

# Business review – Life Sciences



## Performance in 2024

Life Sciences	2024 £m	2023 £m	Change	Constant currency change	2023 £m (ex CV19 <sup>1</sup> )	Change (ex CV19 <sup>1</sup> )	Constant currency change (ex CV19 <sup>1</sup> )
Sales							
Pharma sales			(18)%	(16)%		(5)%	(2)%
Crop Protection sales			(19)%	(16)%			
Seed Enhancement sales			(2)%	1%			
Total Life Sciences sales	504.3	602.3	(16)%	(14)%	554.3	(8)%	(6)%
Adjusted operating profit	104.0	150.3	(31)%	(27)%			
Adjusted operating margin	20.6%	25.0%	(4.4)ppts				
IFRS operating profit	85.5	131.7	(35)%				

\* Where indicated, sales exclude £48m of lipid sales for CV19 vaccine applications in 2023. They are excluded from this growth calculation to give a more informative year-on-year comparison, as there were no CV19 lipid sales in 2024.

Life Sciences sales fell 16%, comprising a 3% reduction in sales volumes, with price/mix 4% lower, a 1% acquisition contribution from sales of phospholipids, and adverse impacts of 8% from the absence of CV19 lipids and 2% from foreign currency translation. Life Sciences returned to growth in the second half year, with sales up 6% (ex CV19, at constant currency) driven by an improved performance in our Agriculture businesses – both Crop Protection and Seed Enhancement.

The adjusted operating margin improved from 18.3% in H124 to 22.9% in H224 due to higher sales volumes in Crop Protection as well as strong cost control, resulting in a full year adjusted operating margin of 20.6% (2023: 25.0%), the prior year margin having benefitted from high margin CV19 lipid sales.

Life Sciences focuses on providing delivery systems for active pharmaceutical and agricultural products. Our technologies deliver the active ingredient, improve its efficacy, and solve challenges of stability and sustainability in customer formulations.

## Business units

### A Pharma

targets leadership in biologics drug delivery, providing excipients and adjuvants for drugs through synthesis, purification, formulation and application technology know-how

### B Crop Protection

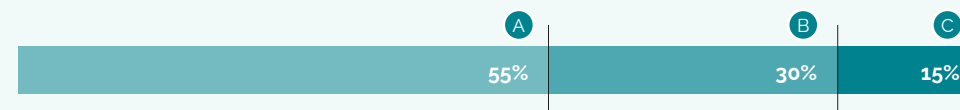
has leading relationships with the major crop science companies, offering ingredients that improve performance and delivery of crop protection formulations

### C Seed Enhancement

leverages our leadership in seed coating systems and enhancement technologies to improve germination, stimulate development of seeds and increase crop yields

## Sales

# £504.3m



## Strategy

Over the next decade, the move to biologics is the principal technology trend in both pharmaceutical and agricultural markets. In Life Sciences, we aim to empower biologics delivery through the development of innovative solutions.

Through execution of our strategy, we have established our Agriculture businesses as innovation partner for delivery systems, creating new systems specifically for the delivery of biopesticides and meeting the sustainability challenges of conventional pesticide delivery and seed solutions.

In Pharma, we have developed a portfolio of delivery systems that generate revenue at every

stage of the development cycle of new drugs, from discovery through to commercial supply. Our portfolio includes an increasing number of novel technologies focused on segments with the highest innovation needs, and has a well-diversified risk profile combining both near and medium-term growth opportunities. Growth of our existing business will be supplemented by opportunities for breakout growth as new drugs that we are supporting are commercialised and we bring our own new drug delivery technologies to market.



**Life Sciences is making a significant contribution to the UN Sustainable Development Goals. For details see page 6 of the Sustainability Impact Report.**

## Strategic progress

### Innovation – our key differentiator

NPP improved to 31% of total sales (2023: 28%) as our strategic growth areas in Pharma grew more quickly than sales for consumer health applications.

In Pharma, innovation pipelines are expanding rapidly:

- Customer new drug pipelines are growing and maturing as new drugs progress through clinical trials:
  - Globally, there are 1,700 RNA therapeutics under development across mRNA and gene editing, with the number increasing rapidly. Moderna's mRNA vaccine for RSV was approved in 2024 and GSK, Pfizer and Moderna are developing vaccines for flu that are expected to commercialise in 2025 or 2026. New Nucleic Acid therapeutics require bespoke delivery systems, playing to our strengths.
  - As adjuvant systems are semi-active substances critical to the efficacy of new vaccines, we have good visibility of the clinical trials in the market and the future systems required. There are now ~1,500 therapeutic vaccines undergoing clinical trials with an additional 280 now marketed, up from 140 in 2022
- We are executing against our plan for launching new technologies:
  - Our novel, lipid-based synthetic alternative to an adjuvant already used in shingles, malaria and RSV vaccines, has been included in 80 active customer projects spanning research and clinical phases
  - Virodrex, our sustainable alternative to a bioprocessing aid now banned in Europe, delivered early sales in 2024 across 10 projects with over 150 other opportunities being pursued
  - We have just launched Super-Refined Poloxamer 188, leveraging our refining and purification expertise. It is an aid to cell growth that is used during upstream

bioprocessing, delivering excellent cell culture performance and batch-to-batch consistency, and therefore lowering biomanufacturing risk

- We are driving partnership opportunities to enhance our in-house capabilities
  - With vaccine adjuvants a particular focus of our sustainability strategy for Pharma, our fermentation-derived squalene adjuvant, developed via an exclusive licensing agreement with Amyris, provides a sustainable replacement for shark-derived material, and is currently under advanced evaluation by global pharma companies

In Agriculture, we develop sustainable solutions to improve yields, accelerate the transition to biopesticides and contribute to food security. All technologies launched in 2024 are contributing sales including:

- Our first dedicated delivery system for biopesticides
- A delivery system optimised for application by drone, now available across Asia after good uptake in China
- Additions to our range of seed coatings that are free from micro-plastics, which grew well reflecting our market-leading position ahead of the ban on microplastics in seeds in Europe by 2028. These coatings are being sold across Europe, North America and Latin America, and are in final test stages with major seed companies

Looking ahead, our internal innovation pipelines and Agriculture product launches for 2025 are focused on:

- Biodegradability – aligned with customer demand
- Biopesticides – with the US Environmental Protection Agency estimating that biopesticides now represent 75% of applications for new pesticides and R&D programmes in place at all major customers
- Biologicals more broadly – including technologies for delivering sensitive microbes on seeds

### Extracting value from investments

Whilst our Crop Protection business will benefit from the commissioning of our new surfactants plant in India in 2025, Pharma has been the principal beneficiary of capital allocated to Life Sciences since 2020 due to its potential for significant incremental growth at superior returns. We are capturing the full potential of acquisitions and organic investments by:

- Driving the sales of phospholipids, acquired with Solus Biotech, through our global selling network
- Leveraging the Alabaster site in Alabama, USA as our centre of excellence for lipid development providing R&D, process development, analysis, small-scale manufacturing and regulatory support. We are also expanding our lipid portfolio and leveraging the Avanti brand to access research customers
- Transferring larger-scale manufacturing and enabling future growth at a new multi-purpose facility in Lamar, Pennsylvania, due to commence production in H2 and built with US Government support
- Expanding our cGMP lipid manufacturing capabilities in Leek, Staffordshire with UK Government support, to provide a second lipid production facility in Europe

We are nearing the end of the previously announced £175m Pharma investment programme and expect capex to moderate in 2025 as new assets are commissioned.

### Leadership

Thomas Riermeier joins Croda as President of Life Sciences in April 2025. He has excellent knowledge of both the chemical and pharmaceutical industries having previously led the Health Care business at Evonik Industries AG. In this role he was responsible for drug substances, drug delivery and products, and health solutions, including lipid delivery systems for nucleic acid-based vaccines and drugs.

## Business unit commentary

### Pharma

Pharma sales fell by 2% excluding the impact of currency translation and £48m of CV19 lipid sales in the prior year. Following the acquisition of Solus Biotech in July 2023, there was a 1% inorganic contribution from phospholipid sales for both intravenous nutrition and as delivery systems for pharma actives. With biopharma demand improving through the year, sales of lipids for drug research and delivery systems for protein-based drugs, both strategic growth areas for Croda, continued to grow. By contrast, sales into consumer health and veterinary markets fell particularly in Europe, and Adjuvant Systems was impacted by the normalisation of CV19 demand. As a result, sales were higher in Asia and North America, important regions for drug development, but fell in EMEA and Latam, where consumer health represents a larger proportion of sales. In response to challenging conditions in consumer health markets, we are refocusing resources to drive an improvement in sales, supported by ongoing flexibility in price.

### Crop Protection

Crop Protection sales fell 16% at constant currency, comprising a 31% decline in H124 against a very strong comparator period and a 6% increase in H224 when volumes started to recover. While customer inventory levels remain mixed, demand has begun to improve in the context of stabilising in crop commodity prices. Our continued development of business with fast-growing local and regional crop protection companies delivered positive sales and volume impact despite the challenging market environment.

### Seed Enhancement

Seed Enhancement sales grew 1% at constant currency with the second half weighting more pronounced than usual. Adverse weather conditions and falling commodity prices earlier in the year adversely impacted field crop sales but the vegetable services business performed well, particularly in EMEA, positively impacting business mix.