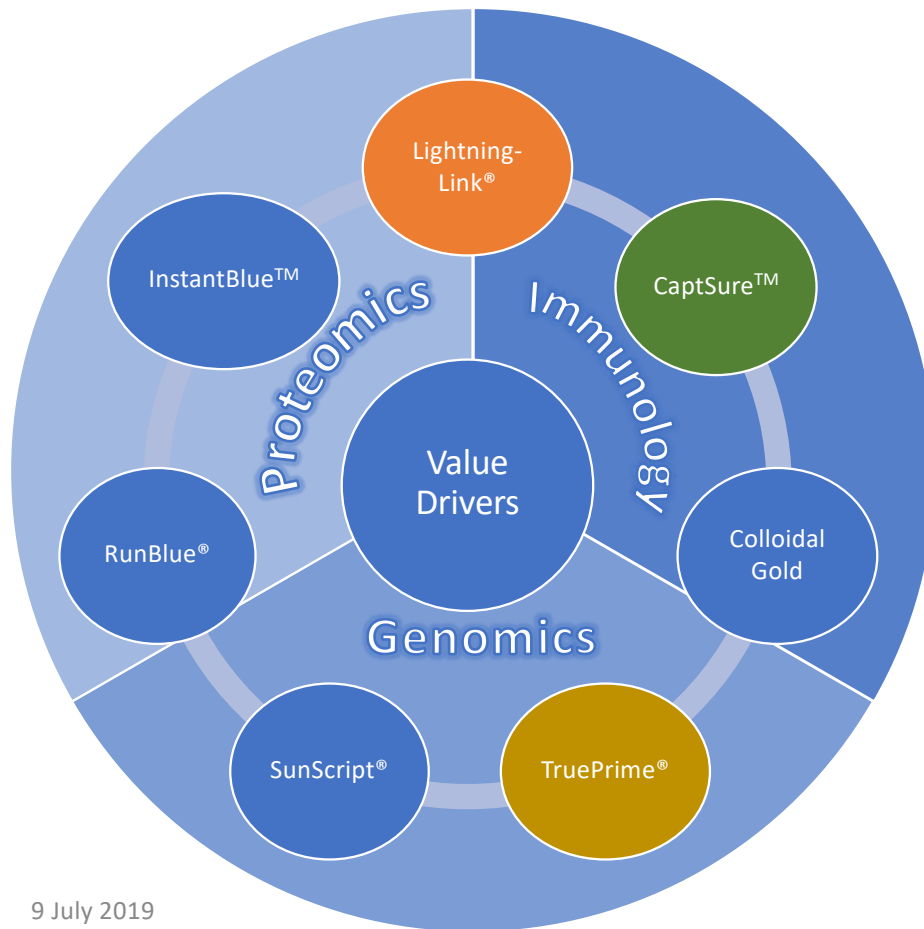


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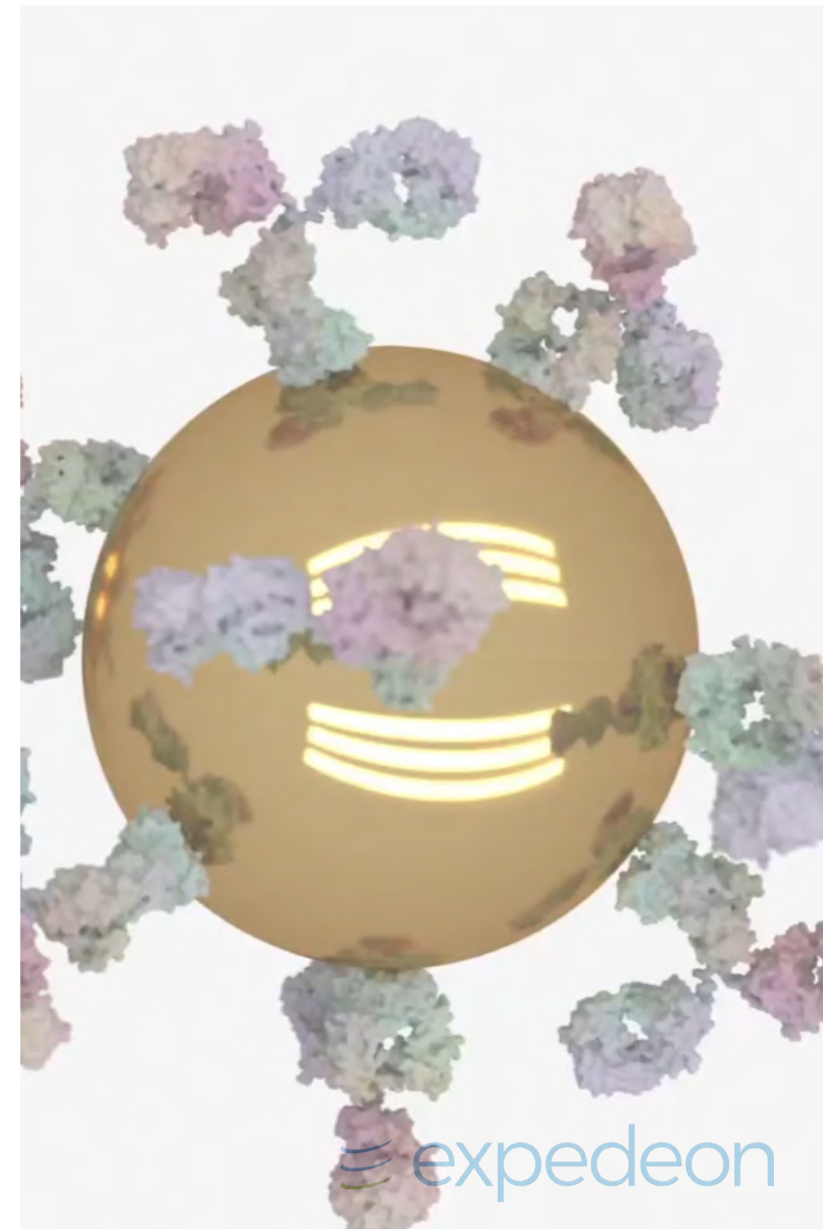


# Key Technologies



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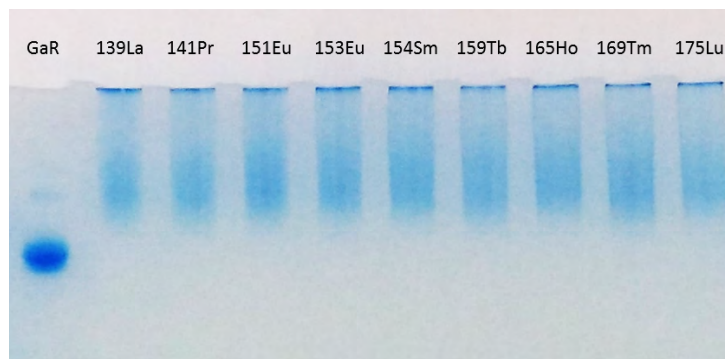
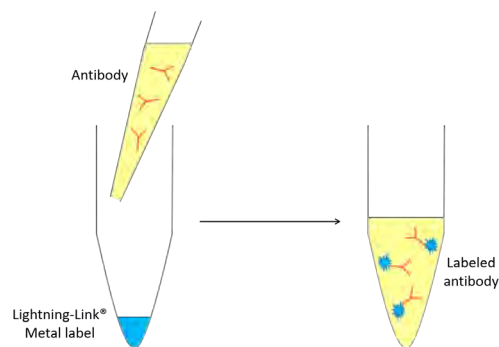


# Core technology: Lightning-Link®

- Single step labeling technology for biomolecules
- USPs: Fast, easy to use, highly reproducible and scalable
- Core Applications:
  - Research: Antibody-based workflows, Flow Cytometry, ELISA, Western Blotting
  - Diagnostics: ELISA, Lateral Flow Assay
- Market Size:
  - R&D Kits: USD 200 million
  - Diagnostics: USD multibillion



# Lightning-Link®: Metal Conjugation



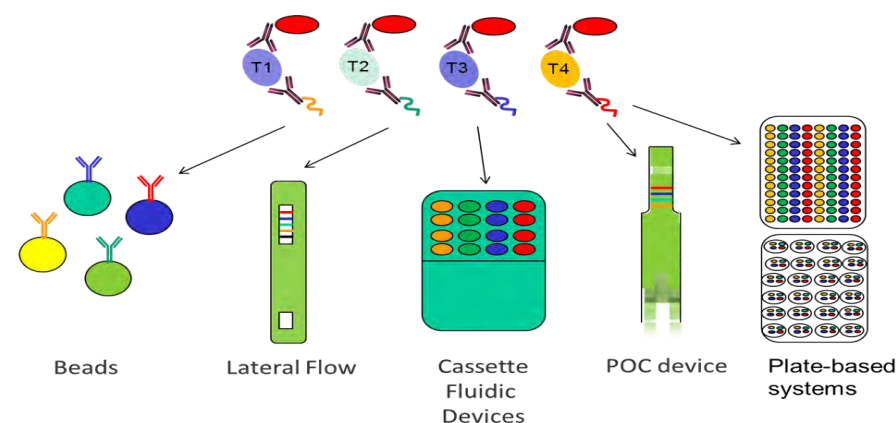
## Applications:

- X-ray fluorescence
- Mass cytometry
- Multiplexed ion beam imaging (\*MIBI™)
- Dissociation-enhanced fluorescence immunoassays (\*\*DELFI<sup>®</sup>)

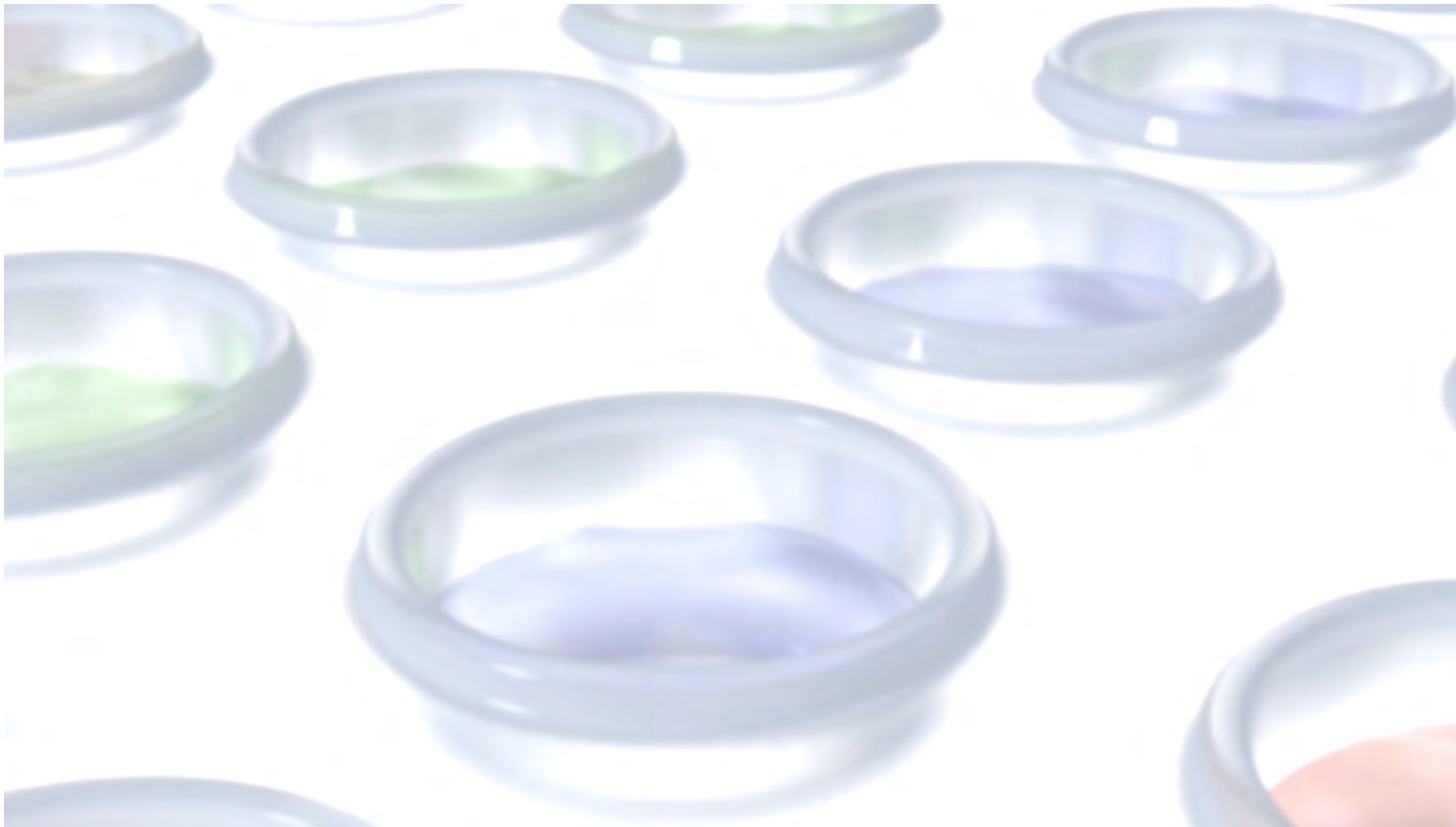


# Core technology: CaptSure™

- Single step Antibody Capture technology
- USPs: Fast, easy to use, scalable, low amount of antibody required
- Core Applications:
  - Research: Antibody-based workflows, Plate-based assays, Bead-based assays, Western blotting, Multiplex
  - Diagnostics: ELISA, Lateral flow assay
- Market Size:
  - R&D Kits: USD 200 million
  - Diagnostics: USD Multibillion



# CaptSure™ DIY ELISA



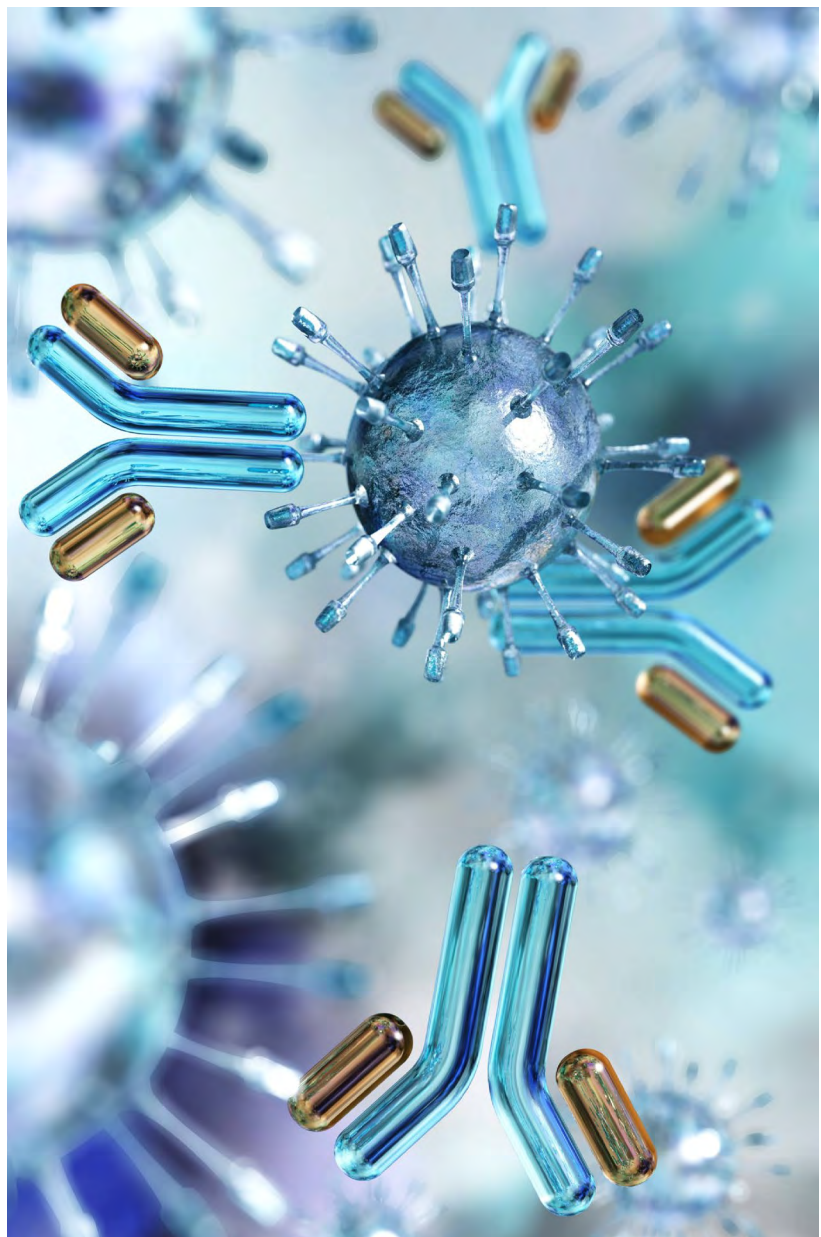
# Core technology: TruePrime™

- DNA Amplification Technology
- USPs:
  - 1000x more sensitive than other MDA methods
  - No synthetic primers → Higher Quality
  - Insensitive to external DNA contamination
  - Robust; reproducible; easy to use
- Core Applications:
  - Liquid Biopsy
  - Gene Therapy
- Market Size: Multi-bn\$



# Core technology: TruePrime™



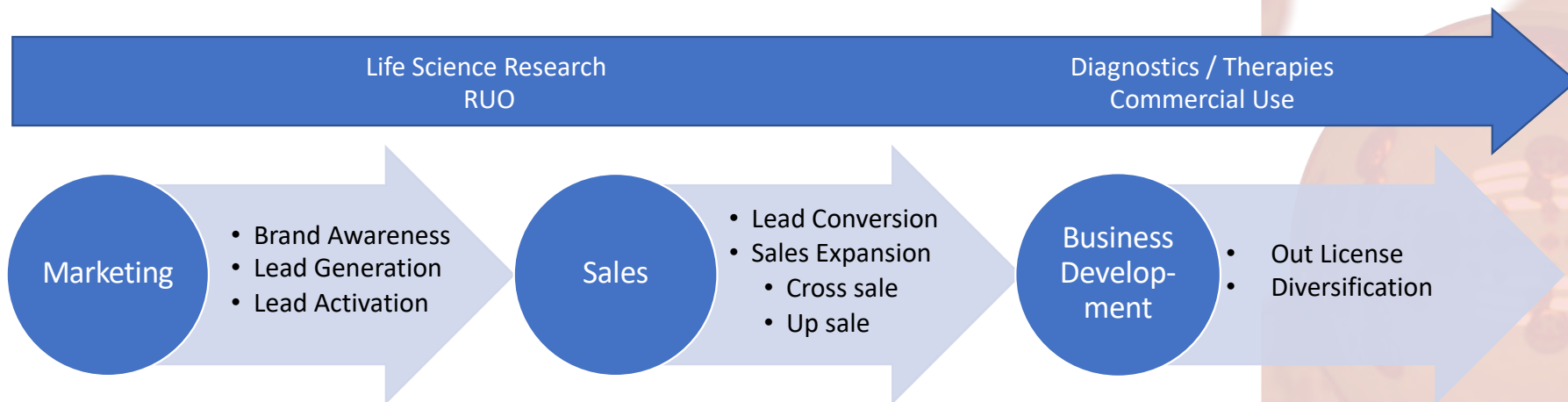


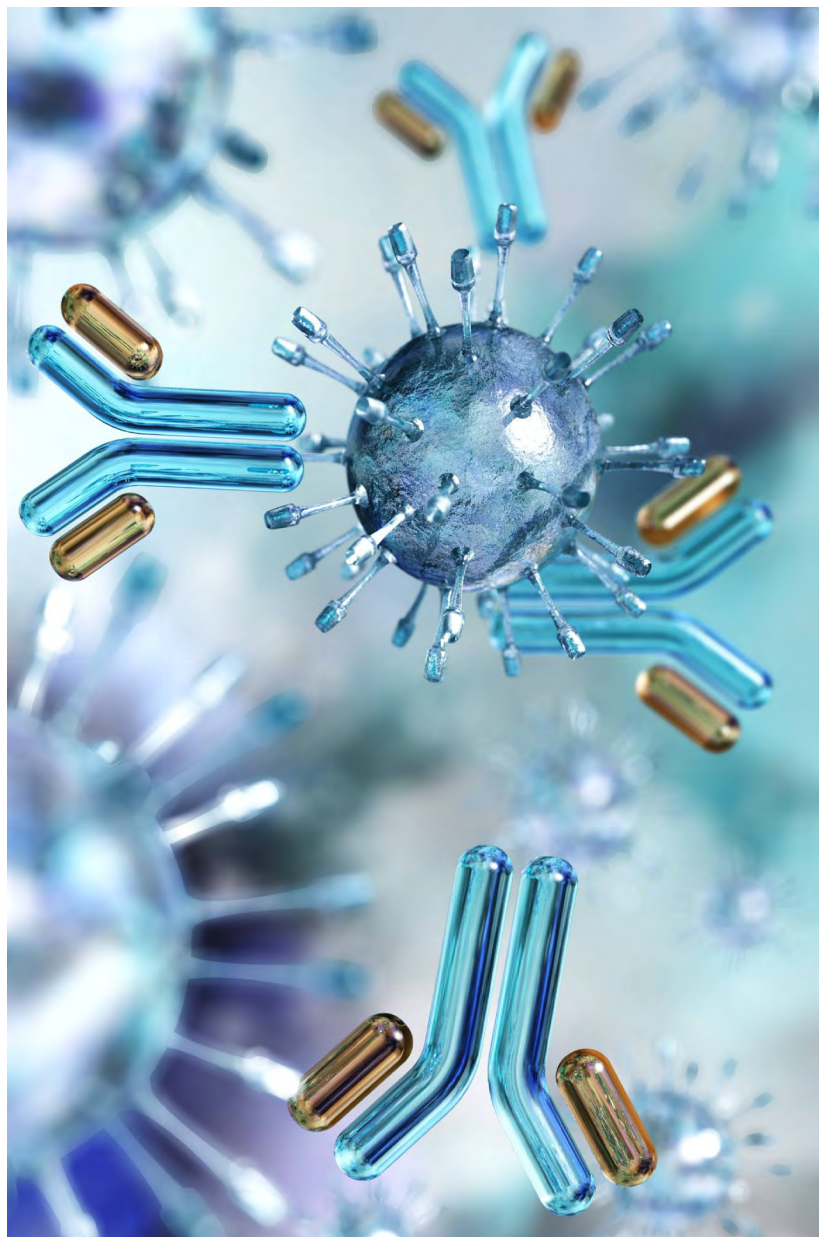
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# Target Markets

- Research Use Only applications across pharma and academia
- Industrial scale biomarker screening
- Integration into diagnostics

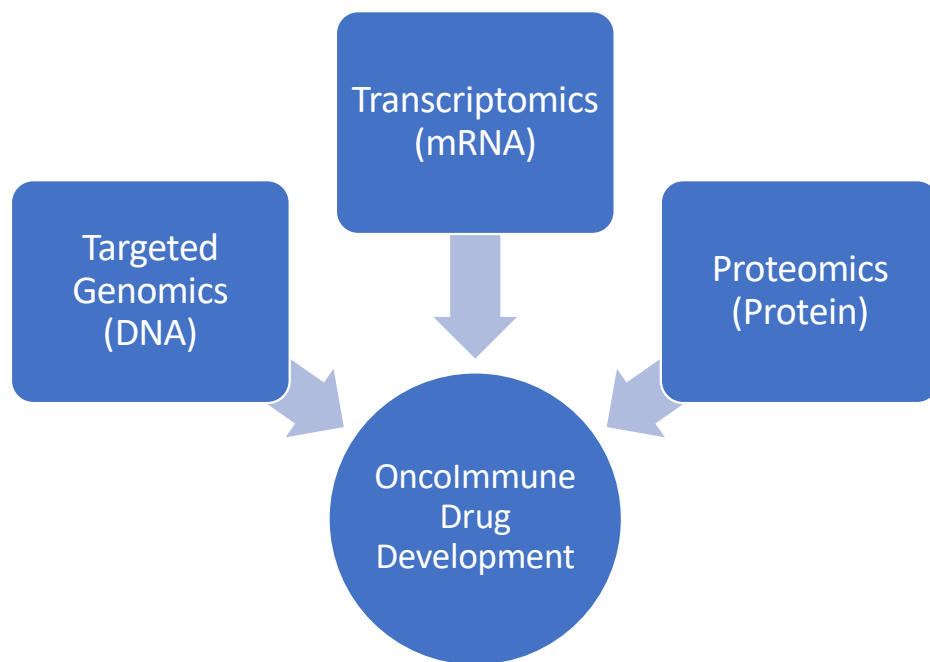




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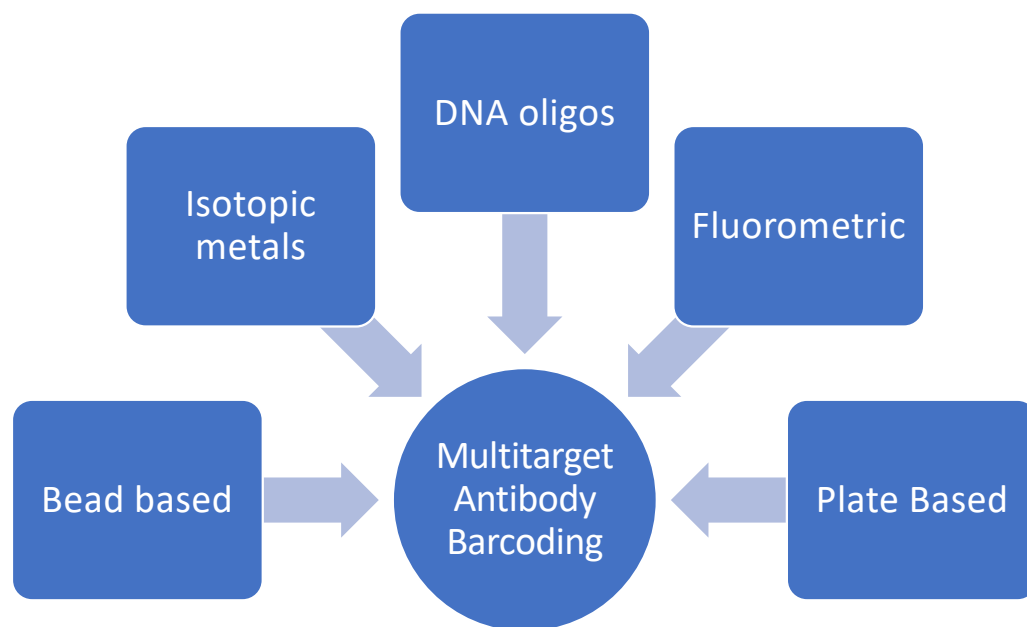
# Multiple biomarker analysis: 'MultiOmics'



## Market Trends in Oncolmmune Research:

- Multiple datasets from single sample
- Single cell resolution
- Emergence of many platforms offering multiomics solutions
- Platforms require bioconjugation solutions

# Multiple biomarker analysis: Higher Plex Solutions



## Customer needs

- Fast and reliable barcoding
- Working at small scale
- Cross platform applicability

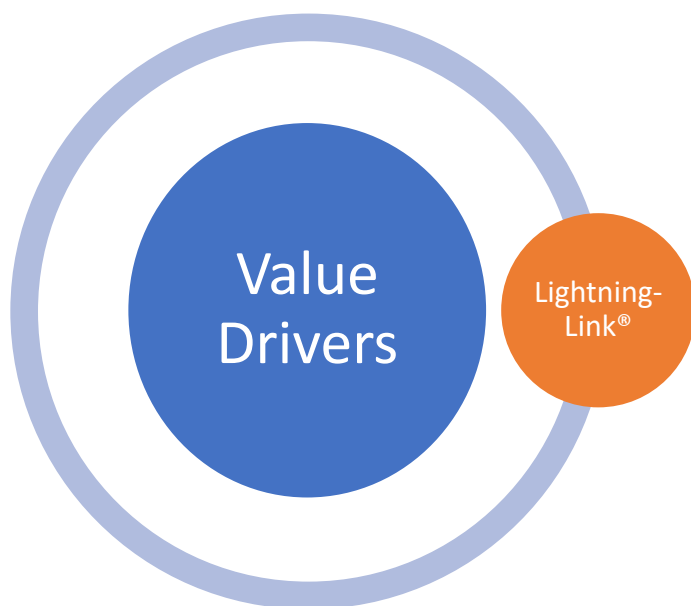
## Expedeon Solutions

- Lightning-Link®
- Captsure™

## Emerging Platform Technology

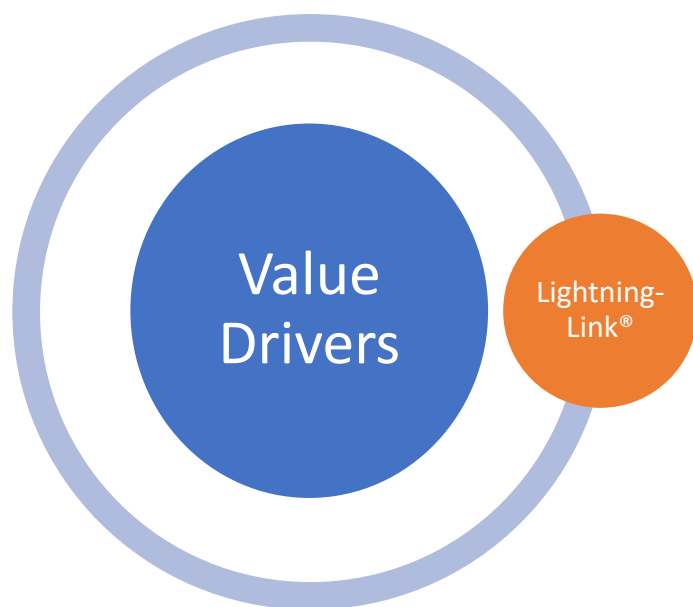
- Metal barcoding
- Oligo barcoding

# Antibody-Metal Barcoding



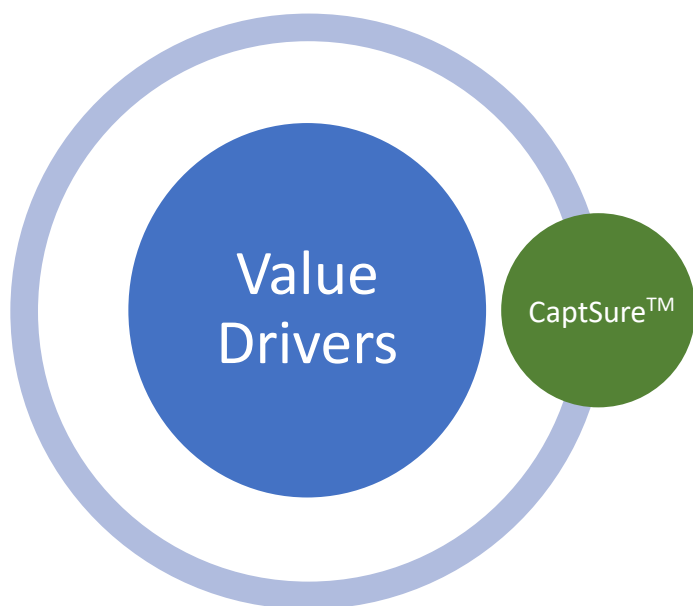
- **Application:**
  - Labeling of antibodies with “metal barcodes” permitting detection of more than 40 biomarkers from a single cell
- **USPs:**
  - Ease of use – reduces multi-step process to one step
  - Fast – reduces hands on time
  - Reduces antibody use – saving considerable cost
- **Opportunity:**
  - Management estimate of market opportunity is \$30m+ and growing >25% per annum

# Antibody-Oligo Barcoding



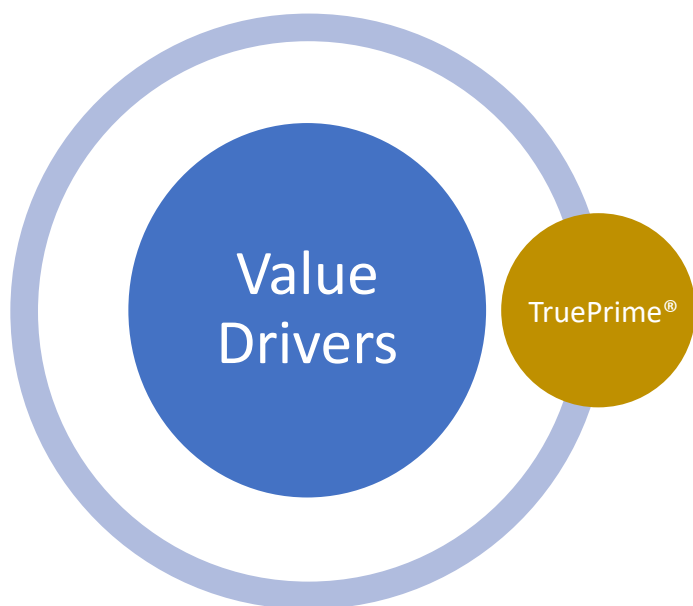
- **Application:**
  - Labeling of antibodies with “oligo barcode” permitting theoretical detection of thousands of biomarkers from a single cell
  - Used on variety of new high-plexing single cell platforms including 10x Genomics (Chromium), Beckton Dickson (Rhapsody), Nanostring (GeoMx), Akoya (Codex),...
- **USPs:**
  - Ease of use and flexible
  - Fast and scalable with potential to work at 10µg scale
  - Reduces antibody use, saving considerable cost
- **Opportunity:**
  - Multiple entrants all requiring access to quick and easy to use reagents

# Multiplex Assay Systems



- **Application:**
  - Creation of universal surface for high throughput antibody analysis
  - Used on variety of platforms for multiplex biomarker analysis
- **USPs:**
  - Unique universal surface for capturing antibodies saves significant time
  - Multiplex compatible
  - Reduce antibody use by 90% saving considerable cost
- **Opportunity:**
  - Multiple platforms where this creates both time and cost savings

# DNA Manufacturing



- **Application:**
  - Manufacture of large amounts of high quality DNA for use in preclinical and clinical gene therapy applications
- **USPs:**
  - Manufacturing of DNA without bio-fermentation creating higher quality DNA
  - Reduced manufacturing cost
- **Opportunity:**
  - Multi-billion \$ gene therapy market expected to grow at over 20% per annum with existing constraints on manufacture of high quality DNA

# Inflection Points: Revenue Opportunities

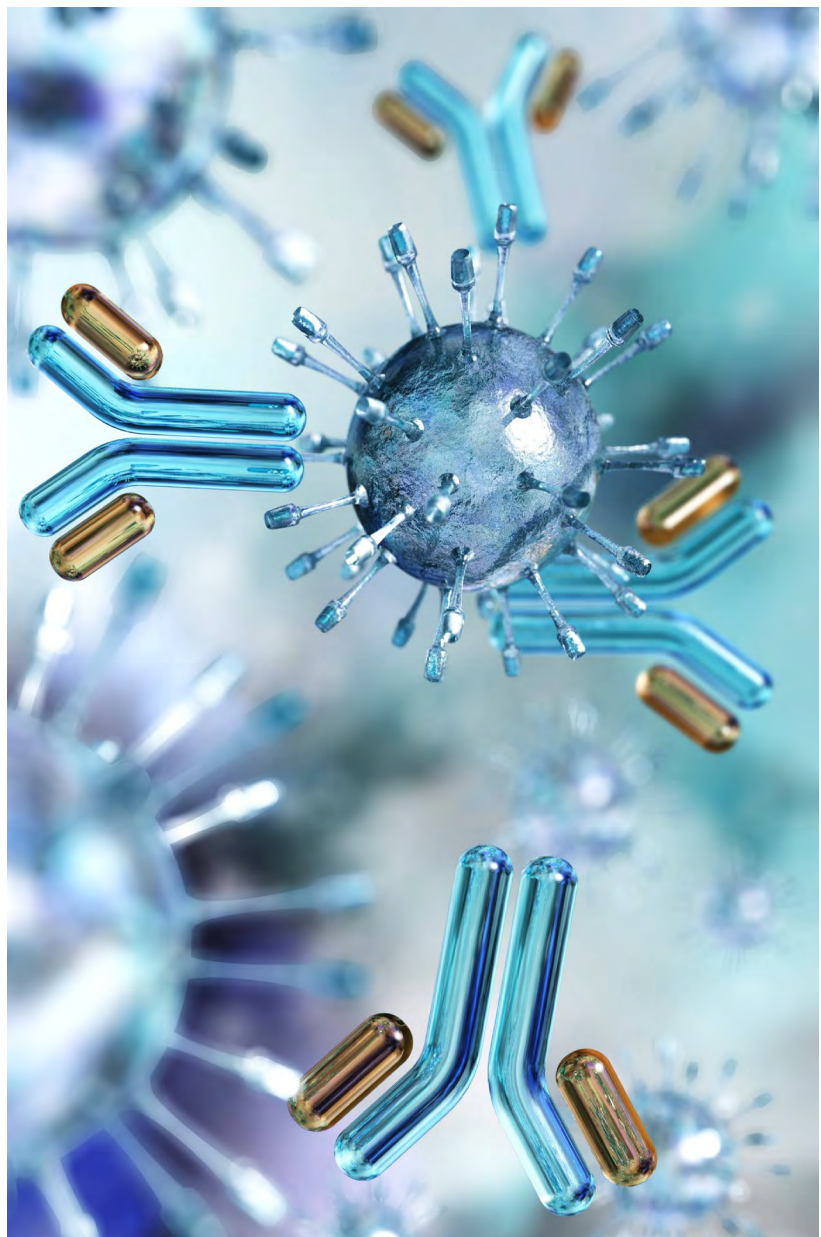
## Indicative revenue opportunities:

(potential by 2022 alongside existing product revenues)

Growth Opportunity	Based on	# active opportunities	revenue opportunity €'million
Gene therapy	TruePrime™	2	€ 10.0
Oligo barcoding	Lightning-Link®	7	€ 5.0
Isotope barcoding	Lightning-Link®	3	€ 5.0
Multiplex	CaptSure™	3	€ 3.0
Diagnostic supplies		9	€ 7.0
		24	€ 30.0

### Important Notice:

This table presents indicative revenue opportunities relating to commercial projects in which Expedeon is engaged. These projects are all subject to commercial risk including competitor activity, competing intellectual property and cost considerations. It is possible that none of these projects are successfully concluded.

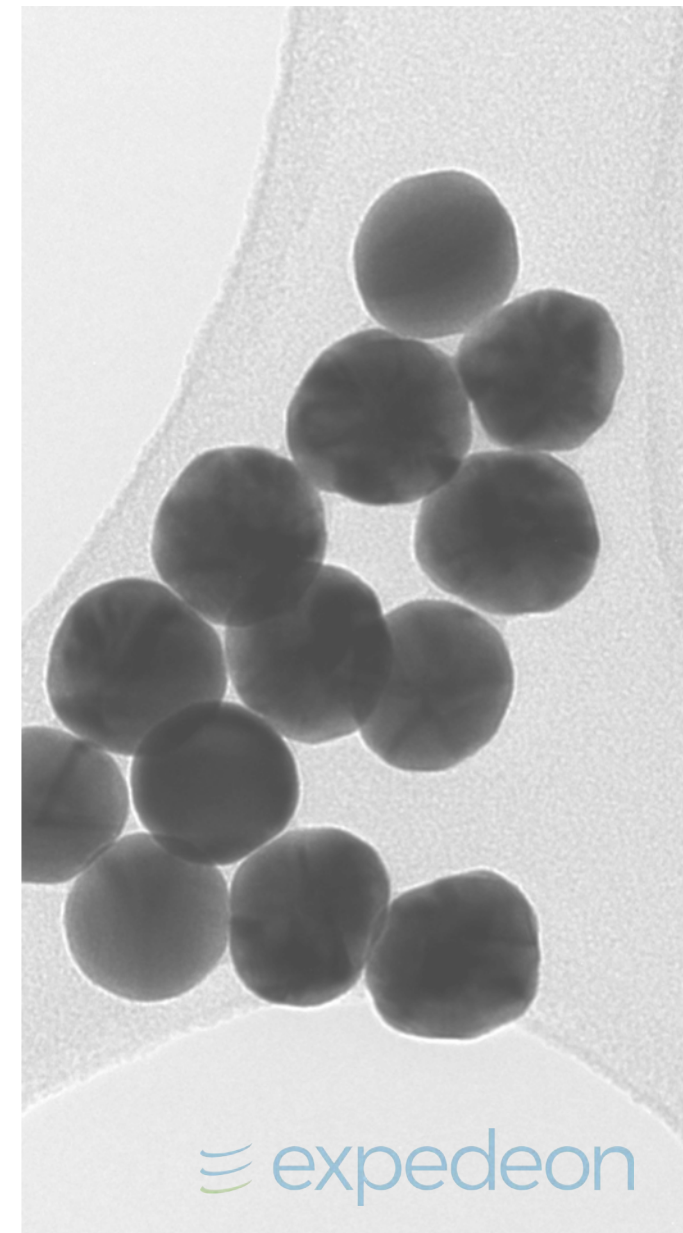


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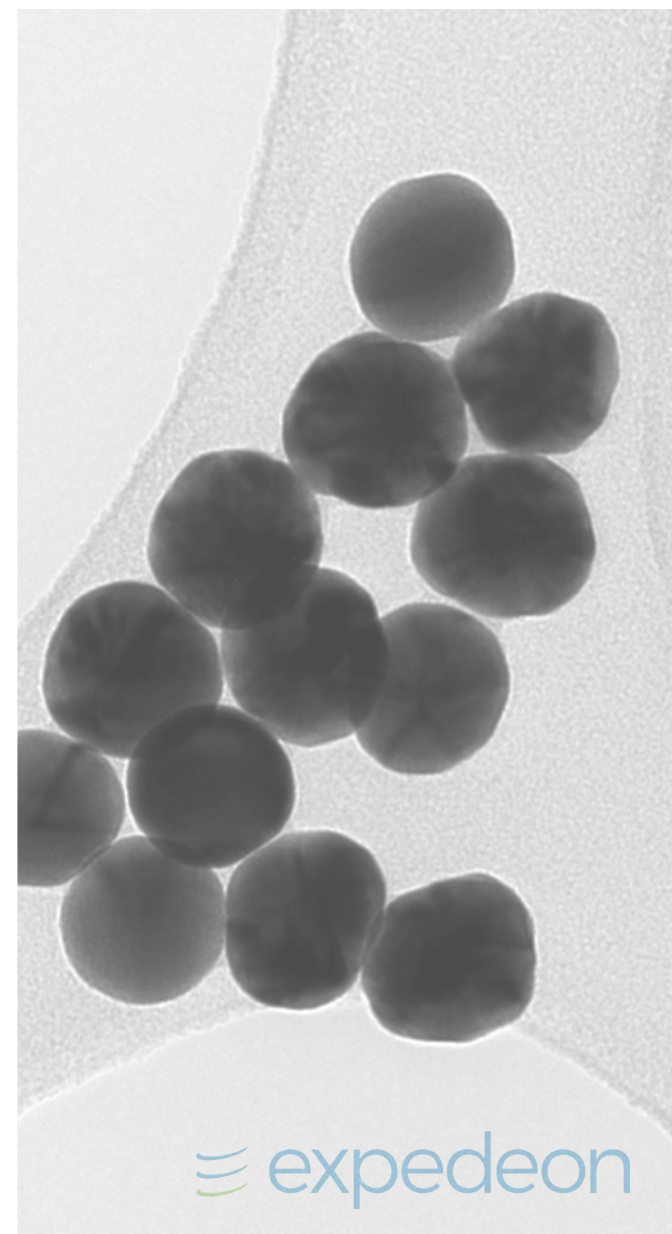
# Key Observations 2018 Financial Statements

- Revenue growth of 68%
  - Revenues guidance of € 13 - 14 million met
  - Enhanced immunology offering with TGR BioSciences acquisition
  - Organic revenue growth of 15%
- EBITDA and adjusted EBITDA positive
  - €1.7m EBITDA
  - €1.0m adjusted EBITDA (2017: loss of €2.1 million)
- Operating cashflows (before interest) positive €92k
- Net short term assets €4.6 million



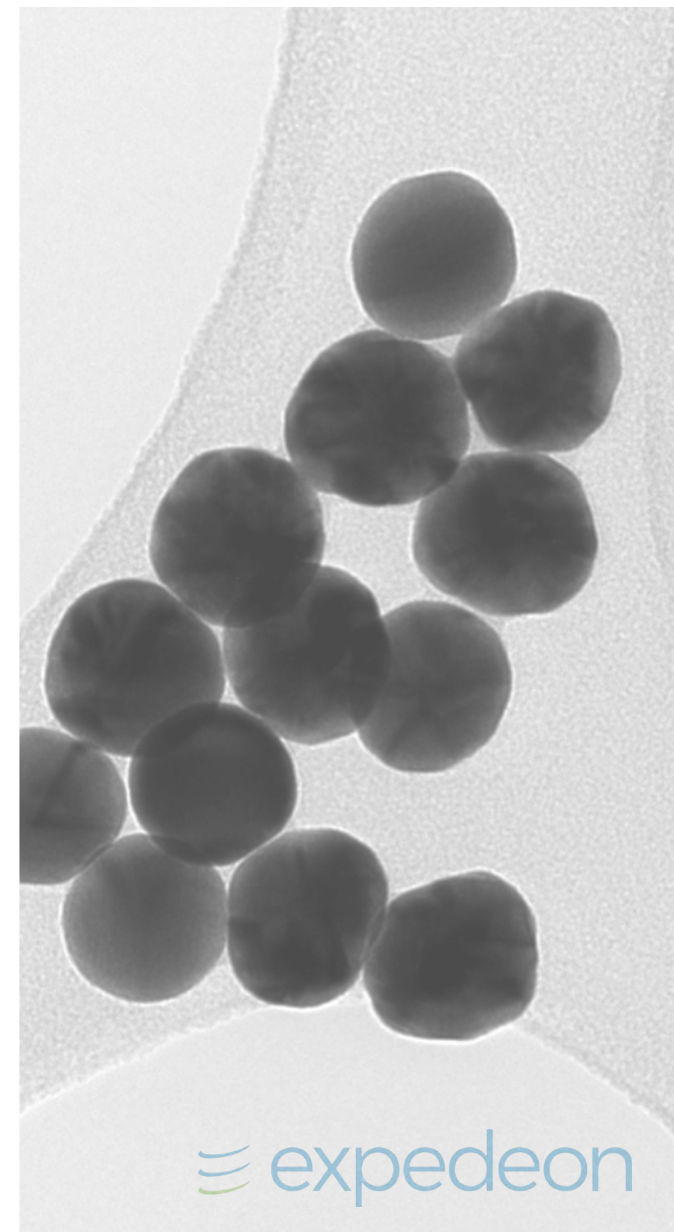
# Key Financial Milestones

- First:
  - Positive EBITDA and adjusted EBITDA
  - Positive operating cashflow before interest
- Consolidated revenues of €13.1 million
- Secured commercial debt funding in year



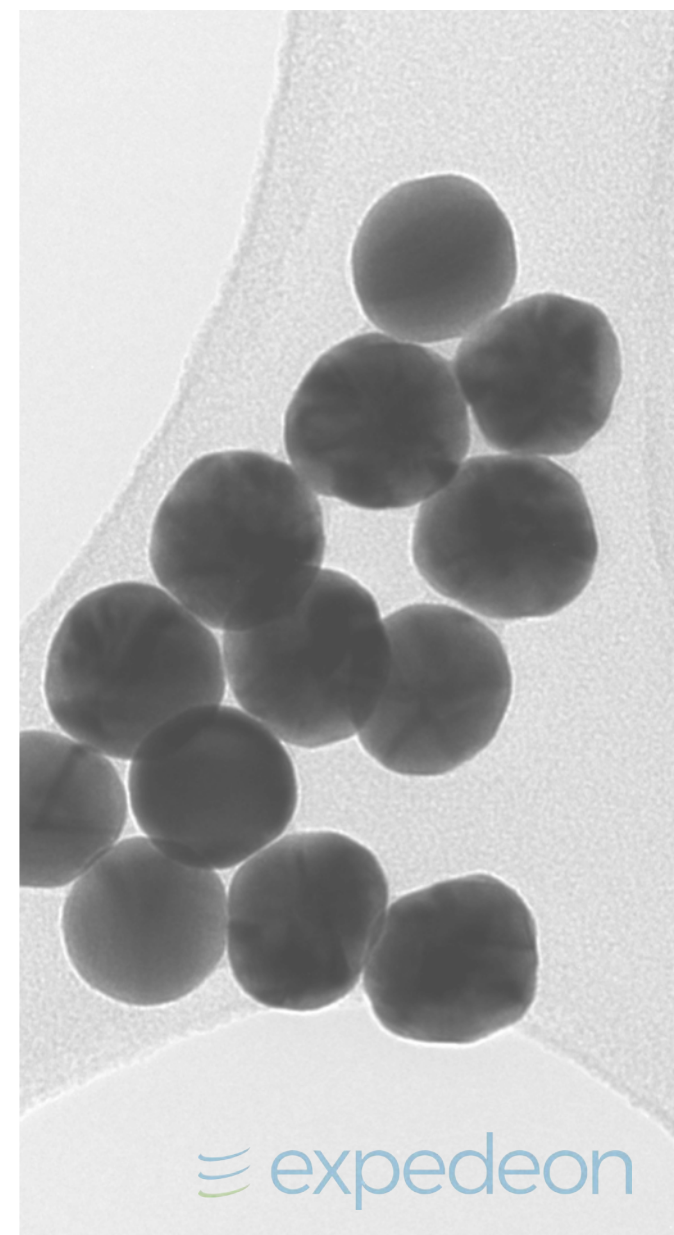
# IFRS Accounting Considerations

- Income Statement:
  - First time adoption of IFRS 15 revenue recognition
  - EBITDA includes €1 million gain on change in valuation of acquisition earn outs
  - EBITDA includes €265k charge on equity settled share compensation
  - Administrative expenses include €1.4 million of amortisation on acquired capitalised intangible assets
- Balance sheet:
  - €49.5 million intangible assets, including goodwill
  - €1.9 million non-cash earn outs included in financial liabilities
  - €2.4 million deferred tax liability on capitalised intangibles



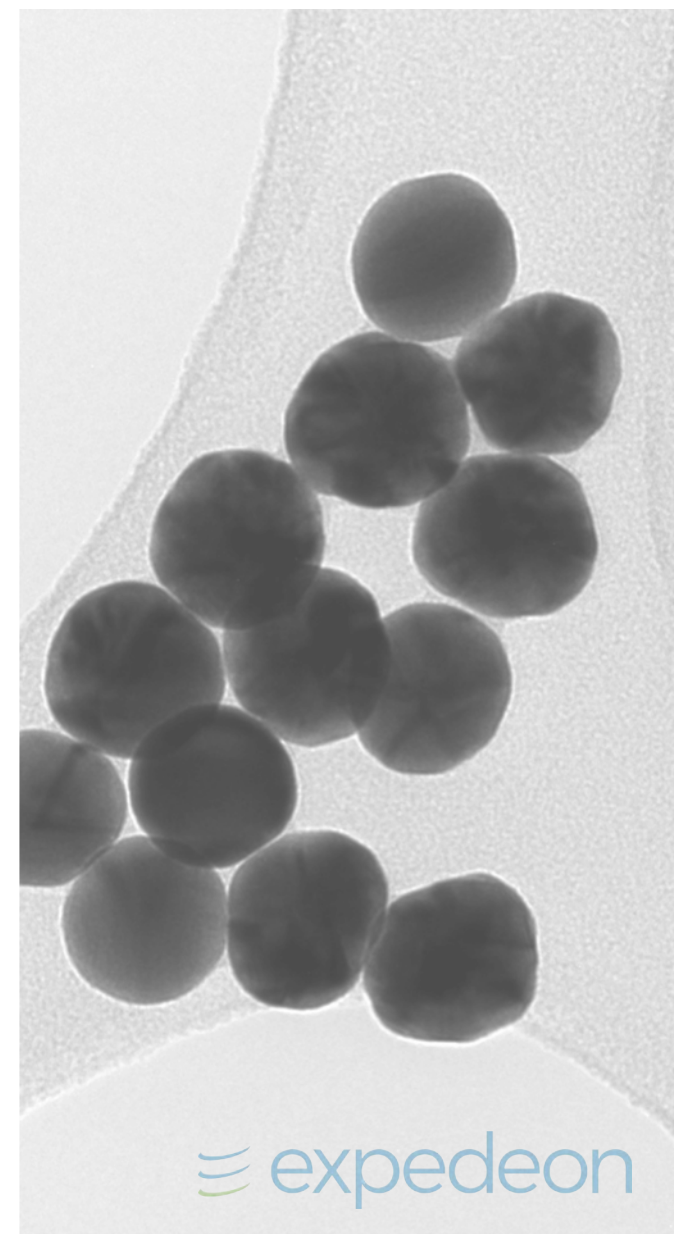
# Consolidated Statement of Comprehensive Income

<i>In € million</i>	Year ended 31 Dec. 2018	Year ended 31 Dec. 2017
<b>Revenues</b>	<b>13.1</b>	<b>7.8</b>
Costs of goods sold	(3.6)	(2.9)
<b>Expenses</b>		
Sales	(2.8)	(1.9)
Administration	(7.5)	(6.7)
Research & development	(1.0)	(0.8)
Other operating income/(expenses)	1.2	0.0
<b>Total operating expenses</b>	<b>(13.7)</b>	<b>(12.3)</b>
<b>Results of operating activities</b>	<b>(0.6)</b>	<b>(4.5)</b>
<b>Earnings before taxes</b>	<b>(0.5)</b>	<b>(4.6)</b>
<b>Net profit/(loss) for the period</b>	<b>(0.3)</b>	<b>(3.7)</b>



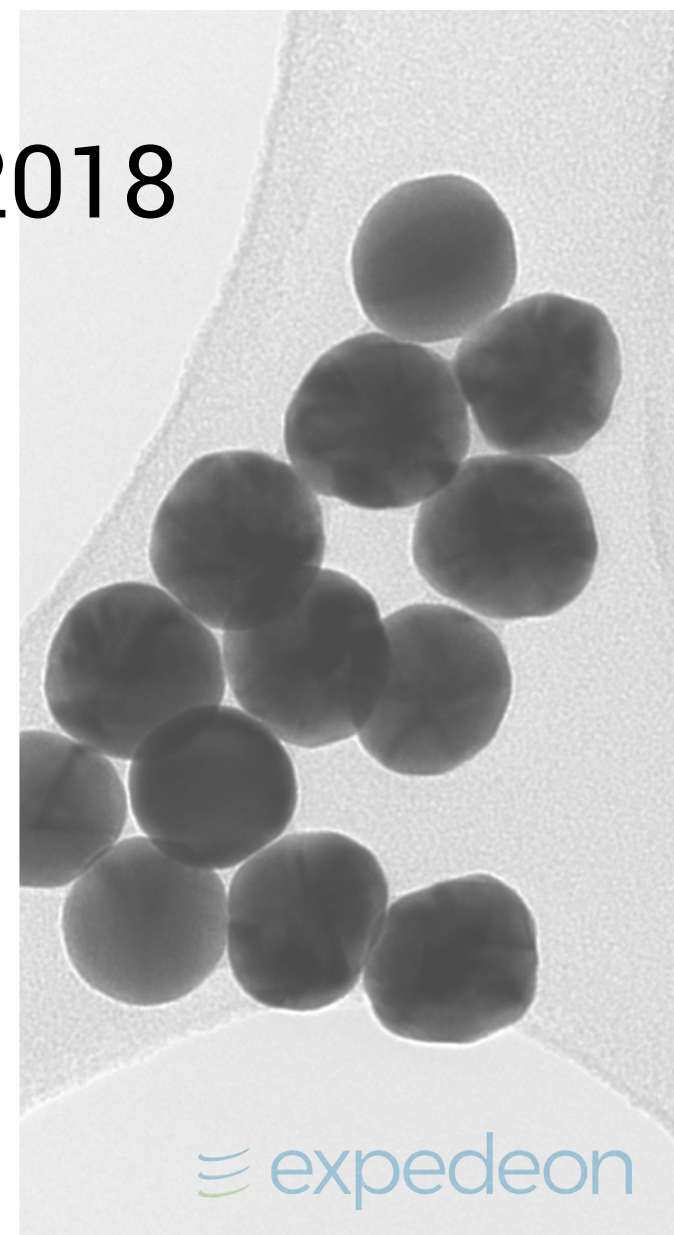
# EBITDA and EBITDA Adjusted Reconciliation

<i>In € million</i>	Effect of Non-cash Charges Year ended 31 December			
	2018		2017	
Reported EBIT		(0.6)		(4.5)
Amortisation and depreciation		2.3		1.6
<b>EBITDA</b>		<b>1.7</b>		<b>(2.9)</b>
<b>Other non-cash charges:</b>				
PPA Fair value charge for inventory acquired and now sold		0.0		0.8
Equity settled share compensation		0.3		0.0
Gain on non-cash revaluation of earn-outs		(1.0)		0.0
<b>EBITDA Adjusted</b>		<b>1.0</b>		<b>(2.1)</b>

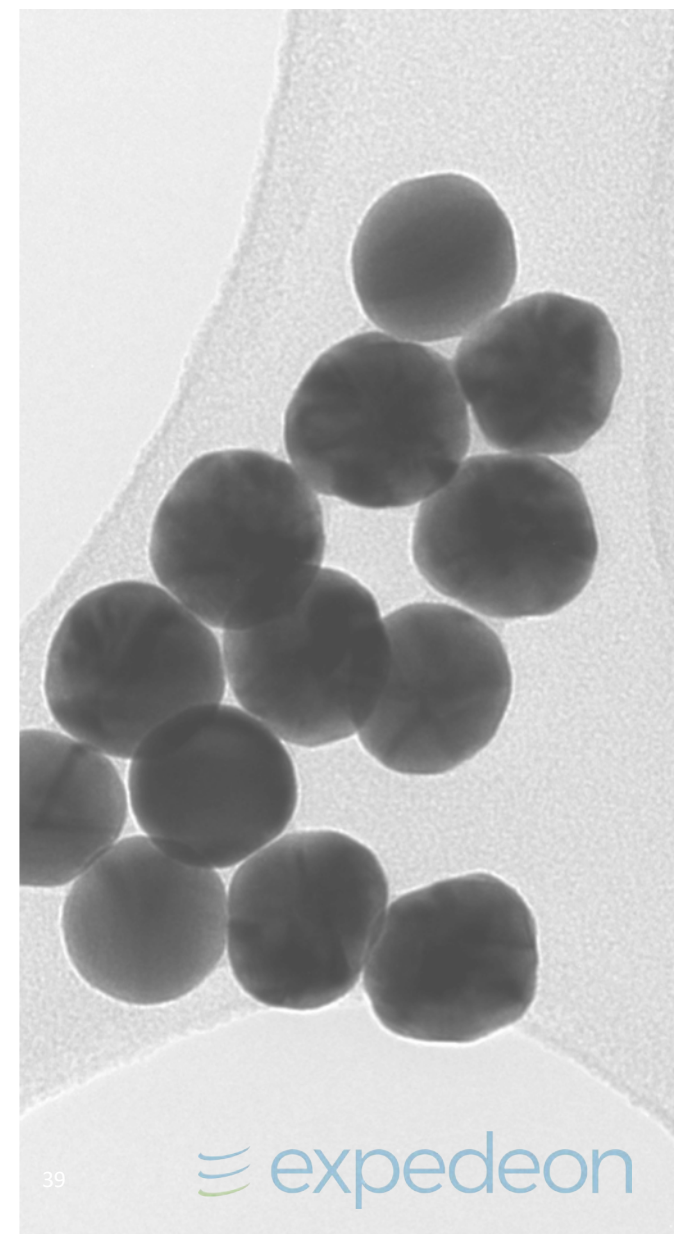
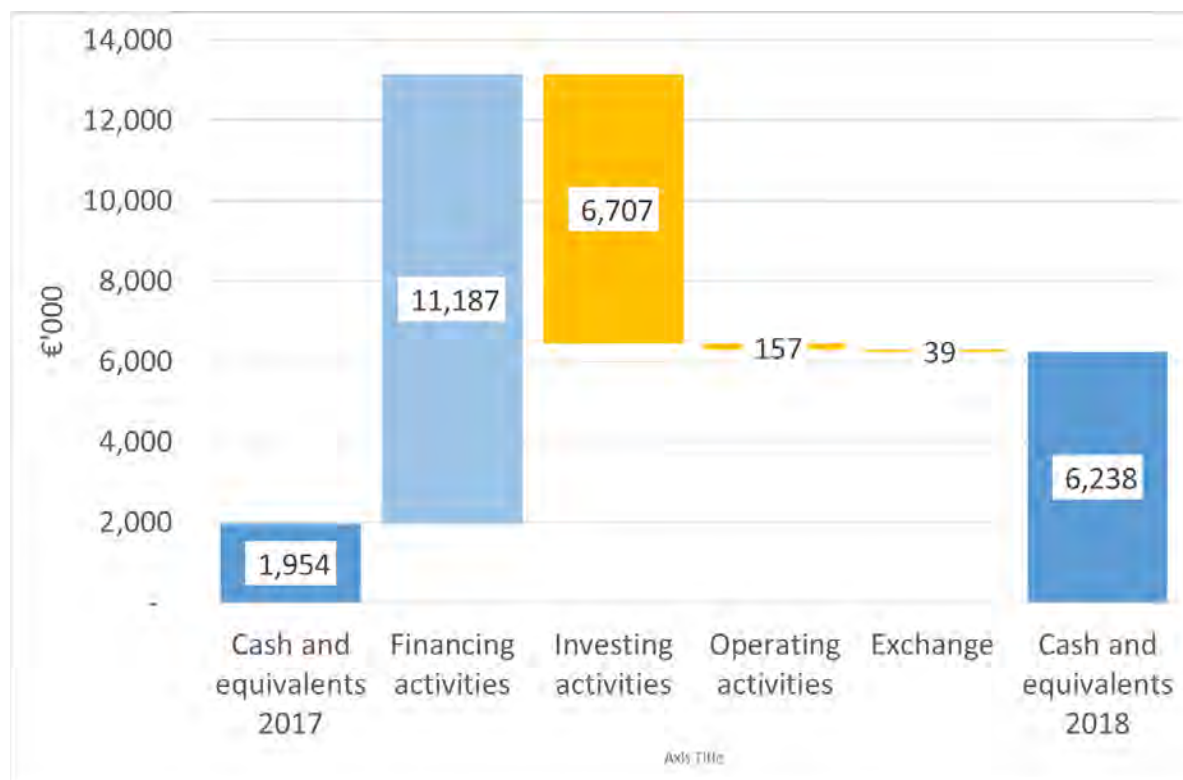


# Balance Sheet 31 December 2018

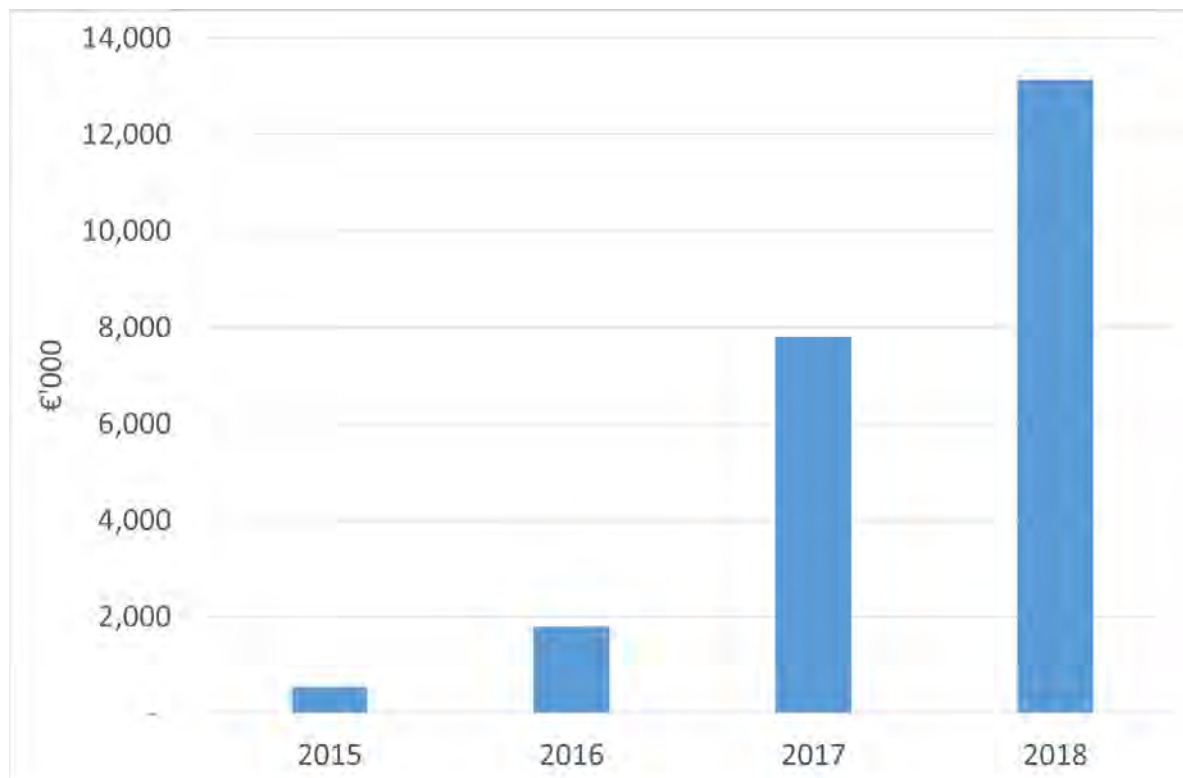
Selected balance sheet data (in € million)	2018	2017
<b>Assets</b>		
<b>Non-current assets</b>	<b>51.8</b>	<b>43.7</b>
thereof goodwill	33.9	30.4
thereof other intangible assets	15.6	11.3
<b>Current assets</b>	<b>12.4</b>	<b>5.8</b>
thereof cash and cash equivalents	6.2	2.0
<b>Total assets</b>	<b>64.2</b>	<b>49.5</b>
<b>Equity</b>		
<b>Shareholders' equity</b>	<b>46.5</b>	<b>39.1</b>
<b>Non-current financial liabilities</b>	<b>9.9</b>	<b>5.3</b>
thereof financial liabilities	7.5	3.9
<b>Current liabilities</b>	<b>7.8</b>	<b>5.3</b>
<b>Total equity and liabilities</b>	<b>64.2</b>	<b>49.5</b>



# Cash Flow Statement 2018

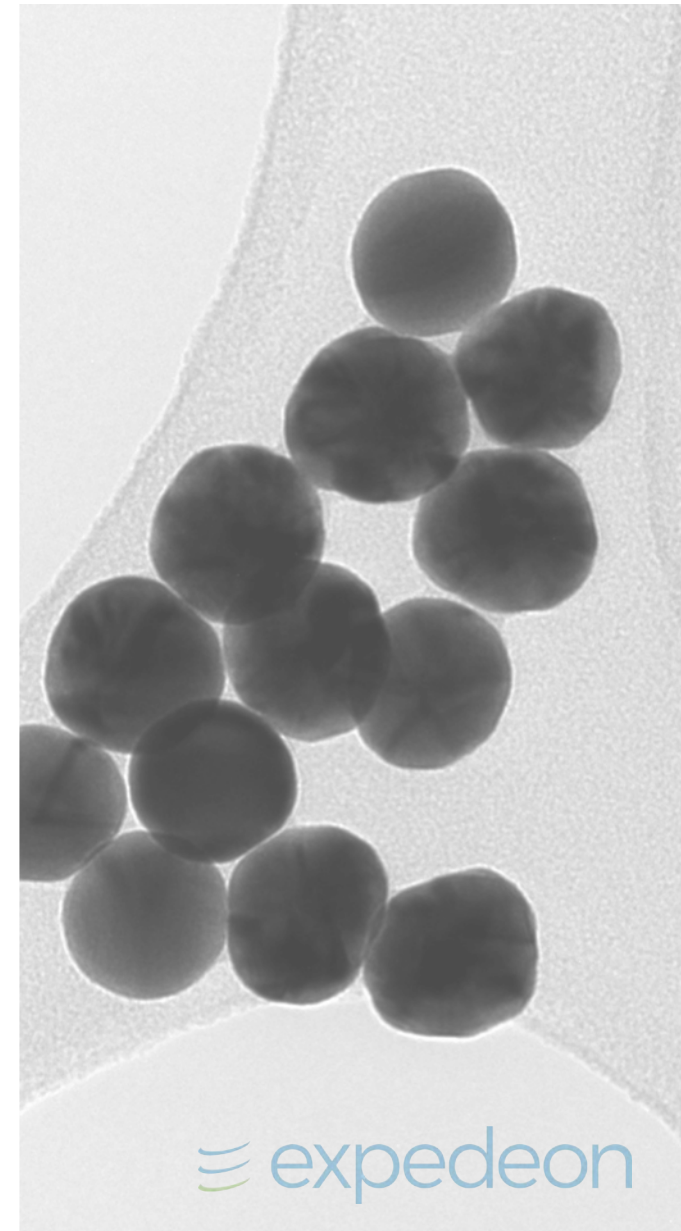


# Company Trends - Revenue

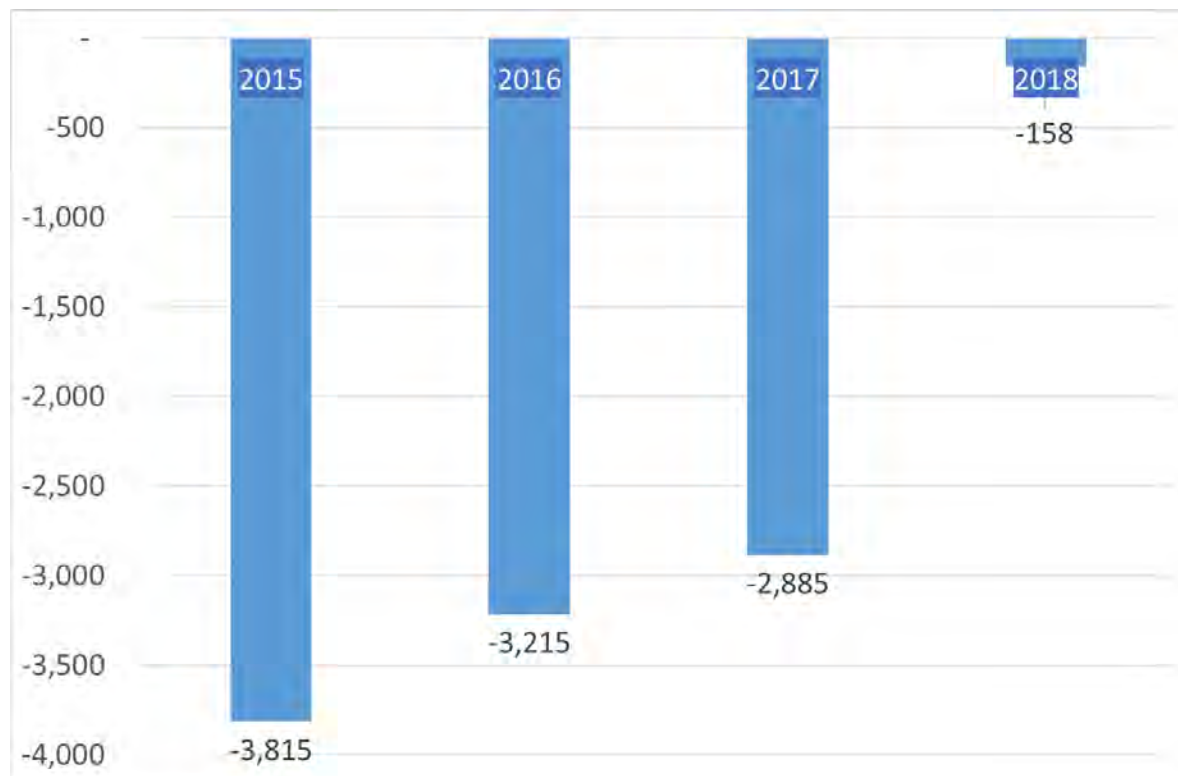


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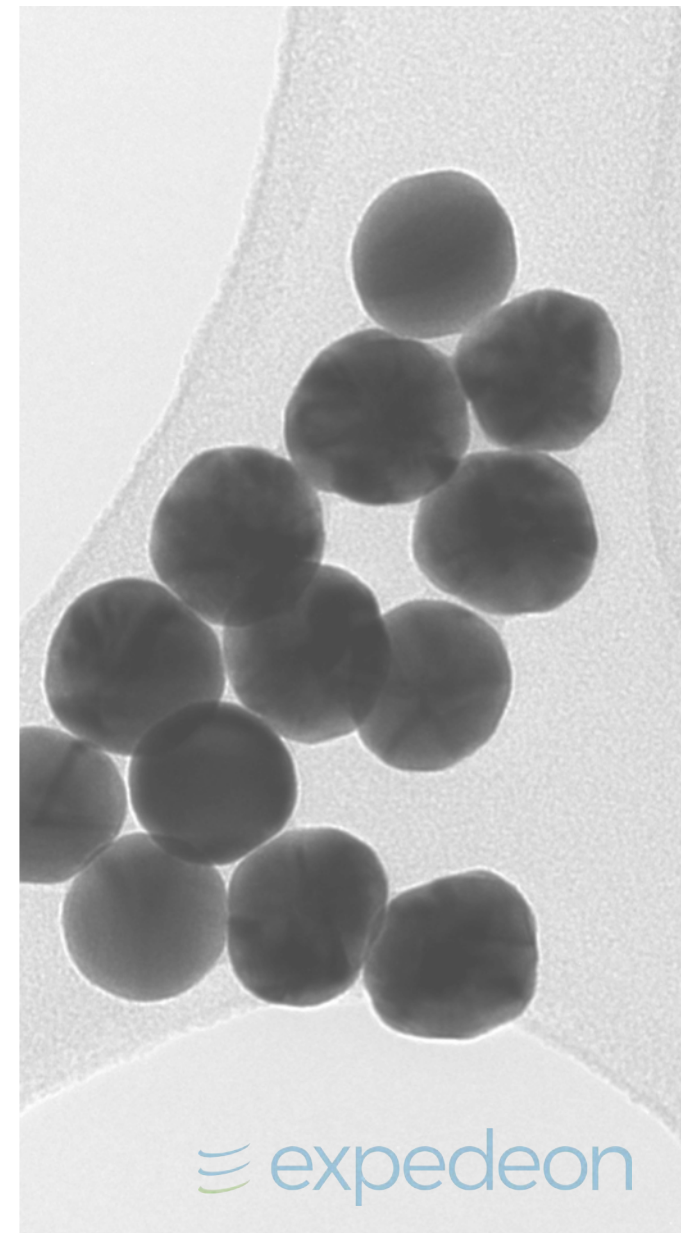


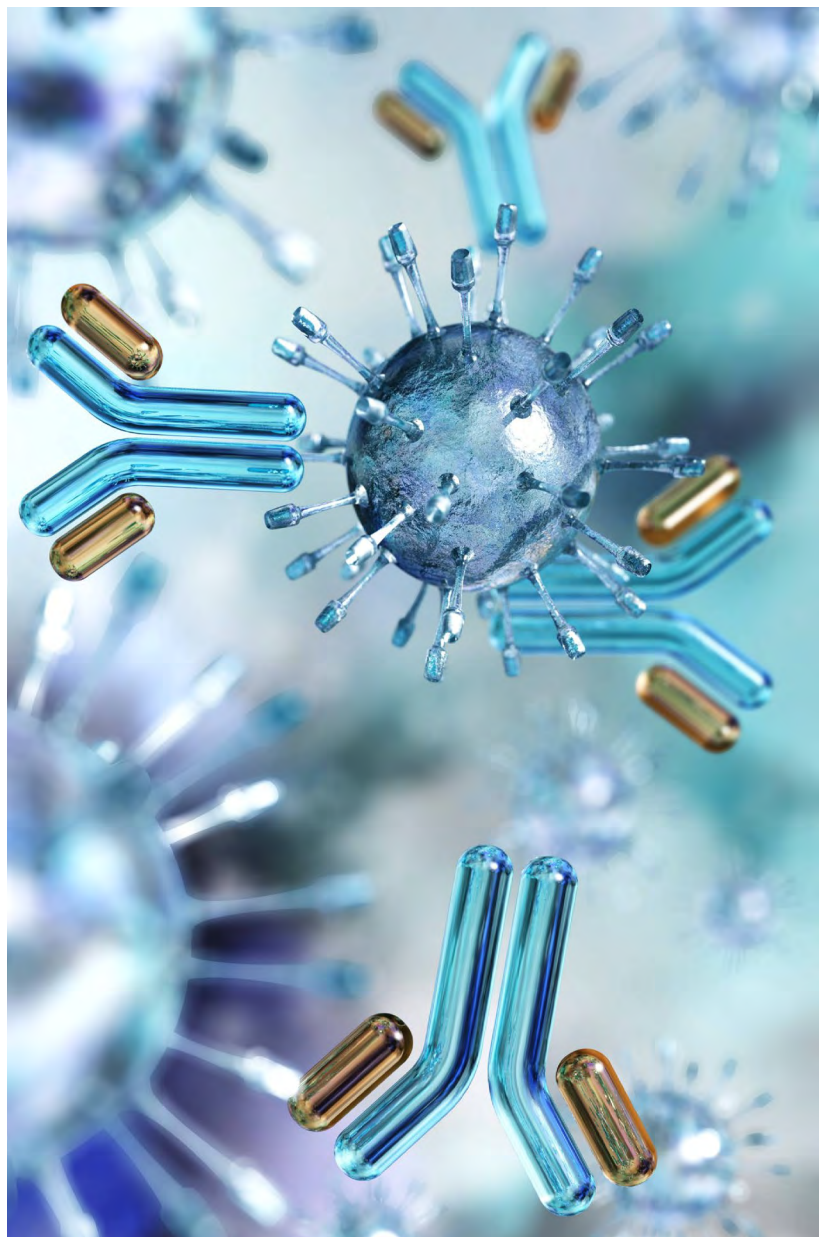
# Company Trends – Operating Cashflow



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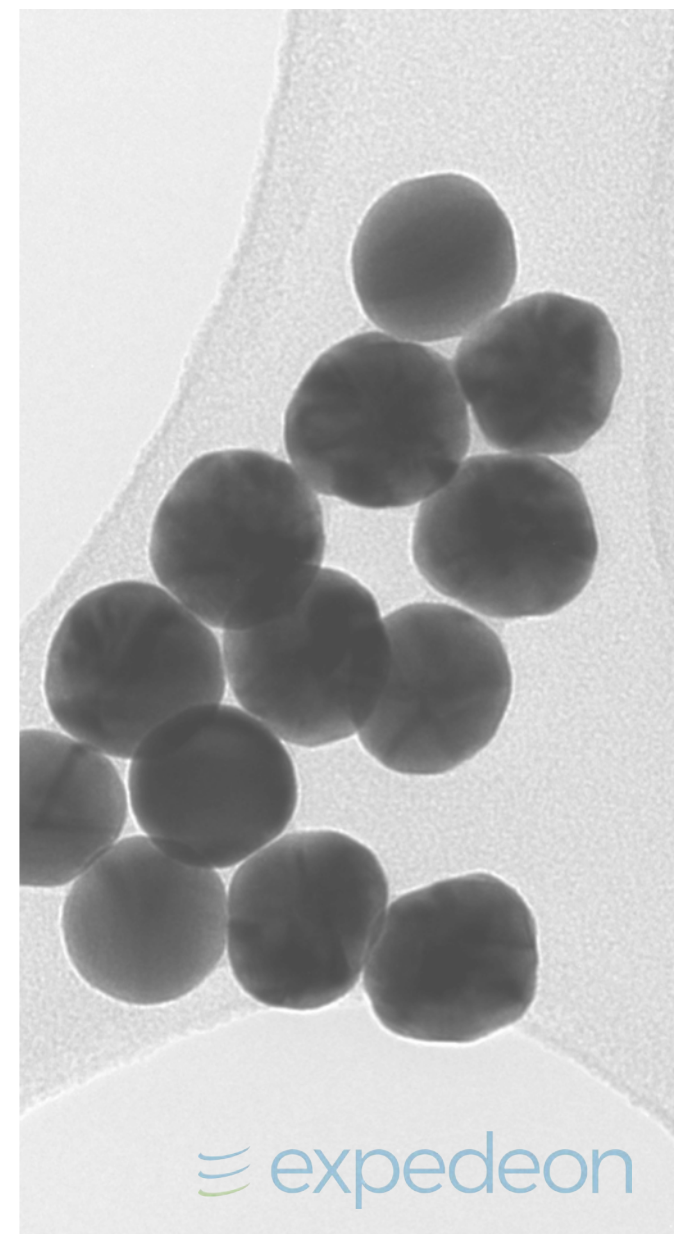


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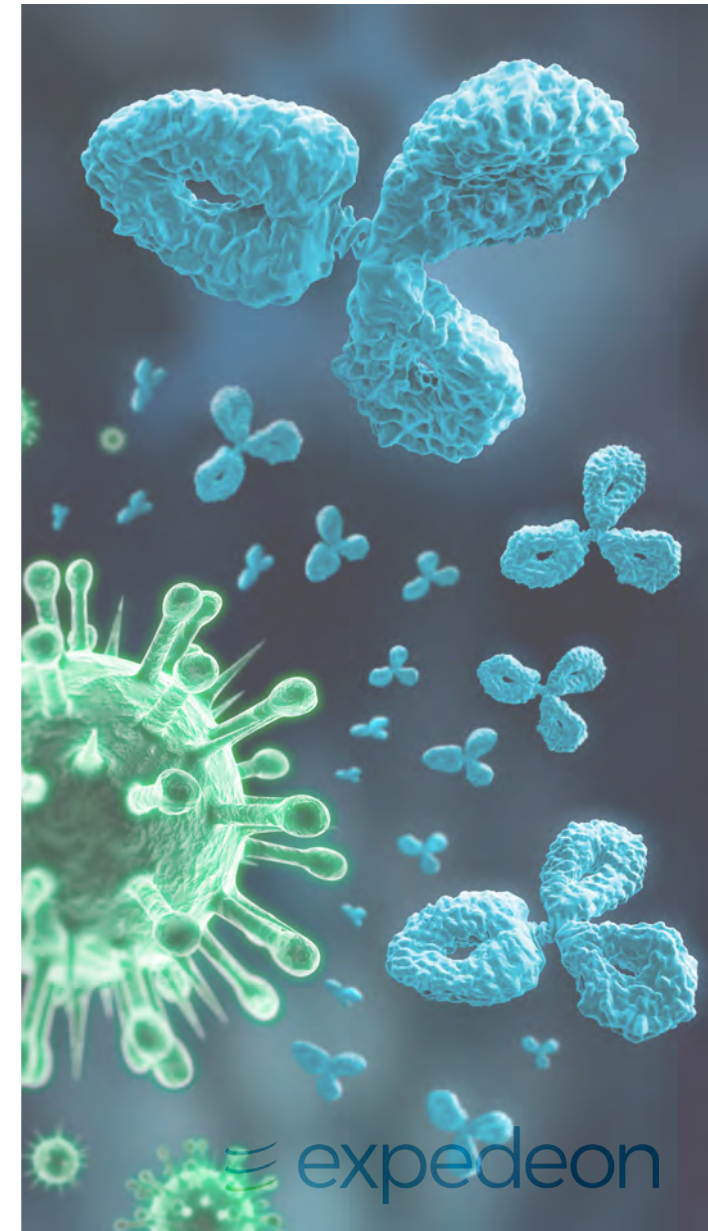
# Financial Objectives 2019

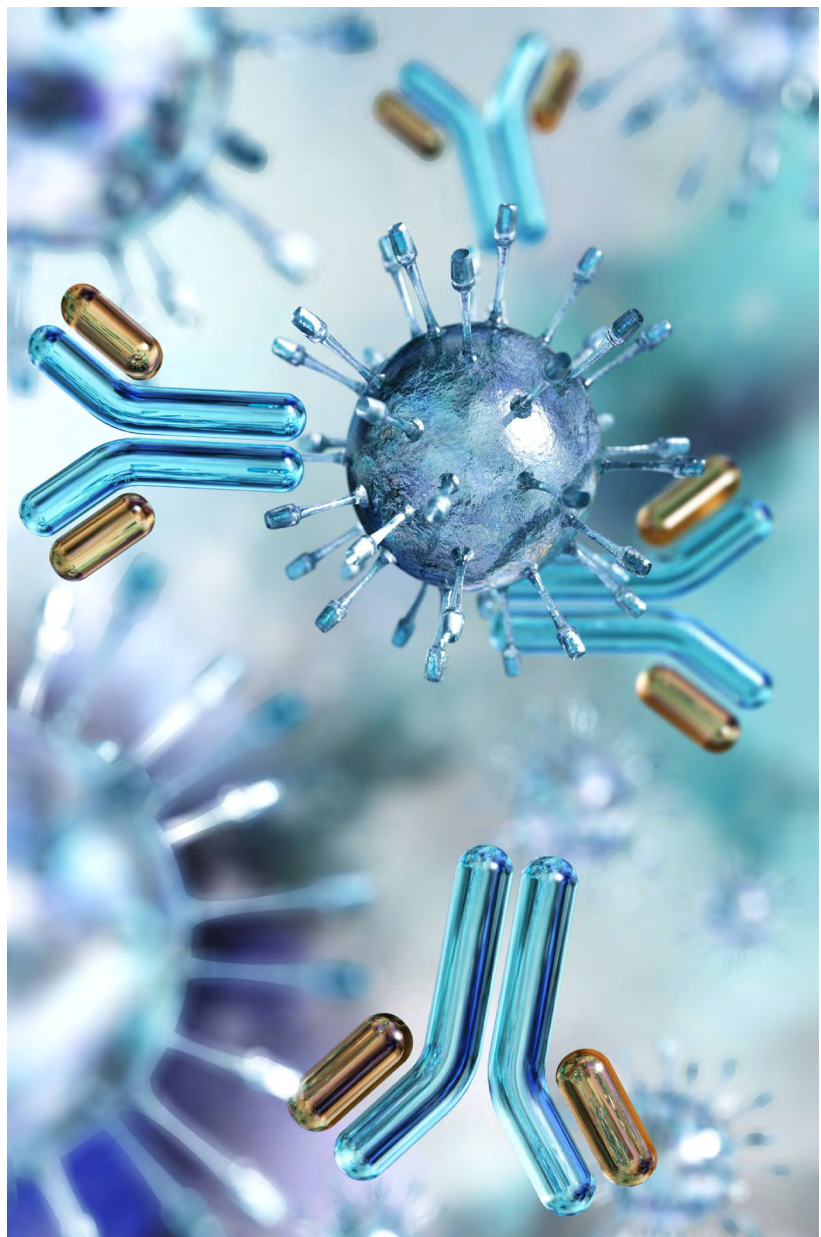
- Continue to strengthen product portfolio
  - Drive organic revenue from product sales and licensing
  - Possibly add complementary acquisition
- Revenues: double digit revenue growth
- EBITDA: adjusted EBITDA >€2 million
- The goal of the Company is to achieve a strong flow of revenues with sector conventional profitability margins over time.



# Commercial Objectives 2019

- Products Launches, so far
  - Metal Labeling
  - DIY ELISA
  - ELISA ONE
- Continue investment in developing technologies and products
- Focus group activity around leading market trends:
  - Onco-immunology
  - Liquid biopsy / Gene therapy
  - Multi-omics (rapid detection of biomarkers in several “omes” (genome, proteome, transcriptome))
  - Multi-plexing (parallel detection of different molecules from one sample)





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# Management Structure

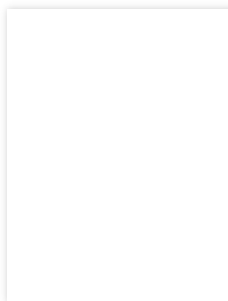
## Supervisory Board



Joseph Fernandez  
Chairman



Tim McCarthy



Vacancy



Peter Llewellyn-Davies  
Audit Committee Chair



Trevor Jarman, PhD



Pilar de la Huerta

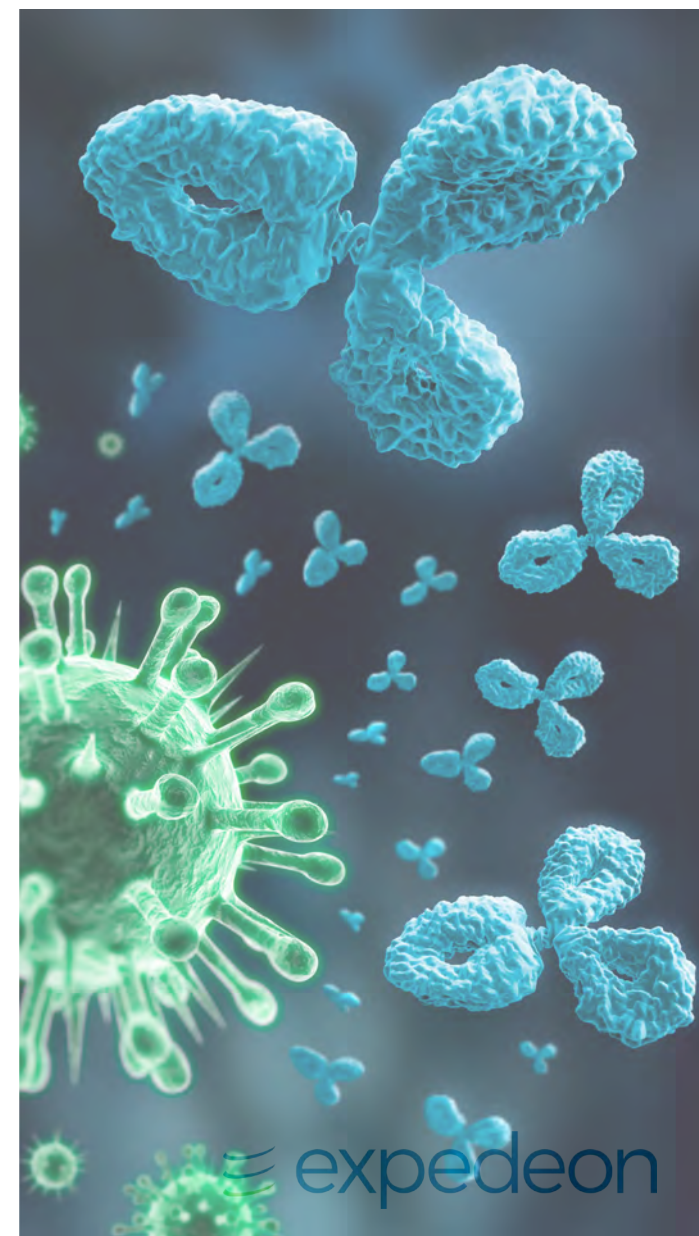
## Management Board



Heikki Lanckriet, PhD  
CEO



David Roth  
CFO



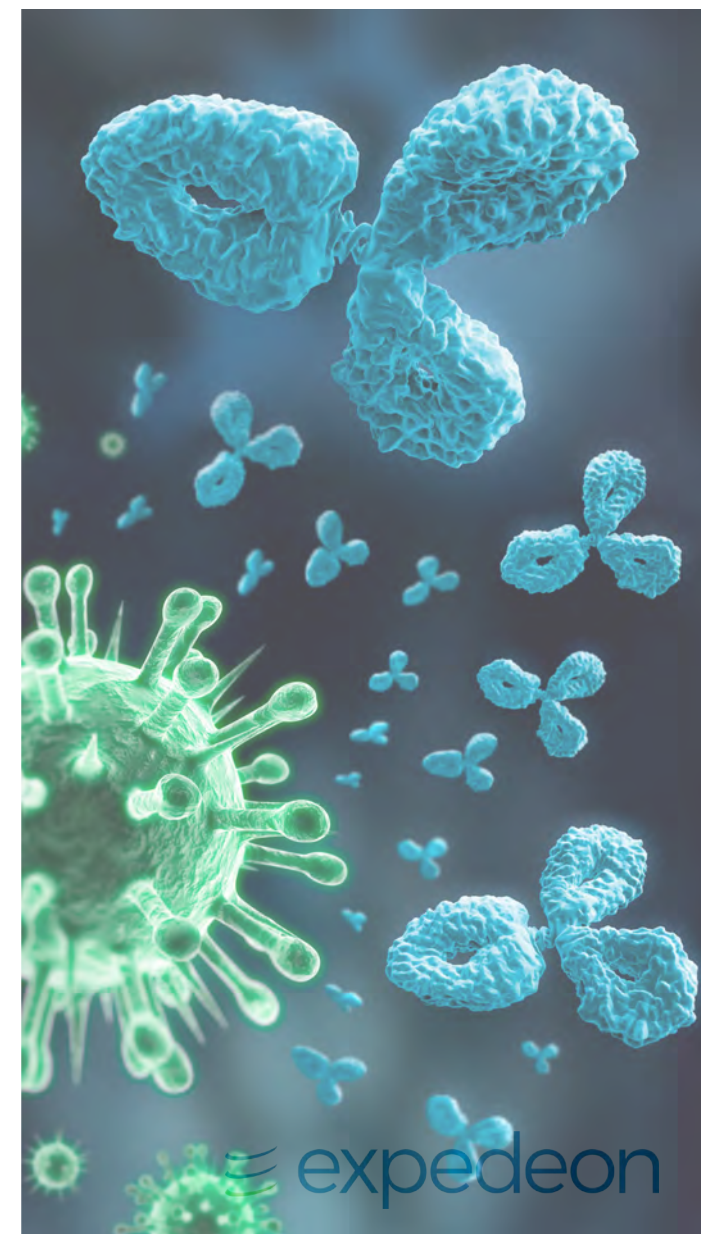
# Expedeon Current Stock Information

(as of 28 June 2019)

<b>Ticker symbol:</b>	EXN (Xetra)
<b>ISIN:</b>	DE000A1RFM03
<b>WKN:</b>	A1RFM0
<b>Issued shares:</b>	51,559,781
<b>Listing:</b>	Germany: Deutsche Börse (Prime Standard) (Major Stock Exchanges)
<b>Free float:</b>	~ 83.6%
<b>Key shareholders (&gt;3%):</b>	Deutsche Balaton: 8.3%; Fernandez Trust: 5.2%; Dr. Heikki Lanckriet: 3.2%
<b>Market cap:</b>	€ ~52 million
<b>Analysts:</b>	GBC AG (Cosmin Filker; BUY: €3.20)

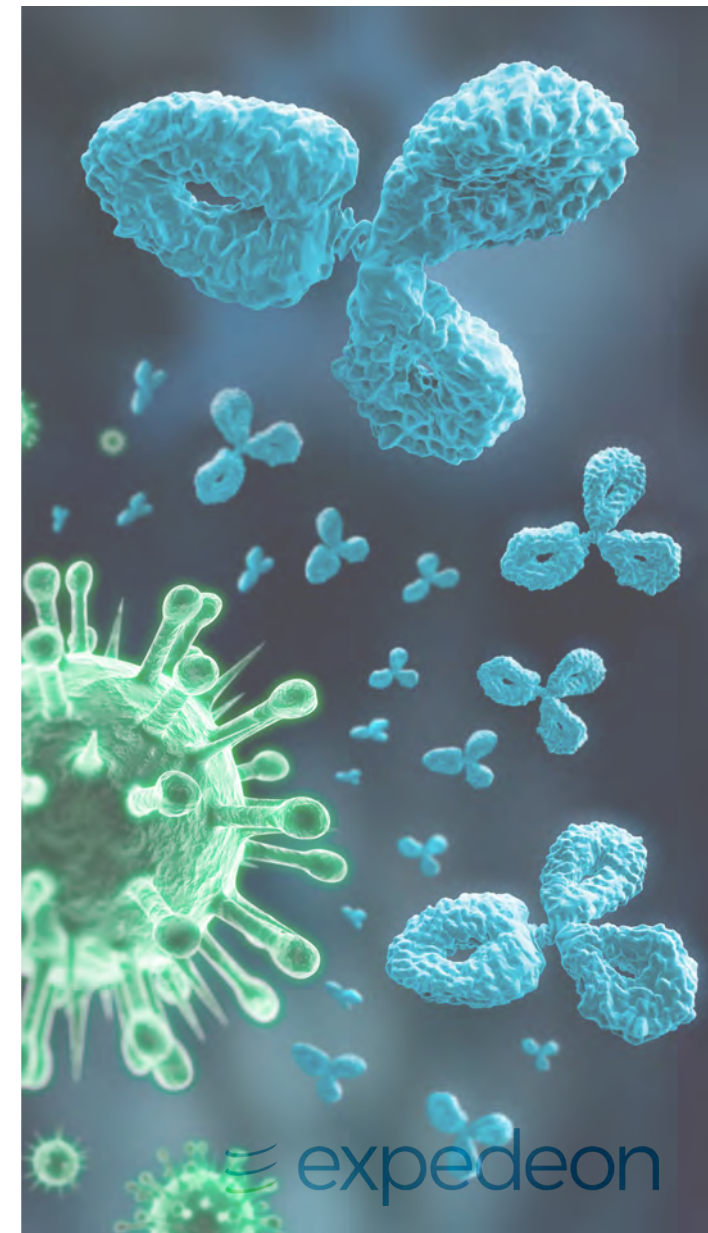
9 July 2019

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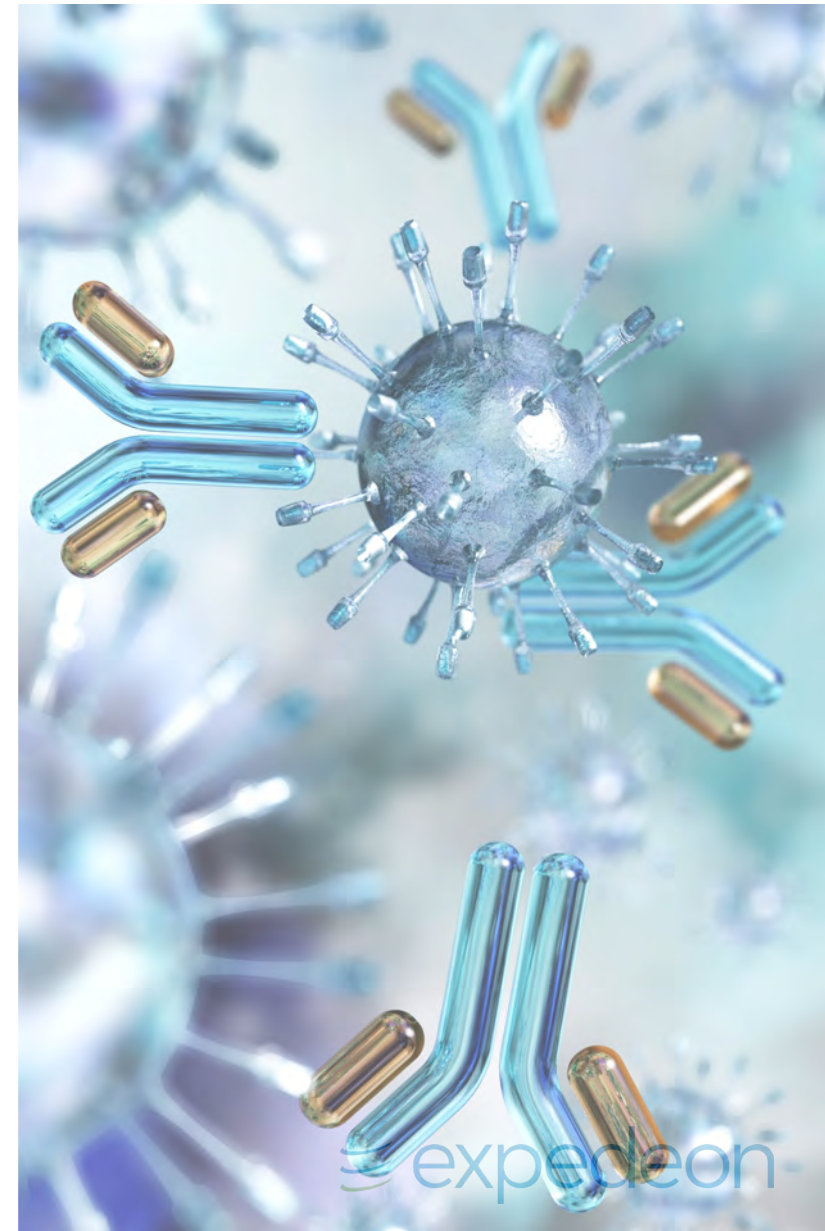
# AGM Resolutions

- Resolution 5: Stock Option Plan 2019
  - Replenish lapsed options
  - Make options available for new staff as following growth
- Resolution 7: Conversion of Bearer Shares
  - Offer visibility of shareholder base
- Resolution 8: Capital Increase from Partial Conversion of Capital Reserve
  - Net equity unchanged
  - Reduces hurdle for dividend payments



# Overall Summary

- 2018 created a platform with strong technologies and infrastructure
- Successful acquisitions creating significant future value
- Exciting markets opening up to Expedeon
- Company well placed to grow strongly over next five year



# Thank You for Your Attention

For more information, please contact:

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