

October 2019

Croda International Plc Investor Seminar Life Sciences



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Welcome and Introduction
Steve Foots, CEO



Cautionary statement and definitions

Cautionary statement

This review is intended to focus on matters which are relevant to the interests of shareholders in the Company. The purpose of the review is to assist shareholders in assessing the strategies adopted and performance delivered by the Company and the potential for those strategies to succeed. It should not be relied upon by any other party or for any other purpose. Forward looking statements are made in good faith, based on a number of assumptions concerning future events and information available to the Directors at the time of their approval of this report. These forward looking statements should be treated with caution due to the inherent uncertainties underlying such forward looking information. The user of this review should not rely unduly on these forward looking statements, which are not a guarantee of performance and which are subject to a number of uncertainties and other facts, many of which are outside the Company's control and could cause actual events to differ materially from those in these statements. No guarantee can be given of future results, levels of activity, performance or achievements.

Adjusted results

Unless otherwise stated, all performance data refers to adjusted results. These are stated before exceptional items (including discontinued business costs), acquisition costs and amortisation of intangible assets arising on acquisition, and tax thereon. The Board believes that the adjusted presentation (and the columnar format adopted for the Group income statement) assists shareholders by providing a meaningful basis upon which to analyse underlying business performance and make year-on-year comparisons. The same measures are used by management for planning, budgeting and reporting purposes and for the internal assessment of operating performance across the Group. The adjusted presentation is adopted on a consistent basis for each half year and full year results.

Constant currency results

All data is at reported currency rates unless otherwise stated. Reported currency results reflect current year performance translated at reported rates (actual average exchange rates). Constant currency results reflect current year performance for existing business translated at the prior year's average exchange rates and include the impact of acquisitions. For constant currency profit, translation is performed using the entity reporting currency. For constant currency sales, local currency sales are translated into the most relevant functional currency of the destination country of sale (for example, sales in Latin America are primarily made in US dollars, which is therefore used as the functional currency). Sales in functional currency are then translated into Sterling using the prior year's average rates for the corresponding period. Constant currency results are reconciled to reported results in the Finance Review.

Non-statutory terms are defined in the 'Alternative Performance Measures' section of the Finance Review in the Half Year Results Statement.

The Core Business comprises Personal Care, Life Sciences and Performance Technologies.

Programme

10.30 — Delivering our strategy

Steve Foots



10.40 — Introduction to Life Sciences

Dr Nick Challoner



11.00 — Opportunities in Crop Care

Dr Dave Cherry



11.20 — Break

11.30 — Opportunities in Health Care

Freek Snieders



12.15 — Q&A

12.45 — Wrap Up

13.00 — Lunch

Meet the team

Board and Executive



Steve Foots
Group Chief Executive



Jez Maiden
Group Finance Director



Prof Keith Layden
Non-Executive Director



Dr Nick Challoner
President,
Life Sciences

Senior Management



Freek Snieders
Managing Director,
Health Care



Dr Dave Cherry
Managing Director,
Crop Protection



Dr Alun Barnes
Vice President R&T,
Life Sciences



Laura Reilly
Marketing Director,
Life Sciences



Ritesh Tanna
Group Financial
Controller



Nick Commandeur
Corporate Development
Director

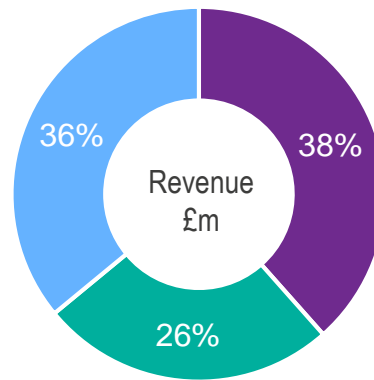
Croda at a glance

Highlights

- £1.39 bn sales
- 4,580 employees
- 72 operations in 38 countries
- 28.2% of sales in new and protected (NPP) products
- 28 years of consecutive dividend increases

Strong track record of delivery

Three strong legs



- Personal Care
- Life Sciences
- Performance Technologies

Balanced sector footprint

Integrated sustainability and business strategy



Winning with our customers

Our strategic priorities

Smart Science to Improve Lives™

Our purpose



Beauty and ageing



Health and well-being



Feeding world population



Sustainability

Our mega trends



Personal Care
Strengthen to grow



Life Sciences
Expand to grow



Performance Technologies
Refine to grow

Our strategy



Become employer of choice



Build strong digital competence



Deliver world class customer experience



More responsive operations



Increased dynamic innovation

Our enablers

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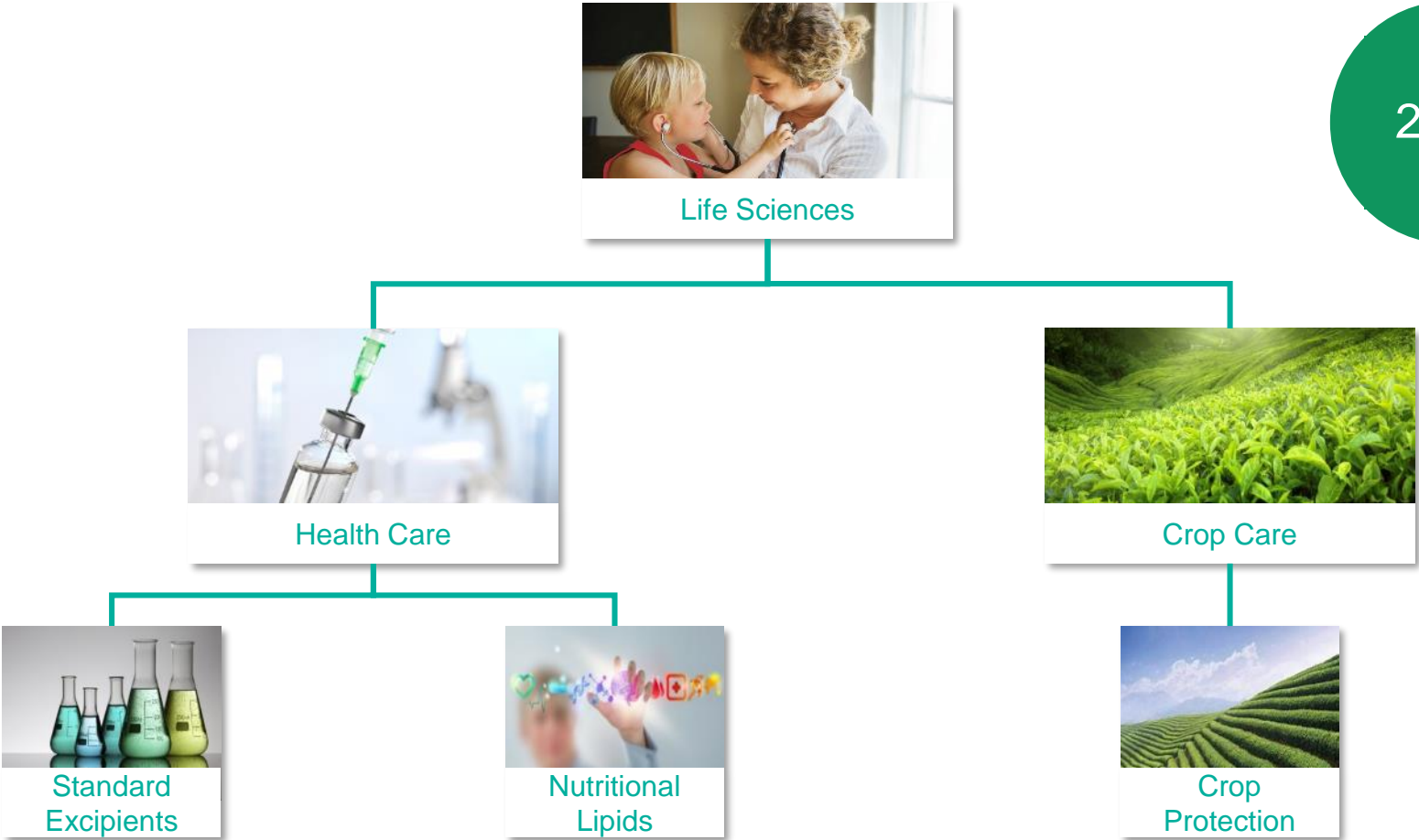
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Introduction to Life Sciences
Dr Nick Challoner, President Life
Sciences



The evolution of Life Sciences

2014

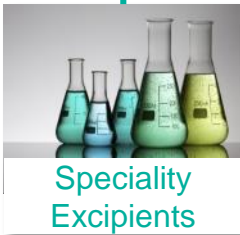


The evolution of Life Sciences

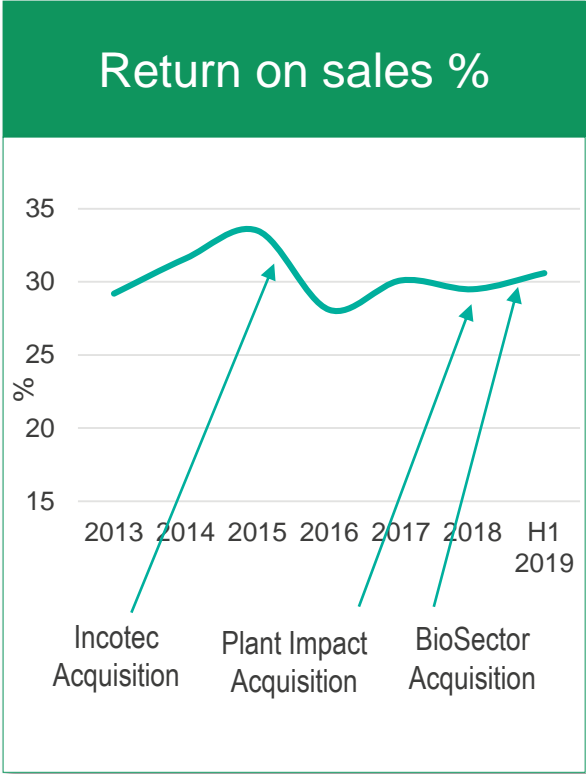
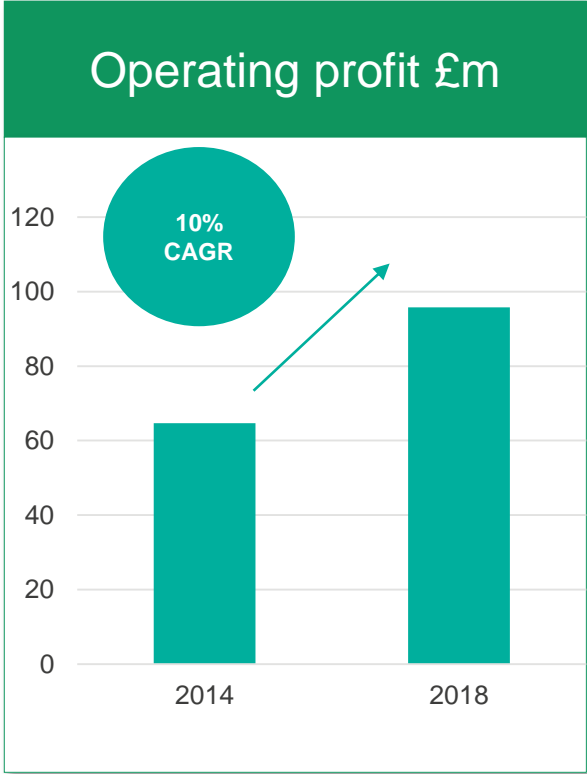
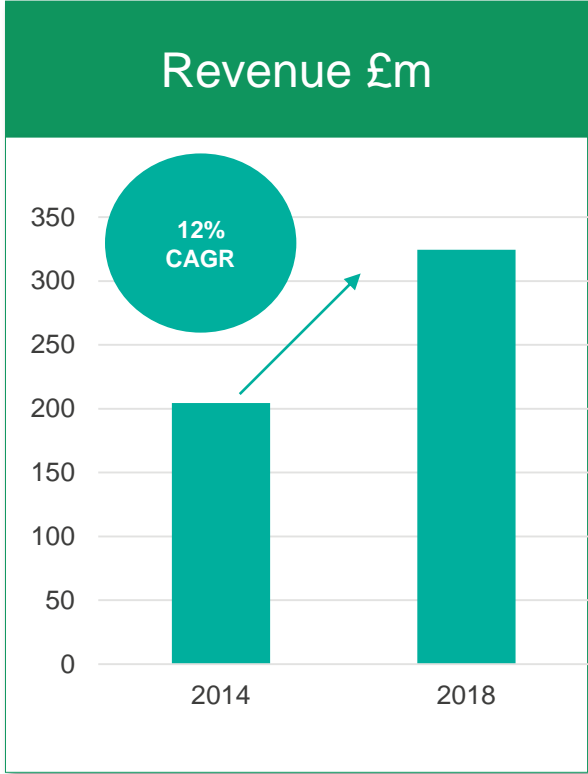
At the smart end of the market, delivering niche applications to our diverse customer base



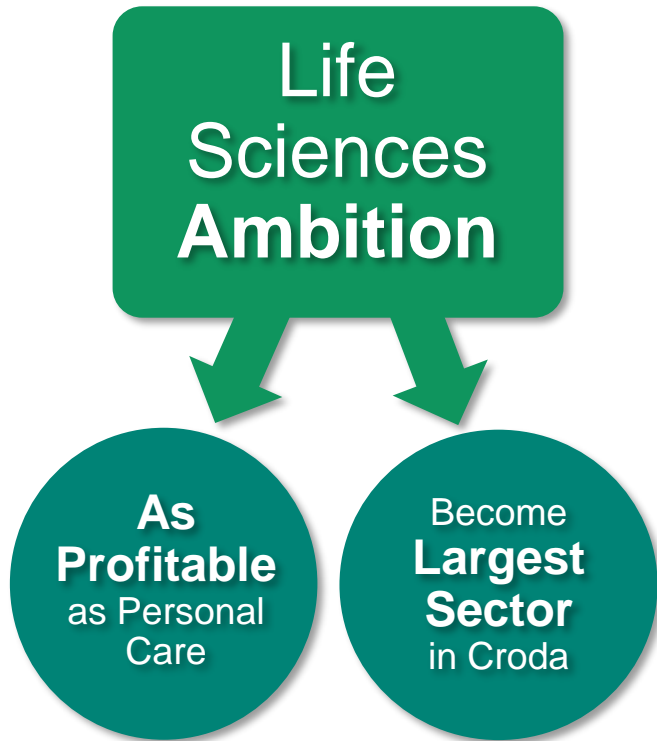
2019



Strong track record of results delivery



Building on the success of Personal Care

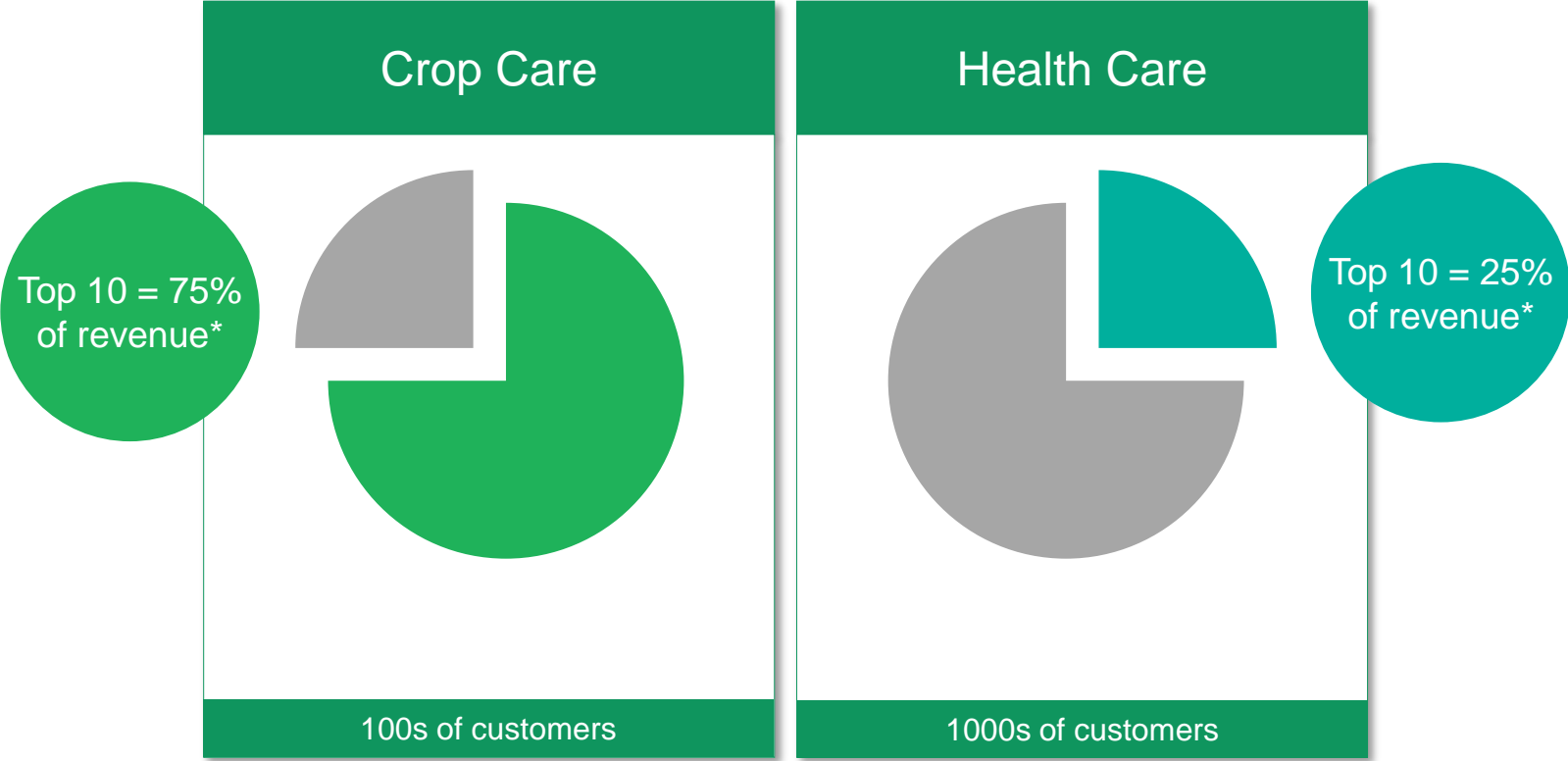


	Personal Care	Life Sciences
Innovation	High	High
Customer intimacy	High	High
Growth rates	Medium	High
Barriers to entry	Medium	High
SDG alignment*	Medium	High
Market fragmentation	High	Medium

Strong IP and technology-rich portfolio and pipeline well positioned for Growth

* United Nations Sustainable Development Goals

Growing with diverse customer base



* Revenue of top 10 customers in 2018

Life Sciences strategy



**Increasing
global
footprint**



**Accelerated
innovation**



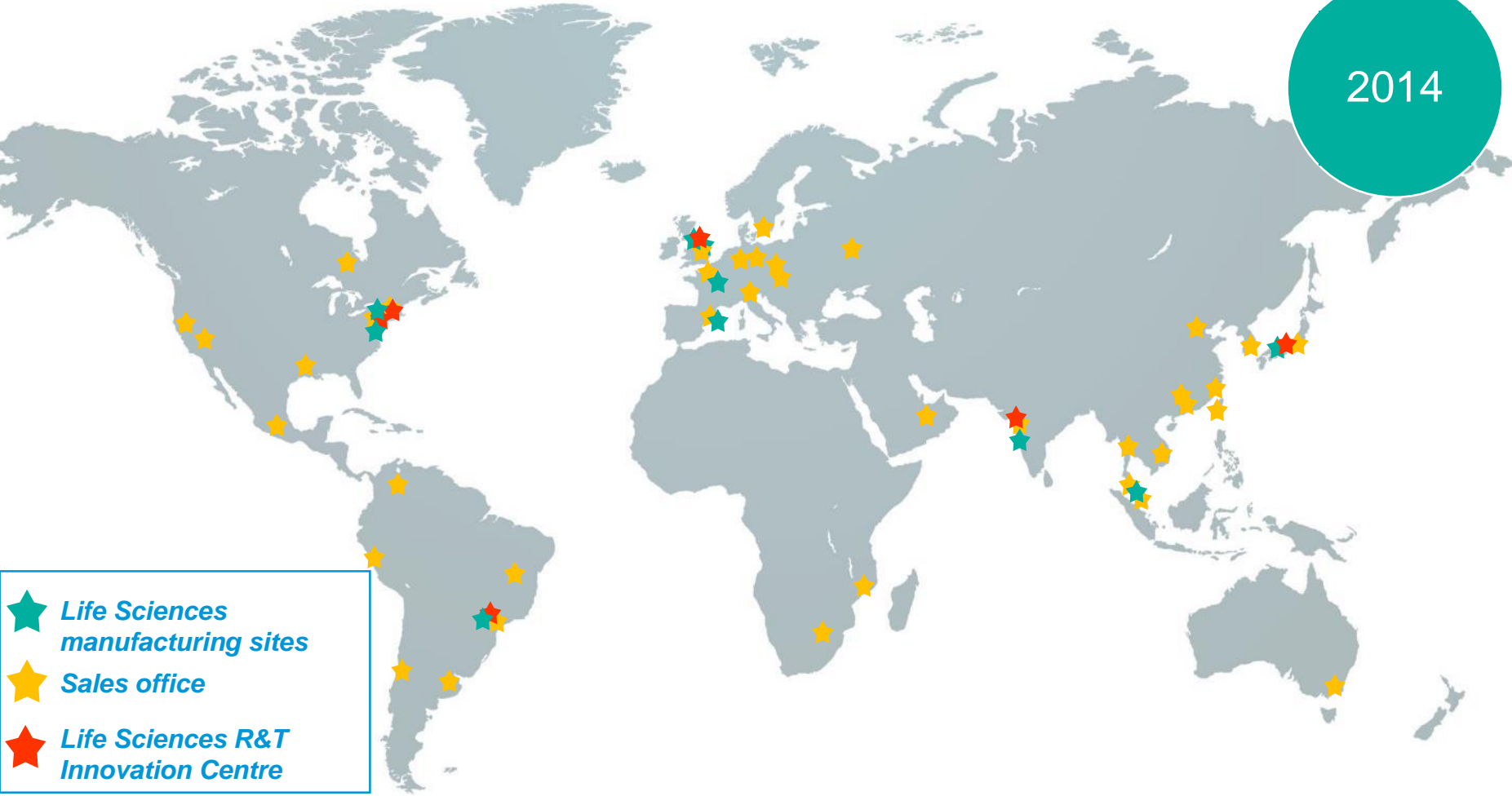
**Customer
intimacy**



**Targeted
M&A**

Increasing global footprint

2014



Increasing global footprint

2019



*Innovation Centre,
US, Crop Care*

*Innovation Centre,
Denmark, Health Care*



*Innovation Centre,
China, Crop Care*



*Local Manufacture,
Brazil, Crop Care*



*Innovation Centre,
Japan, Health Care*

- ★ Life Sciences manufacturing sites
- ★ Sales office
- ★ Life Sciences R&T Innovation Centre

Doubled
number of
innovation
centres

+40%
Sales team

40%
Employees in
emerging
markets

Increasing global footprint

Crop



- PaddyRise™ - stronger, more resilient plants
- 25% increase in yield from fixed land area
- Improved income from less land

Health



- Doubled capacity for speciality excipients
- Increased manufacturing footprint in Japan, US and UK
- New R&T facilities Brazil and Denmark

Innovation is delivering returns

Accelerating Innovation

>30%

Average sales of NPP in last 2 years

10x

R&D ROI for every £1 invested in R&D

1600

New customers in last 2 years

Increasing IP

35

Number of new patents granted in last 2 years - fastest growing of all sectors

71

Open Innovation projects in last 2 years

£210m

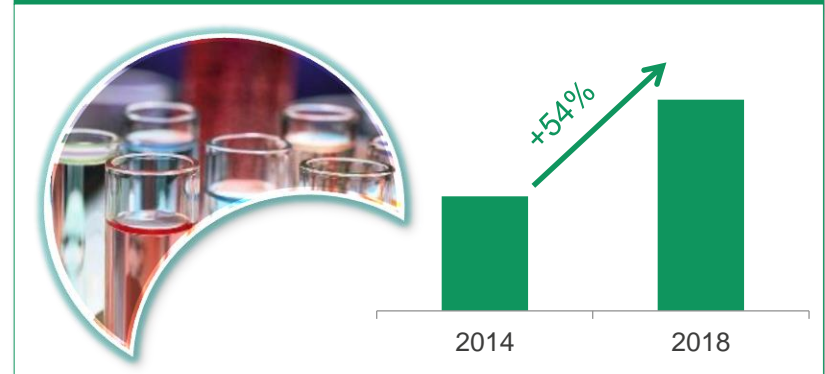
Invested in last 5 years in technology-led acquisitions

Innovation is keeping us a step ahead

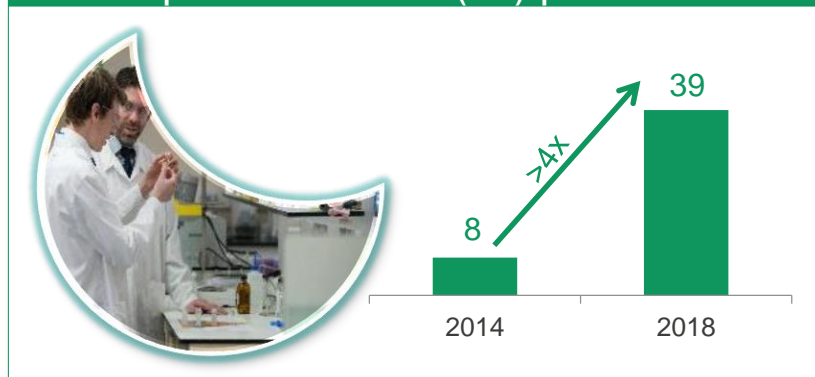
Accelerating number of Technology Investments (TI)



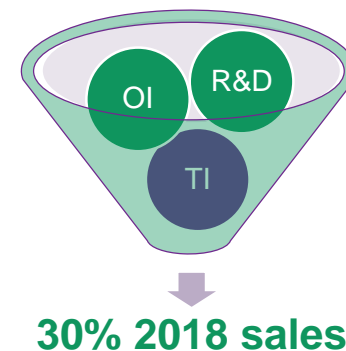
Growing sales from new technologies



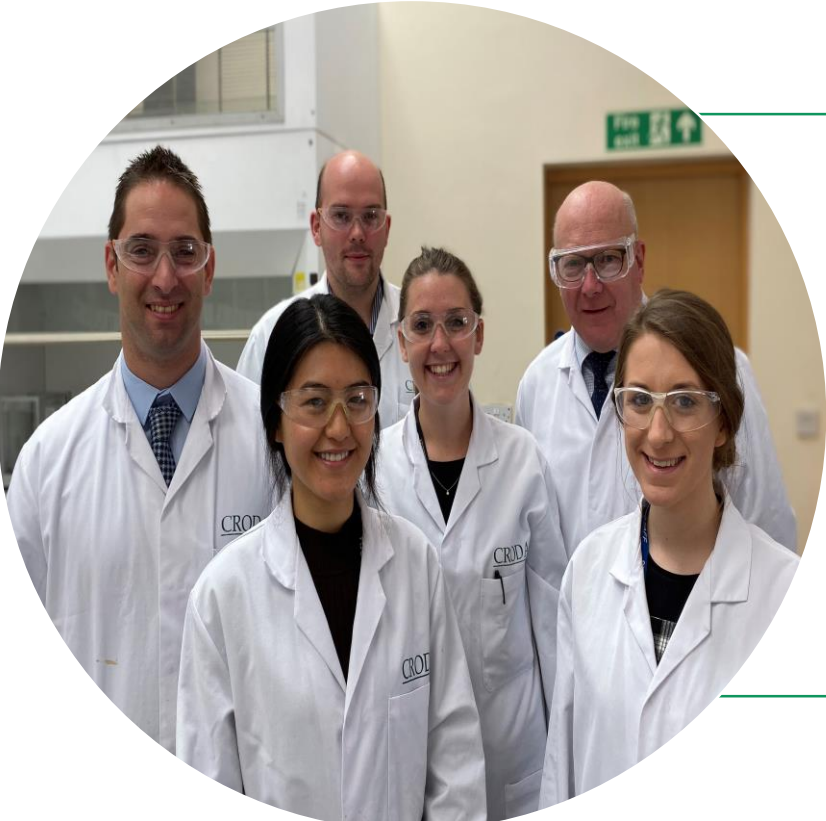
Increasing number of Open Innovation (OI) partners



Significant innovation pipeline



Customer intimacy



Academies,
masterclasses,
virtual events



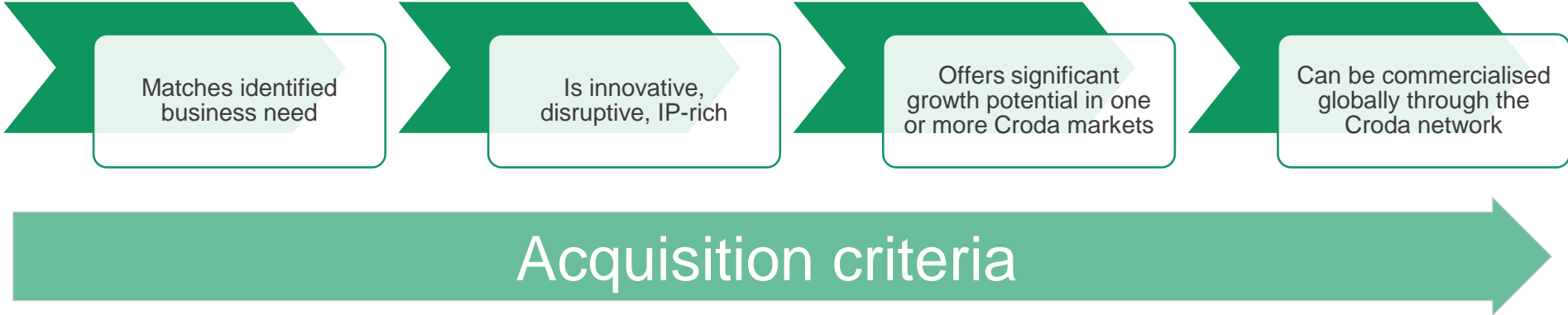
2500+
attendees
across
20
countries
in last 3 years



“Go to”
company
“Formulator’s
friend”

Targeted M&A

Target screening, selection and
prioritisation achieved against 22 criteria



Targeted M&A



Incotec
2015
Seed Enhancement



Profit doubled
in 3 years



Novel Technologies
2016-18
Drug Delivery



Acquired advanced
research pipeline



Plant Impact
2018
Plant Biostimulants



Technology
adjacency ready for
commercialisation



Biosector
2018
Vaccine Adjuvants



Commercialised
technology
adjacency with
strong potential

Investing in
niche
adjacencies to
improve lives

Life Sciences takeaways

Successful delivery

- Increased niche market positions
- Stronger IP & technology portfolio

Driving strong returns

- Revenue and profit CAGR >10%
- High margin > 30%
- Superior return on capital

Exciting future

- Strongly aligned to mega trends
- Organic and inorganic growth opportunities

Delivering strategy

- Increasing global footprint
- Accelerating innovation & NPP
- Greater customer intimacy

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Croda International Plc Opportunities in Crop Care

Dr Dave Cherry,
Managing Director
Crop Protection



What drives Crop Care?



Expanding
population



Changing
environment

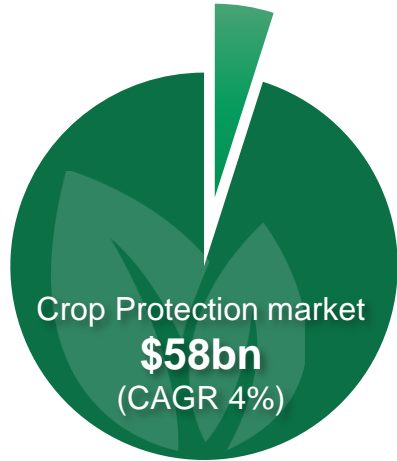


Demand for
transparency and
trust



Digitalisation and
interconnectedness

Exciting niche markets

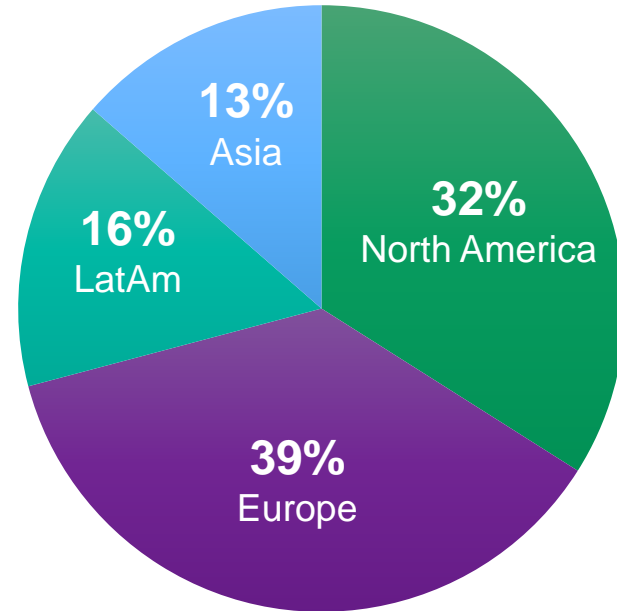


Adjuvants and Additives
\$3bn (CAGR 5%)



Seed Treatment
\$5bn (CAGR 10%)

Croda Crop Care Sales by Region 2018



- Strong consistent performance across regions and key customers
- Accelerated growth in LatAm and Asia

Source : Mordor Intelligence, 2018
CAGR: 2018-2024

The evolution of Croda Crop Care



incotec

the seed enhancement company



Agrochemicals



Leader in formulation, delivery and seed technology

Sustainable solutions aligned with UN SDGs

Cross-fertilisation enhances innovation pipeline

Delivering success in Crop Care

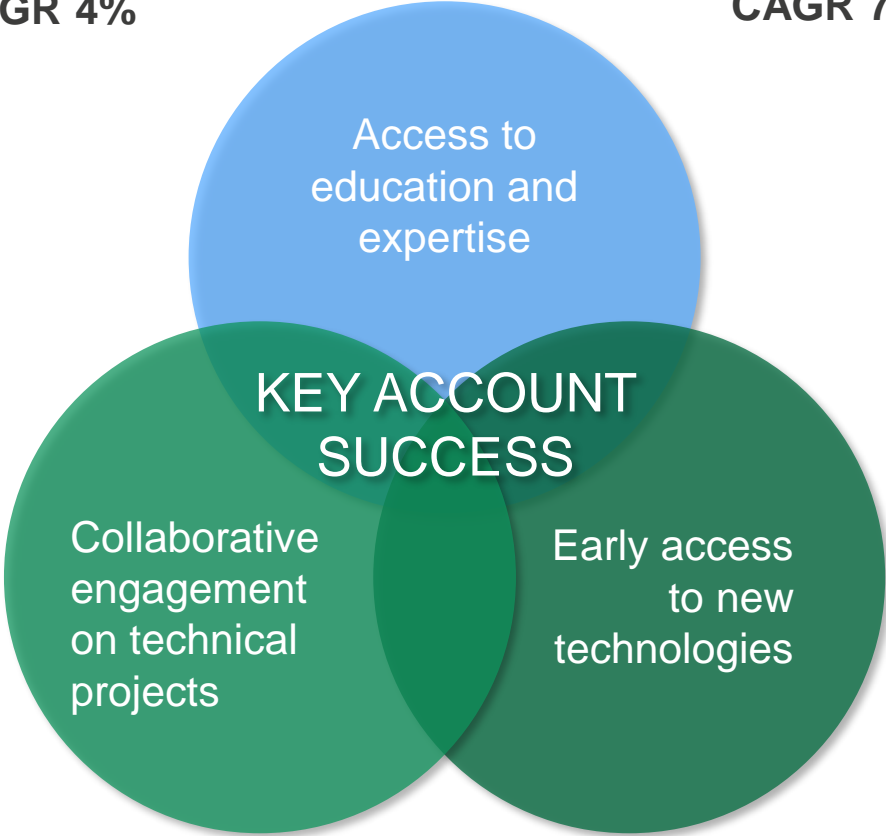
Collaboration	Innovation	Education
		
Strategic partnerships at multinationals	Strong pipeline plus open innovation	Showcasing expertise at customer events
Diversification	Responsibility	Expansion
		
New customers, markets, applications	Sustainable solutions at our core	Strong organic growth supplemented by M&A

Customer collaboration in Crop Care

Market Growth
CAGR 4%



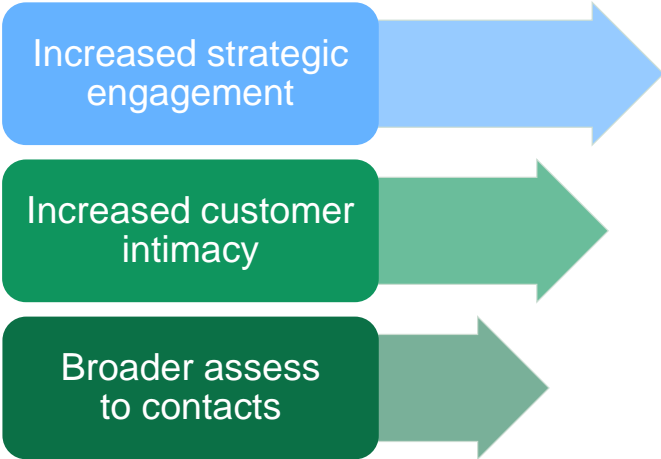
Croda Growth
CAGR 7%



Suppliers Award
2018



Innovation Award
2019



Agrow Annual Review 2018
Croda CAGR – 2015 - 2018

Platforms for growth



Crop Protection

- Industry leading adjuvant supplier, innovation aligned with key customer base



Seed Enhancement

- Innovative technologies to improve the quality and performance of seeds and maximise yields



Plant Biostimulants

- Creating a new category; investing for the future to sustainably improve crop yield and quality

Targeted, sustainable solutions

Crop Protection

Improving performance of agrochemical active ingredients with specialised additives

Hydravance™
Soil adjuvant



Water management in soil

Aplus DRT™
Drift reduction technology



Precision agriculture



Targeted, sustainable solutions

Seed Enhancement



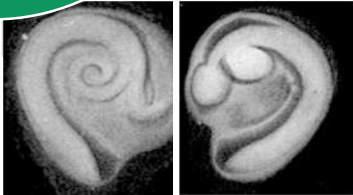
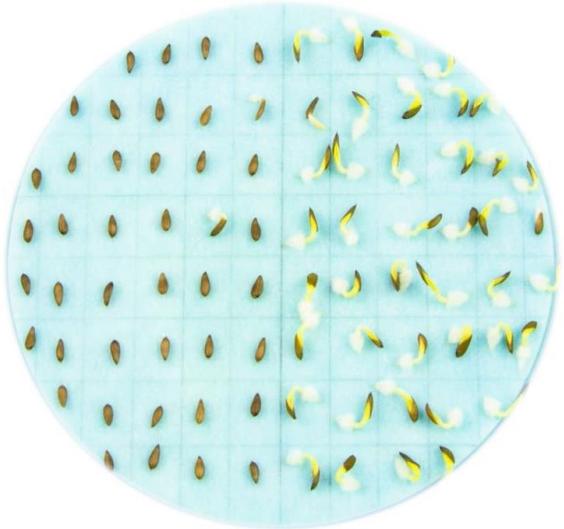
incotec

the seed enhancement company

Enhancing seeds to reach their maximum potential

Upgrading X-ray technology

Priming
Unprimed Primed



Maximising the value of seeds

Faster, more uniform germination

Targeted, sustainable solutions Plant Biostimulants



Stimulating natural plant responses, helping plants direct their resources to improving crop quality and creating yield



Without CaT™



Without Alethea™



With Alethea™

Improving calcium mobility



Mitigating impact of environmental stress



Crop Care takeaways

Value generation

- High growth within exciting niche markets
- Proven capability and potential
- Strong margin generation

Stronger together

- Broadening our platforms and market relevance
- Greater insights and expertise
- Smarter innovation

Customer collaboration

- Enhanced strategic relationships
- New customers and applications

Sustainable future

- Responding positively to the challenges of a changing world
- Targeted, sustainable solutions

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Break



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Croda International Plc Opportunities in Health Care

Freek Snieders, Managing
Director Health Care



What drives Health Care?



Growing and ageing population



Growth in biotech providing significant formulation challenges



Concern around drug safety and integrity



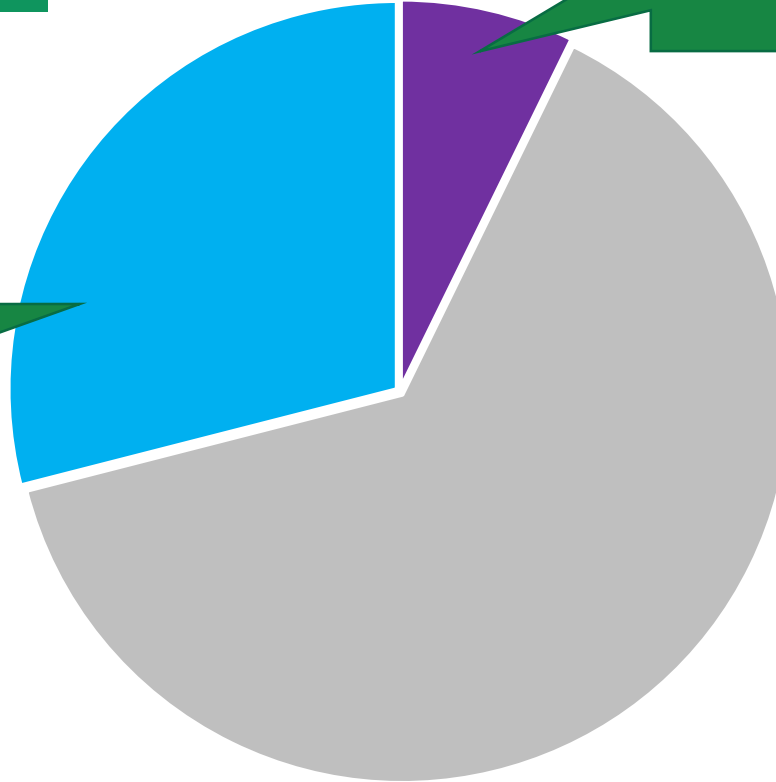
Development of drugs and vaccines for rare diseases

Exciting niche markets

**Global Pharma Market
\$1.204tn (CAGR 4-6%)**

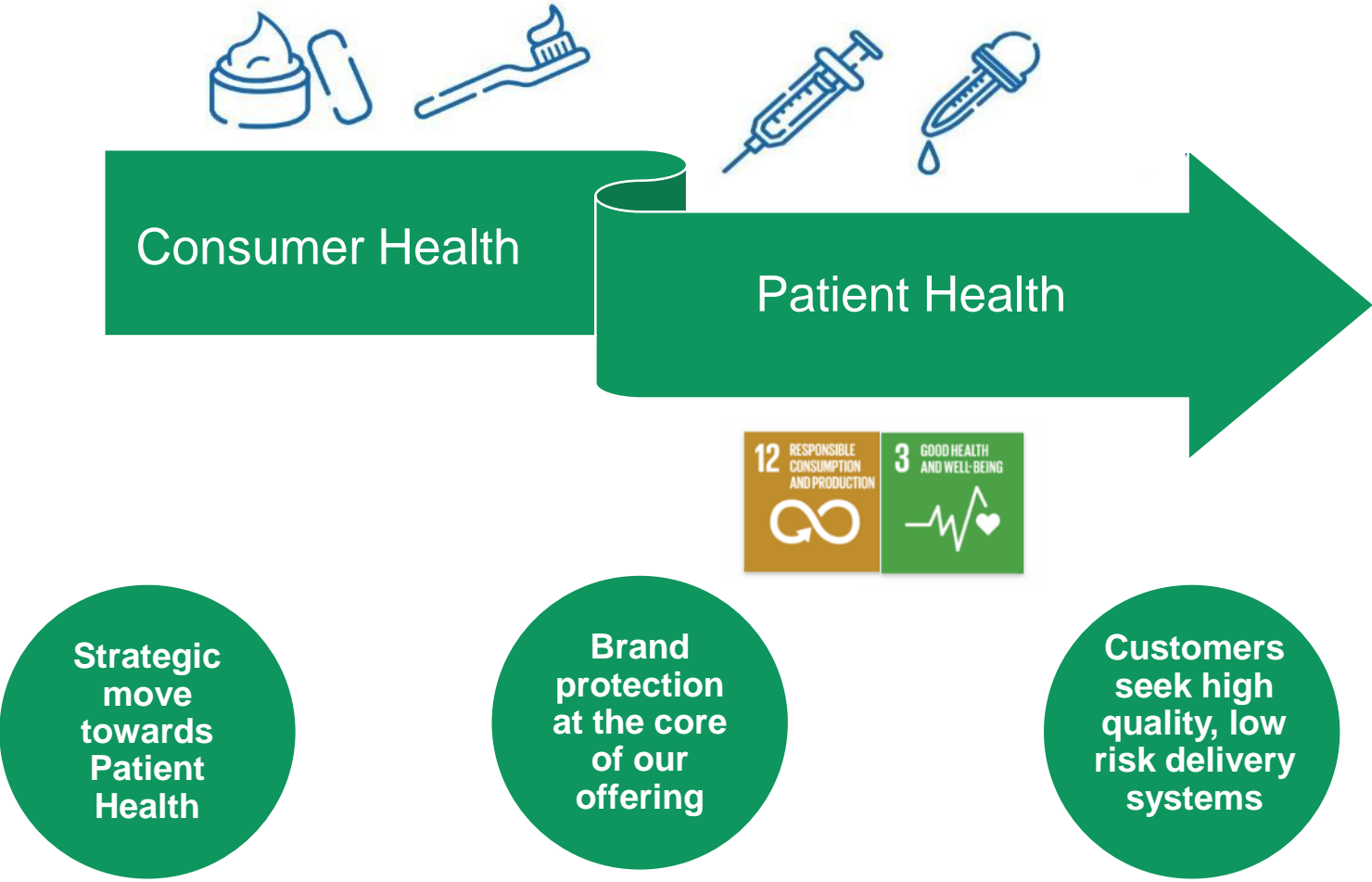
**Croda's Vaccine
Adjuvant niche
\$0.5bn**

**Croda's Speciality
Excipient niche
\$2bn**



**Global Excipient Market
\$6.9bn (CAGR 4-5%)**

The evolution of Croda Health Care



Platforms for growth



Speciality Excipients

- Excipient niche highly valued by customers
- Continued innovation with unique solutions and purification technologies
- Substantial regulatory know-how and influence



Vaccine Adjuvants

- Established adjuvant portfolio and expertise
- Industry-leading site quality credentials
- Strong pipeline of next generation vaccine adjuvants

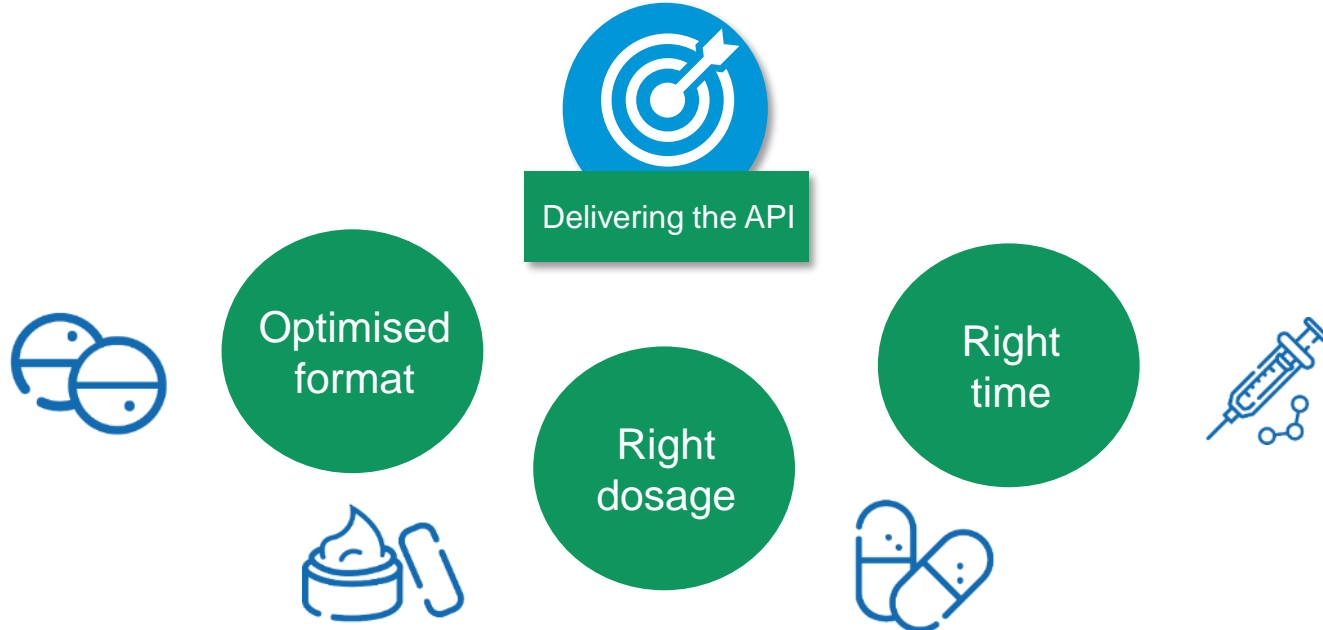


Drug Delivery

- Technology investments for the future
- Targeted and controlled drug delivery
- Accessing new business models

What are Excipients?

Excipients are the inactive part of a drug formulation that enable the Active Pharmaceutical Ingredient (API) to be delivered effectively to the patient



What are Excipients?

Tablet



Drugs comprise:

- API 1%
- Excipients 99%

Topical cream



Drugs comprise:

- API 1%
- Excipients 25%
- Water 74%

Liquid capsule



Drugs comprise:

- API 8%
- Excipients 92%

Injectable



Drugs comprise:

- API 2%
- Excipients 98%

Injectable (biologic)



Drugs comprise:

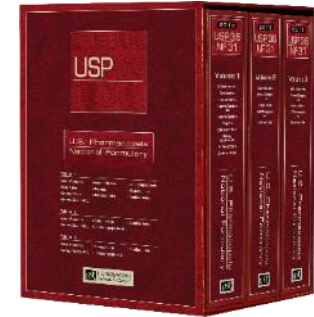
- API 10%
- Excipients 4%
- Water 86%

**Excipients play differing roles across differing applications
Opportunity for increased value capture in challenging formulations**

Croda protects pharmaceutical brands



Customers require independent accreditations and a global, consistent ability to supply



Excipient selection restricted to regional pharmacopoeia

Opportunity to build on performance and functionality of "standard" grades

Why compromise on delivery?



Pharma focus on API

Discovery is complex, costly, high risk

Pharma focus on delivery

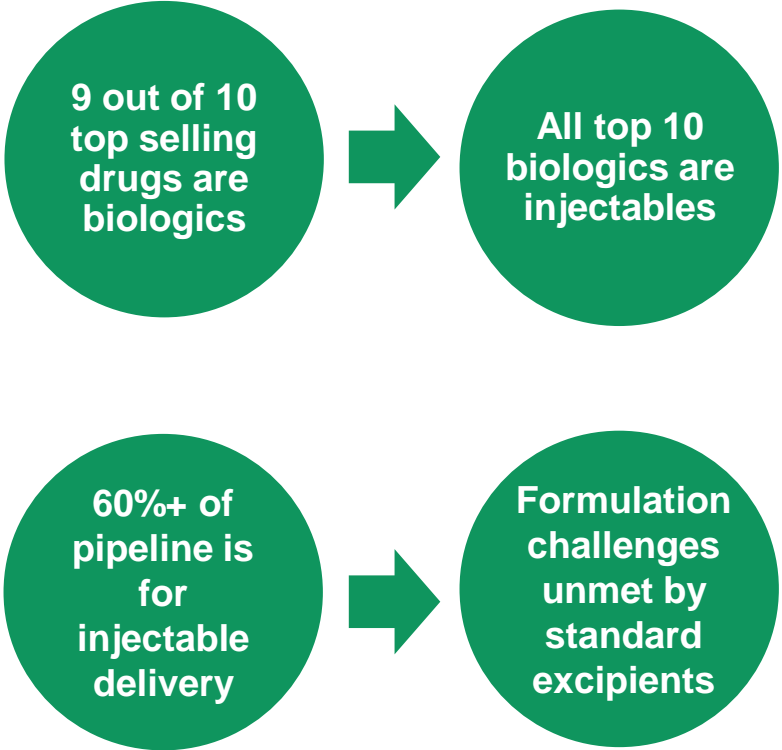
Formulating for success with Speciality Excipients

PhRMA (Pharmaceutical Research and Manufacturers of America)

Increasing challenges of Biotech

Position	2003		2018	
1	Lipitor	\$10.7bn	Humira	\$20.0bn
2	Zocor	\$5.0bn	Revlimid	\$9.7bn
3	Norvasc	\$4.3bn	Opdivo	\$7.6bn
4	Zyprexa	\$4.3bn	Enbrel	\$7.5bn
5	Prevacid	\$4.1bn	Eylea	\$7.2bn
6	Epogen	\$4.0bn	Herceptin	\$7.2bn
7	Plavix	\$3.6bn	Keytruda	\$6.8bn
8	Advair	\$3.6bn	Avastin	\$7.1bn
9	Nexium	\$3.3bn	Rituxan	\$7.0bn
10	Zolofit	\$3.1bn	Remicade	\$6.4bn

 Biologics delivered in Injectable Formulation



Pharmacircle, 2018

Croda's excipient offering



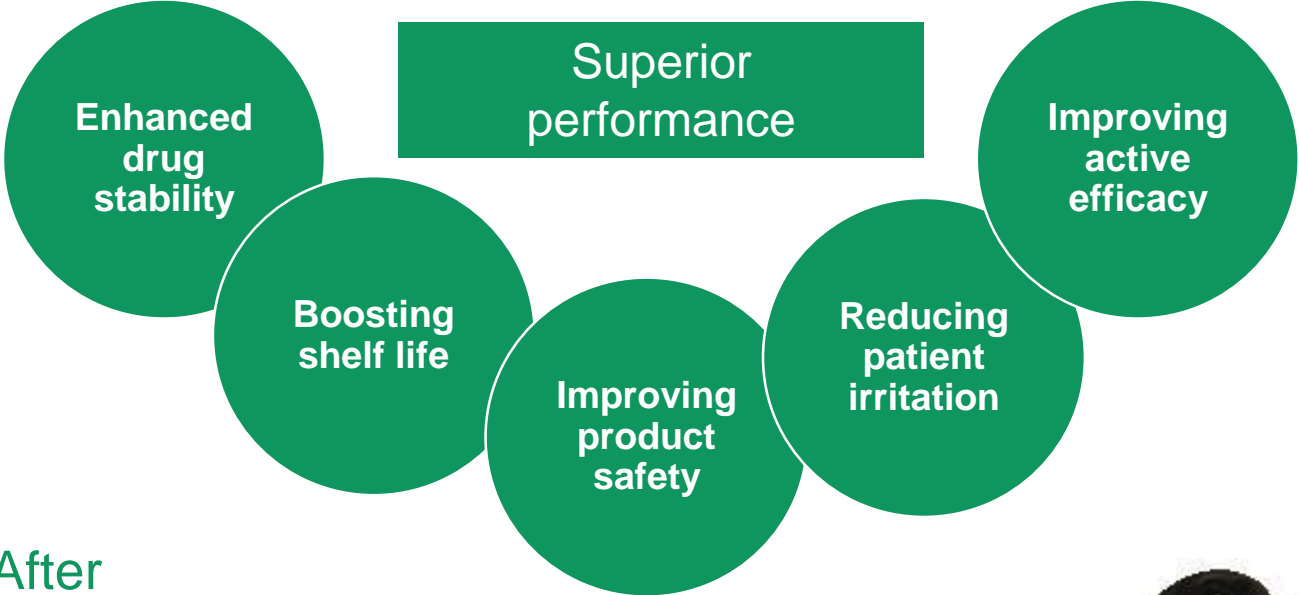
Standard Excipients
Routine applications



**Speciality
Excipients for
superior
performance**

Speciality Excipients
Sensitive, challenging
applications

Speciality Excipients



Before

After



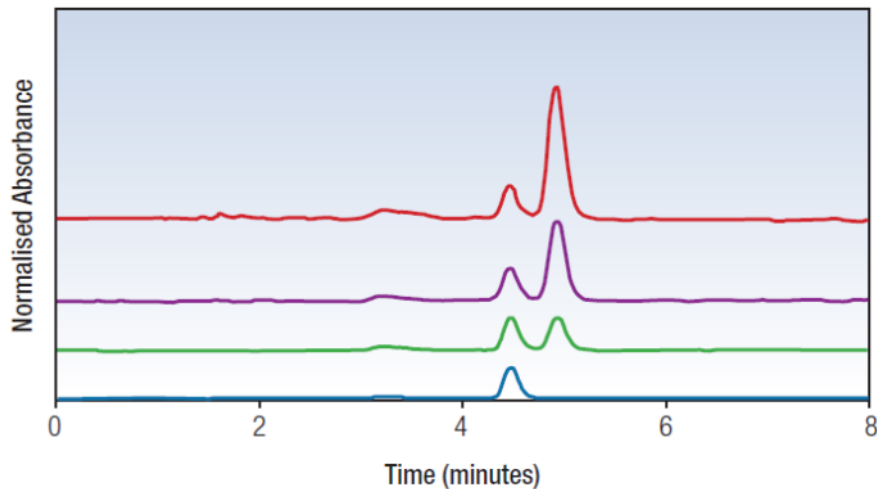
Soybean Oil



Impurities extracted from a standard grade

Speciality Excipients

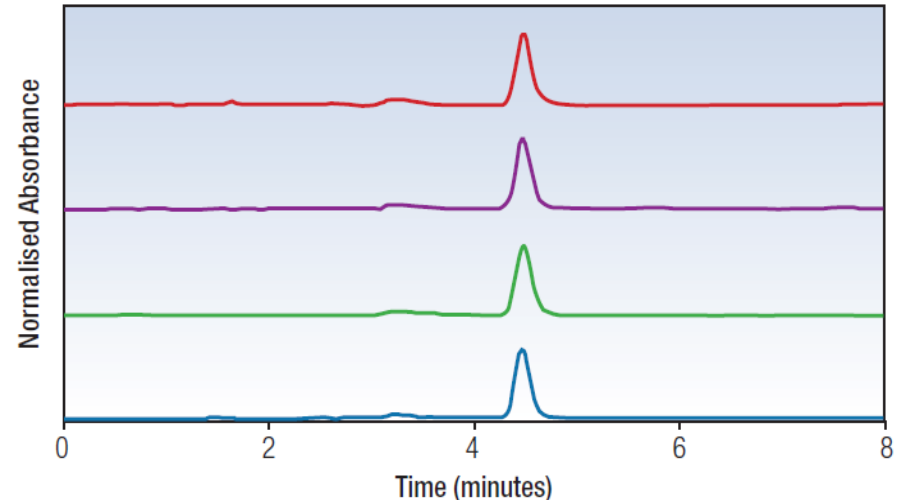
Oncology drug performance



— 12 weeks — 8 weeks — 4 weeks — Initial

Chromatogram of Etoposide in a standard excipient

In standard excipient products,
multiple API degradation
products develop



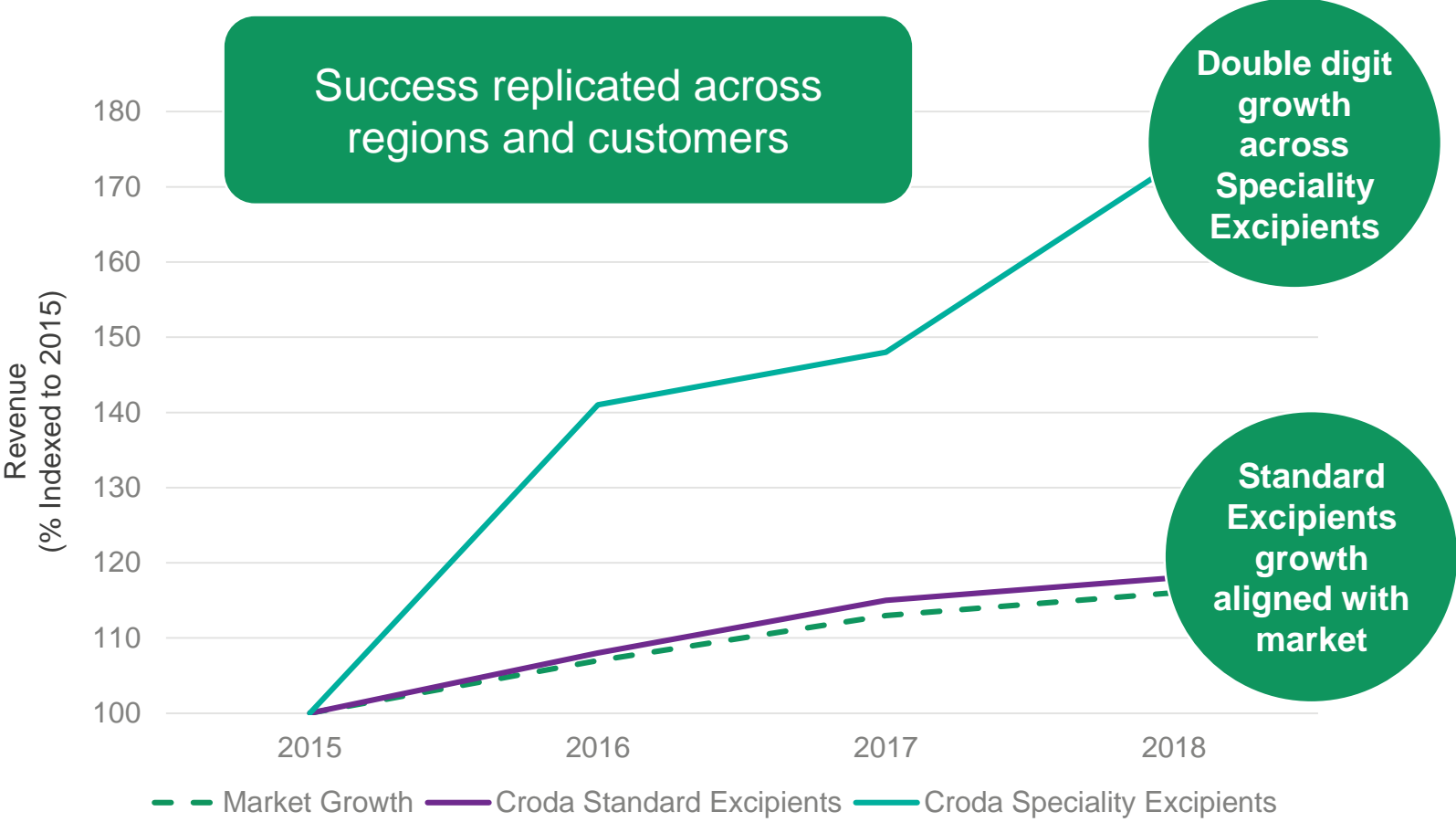
— 12 weeks — 8 weeks — 4 weeks — Initial

Chromatogram of Etoposide in a Croda speciality excipient

Speciality excipients offer more
predictable, consistent drug
performance

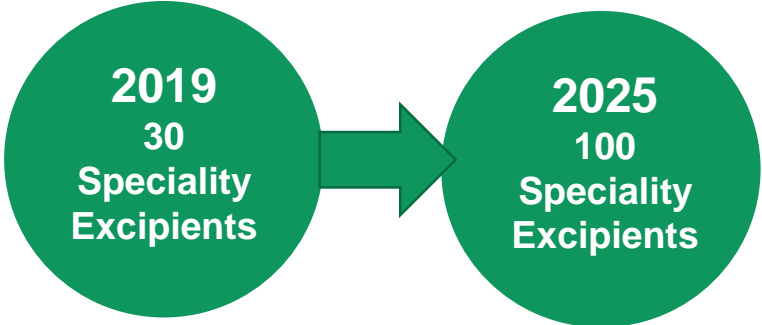
Speciality Excipients

Outperforming the excipient market



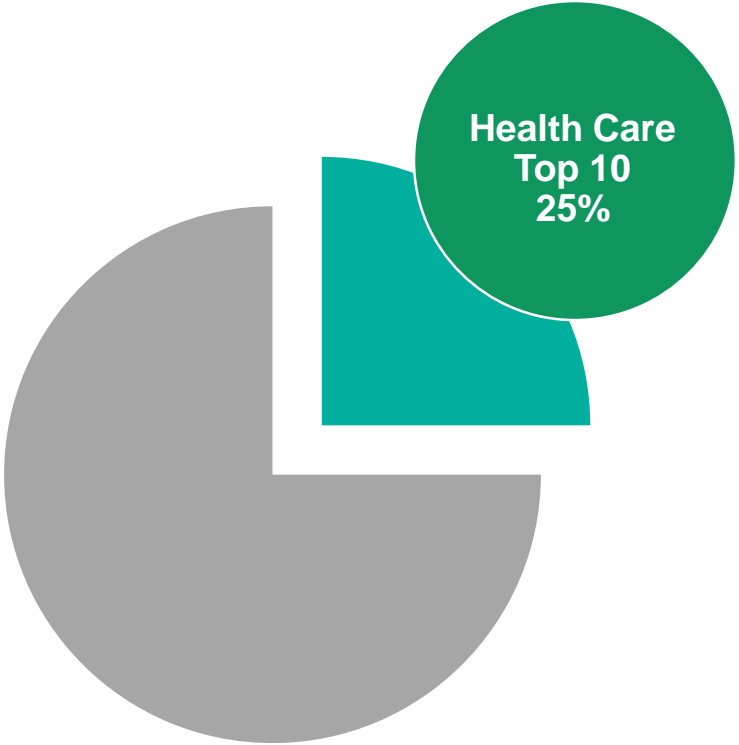
Speciality Excipients

Investing in range and technologies



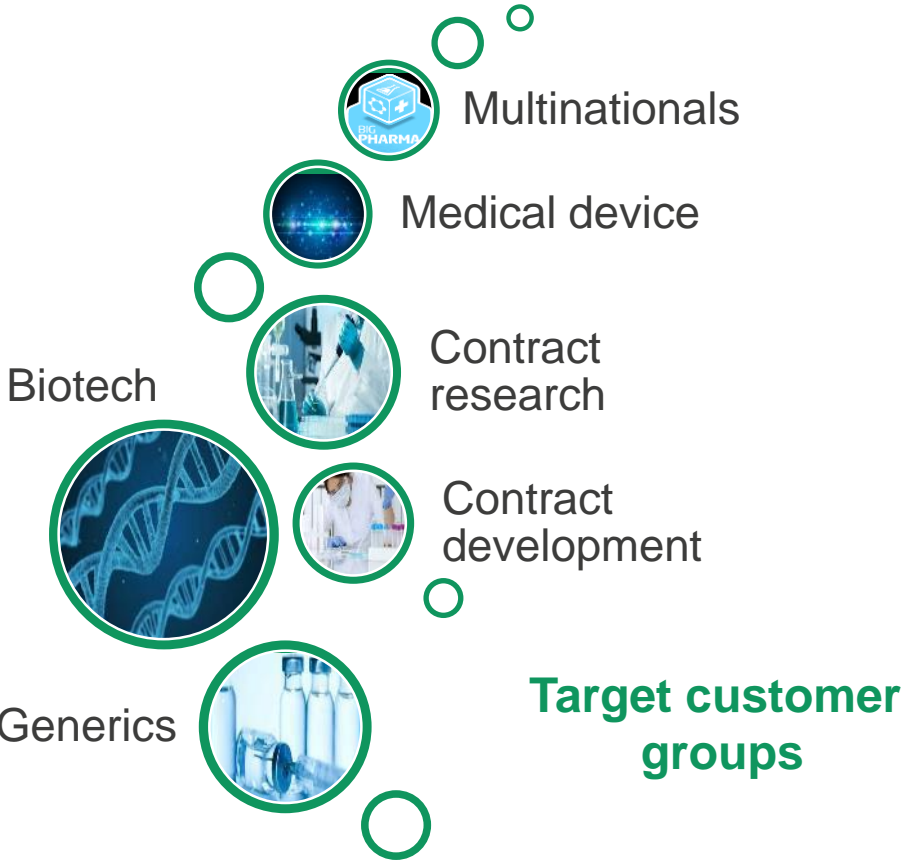
Speciality Excipients

Growing with diverse customer base



Top 10 Customer
Revenue, 2018

1000s of Customers



Speciality Excipients

Investing in quality and reach



-  Health Care manufacturing sites
-  Sales office
-  Health Care R&T Innovation Centre

1st
Excipient supplier to achieve EXCiPACT

Significant new opportunities in emerging markets

Ability to manufacture to pharma API standards

Industry-leading vaccine adjuvant site

What is a vaccine adjuvant?

A vaccine is a biological preparation that improves immunity to a particular disease

An adjuvant is a key component of a vaccine.
It boosts the body's immune response to a vaccine



Vaccine Adjuvants

Acquiring in adjacent technologies



Biosector
€72m Acquisition



Vaccine Adjuvants

Disease prevention

Enhancing the immune response of a vaccine to boost performance

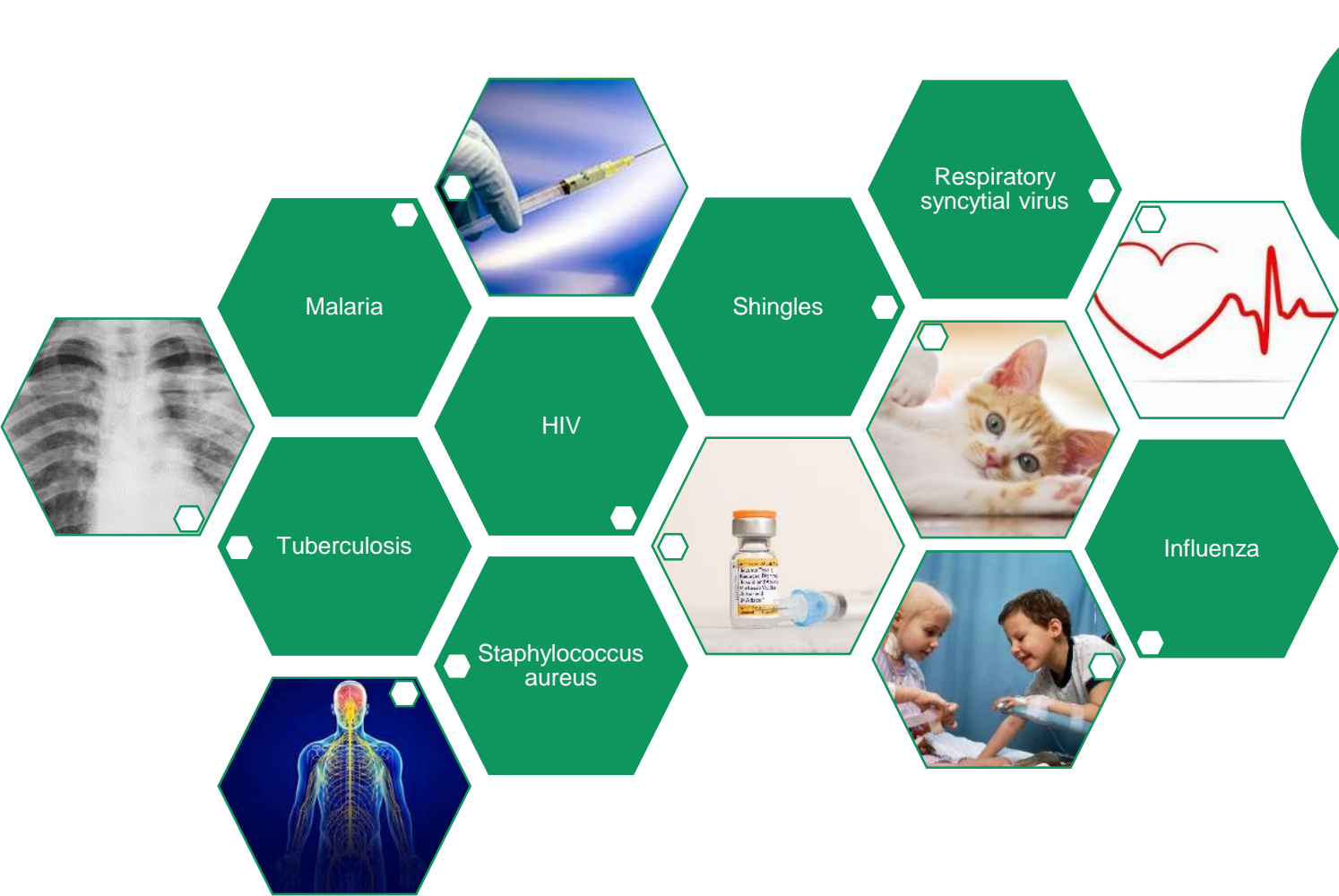


Gold standard products and facility

Novel, natural saponin pipeline

Vaccine Adjuvants

Combating challenging diseases



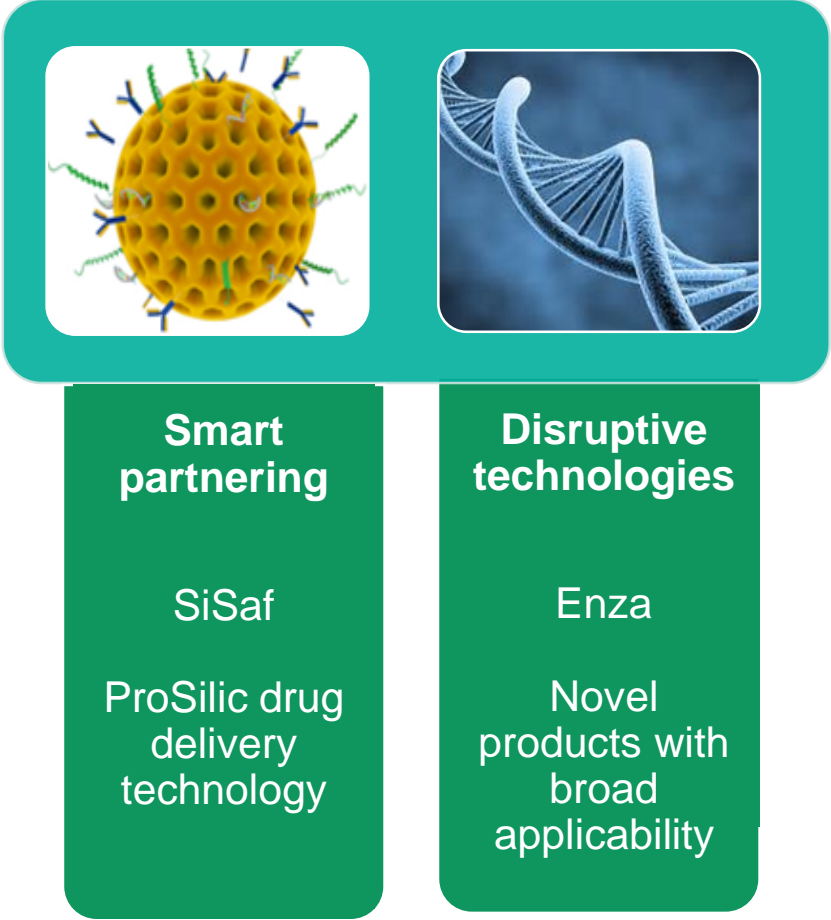
“Easy” vaccines have already been developed

Partnering to target new diseases



Adjacent Technologies

Drug delivery

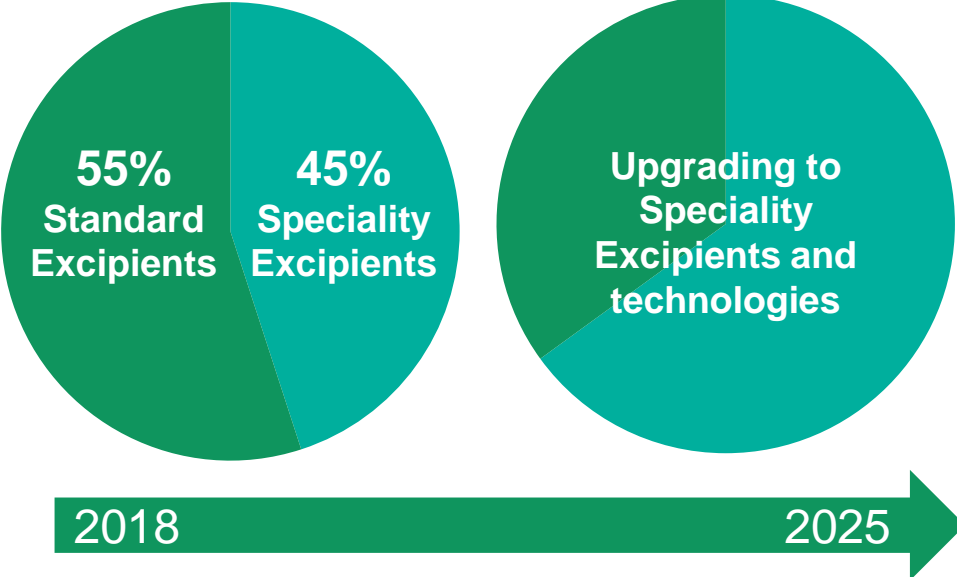


Technology investments for the future

Targeted and controlled drug delivery

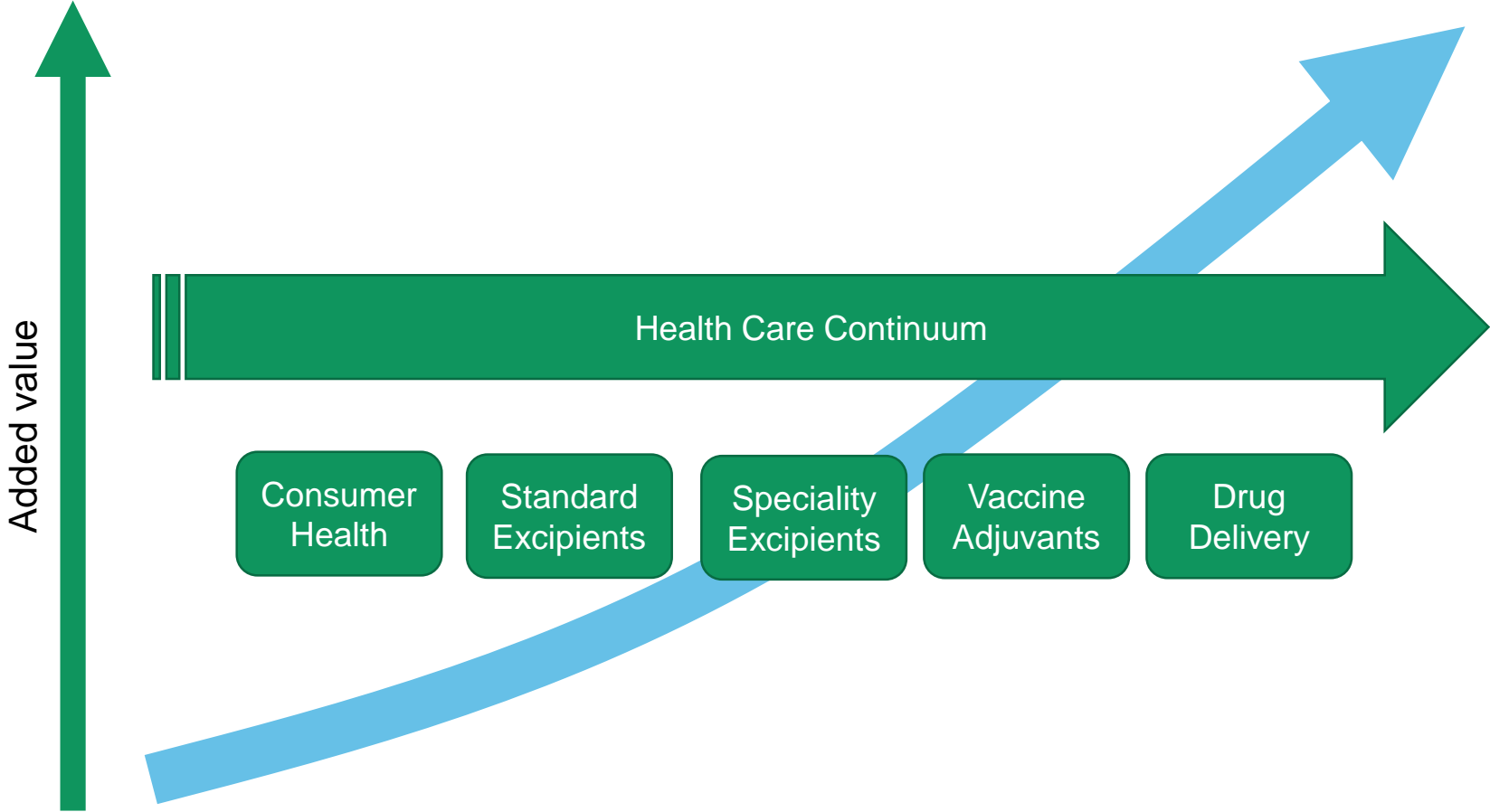
Accessing new business models

Our speciality journey

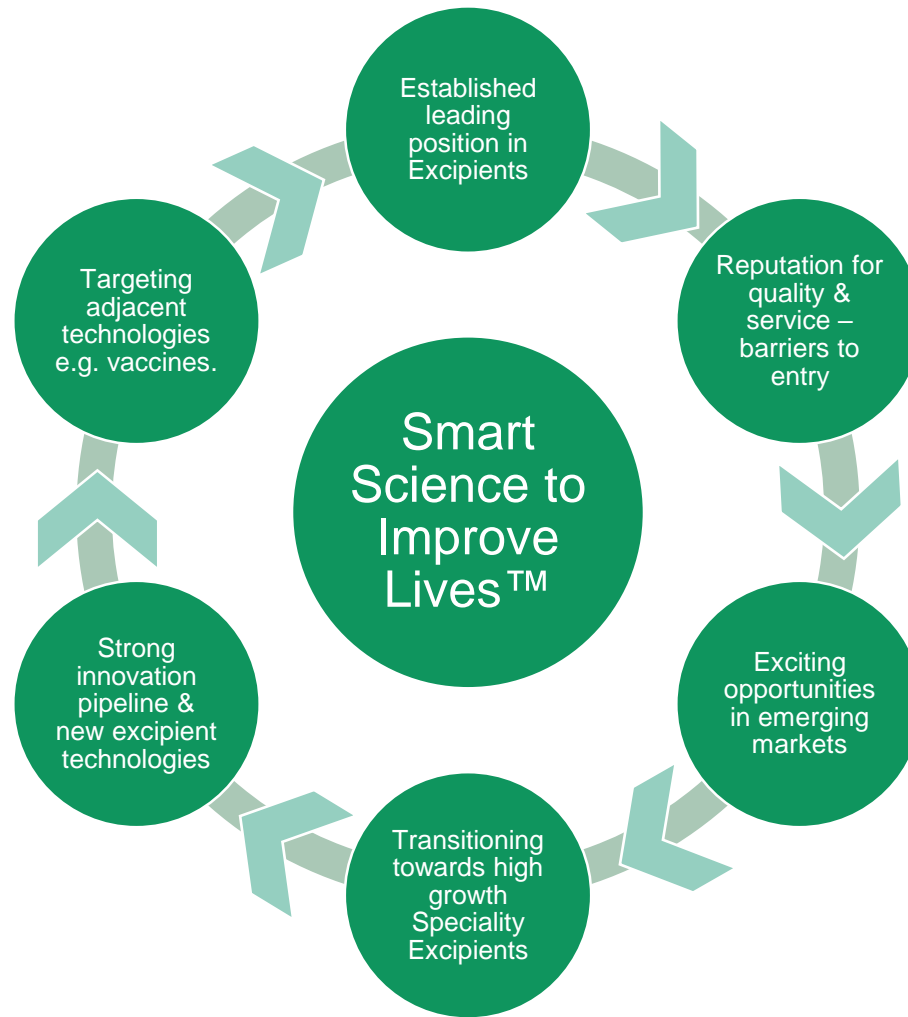


Our speciality journey

Health Care increasing value



Health Care takeaways



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Q&A

