

October 2024

Initiating Coverage

# Jubilant Pharmova

## Booster shot: A well-rounded strategy



Radio-Pharma  
Manufacturing



Radio-Pharmacy



Allergy  
Immunotherapy



CDMO



Generics

**Shrikant Akolkar**  
Shrikant.Akolkar@nuvama.com

**Aashita Jain**  
Aashita.Jain@nuvama.com

**Gaurav Lakhotia**  
Lakhotia.Gaurav@nuvama.com

# JUBILANT PHARMOVA

## INITIATING COVERAGE



### KEY DATA

<b>Rating</b>	<b>BUY</b>
Sector relative	Outperformer
Price (INR)	1,112
12 month price target (INR)	1,450
52 Week High/Low	1,247/319
Market cap (INR bn/USD bn)	177/2.1
Free float (%)	49.3
Avg. daily value traded (INR mn)	918.7

### SHAREHOLDING PATTERN

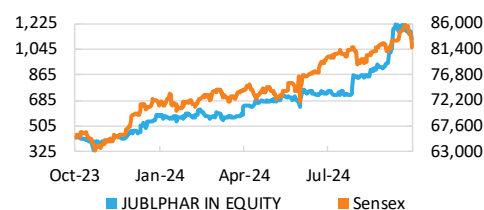
	Jun-24	Mar-24	Dec-23
Promoter	50.68%	50.68%	50.68%
FII	19.49%	19.06%	20.29%
DII	4.07%	3.78%	2.89%
Pledge	0%	0%	0%

### FINANCIALS

(INR mn)

Year to March	FY24A	FY25E	FY26E	FY27E
Revenue	67,029	73,174	82,539	92,593
EBITDA	9,008	11,691	14,192	16,978
Adjusted profit	1,955	4,435	5,746	7,800
Diluted EPS (INR)	12.3	27.8	36.1	49.0
EPS growth (%)	63.1	126.9	29.6	35.7
RoAE (%)	1.4	13.5	9.1	11.4
P/E (x)	90.6	39.9	30.8	22.7
EV/EBITDA (x)	22.7	17.4	14.1	11.4
Dividend yield (%)	0.5	0.9	0.6	0.9

### PRICE PERFORMANCE



## Booster shot: A well-rounded strategy

Jubilant Pharmova (JPL) is undergoing a turnaround and adding new growth drivers, which provides long-term growth and earnings visibility. We argue JPL can expand its revenue/EBITDA at a CAGR of 11%/24% through: i) Ruby-Fill ramp-up; ii) turnaround of Radiopharmacy and generics business; iii) commissioning of Line-3 at Spokane; and iv) CRO growth. The real booster shot would be balance sheet improvement, lifting PAT 4x over FY24–27E.

Valuing JPL's diversified—and unique—businesses using an SotP methodology yields a TP of INR1,450. Given growth/earnings visibility beyond FY27E and JPL's sustained improvement, we recommend a BRAVEHEART 'BUY' with upside potential of ~30%.

### Embracing diversified business model with new growth drivers

JPL operates a diversified business model with a mix of Radiopharma, allergy immunotherapy, CRDMO and commoditised business. We observe non-commoditised segments of its businesses have potent growth drivers such as launches, fresh capex coming on stream and industry tailwinds. The Radiopharma business is likely to benefit from Ruby-Fill ramp-up (~USD60mn in FY27E) and I-MIBG launch. Allergy business is likely to benefit from ex-US market growth while the CRDMO business shall benefit from industry normalisation and capex getting completed in FY27E. The Generics business would benefit from launches and reinstatement of compliance at the Roorkee facility. In a nutshell, JPL is now embarking on a new earnings cycle riding several growth factors.

### Multiple triggers augur additional revenue potential of ~USD350mn

We reckon JPL has growth visibility of ~USD350mn beyond FY27E till FY30E through i) Ruby-Fill ramp-up (USD30–50mn additional revenue); ii) I-MIBG (~USD100mn); iii) establishment of six new PET pharmacies in FY28E (USD60mn revenue with 20% margins); and iv) full utilisation of CDMO Line-3 and 4 (USD160mn). Besides potential tailwinds in the wake of the BIOSECURE Act in the CRO business, product launches in generics may unlock further potential upside to revenue in our estimates.

### PAT: 4x potential due to operational factors, financial turnaround

Given growth drivers in place, operating leverage and interest cost savings can catapult PAT growth by 4x over FY24–27E, indicating JPL might well be on the cusp of a new earnings cycle. Due to the improvement in the P&L and balance sheet, the company is set to generate cumulative FCF of ~INR19bn (FY25E–27E) leading to debt repayment while the RoCE would climb up from 6.5% in FY24 to ~14% in FY27E. We estimate its net debt/EBITDA shall improve from the current 3x to 1x in FY27E.

### Unique business with long-term earnings visibility; initiate at 'BUY'

We are initiating coverage on JPL at 'BUY' with an SotP-derived TP of INR1,450, implying upside potential of 30%, 14x EV/EBITDA and 30x P/E on FY27 estimates. Key risks: delay in I-MIBG launch/CMO/pharmacy capex, regulatory hurdles at Montreal/other units, inability to turn around the generics business.

## Contents

Executive Summary .....	3
Story in Charts .....	5
Financial Statements .....	7
Investment Rationale .....	8
Valuations.....	25
Financial Outlook.....	27
Key Risks .....	30
Company Description .....	31
Management Overview.....	37
Industry Outlook.....	41

## Executive Summary

### **PAT growth of 4x hinges on revenue mix, operational turnaround**

Jubilant Pharmova (JPL) is likely to grow its revenue at 11% CAGR over FY24–27E. At the same time, EBITDA is likely to grow at 24% CAGR owing to: i) improving revenue mix (>200bp increase in the contribution of mid-high margin business over FY24–27E); ii) operating leverage in CRO business (~300bp margin expansion over FY25–27E); and iii) continued turnaround in the Radiopharmacy and generics business (delta of INR2.7bn in EBITDA over FY24–27E). We reckon PAT shall clock 4x growth over FY24–27E as the company also benefits from its financial deleverage (debt reduction from INR37bn in FY24 to INR24bn by FY27E).

### **Ruby-Fill ramp-up to benefit Radiopharma manufacturing segment**

JPL in its high-margin Radiopharma manufacturing business is likely to see a ramp-up of Ruby-Fill, a low competition PET imaging product with cost advantage over the competition. Ruby-Fill generator has already been installed in the top 80% of the US cardiac network and is poised to increase its market share further due to the network driven growth and operating leverage. Furthermore, the company has also added Ruby Mobile Solutions, for the small hospitals and rural areas, which too can capture additional market share. We forecast Ruby-Fill's revenue shall clock USD49mn/USD59mn in FY26E/FY27E and believe that it has potential to reach ~USD100mn revenue by 2030, indicating long runway for this product.

### **I-MIBG: Potential addition of new growth driver in FY27**

Jubilant also has a product called I-MIBG, a combination of Iodine 131 and Meta-Iodobenzylguanidine (MIBG). This therapeutic Radiopharma drug is under phase II/III trials for paediatric indication in high-risk Neuroblastoma in children. This is an ultra-rare indication with high clinical benefits and positive reviews. The drug has already given to ~100 patients under expanded access programme. Considering the competition in the drug and treatment options, this drug can clock ~USD100mn revenue in three years of launch and should continue to grow thereafter. Our current valuation framework does not include I-MIBG but probability adjusted NPV of this drug works out to INR39/share (3% of the current market price of JPL).

### **Capex-led growth in CMO business**

JPL is adding new lines (line 3 and Line 4) at its Spokane contract manufacturing facility. A large part of the capex is funded by the US government in exchange for 50% capacity booking at times of healthcare emergency, but the offtake would be at the market price. Of this, Line 3 is opening in Q1FY26E while Line 4 would open in FY28E. With the global CDMO market for sterile products growing at 10–11% CAGR and possible capacity shortages, this capacity is likely to see faster revenue ramp-up. Sterile CDMOs have a high-margin business with high customer stickiness, which would benefit JPL. Combined together, both lines have peak revenue potential of ~USD160–180mn (~20–22% of FY24 revenue).

### **CRO business to benefit from favourable industry dynamics**

JPL has a small drug discovery business operated from India, which contributed 16% of the revenue in FY24. The business declined 14% YoY in FY24 due to the slowdown in biotech funding. We bake in ~12% CAGR in the CRO business over FY24–27E with the biotech-funding environment likely to reach normalcy. The CRO business margins can also see ~300bp expansion over FY25E–27E as this business operates on higher fixed cost, which should provide operating leverage with growth in the revenue.

## Generic business margins on the cusp of breakeven

JPL's generic business suffered after its Roorkee facility received an import alert. The business declined from ~USD200mn in FY21 to ~USD93mn in FY24 with EBITDA margins tanking to -30% in FY23. The business is now on the cusp of margin recovery in FY25E with i) shutdown of its expensive US manufacturing facility; and ii) lifting of the import alert on Roorkee. We think this business can provide a delta of INR2.4bn during FY24–27E, which is the highest for any segment of the company.

## FCF and debt repayment to improve balance sheet

Given improving revenue mix, margin progression and working capital improvement, we reckon JPL's FCF shall experience substantial growth over FY24–27E. Cumulatively, we anticipate FCF of INR19bn leading to rounds of debt repayment and balance sheet improvement. This improvement in P&L and balance sheet should lead RoCEs to climb up from 6.5% in FY24 to ~14% in FY27E in our view.

## Catalysts in place for growth beyond FY27E

While JPL's mid-term growth factors are promising, we anticipate continued growth beyond FY27E too, with i) ramp-up in Ruby-Fill; ii) launch and expansion of I-MIBG; iii) establishment of six new PET pharmacies; iv) commercialisation of Line 4 and full utilisation of Line 3; v) potential benefits of BIOSECURE act in CRO business; and vi) product launches in the generics business. These factors provide additional revenue visibility of ~USD350mn until FY30E, indicating sustained growth momentum with improved profitability across all segments.

## Initiate at 'BUY' with potential upside of ~30%

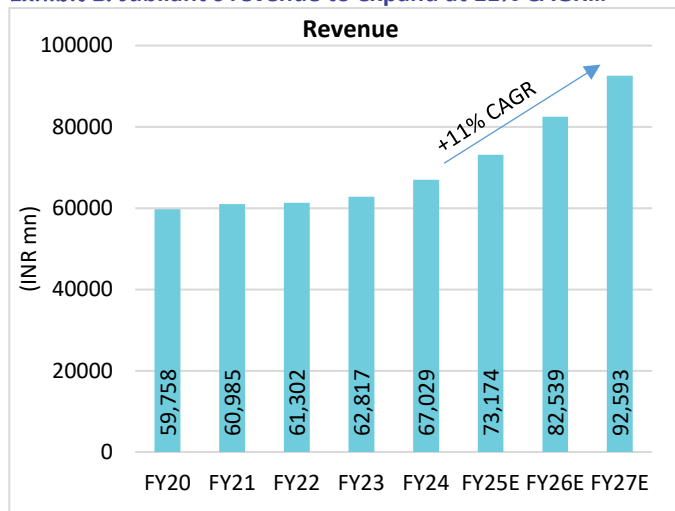
Due to the firm growth drivers that include mid to long-term opportunities and margin accretion opportunity through low hanging recoveries and operational improvements, we expect revenue/EBITDA to grow at 11%/24% CAGR over FY24–27E. Due to financial deleverage, we expect PAT to grow 4x during our forecast period. We employ SotP to value the company using carefully chosen peers/multiples such as ALK-Apello (for Allergy immunotherapy), Catalent/Lonza (for CDMO-SI) and Telix Pharma (for Radiopharma). Initiate coverage with 'BUY' on JPL with TP of INR1,450. This implies a P/E multiple of 30x on our FY27E EPS.

## Key risks

We highlight key risks such as: i) failure to ramp up Ruby-Fill and I-MIBG; ii) competition in the allergy business; iii) delayed commercialisation of new CDMO lines; iv) escalation of compliance issues at the Montreal facility; v) failure to recover margins in the generics and radiopharmacy business; and vi) any adverse regulatory/compliance action on JPL's operations.

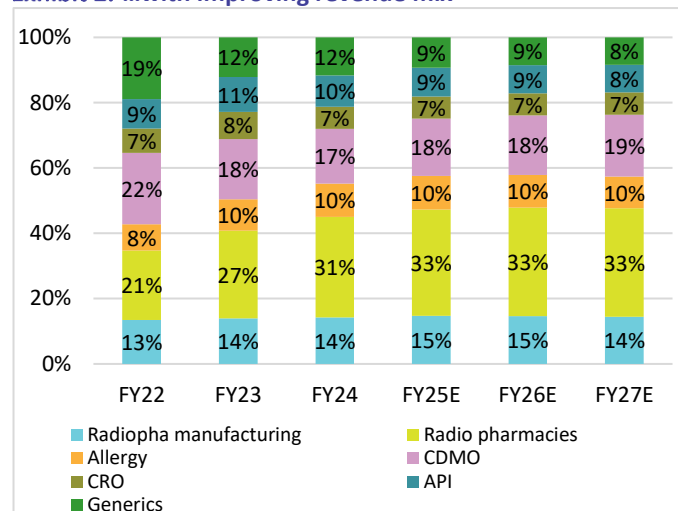
## Story in Charts

**Exhibit 1: Jubilant's revenue to expand at 11% CAGR...**



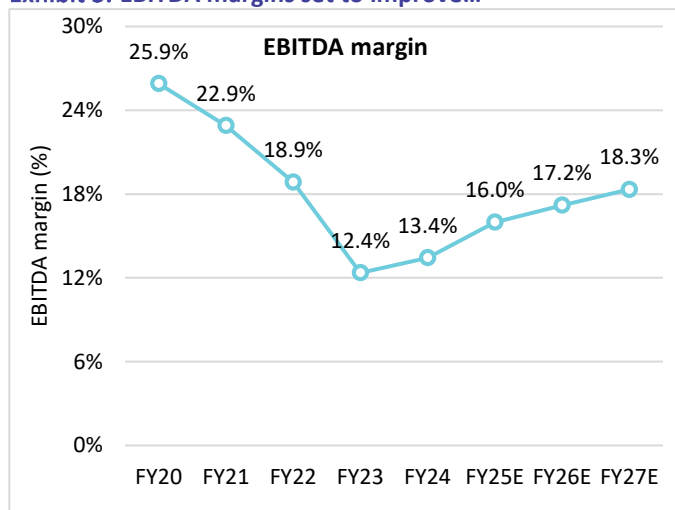
Source: Company, Nuvama Research

**Exhibit 2: ...with improving revenue mix**



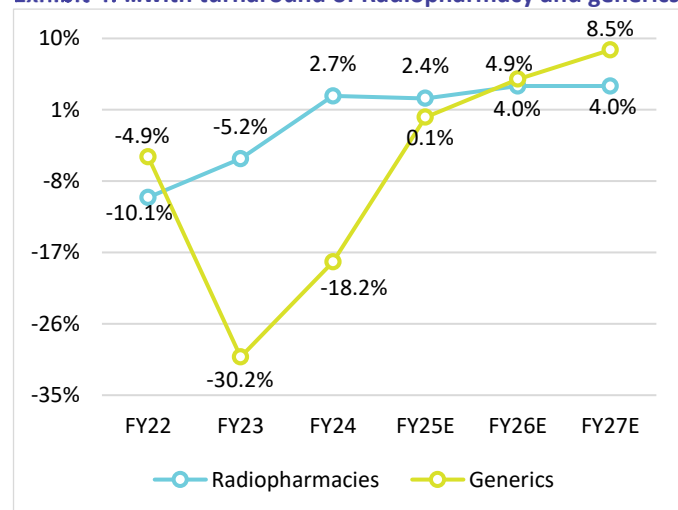
Source: Company, Nuvama Research

**Exhibit 3: EBITDA margins set to improve...**



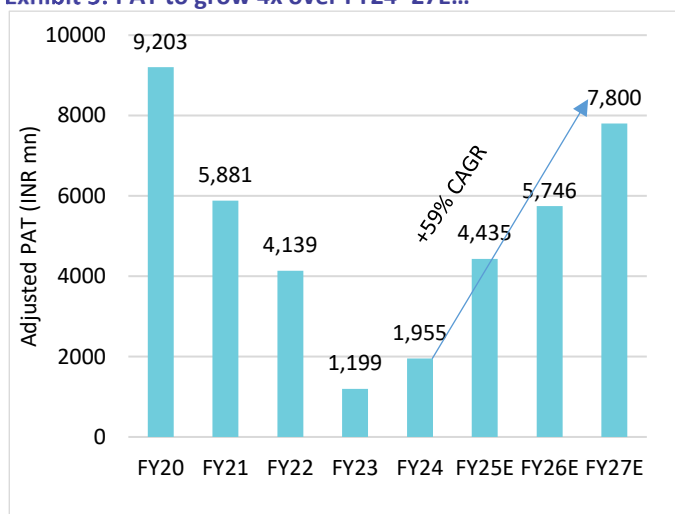
Source: Company, Nuvama Research

**Exhibit 4: ...with turnaround of Radiopharmacy and generics**



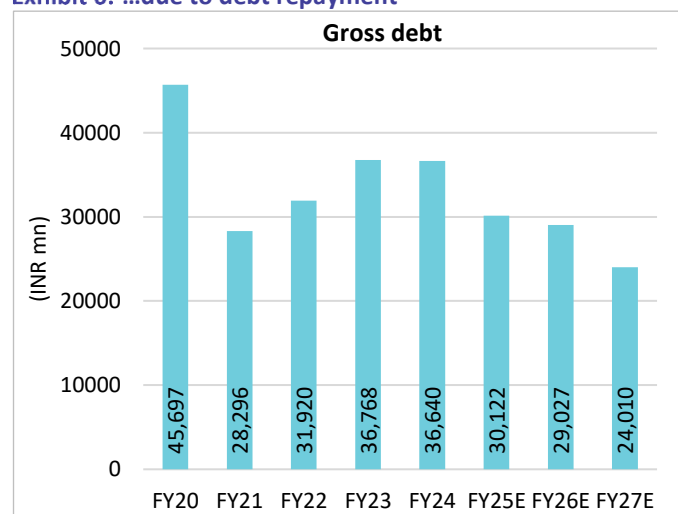
Source: Company, Nuvama Research

**Exhibit 5: PAT to grow 4x over FY24-27E...**



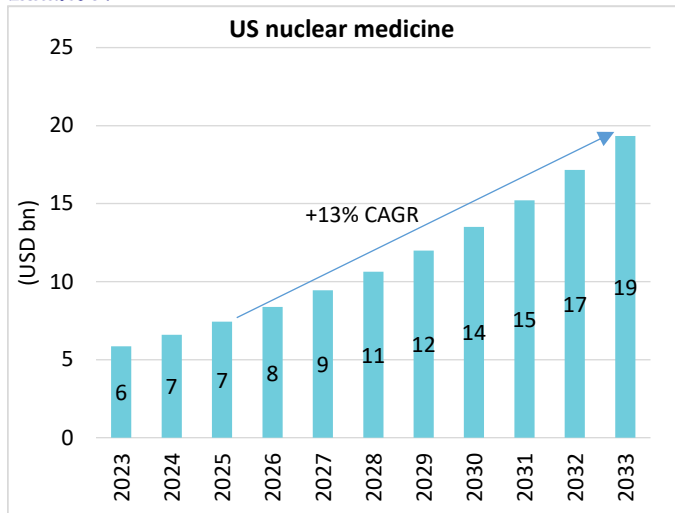
Source: Company, Nuvama Research

**Exhibit 6: ...due to debt repayment**



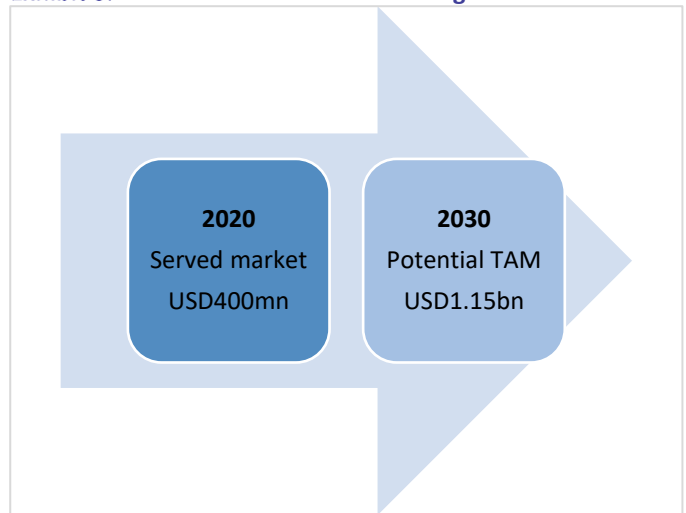
Source: Company, Nuvama Research

**Exhibit 7: US nuclear medicine market: 13% CAGR**



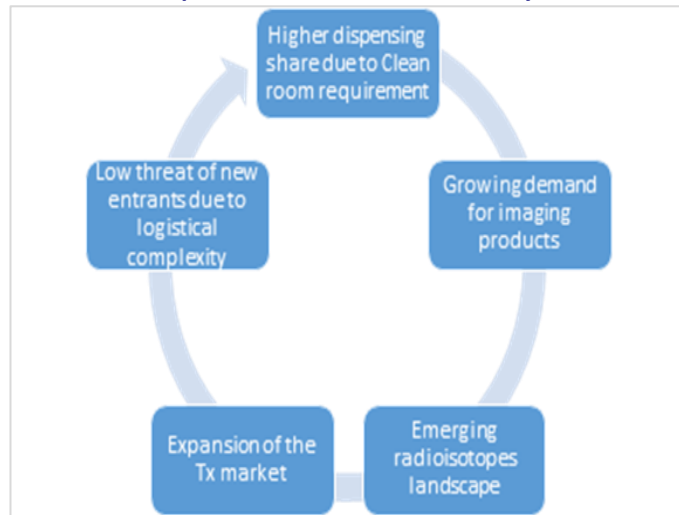
Source: Nuvama Research

**Exhibit 8: Plans afoot to increase coverage market size**



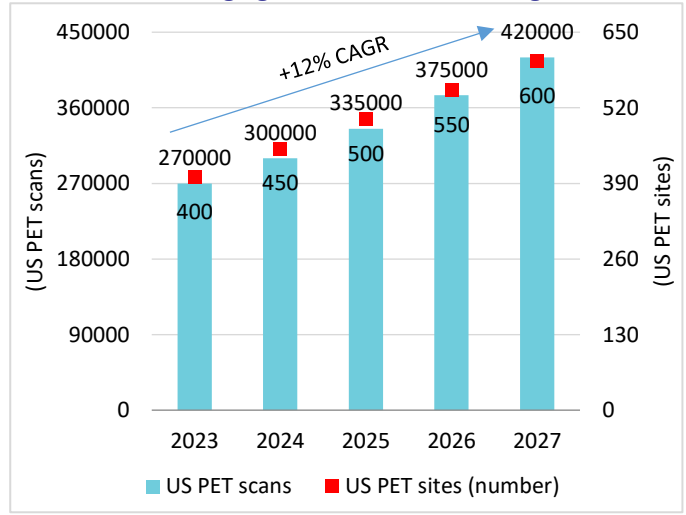
Source: Company, Nuvama Research

**Exhibit 9: Radiopharma —an attractive industry**



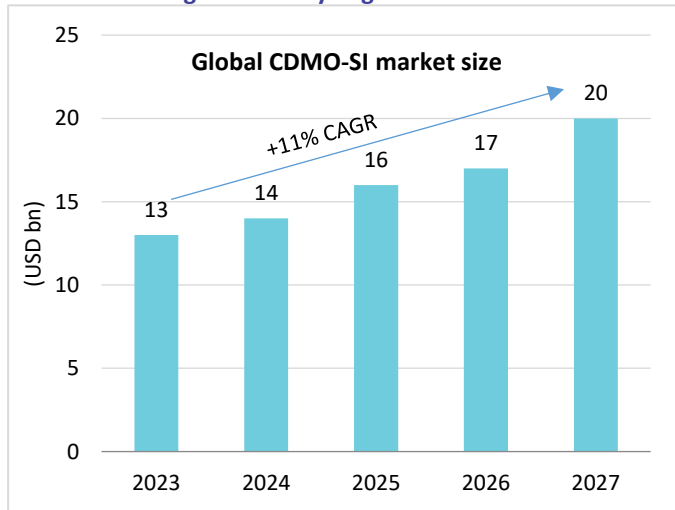
Source: Company, Nuvama Research

**Exhibit 10: PET imaging boom: Secular volume growth**



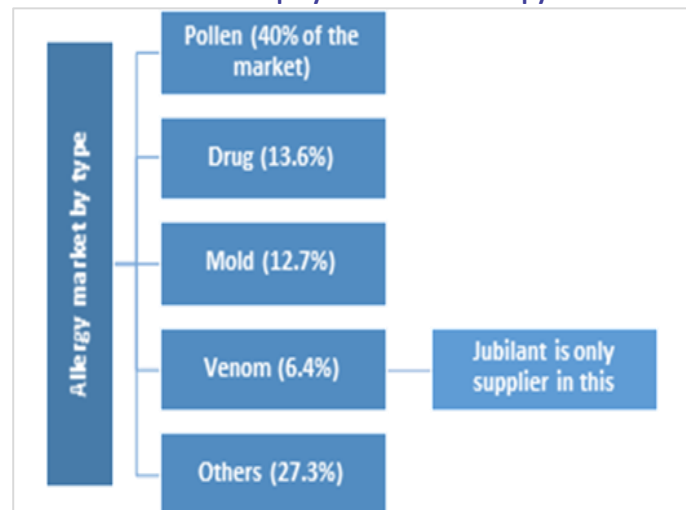
Source: Company, Nuvama Research

**Exhibit 11: 1.5x growth likely in global CDMO SI market**



Source: Company, Nuvama Research

**Exhibit 12: Jubilant sole player in venom therapy**



Source: Company, Nuvama Research

## Financial Statements

### Income Statement (INR mn)

Year to March	FY24A	FY25E	FY26E	FY27E
Total operating income	67,029	73,174	82,539	92,593
Gross profit	45,622	49,459	55,796	62,963
Employee costs	22,160	23,962	27,238	30,556
R&D cost	0	0	0	0
Other expenses	14,454	13,806	14,366	15,430
EBITDA	9,008	11,691	14,192	16,978
Depreciation	3,819	4,313	4,081	4,249
Less: Interest expense	2,723	2,420	2,120	2,000
Add: Other income	687	350	200	240
Profit before tax	3,153	5,308	8,191	10,969
Prov for tax	978	1,546	2,457	3,181
Less: Exceptional item	(1,689)	3,959	0	0
Reported profit	771	7,734	5,746	7,800
Adjusted profit	1,955	4,435	5,746	7,800
Diluted shares o/s	159	159	159	159
Adjusted diluted EPS	12.3	27.8	36.1	49.0
DPS (INR)	5.0	9.7	7.2	9.8
Tax rate (%)	31.0	29.1	30.0	29.0

### Important Ratios (%)

Year to March	FY24A	FY25E	FY26E	FY27E
Gross margin	68.1	67.6	67.6	68.0
R&D as a % of sales	3.0	2.2	1.6	1.0
Net Debt/EBITDA	81.9	89.7	98.1	107.3
EBITDA margin (%)	13.4	16.0	17.2	18.3
Net profit margin (%)	2.9	6.1	7.0	8.4
Revenue growth (% YoY)	6.7	9.2	12.8	12.2
EBITDA growth (% YoY)	16.0	29.8	21.4	19.6
Adj. profit growth (%)	63.1	126.9	29.6	35.7

### Assumptions (%)

Year to March	FY24A	FY25E	FY26E	FY27E
GDP (YoY %)	6.7	6.0	6.2	6.2
Repo rate (%)	6.5	6.0	5.0	5.0
USD/INR (average)	83.0	84.0	82.0	82.0
Radiopharmaceuticals margin (%)	50.1	45.8	45.0	45.0
CDMO growth (%)	-3.3	14.8	17.2	16.5
CRO growth (%)	-14.0	10.7	12.2	14.0
Generic margin (%)	-18.2	0.1	4.9	8.5

### Valuation Metrics

Year to March	FY24A	FY25E	FY26E	FY27E
Diluted P/E (x)	90.6	39.9	30.8	22.7
Price/BV (x)	3.3	2.9	2.7	2.5
EV/EBITDA (x)	22.7	17.4	14.1	11.4
Dividend yield (%)	0.5	0.9	0.6	0.9

Source: Company and Nuvama estimates

### Balance Sheet (INR mn)

Year to March	FY24A	FY25E	FY26E	FY27E
Share capital	158	158	158	158
Reserves	54,181	60,368	64,965	71,204
Shareholders funds	54,339	60,526	65,123	71,362
Minority interest	(128)	(128)	(128)	(128)
Borrowings	36,640	30,122	29,027	24,010
Trade payables	8,563	9,222	10,176	11,162
Other liabs & prov	9,444	10,244	11,555	12,963
Total liabilities	1,15,485	1,17,126	1,23,783	1,28,353
Net block	21,578	25,907	27,314	28,392
Intangible assets	35,072	35,484	34,421	33,702
Capital WIP	12,523	12,523	12,523	12,523
Total fixed assets	69,173	73,914	74,258	74,617
Non current inv	422	444	491	541
Cash/cash equivalent	9,568	4,275	6,732	6,936
Sundry debtors	9,159	10,024	11,081	12,177
Loans & advances	8	8	8	8
Other assets	22,353	23,702	26,176	28,793
Total assets	1,15,485	1,17,126	1,23,783	1,28,353

### Free Cash Flow (INR mn)

Year to March	FY24A	FY25E	FY26E	FY27E
Reported profit	1,705	9,267	8,191	10,969
Add: Depreciation	3,819	4,313	4,081	4,249
Interest (net of tax)	0	0	0	0
Others	2,555	1,221	77	(737)
Less: Changes in WC	1,634	(942)	(1,621)	(1,702)
Operating cash flow	9,713	13,859	10,729	12,779
Less: Capex	(8,977)	(9,138)	(4,460)	(4,590)
Free cash flow	736	4,722	6,268	8,189

### Key Ratios

Year to March	FY24A	FY25E	FY26E	FY27E
RoE (%)	1.4	13.5	9.1	11.4
RoCE (%)	6.5	8.5	11.2	13.7
Inventory days	228	204	196	196
Receivable days	51	48	47	46
Payable days	143	137	132	131
Working cap (% sales)	19.8	19.0	18.3	17.7
Gross debt/equity (x)	0.7	0.5	0.4	0.3
Net debt/equity (x)	0.5	0.4	0.3	0.2
Interest coverage (x)	1.9	3.0	4.8	6.4

### Valuation Drivers

Year to March	FY24A	FY25E	FY26E	FY27E
EPS growth (%)	63.1	126.9	29.6	35.7
RoE (%)	1.4	13.5	9.1	11.4
EBITDA growth (%)	16.0	29.8	21.4	19.6
Payout ratio (%)	103.5	20.0	20.0	20.0



## Investment Rationale

### Radiopharma manufacturing – opportunity in complexity

- Jubilant is among the top three radiopharmaceutical manufacturers in the US, and has a presence in SPECT, PET and therapeutic usage products. This business has 45–50% margin profile due to its backward- and forward-integration and consolidated nature of the industry.
- Ruby-Fill, its PET scan product, is set to drive growth due to its superiority over the competition product Cardiogen-82. We build Ruby-Fill revenue of USD59mn in FY27E and think that it has mid-term revenue potential of >USD100mn.
- I-MIBG, a therapeutic molecule in phase-II trials can be a game changer, and we reckon it has potential to clock ~USD100mn in revenue in the third year of launch.

Jubilant’s Radiopharma manufacturing segment includes manufacturing of radioactive drugs for diagnostic (SPECT and PET scans) and therapeutic use. This segment contributed 14% of consolidated sales and 53% of its consolidated EBITDA in FY24. Radiopharma manufacturing is highly regulated and complex, which leads to limited competition, high customer stickiness and low price erosion (for generics). Given this and efficient cost structure, in-house manufacturing, captive R&D and robust supply chain management, Jubilant earns 45–50% EBITDA margins in this segment.

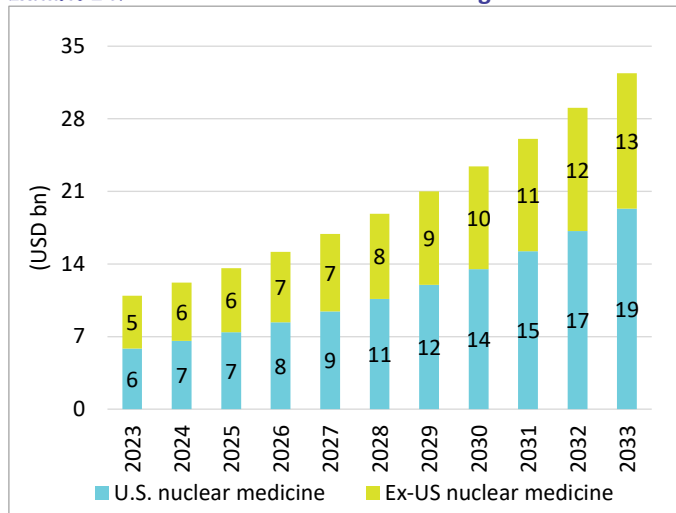
**Exhibit 13: Jubilant’s Radiopharma portfolio**

Product	Key indication	Type	Launched	Nature and characteristics
Tc99m-DTPA	Pulmonary Embolism	SPECT	Market leader	Mostly generic products with steady demand and high margins
Tc99m-MAA	Pulmonary Perfusion	SPECT	Was a market leader but has seen competition	
I-131	Metastases associated with thyroid malignancies	SPECT	Launched, under patent protection	
I-131 HICON	Hyperthyroidism, Selected cases of Carcinoma of Thyroid	Therapeutic	Market leader	
Tc99m-Gluceptate	Cardiac blood pool Imaging	SPECT	Launched	
Tc99m-Sestamibi	Coronary Artery disease	SPECT	Launched	
Sulfur Colloid	Localization of metastatic lymph nodes, imaging of liver, spleen	SPECT	Launched in Q3FY24 and expecting high market share	
Tc99m-Exametazime	Intra-abdominal Infection	SPECT	Launched	
Tc99m-Mertiatide	Renal failure, Urinary tract obstruction	SPECT	Launched	
Tc99m-MDP	Delineate areas of altered Ontogenesis	SPECT	Launched	
Ruby-Fill	Coronary Artery disease	PET	Launched	High growth product
I-131 MIBG	Neuroblastoma	Therapeutic	To be launched in FY27	IP driven product in oncology, expected to see high growth

Source: Company, Nuvama Research

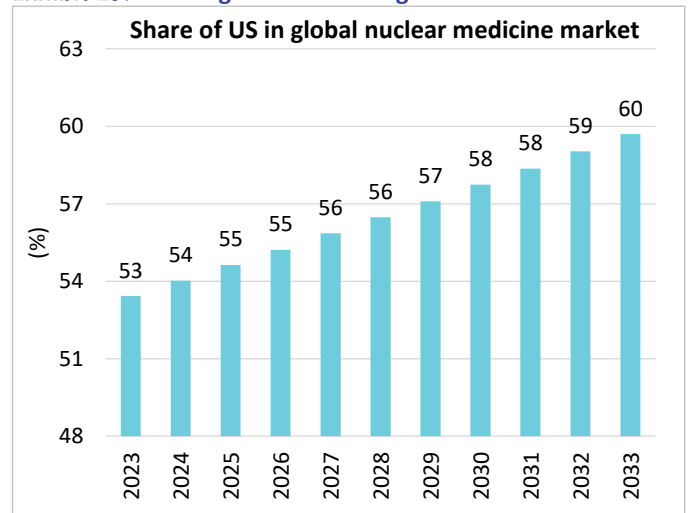
This business historically has seen mid to high single digit growth, and we think it can grow in double digits going forward. The growth is likely to be led by i) organic growth in the base business; ii) ramp-up in Ruby-Fill; 3) I-MIBG launch; and iv) new launches.

**Exhibit 14: US nuclear medicine market to grow at 13% CAGR**



Source: Biospace, Nuvama Research

**Exhibit 15: Growing share of US in global nuclear medicine**



Source: Biospace, Nuvama Research

### Favourable industry dynamics

Radiopharma manufacturing industry growth is driven by demand for superior imaging and therapeutics profiles, emerging isotopes with low off-target toxicity and increasing use cases for unmet needs. This is especially in the case of PET imaging and Radio Therapeutics (Tx).

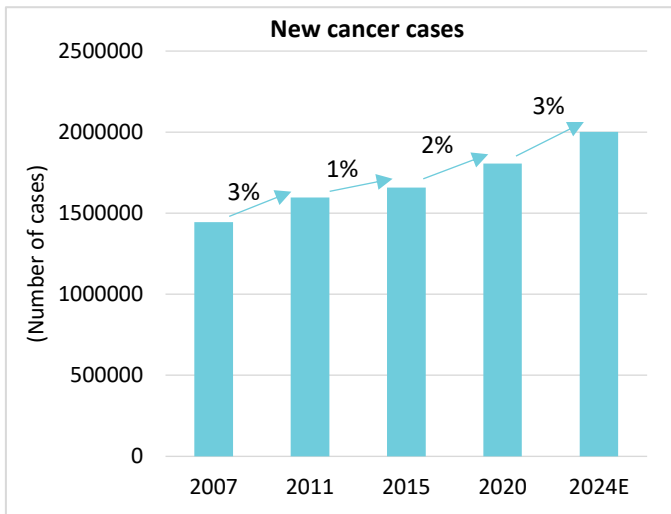
**Exhibit 16: Diagnostics and Tx have strong growth drivers**

Particular	SPECT imaging	PET imaging	Radiopharmaceutical Therapeutics (Tx)
The technology	<ul style="list-style-type: none"> <li>SPECT scans use <b>low</b>-energy radio isotopes that emit gamma rays which are detected by SPECT cameras</li> </ul>	<ul style="list-style-type: none"> <li>PET scans use <b>high</b> energy radio isotopes that emit positrons which are detected by a PET scanner</li> </ul>	<ul style="list-style-type: none"> <li>Radioactive drug delivered to the cancer cells releases energy due to radioactive decay damaging DNA of surrounding.</li> </ul>
Key facts	<ul style="list-style-type: none"> <li>Longer half-life of the molecules</li> <li>Lower prices</li> </ul>	<ul style="list-style-type: none"> <li>Shorter half-life of the molecules</li> <li>Better imaging</li> <li>Faster examination time</li> </ul>	<ul style="list-style-type: none"> <li>Higher efficacy and minimal off target toxicity vs. conventional treatments</li> </ul>
Market	<ul style="list-style-type: none"> <li>Large and stable market</li> <li>Robust supply chain and market is mostly made of generic molecules</li> </ul>	<ul style="list-style-type: none"> <li>High growth market driven by novel products</li> </ul>	<ul style="list-style-type: none"> <li>Fastest growing market</li> </ul>
Current addressable market in US	~USD250mn	~USD150mn	Not disclosed 30
Growth drivers	<ul style="list-style-type: none"> <li>Growing Demand for Molecular Imaging due increasing adoption of these technologies</li> <li>Growing Clinical Applications</li> <li>increasing prevalence of chronic diseases and age-related illnesses</li> <li>integration of artificial intelligence for enhancing the efficiency and accuracy</li> <li>innovations in manufacturing technology</li> </ul>		<ul style="list-style-type: none"> <li>Increasing number of new novel molecules</li> <li>Advent of Peptide Drug Conjugates (PDC) in Radiotherapies</li> <li>Larger interest of big pharma</li> </ul>

Source: Company, Nuvama Research

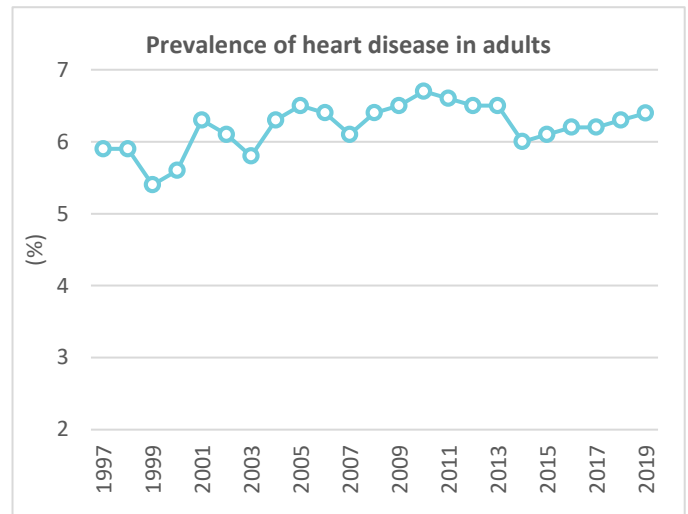
The US (where Jubilant operates) continues to witness increasing number of new cancer cases and high burden of cardiovascular diseases. The growing prevalence/new cases highlights the requirement for diagnostics and therapeutic interventions and increasing opportunity for Radiopharma industry players.

**Exhibit 17: Rising new cancer cases in US**



Source: Cancer.org, Nuvama Research

**Exhibit 18: Prevalence of heart disease in adults in US**



Source: CDC, Nuvama Research

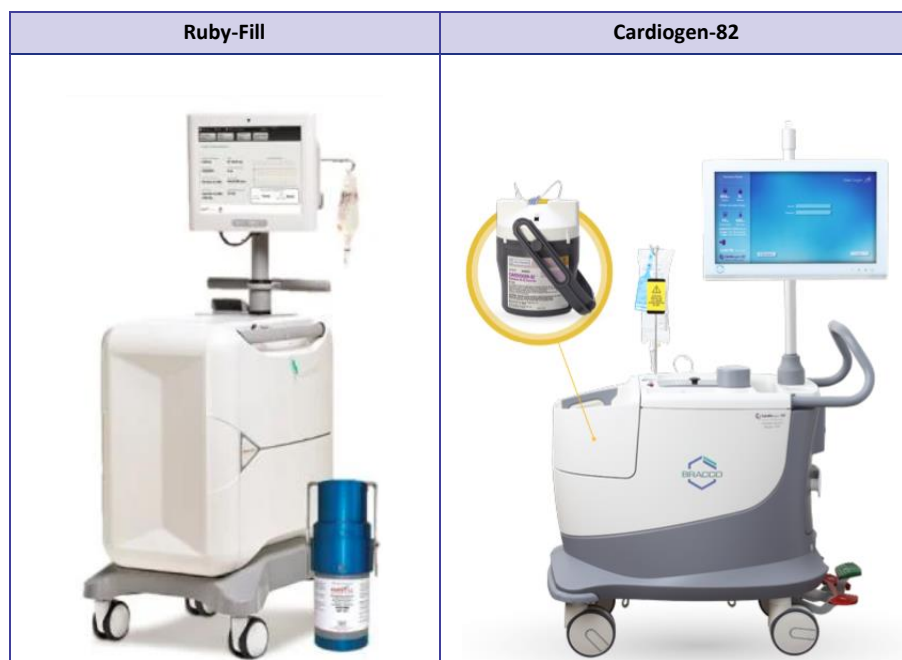
### Ramp up in Ruby-Fill due to superior clinical characteristics

Ruby-Fill is a generator that converts Strontium-82 to Rubidium-82, which is later used for PET scans in cardiology. Rubidium-82 ( $^{82}\text{Rb}$ ) is widely used as a PET tracer in cardiac PET centres for assessment of coronary artery disease. It has a half-life ( $\lambda$ ) of  $\sim 75$  seconds; hence, a generator is required to be beside the bed. However, this allows faster cardiac imaging with low-radiation exposure to patients and medical staff.  $^{82}\text{Rb}$  is produced by an on-demand mobile generator system from the parent radioisotope Strontium-82 ( $^{82}\text{Sr}$ ,  $\lambda = 25$  days) which has a half-life of  $\sim 25$  days.

JPL faces competition from rival brand i.e. Cardiogen-82 (innovator Bracco Diagnostics, approved in 1989) with the same molecule i.e.  $^{82}\text{Rb}$ . Ruby-Fill has higher shelf life of generator than Cardiogen-82, which leads to lower cost and more scans per generator. Before USFDA approval to Ruby-Fill, Cardiogen-82 was the only Rubidium-82 generator in the US market. This monopoly has now been broken by JPL's product.

According to the conclusion of the 2020 research ([link](#)), the Ruby-Fill generator, has slightly higher  $^{82}\text{Rb}$  isotope production efficiency, longer shelf life and small elution activity error compared to Cardiogen-82. Due to these characteristics, Ruby-Fill installations have been increasing in the US cardiac network (top 80% of the cardiac network has already installed it).

**Exhibit 19: Ruby-Fill versus Cardiogen-82**



Source: Nuvama Research

The company has a dedicated sales team for Ruby-Fill and in FY22, encouraged by the success of the product, JPL doubled its production capacity at its Montreal unit.

Ruby-Fill is used in large hospitals, which limits its usage in outpatient programmes and physician clinics. To address this limitation, JPL introduced Ruby Mobile Solutions (generator fitted in vehicle) in 2023. This shall allow JPL to expand the use of Ruby-Fill cardiac PET into smaller community hospitals, rural areas, and in areas where a full-time cardiac PET programme is unavailable.

As the product was launched in FY19, we think there is a long runway ahead for this product and it can get ~50% of the Rubidium-82 generator market share at peak, conservatively. The current market for Rubidium-82 generator is in the range of USD120–150mn. This market is estimated to double in the next seven years (~10% CAGR). We forecast Ruby-Fill shall clock revenue of USD49mn/USD59mn in FY26E/FY27E and believe that it has potential to reach ~USD100mn revenue by 2030, indicating long runway for this product.

### **I-131 MIBG Theranostics: Indication in ultra-rare condition**

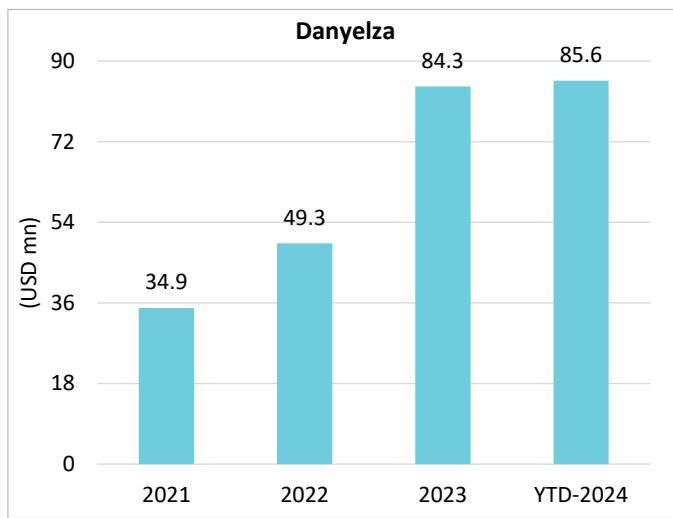
I-131 MIBG is a combination of Meta-Iodobenzylguanidine (MIBG). A low dose radioactive iodine I-131 is given to the patients through an IV infusion in the treatment of Neuroblastoma, a rare cancer that develops in nerve tissues. It is the third most common cancer in children. Every year, ~800 children are diagnosed with Neuroblastoma. Currently available treatment options include surgery, chemotherapy, radiation therapy as well as costly options such as bone marrow transplant and immunotherapy.

I-131 MIBG is a therapeutic Radiopharma product (also called as I-MIBG), currently in the phase-II/III trials for paediatric indication in high-risk Neuroblastoma. [Research](#) shows that ~30% of child patients with relapsed or treatment-resistant Neuroblastoma experienced significant shrinkage of tumours with I-MIBG therapy while additional 30% of patients showed tumour stabilisation. Another pooled [study](#) also shows that I-MIBG monotherapy response rate was 39% while that in combination with other therapies was 28%. This paper concluded with positive review of the I-MIBG treatment.

Due to traditional methods of the treatment of Neuroblastoma, I-MIBG treatment is regarded as a relatively new treatment. While the drug is not yet approved by the USFDA, currently there is an [expanded access programme](#) to provide this treatment to kids. JPL provides I-MIBG to ~100 patients. Jubilant expects this product to complete the trials in the CY25 and commercialise it in CY26 (FY27).

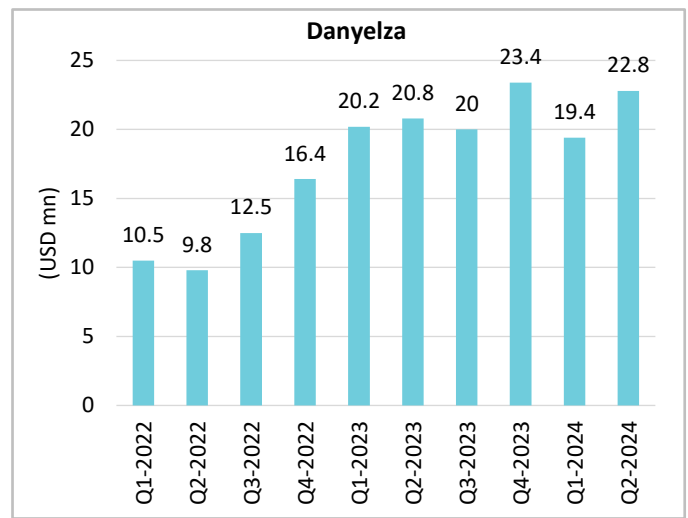
Currently Y-mAbs Therapeutics' Danyelza is a leading product in Neuroblastoma and over the past three years, it has ramped up to USD85mn in global revenue (mostly US revenue). After the launch, we think I-MIBG can also clock ~USD100mn revenue within the first three years, indicating strong potential of this product.

**Exhibit 20: Strong ramp-up in Danyelza (annually)**



Source: Y-mAbs Therapeutics, Nuvama Research

**Exhibit 21: Strong ramp-up in Danyelza (quarterly)**

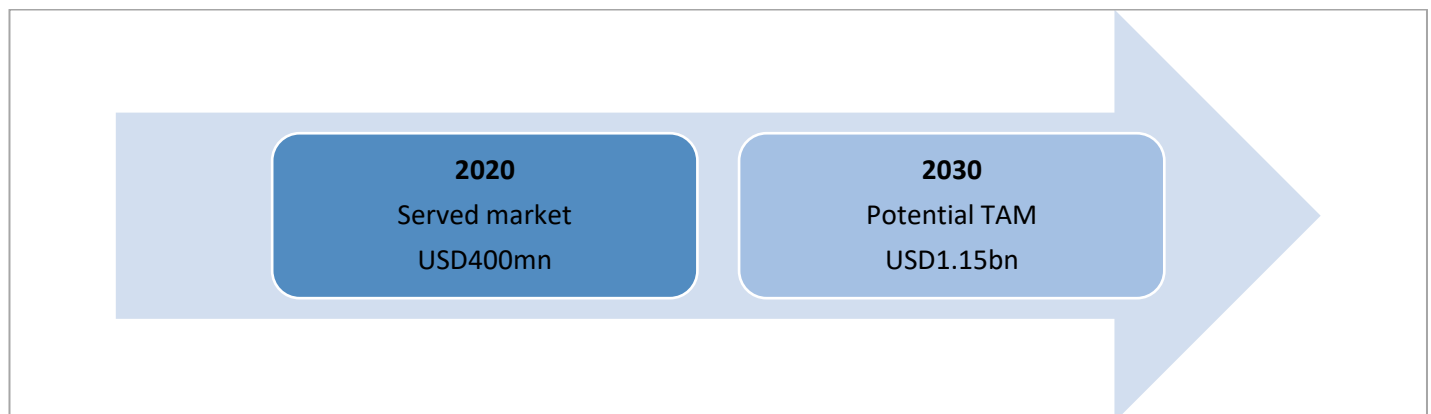


Source: Y-mAbs Therapeutics, Nuvama Research

## Introduction of other new products

JPL plans to expand its portfolio in Radiopharma to expand its covered market size from ~USD400mn currently to USD1.5bn in the next few years and further to USD5bn by 2030. JPL's SPECT imaging product pipeline has an addressable market of ~USD50mn while PET imaging product pipeline has an addressable market of ~USD500mn. Given the US nuclear medicine market slated to grow at 13% CAGR to reach ~USD14bn by the end of this decade, a breakthrough from its pipeline, would provide a strong thrust to JPL's revenue.

**Exhibit 22: JPL planning to add products that will take addressable market size to USD1.15bn in 2030**

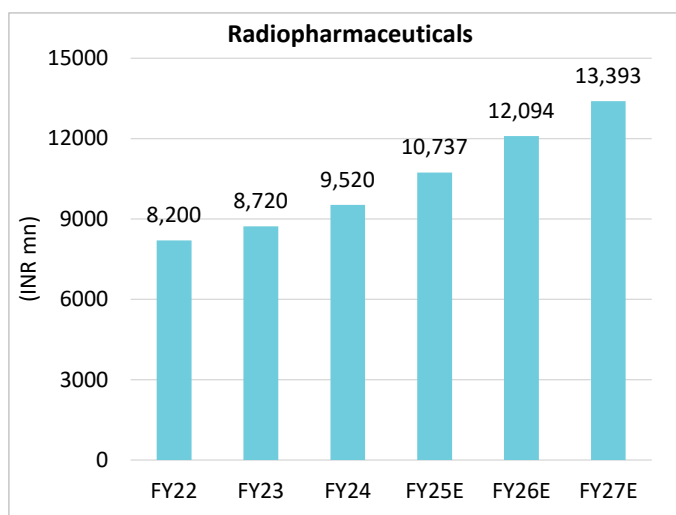


Source: Company, Nuvama Research

## Radiopharma: Burgeoning at 12% CAGR with margin blips

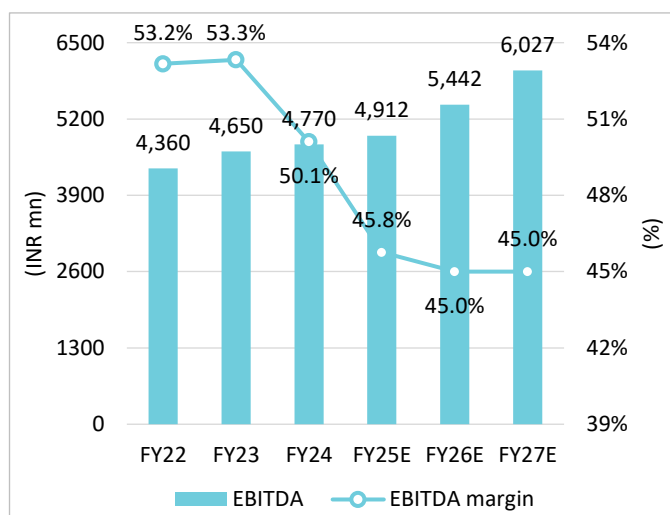
With the favourable industry dynamics, growth in the base business including Ruby-Fill, we anticipate JPL's Radiopharma revenue/EBITDA to grow at 12%/8% CAGR with a slight change in its margin profile. We are building ~45% margin due to i) slight change in the revenue mix; and ii) Ruby-Fill yet to achieve its full potential. Our forecast indicates that Radiopharma manufacturing business shall contribute 14%/35% to the FY27E revenue/EBITDA versus 14%/53% in FY24.

**Exhibit 23: Radiopharma business to grow at 12% CAGR**



Source: Company, Nuvama Research

**Exhibit 24: EBITDA to grow at 8% CAGR**



Source: Company, Nuvama Research

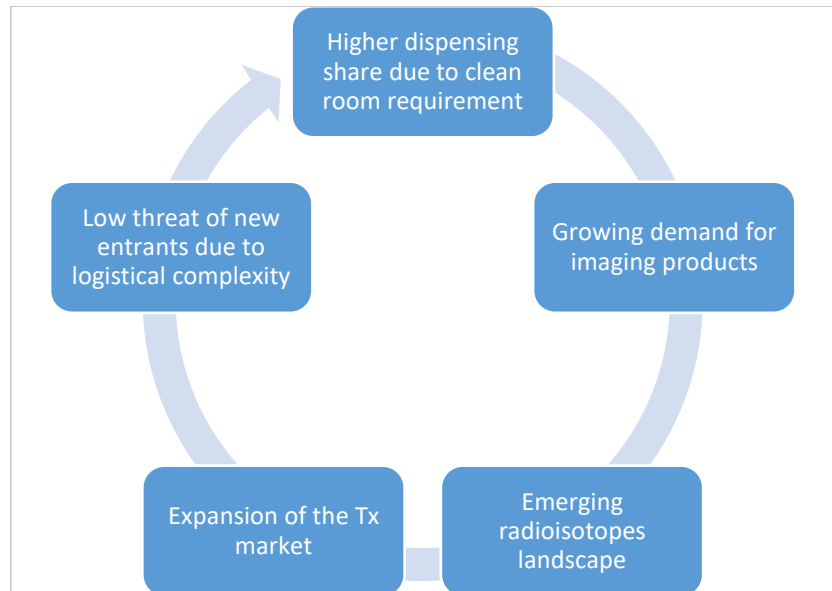
## Radiopharmacy business: Complex business making turnaround

- Jubilant has a network of 49 Radiopharmacies in the US, mostly SPECT in nature, which distribute diagnostics and therapeutic products.
- Radiopharmacy is an attractive business due to lower competition driven by regulatory challenge and unwillingness of the hospitals to invest in the clean room infrastructure to prepare the formulations.
- The business is undergoing a turnaround from -10% EBITDA margins in FY22 to 3% margin in FY24. We build ~4% EBITDA margins in FY27E.
- Furthermore, the company is also investing in six new PET pharmacies that can see faster ramp-up and would be margin accretive.
- We are observing M&A rush in the US Radiopharma industry with a number of assets in the manufacturing and pharmacy businesses being acquired.

In its Radiopharmacy business, JPL distributes nuclear medicines through its second largest Radio pharmacy network in the US, which has 49 pharmacies and ~1,800 customers. JPL's business predominantly distributes SPECT imaging products and has a minor presence in the PET pharmacy business.

Radiopharmacies run complex operations 24/7 and it involves the distribution of multiple products. Due to the nature of the products (lower half-life and radioactivity), these products have high degree of logistical challenge; hence, only a handful of large pharmacy operators exist in this space.

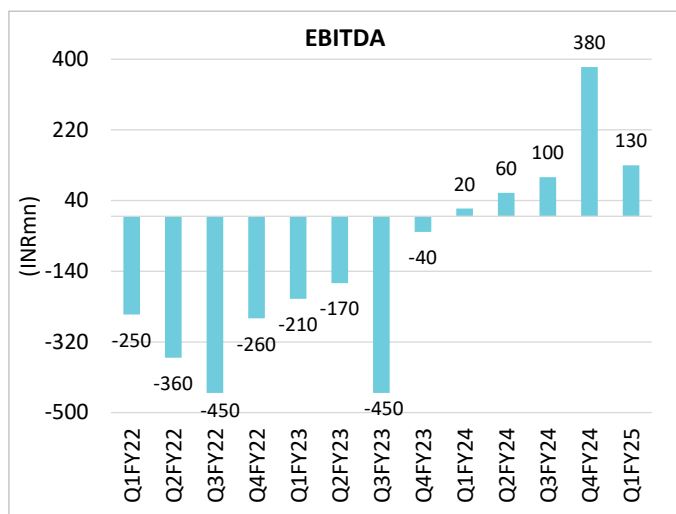
### Exhibit 25: Radiopharmacy an attractive industry



Source: Company, Nuvama Research

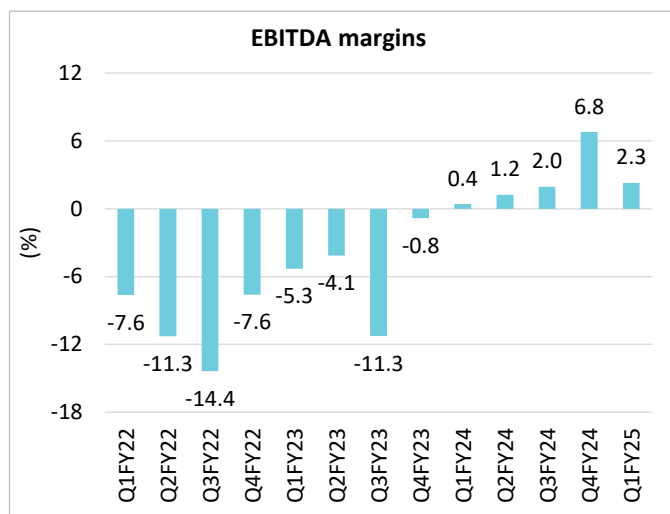
The Radiopharmacy business was loss making until FY23, but has turned around and become profitable at the EBITDA level (3% EBITDA margins) in FY24.

**Exhibit 26: Radiopharmacy business turns around in FY24...**



Source: Company, Nuvama Research

**Exhibit 27: ...and 2–3% margins are still below its potential**

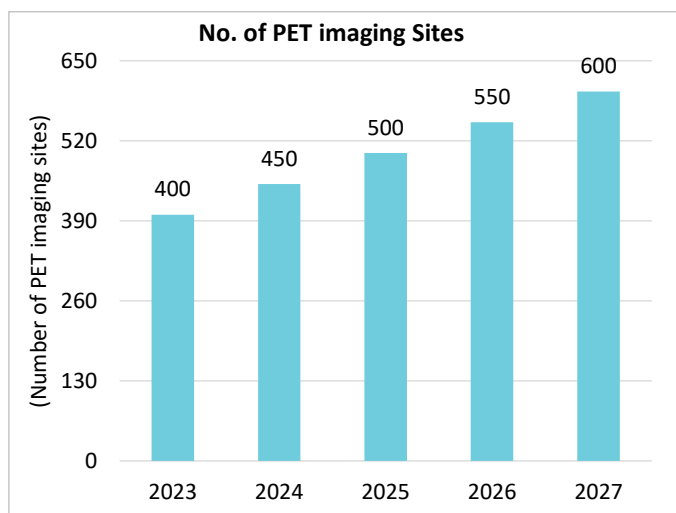


Source: Company, Nuvama Research

## Radiopharmacy business: Growth by expanding in PET pharmacies

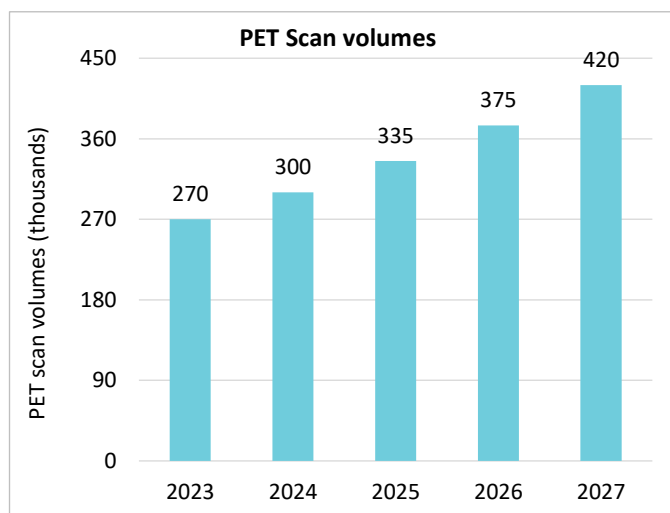
In FY21, Jubilant Pharmova invested USD25mn to acquire 25% stake in another radiopharmacy business, Sofie Bioscience. In FY24, Jubilant sold this stake for USD143mn (5.7x capital appreciation). Encouraged by this and the current boom in PET pharmacy business, the company is expanding its PET network by adding six new pharmacies at a capex of USD50mn over the next three years at strategic locations in the US. This capacity would be operational in FY28E. PET pharmacies have faster ramp-up and high margins against SPECT pharmacies. The current revenue/store of the network is ~USD5mn/year and it has margin potential of 6%. PET pharmacy, in the first year, can achieve ~USD4–5mn of sales and can deliver ~20% of peak EBITDA margins. We think the new PET pharmacies can add ~USD25–30mn of revenue in FY28E with more growth opportunity in the later years.

**Exhibit 28: Boom in PET imaging: Growth in sites**



Source: Company, Nuvama Research

**Exhibit 29: Boom in PET imaging: Secular volume growth**



Source: Company, Nuvama Research

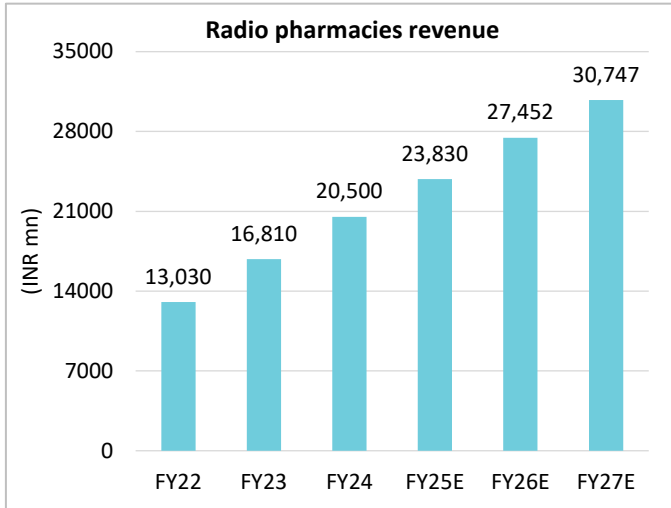
## Radiopharmacy revenue to grow at 14% CAGR with 5% exit margins

We project revenue/EBITDA of the Radiopharmacy business to grow at 14%/30% CAGR with continued industry tailwinds and maintenance of the margin turnaround. We are building in EBITDA margins of 4% each in FY26E and FY27E. Radiopharmacy business provides a delta of INR670mn in EBITDA over FY24–27E. In the absence of any new SPECT pharmacy addition in our forecast period, our model suggests JPL's



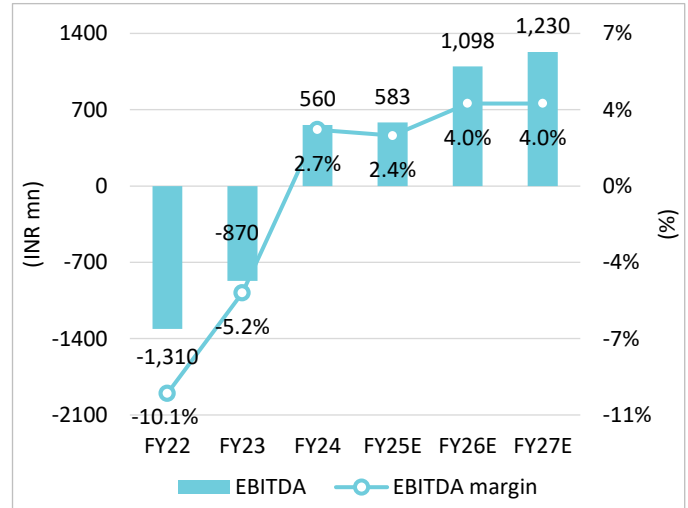
revenue/pharmacy/year would expand from USD5mn in FY24 to USD8mn in FY27E. The new driver of PET pharmacies would be operational in FY28E and hence, it is not a part of our current forecast.

**Exhibit 30: Radiopharmacy business to grow at 14% CAGR**



Source: Nuvama Research

**Exhibit 31: Margins likely to move to ~4% in FY27E**

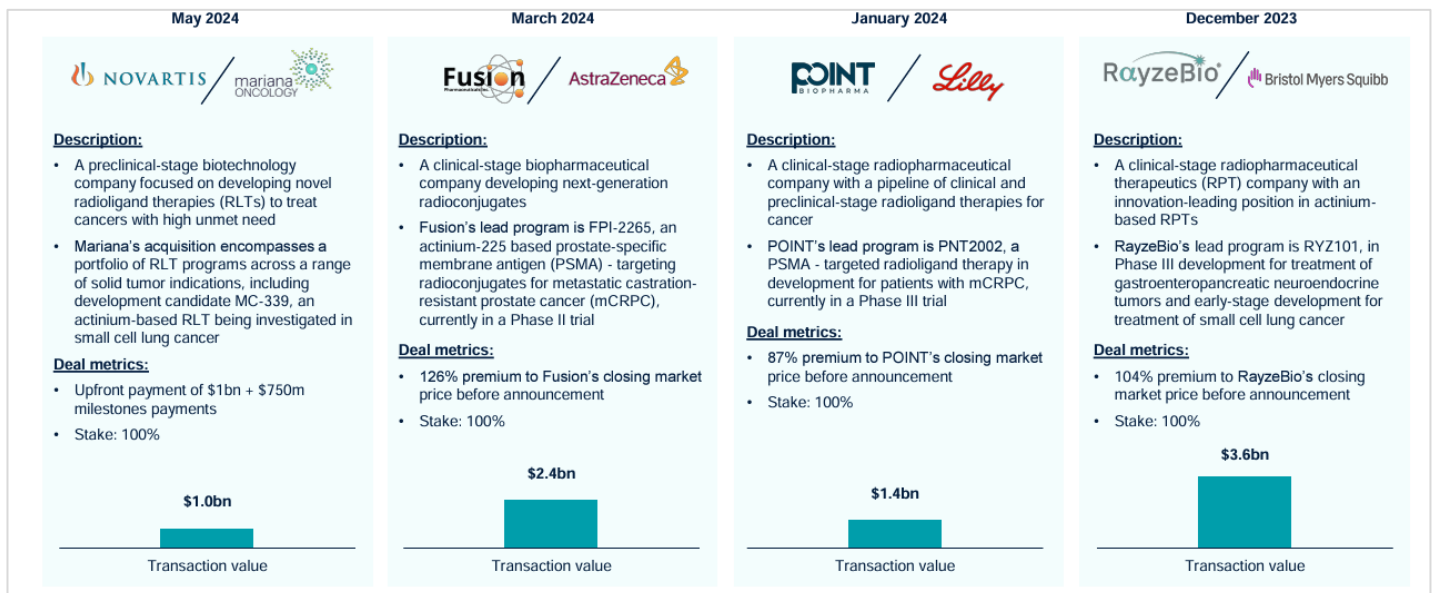


Source: Nuvama Research

## Recent boom in Radiopharma business in US

Currently, we are observing an M&A boom in the Radiopharma business in the US (Exhibit 32). Moreover, Australia-based Telix Pharma, in the past 12 months has acquired i) Iso Therapeutic – CDMO (Feb-24); ii) ARTMS - a cyclotron-based isotope production platform (Apr-24); iii) QSAM Biosciences (May-24); and iv) RLS Radiopharmacies (Sep-24). This M&A rush indicates strong potential of the Radiopharma business and bodes well for a fully integrated player such as Jubilant.

**Exhibit 32: Recent spree of M&A in radiopharma space**



Source: [Ezag](#), Nuvama Research

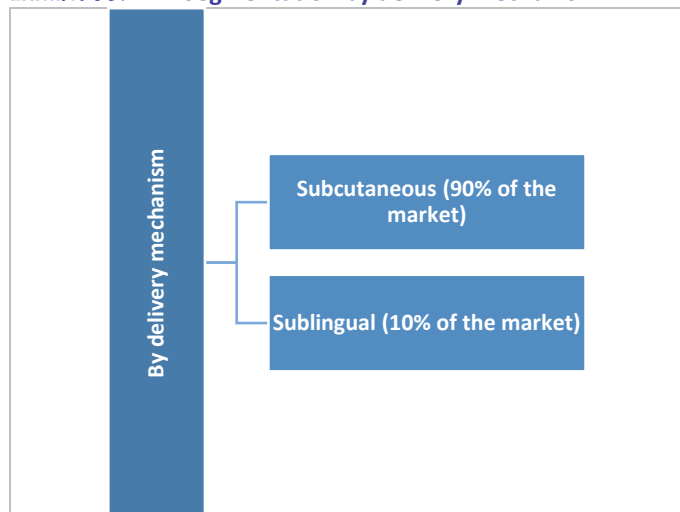
## Allergy therapy: Immunotherapy products with consistent demand

- The allergy therapy business focusses on treating the underlying cause of the allergy than only treating the symptoms.
- The business is consolidated among a few companies due to complex manufacturing and supply chain and the requirement of Biologics license. Due to this, Jubilant has 35–40% margins in this business.
- The company has a strategic advantage as it is the sole supplier of venom extracts in the US. Venom market is 6.4% of the total most common allergies in the US.
- Jubilant anticipates to grow this business by focusing on growing venom segment and expanding in the other territories.

JPL's Allergy immunotherapy (AIT) business is a high entry barrier business with direct sales force. These are biological products to treat the underlying cause of the allergic conditions than just treating the symptoms. JPL operates this business under the name Jubilant HollisterStier, a 100-year old brand ranked number two in subcutaneous immunotherapy. It also has a presence in other markets such as Canada, Europe, and Australia. Jubilant HollisterStier is a sole supplier of venom immunotherapy in the US market. JPL manufactures these subcutaneous allergy immunotherapy drugs at its Spokane facility. The market is dominated by four–five major players and new entrants face following barriers due to:

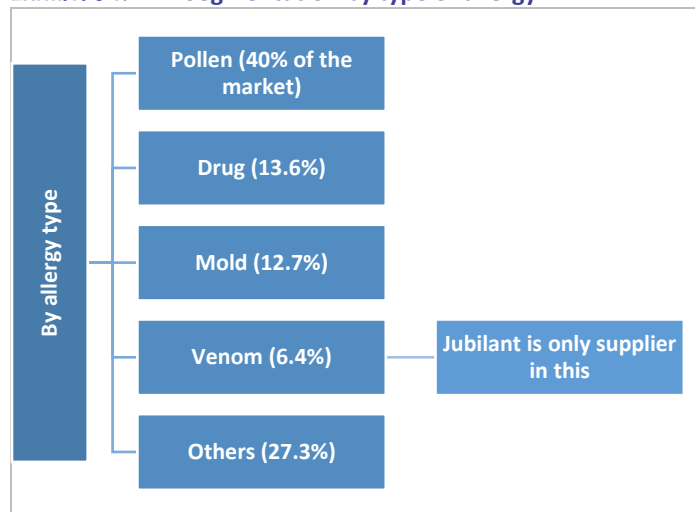
- **Regulatory hurdles:** The need for a Biologics License Application (BLA) for new products creates a barrier for new entrants.
- **Established competition:** Intense competition from existing players makes it challenging for new firms to enter.
- **Complex supply chain:** The intricate supply chain poses logistical and operational challenges for new entrants.
- **Large portfolio:** The need to maintain a portfolio of extractable components such as inhalants, moulds, animal epidermis and insects.
- **High capital investment:** The overall cost of setting up and operating in this market against industry size is not attractive for new entrants.

Exhibit 33: AIT: Segmentation by delivery mechanism



Source: Company, Nuvama Research

Exhibit 34: AIT: Segmentation by type of allergy



Source: Company, Nuvama Research

## Growth strategy going forward

The global AIT market is a ~USD2.2bn market and shall reach ~USD3bn in 2028 by growing at ~7% CAGR. Of this market, the US allergy market was ~USD200mn in 2023, which shall reach USD300mn in 2028 (CAGR of 8.4%). Jubilant has been able to grow its AIT business by more than 10% over the past five years implying that the company has been able to win market share.

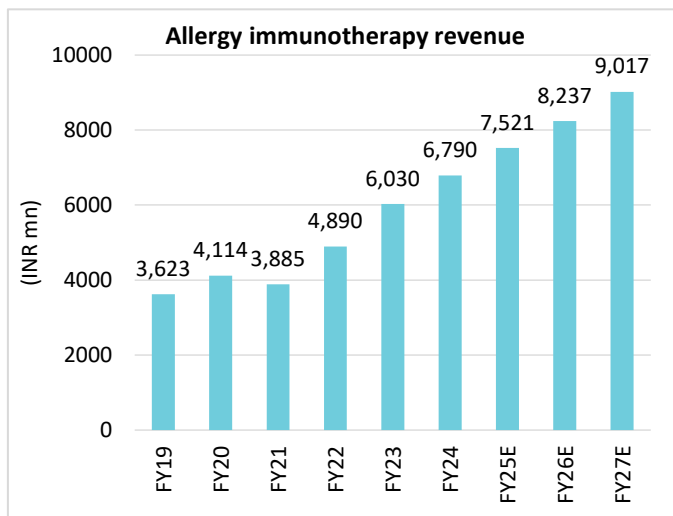
Going forward, the company shall be following a multi-pronged growth strategy i.e.

- i) Grow the US venom segment by increasing customer awareness and banking on its strategic advantage. This can be achieved by aggressive promotion and increasing digital reach of [Beeaware programme](#).
- ii) Raise market share in US allergenic extract market by product differentiation.
- iii) Expand internationally through strategic partnerships and distribution channel. This market is 10x the US market currently and is growing at 5% CAGR.

## Building in 10% revenue CAGR with margins at 38%

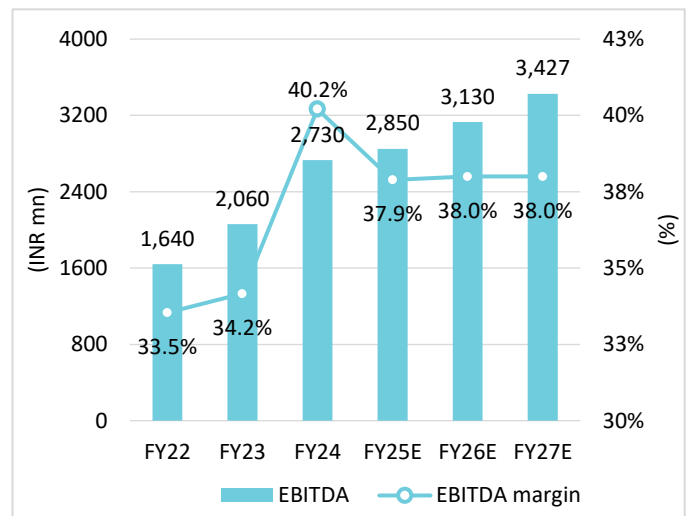
We forecast Jubilant's revenue shall grow at 10% CAGR over FY24–27E, sustaining the growth trajectory shown in earlier years. In FY24, its EBITDA margins expanded 600bp YoY on the back of the price and volume growth. We are building in 38% margin, which is leading to EBITDA growth at 8% CAGR during the forecast period.

**Exhibit 35: Secular revenue ramp-up in allergy business**



Source: Company, Nuvama Research

**Exhibit 36: Margins likely to remain stable**



Source: Company, Nuvama Research

## CMO business: Low-cost capex to drive growth

- Jubilant is a mid-size contract manufacturer having two facilities, with sterile fill-finish and ophthalmic capabilities, in North America.
- The company is currently expanding its capacity by adding new lines at both the CMO units (Spokane and Montreal) in the sterile injectable/ophthalmic operations, which can add solid growth factor in its business. The capex at both the units is partly funded by the US and Canadian government.
- Due to the substantial expansion of the manufacturing capacity, the company is focusing on new customer additions, leading to eight additional wins and expects to see tech transfer of multiple new products at its line 3.
- The business enjoys strong margins and benefits from the product shortages created by the compliance issues.

JPL currently operates two manufacturing facilities in Montreal and Spokane. This is a fully integrated business with capabilities in sterile liquids and lyophilised products, ointments, creams and lotions. Its capacities can handle vial ranges from 2ml to 100ml and batch sizes ranging up to 2,000 litre, which can support volumes required for clinical trials and commercial requirements. The CMO business generates ~80% of revenue from sterile injectable, which has high entry barriers due to i) high upfront capital costs; ii) long-term relationships of customers; iii) higher switching costs; and iv) tougher regulatory and IP compliance expectations.

JPL's customer stickiness is highlighted by the fact that its top ten customers have been working with the company for more than five years and it has ~92% repeat business rate from existing customers. The company works with seven of the top 20 large pharma companies, indicating ability to work with the most influential industry players which determine the industry course, with novel and large product launches.

## Ongoing, partially state-funded capex programmes to drive growth

**Spokane:** The company is now doubling its capacity in Spokane with an investment of USD285mn by adding two new high-speed injectable fill lines with isolator technology. JPL would spend USD92mn on Line 3 and USD193mn on Line 4. The US government would fund 52% of this capex i.e. USD149.6mn, which would give them rights to manufacture at the market-based rates during the times of pandemic. The line 3 would start commercial production in Q1FY26. Line 4 would be operational in FY28E. Combined together, both lines have revenue potential of ~USD160–180mn.

**Montreal:** At its Montreal unit, which is under OAI currently, the company has an expansion plan to triple its sterile fill manufacturing capacity with capex of USD80mn. Should this plan go ahead, the Canadian government would be funding ~50% of the capex through concessional loans.

**Exhibit 37: Capacity, regulatory status and capex plan at Spokane and Montreal**

Unit	Capability	Current capacity	Regulatory status	Additions
Spokane, US	Clinical and commercial fill and finish services for sterile liquid and lyophilisation capabilities	This unit currently has two lines. Spokane contributes ~90% of the CDMO revenue	Spokane received <a href="#">warning letter</a> in 2013 but got <a href="#">cleared</a> in June-2015.	<b>Line 3</b> to be operational by Q1FY26 (total capex USD92mn) and <b>Line 4</b> to be operational in FY28 (Total capex USD923mn). This will double its fill finish capacity.
Montreal, Canada	Multi-dosage form capabilities in sterile injectable manufacturing and sterile/non-sterile ophthalmic manufacturing	Currently one filling line. Montreal contributes ~10% of the CDMO revenue	Montreal received <a href="#">warning letter</a> in March-13 but got <a href="#">cleared</a> in March-14. Montreal has again received <a href="#">OAI classification</a> in May-23 and the facility is currently under remediation. The facility has again received OAI status in <a href="#">Sept-24</a> .	The company is planning a capex of ~USD80mn at this facility. This new capex may triple its manufacturing capacity.

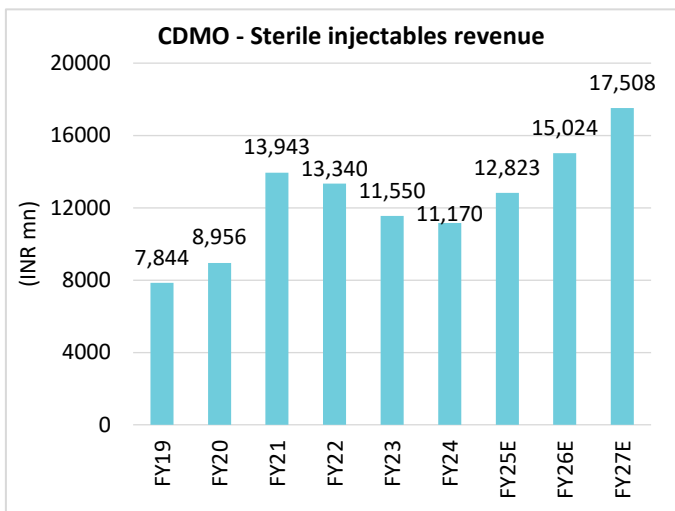
Source: Company, Nuvama Research

### CDMO growth to be driven by favourable industry dynamics

As per the 2023 [McKinsey report](#), the global revenue from sterile pharmaceuticals is projected to increase by ~50% between 2021 and 2028, which suggests promising growth opportunities for companies involved in sterile product manufacturing. Furthermore, the global market for sterile injectable CDMOs is estimated to be worth ~USD13bn in 2023 and is likely to grow to USD20bn by 2027. These trends indicate a favourable outlook for the sterile product manufacturing industry. Due to the frequent compliance issues and product shortages, there is a demand-supply mismatch, which favours CMO operators.

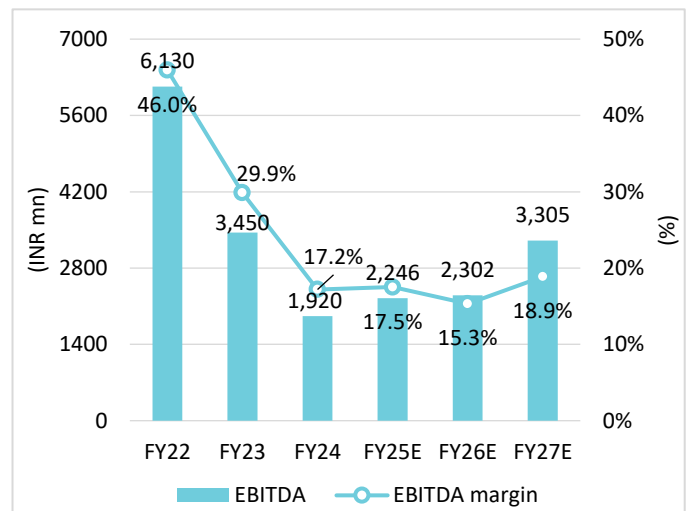
For Jubilant’s CDMO business, we are building revenue/EBITDA growth at the CAGR of 16%/20% over FY24–27E. Our forecast indicates CDMO revenue to grow from USD135mn in FY24 to USD185mn in FY27E with ~USD23mn contribution from the Line-3 in FY27E. We think that this business has more growth potential as Line-3 can continue to ramp-up while Line-4 would be commissioned in FY28E.

**Exhibit 38: CDMO business: Capex-driven growth**



Source: Company, Nuvama Research

**Exhibit 39: CDMO: FY27 an inflection year for margins**



Source: Company, Nuvama Research

## CRO business: Likely to benefit from easing biotech funding

- The biotech funding winter has affected the CRO industry in the past two years, which impacted Jubilant’s CRO revenue that fell 14% YoY in FY24 while EBITDA declined 35% YoY.
- Jubilant in FY24 signed two new pharma clients and together with normalisation of the biotech funding, this business can now grow at 12% CAGR. We reckon EBITDA margins shall move to 25% in FY26E.

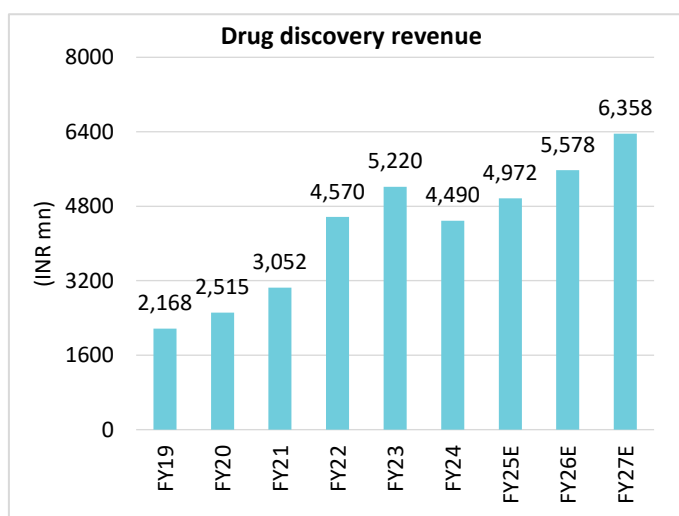
Jubilant operates its CRO business from its India-based research centres i.e. Bengaluru, Noida and Greater Noida. It offers research on novel compounds, intermediates and New Chemical Entities (NCEs) in discovery and development services to global innovators. The business provides contracts on Full Time Equivalent (FTE), Fee for Service (FFS) basis and has contracts for Integrated Drug Discovery (IDD).

The business was affected in the past two years due to the biotech funding winter in the US. Its FY24 revenue declined 14% YoY while EBITDA declined 35%. Given the gradual easing in the biotech funding, we think that this business should start performing in CY25E. This is already evident in its Q1FY25 numbers as its CRO revenue grew 10% YoY.

Moreover, the company is also expanding its Greater Noida research capacity to diversify/strengthen its service offerings. In FY24, the company has signed two new pharma clients, in challenging conditions for the industry. With the biotech funding easing and potential impact of the BIOSECURE act, the company may be able to expand its customer base going forward. As its facilities are in India, we think it can continue to provide cost-arbitrage based research services, which is a long-term growth rationale for this sector.

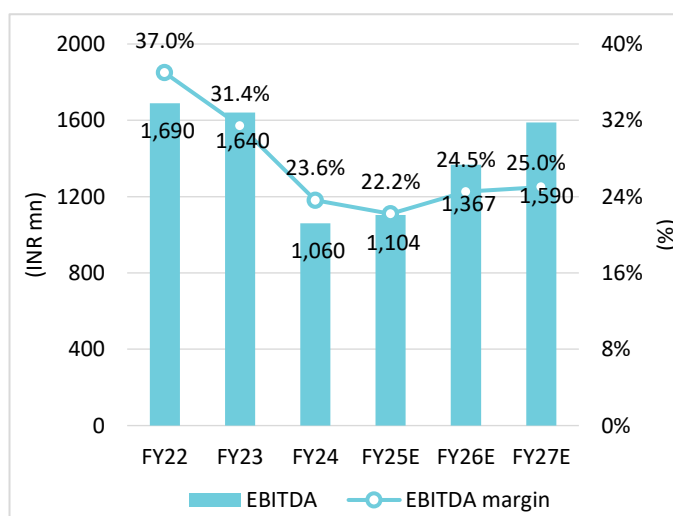
Overall, we are building in revenue/EBITDA for its CRO business to grow at 12%/14% CAGR over FY24–27E. EBITDA margins in FY24 were at 24%, which we think can see some softness in FY25E but recover to 25% in both FY26E and FY27E.

**Exhibit 40: Industry tailwinds to help in revenue growth**



Source: Company, Nuvama Research

**Exhibit 41: EBITDA margins to recover in FY25E**



Source: Company, Nuvama Research

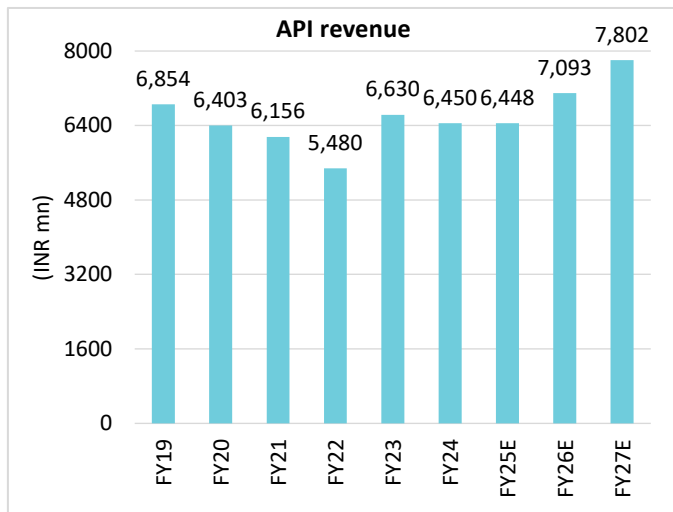
## API business: Needs high execution for growth impetus

- Jubilant is a mid-size contract manufacturer having two facilities with sterile fill-finish and ophthalmic capabilities in North America.
- The business enjoys strong margins and benefits from the product shortages created by the compliance issues.

Jubilant operates its API business from the Nanjangud facility in India. It has a portfolio of 100 different APIs from therapeutic categories such as Central Nervous System, Cardiovascular System, anti-infectives and anti-diabetics. The key products that it manufactures are Oxcarbamazepine, Carbamazepine, Pinaverium, Resperidone, Donepezil, Lamotrigine, Meclizine, etc. At the Nanjangud facility, Jubilant has seven multi-stream manufacturing blocks.

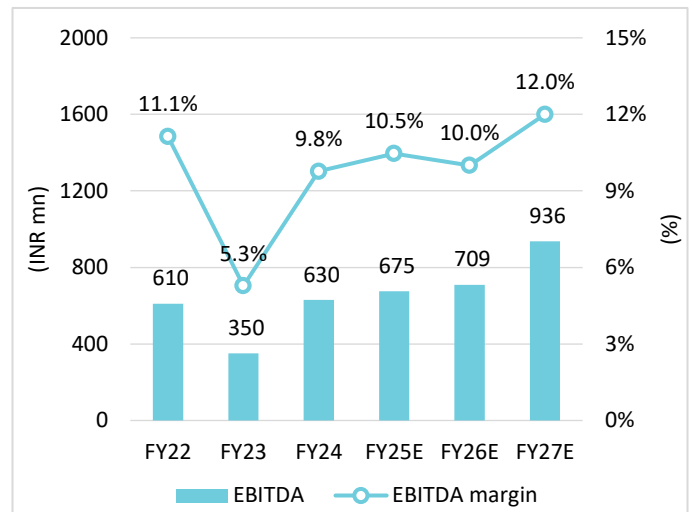
The revenue of the API business has stayed flat over the past many years while margins have remained range bound between 5% and 10%. We do not expect any material change in this performance. Hence, we have built in revenue/EBITDA CAGR of 7%/14% over the forecast period of FY24–27E.

**Exhibit 42: API business likely to post gradual growth**



Source: Company, Nuvama Research

**Exhibit 43: No change in margin trajectory**



Source: Company, Nuvama Research

## Generic business: Turning around

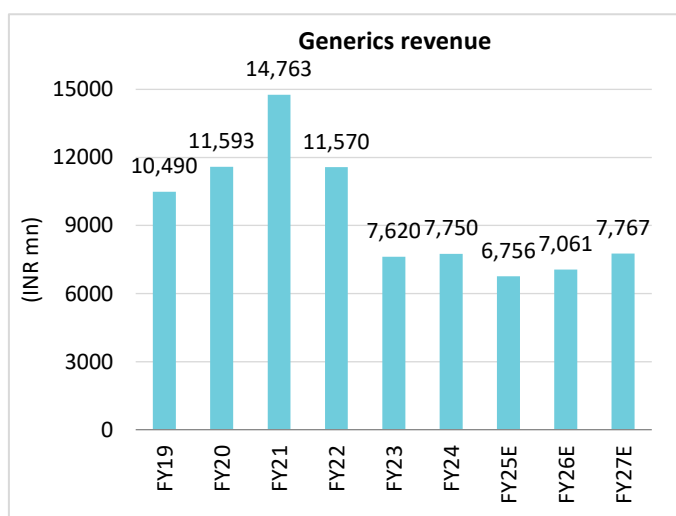
- The generic business should see a turnaround with lifting of the import alert on Roorkee unit and closure of the Salisbury unit in the US. We estimate flattish growth in revenue; however, EBITDA margins are likely to move to high single digits in FY27E. This would make an ~INR2bn delta in EBITDA between FY24-27E.

Jubilant operates the oral solid generic business in the US and 45 other markets. It also markets branded products in eight countries, but the US unbranded generics is a major revenue market for the company. The company has backward integration with ~60% API manufactured in-house and also has captive R&D capabilities. JPL has one formulations manufacturing capacity at Roorkee, India. It has discontinued manufacturing operations at its Salisbury facility in the US.

The generic business has seen substantial challenges after its Roorkee facility received an [import alert](#) in Jul-21. The facility was under a [warning letter](#) since Mar-19. Following the import alert, Jubilant's generic business declined from ~USD200mn revenue in FY21 to ~USD93mn in FY24. The generics business turned loss making in FY22, in the absence of new launches, remediation costs and high cost of operations at its then US manufacturing facility. Roorkee facility received FDA's clearance in Apr-24 with [VAI classification](#). To battle the losses that the company has been incurring in this business, management first [restructured](#) operations at the Salisbury unit in 2022 but in Apr-24 decided to [shut down](#) this facility. With Roorkee in operations and shut down of the US manufacturing facility, the company expects to experience a turnaround of the profitability in this business. For the new launches, which would boost the generic segment revenue, the company would be depending upon the Roorkee unit in H2FY25E and sourcing products from third party CMOs.

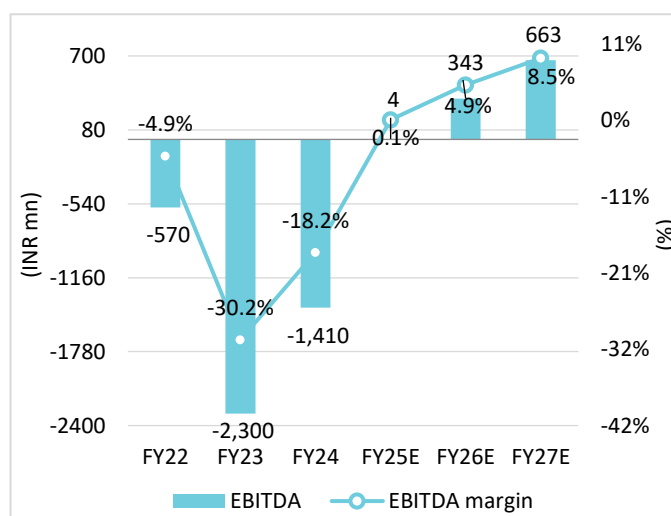
We forecast the generics business shall see flattish growth over FY24-27E. Post the closure of the Salisbury unit, EBITDA margins of the generic business have improved from -18% in FY24 to -7% in Q1FY25. We reckon the EBITDA margin turnaround shall continue with FY25E margins to see breakeven. Furthermore, by FY27E, we think the generics segment would touch high single-digit EBITDA margins that can make a delta of INR2bn in EBITDA between FY24 and FY27E. We think generic segment may surprise positively, if the company launches sizable new products in the US.

Exhibit 44: Expecting mostly flattish revenue...



Source: Company, Nuvama Research

Exhibit 45: ...however, EBITDA to see turnaround



Source: Company, Nuvama Research



## Proprietary novel drugs: Currently in investment phase

- The company currently has two assets in clinical trials while two more are nearing IND filling stage. This business is in investment phase and may provide an option value if the company is able to out license any of its molecules.

Jubilant is developing precision medicine, novel small molecule assets in oncology and autoimmune diseases through its subsidiary Jubilant Therapeutics. Its pipeline consists of JBI-802, which is currently in phase-II trials with the data release expected in H2CY24. JBI-802 has also received an orphan drug designation. Its other asset, JBI-778 is under Phase I trials. Two other assets i.e. JBI-2174 and JBI-1044 are nearing the IND filling stage while it has out licensed its EGFR Inhibitor molecule to Blueprint Medicines and BRD4 inhibitor to Checkpoint Therapeutics.

The business is in the investment phase and continues to incur losses. The development pipeline assets may provide the company partnering/value unlocking opportunity in the future, which can create an option value opportunity for the investors.

### Exhibit 46: Jubilant's novel pipeline with two assets in clinical trials

Program	Mechanism	Indications	Lead Optimisation	Pre-Clinical (IND)	Phase I/II	Milestones
JBI-802	CoREST Inhibitor/ Epigenetic Modulating agent	Essential Thrombocythemia / Myeloproliferative Neoplasms, Non-small cell Lung Cancer, Post-MPN Acute Myelogenous Leukemia				Phase 1 data suggests therapeutic potential. Early Phase II in ET/MPN in H2-2024
JBI-778	PRMT5 Inhibitor Brain Penetrant	Epidermal Growth factor receptor refractory Non-small cell Lung Cancer, ACC, High-grade Glioma				Phase I / II initiation in H1 2024
JBI-2174	PD-L1 Inhibitor Brain Penetrant	Brain tumor and metastases				On IND track
JBI-1044	PAD4 Inhibitor	Oncology and auto-immune disease				On IND track
Other	Various	Various	Undisclosed research programs			
EGFR Inhibitor <sup>1</sup>		Oncology				
BRD4 Inhibitor		Oncology				

Source: Company, Nuvama Research

## Valuations

- We are valuing Jubilant Pharmova based on SotP and have selected nearly matching peers. However, the peer-set selection is limited by some of the unique businesses that Jubilant operates in such as Radiopharma and allergy business.
- Jubilant provides an investment opportunity in the high-margin specialty pharma and CRDMO business, which enjoy high margins and attract better multiples than commoditised generic/API businesses.
- Our SotP valuation yields a TP of INR1,450, which implies EV/EBITDA and P/E multiple of 14x and 30x, respectively, on our FY27E forecasts. Initiate at 'BUY'.

Jubilant Pharmova's business segments are slightly unconventional due to its presence in the US Radiopharma and allergy business. For better classification of its six diverse business segments and assigning multiples, we can classify them in four buckets as follows:

**Exhibit 47: Classification of Jubilant's business segments in different buckets for an easy valuation framework**

Type	Segments	Characteristics
Specialty injectable pharma	Radiopharma manufacturing and Allergy business	Complex product businesses, high customer stickiness, and long product lifecycle despite patent expiry. This means higher margins to continue beyond our forecast period.
Contract research and manufacturing	CDMO and CRO business	Businesses with growth tailwinds due to capex, biotech funding normalization and BIOSECURE act. This will highlight: i) long-term growth potential and improving margins in CRO business; and ii) capex driven growth opportunity in the CDMO business.
Pharmacy business	Radiopharmacy	Pharmacy business with growth opportunity due to new capex in high margin PET business.
Commoditised product	Generics and API	Lower multiples owing to the lower profitability and subdued growth. Would attract lower valuation multiples as company lacks scale.

Source: Nuvama Research

As per the above theme, we select the following peer set to value Jubilant's business:

**Exhibit 48: Peer set for Jubilant Pharmova**

Peer	Segment	CAGR (2024-2026)			Multiple on FY26	
		Revenue	EBITDA	PAT	EV/EBITDA	P/E
ALK-Abello	Allergy business	11.5%	21.7%	25.9%	17.6	26.7
Syngene*	CRO business	15.9%	19.0%	20.6%	22.0	44.4
Catalent	CDMO business	7.7%	14.8%	44.0%	13.1	24.9
Lonza	CDMO business	14.3%	17.6%	19.7%	15.5	27.1
Telix Pharma	Radiopharma business	28.7%	58.5%	81.0%	23.1	33.8
Lantheus	Radiopharma business	12.4%	13.7%	14.0%	8.2	12.8
RLS Inc#	Radiopharmacy	N.A	N.A	N.A	4.5	
Aurobindo*	Generics	7.3%	6.5%	9.3%	10.9	18.3
Solara*	API	10.1%	24.0%	101.1%	12.1	22.6

Source: Nuvama Research, Bloomberg

\*CAGR of Indian companies calculated for FY25-FY27 period

#RLS Inc was acquired by Telix Pharma in 2024 at the transaction multiple of 4.5x

## Exhibit 49: SotP valuation yields 30% upside

Segment	FY27E EBITDA	EV/EBITDA (x)	Enterprise value
Radiopharmaceuticals	6,027	16	95,464
Radiopharmacy	1,230	6	7,379
Allergy Immunotherapy	3,427	18	61,677
CDMO -Sterile Injectables	3,305	11	37,017
Drug discovery	1,590	18	27,977
API	936	8	7,490
Generics	663	4	2,919
<b>Total</b>	<b>17,178</b>	<b>14</b>	<b>2,39,924</b>
Gross Debt			24,010
Cash			6,936
<b>Equity value</b>			<b>2,22,851</b>
Equity value/share			1,399
BV/share of Proprietary Novel Drugs			15
I-MIBG : NPV/share			39
Target price			1,450
<b>Upside</b>			<b>30%</b>
<b>Implied P/E on FY27E EPS</b>			<b>30</b>

Source: Nuvama Research

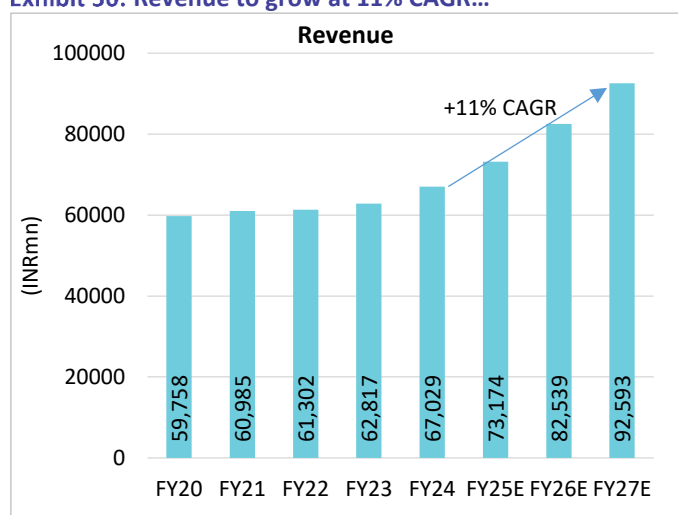
## Financial Outlook

- We estimate Jubilant’s revenue to grow at 11% CAGR with contribution of the low margin businesses declining by >200bp over FY24–27. Radiopharma manufacturing and CDMO businesses are likely to grow at 12%/16% CAGR.
- EBITDA to grow at 24% CAGR over FY24–27E with margins moving past 18% in FY27E and margin recovering in Radiopharmacy, CRO and generics business.
- We forecast 4x PAT growth (~59% CAGR) boosted by operating leverage and financial deleverage. We project ~INR19bn of FCF during our forecast.
- With the continued income statement and balance sheet improvement, we forecast RoCE shall improve from 6.5% in FY24 to ~14% in FY27E.
- JPL can continue to improve its financial performance with the commissioning of the Line-4 and six PET pharmacies, ramp-up in Ruby-Fill, launch of I-MIBG and further debt repayment.

### Revenue to grow at 11% CAGR; revenue mix to improve

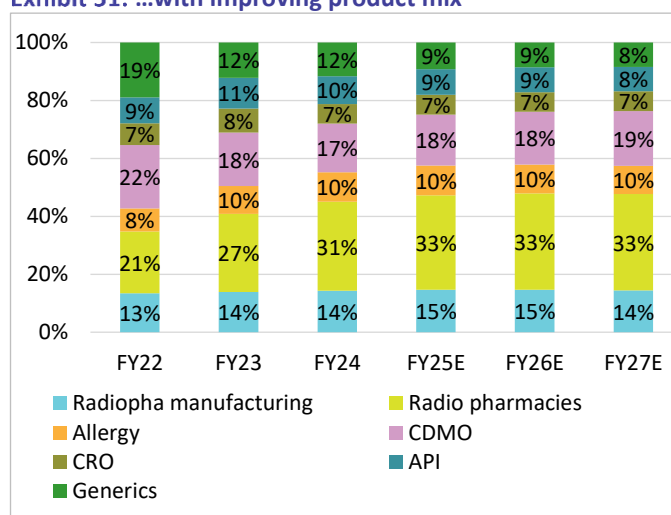
We forecast 11% CAGR in JPL’s revenue over FY24–27E driven by 14% CAGR in Radiopharma business and 16% CAGR in the CDMO business. Within the Radiopharma business, we forecast Radiopharma manufacturing shall grow at 12% CAGR while Radiopharmacy business shall grow at 14% CAGR. We expect 10%/12% CAGR in the Allergy/CRO business while generics business shall continue to recover; hence, we anticipate flattish growth while API businesses continues to remain suboptimal.

Exhibit 50: Revenue to grow at 11% CAGR...



Source: Company, Nuvama Research

Exhibit 51: ...with improving product mix



Source: Company, Nuvama Research

During the forecast period of FY24–27E, JPL’s revenue mix is likely to see a gradual change with contribution of high margin businesses i.e. Radiopharma manufacturing and allergy businesses to remain flat at 24%. The contribution of mid-margin businesses i.e. CRO and CDMO is likely to grow >200bp to ~26% in FY27E while the contribution of the low margin businesses (Radiopharmacies, generics and API) is anticipated to decline ~200bp.

## EBITDA CAGR likely at 24% with revenue mix change and turnaround

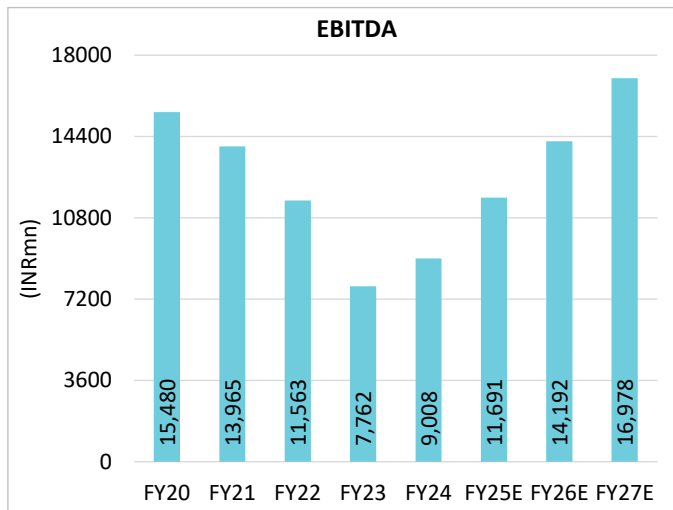
We are building in EBITDA growth at 24% CAGR over FY24–27E with better revenue mix and margin recovery in its three businesses. Jubilant is emerging out of the margin challenges faced by its Radiopharmacy, CRO and generics business.

**Radiopharmacy business:** This business has returned to low-single digit EBITDA margins (2.7%) in FY24 from the losses reported in the earlier years. We reckon this margin recovery shall sustain with EBITDA margins clocking 4% in FY27E. The peak margin potential of this business in the current form is ~5–6% and hence, there would be margin expansion beyond our forecast period.

**Drug discovery business (CRO):** This business has seen a margin challenge owing to the decline in revenue in a challenging industry environment. We reckon this business shall see ~300bp margin expansion over FY25E-27E.

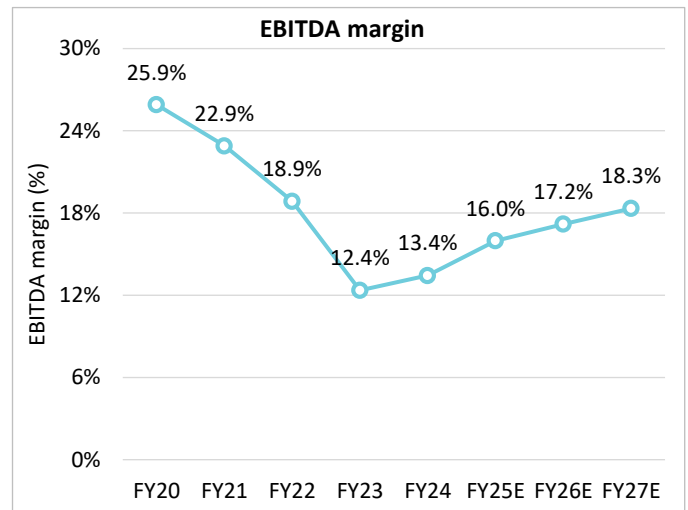
**Generics business:** Generics business has already reduced its losses at the EBITDA level after the shutdown of the Salisbury unit and lifting of the import alert on its Roorkee facility. This business should return to EBITDA breakeven in FY25E and continue to improve thereafter. The business may surprise positively in the margins, if the company is able to launch new products through the Roorkee facility or through its CMO partners. We are building 8.5% EBITDA margins in FY27E.

Exhibit 52: Consolidated EBITDA likely to grow at 24% CAGR...



Source: Company, Nuvama Research

Exhibit 53: ...with margins set to recover to >18% in FY27E

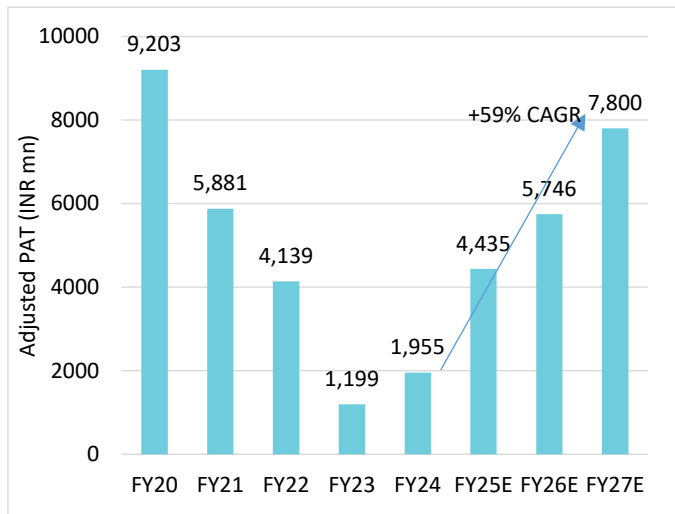


Source: Company, Nuvama Research

## Financial deleverage to spike 4x PAT growth over FY24-27E

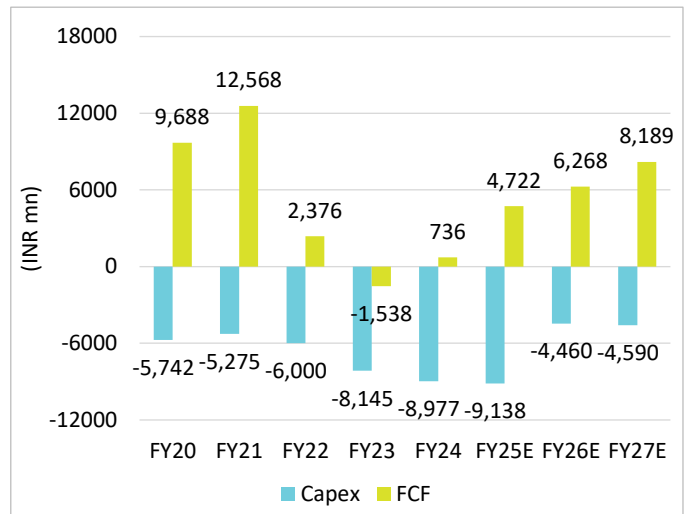
We are forecasting 4x growth in PAT over FY24–27E (59% CAGR) primarily driven by improvement in EBITDA and lower interest costs due to financial deleverage. FY24 saw higher other income owing to the proceeds from [divestment](#) of its 25.8% stake in Sofie Biosciences for USD143mn, which the company has used to repay debt. With the cumulative INR19bn of FCF during FY24–27E, we think the company would continue to deleverage the balance sheet, which shall lead to lower interest costs and higher PAT growth.

**Exhibit 54: PAT boost due to lower interest cost...**



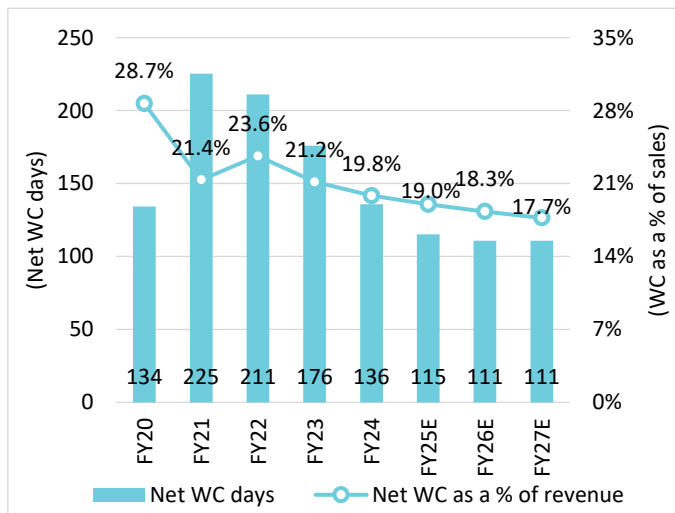
Source: Company, Nuvama Research

**Exhibit 55: ...as it deleverages balance sheet using FCF**



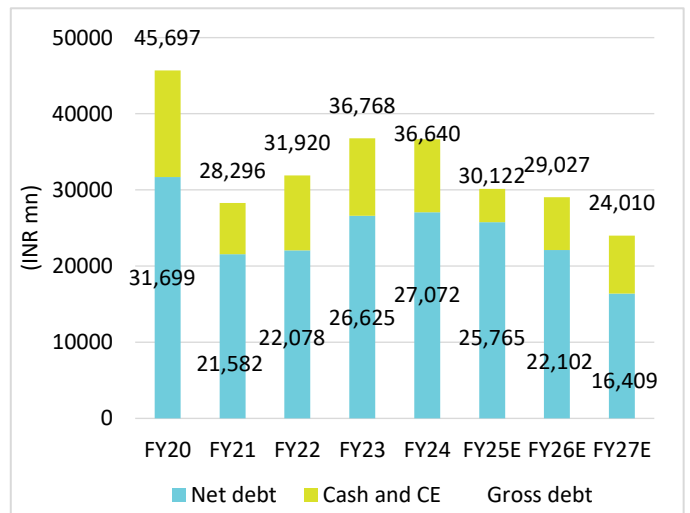
Source: Company, Nuvama Research

**Exhibit 56: Working capital improvement to continue**



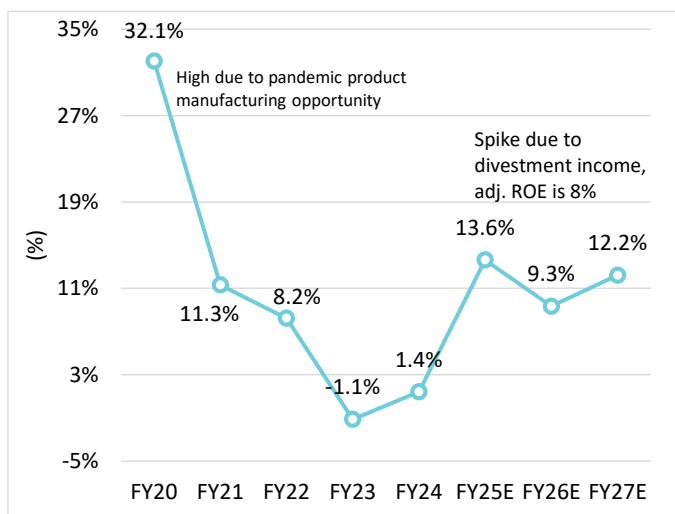
Source: Company, Nuvama Research

**Exhibit 57: Debt repayment to fortify balance sheet**



Source: Company, Nuvama Research

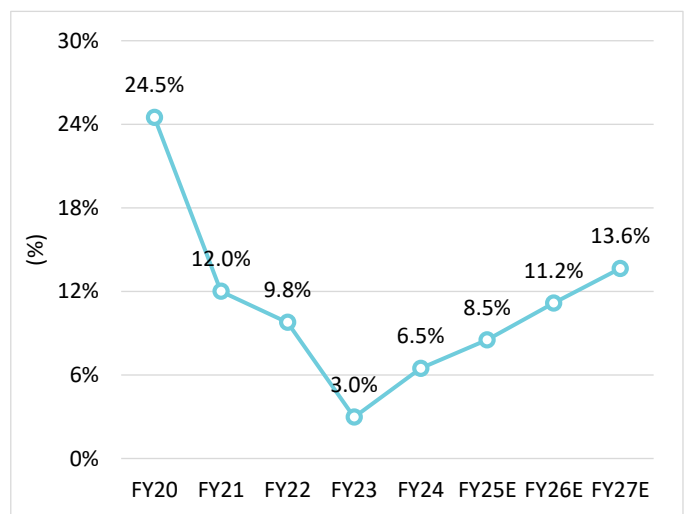
**Exhibit 58: RoE to improve by FY27E**



Source: Company, Nuvama Research

\*High ROE in FY2E due to SOFIE divestment

**Exhibit 59: RoCE set to see secular improvement**



Source: Company, Nuvama Research

## Key Risks

### Failure to get approval for I-MIBG

I-MIBG is a critical therapeutic product for the company in the Radiopharma segment. The drug is likely to be launched in FY27E, ramp up quickly and provide a future growth opportunity. Failure to secure final approval would hurt its future prospects.

### Lower-than-expected ramp-up in Ruby-Fill

We are building Ruby-Fill to ramp-up to USD60mn in FY27E and hence it is a critical product for its Radiopharma segment. Any challenge in gaining market share and revenue ramp-up would affect our P&L forecasts.

### Delayed turnaround of generics and Radiopharmacy business

The turnaround of generics and radiopharmacy business is providing INR2.7bn of delta in FY24–27E EBITDA. Delay in delivering the expected EBITDA in these segments would impact our FY27E P&L forecasts.

### Delayed commercialisation of Line 3 at Spokane

Revenue from Line 3 from Spokane is already built in our FY27E forecast, albeit a lower quantum. This, however, has strong future potential; hence, delay in commissioning this line would have temporary impact on the revenue generating capability of the CDMO business.

### Escalation of compliance action at Montreal

The Montreal unit is under OAI since past year. While this unit is not critical with respect to revenue capability, the company has capex plans at this facility. Escalation of compliance action at this unit may have minor impact on P&L but, valuation may see a higher impact. Any adverse compliance action at other facilities may also have impact on the forecasts and valuation.

### Challenges in CRO industry due to biotech funding environment

The biotech funding slowdown has already affected JPL's CRO business revenue. If the environment fails to report a pickup or the company is unable to add more clients in this business, our CRO business forecast would get hurt.

## Company Description

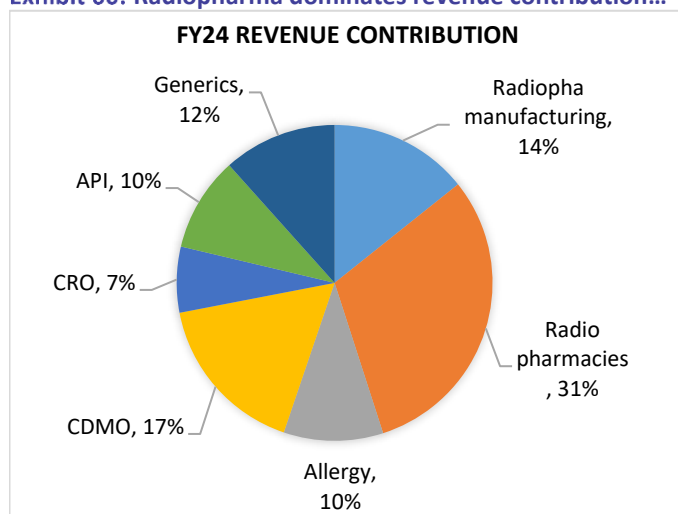
Jubilant Pharmova has a global presence and is involved in multiple businesses: Radiopharma, allergy immunotherapy, CDMO sterile injectables, contract research development and manufacturing organisation (CRDMO), generics and proprietary novel drugs businesses. The company operates multiple manufacturing facilities that cater to all the regulated markets, including the US and Europe, and has a headcount of ~5,500 professionals across the globe.

In the Radiopharma business, the company is involved in manufacturing and supply of radiopharmaceuticals with a network of 46 radio pharmacies in the US. The allergy immunotherapy business manufactures and supplies allergic extracts and venom products in the US and in some other markets such as Canada, Europe and Australia.

Through its CDMO sterile injectables business, the company offers manufacturing services including sterile fill and finish injectables (both liquid and lyophilisation), full-service ophthalmic offer (liquids, ointments and creams) and ampoules. The CRDMO business includes the drug discovery services business that provides contract R&D services through two research centres in Bengaluru and Noida in India and the CDMO-API business, which manufactures APIs.

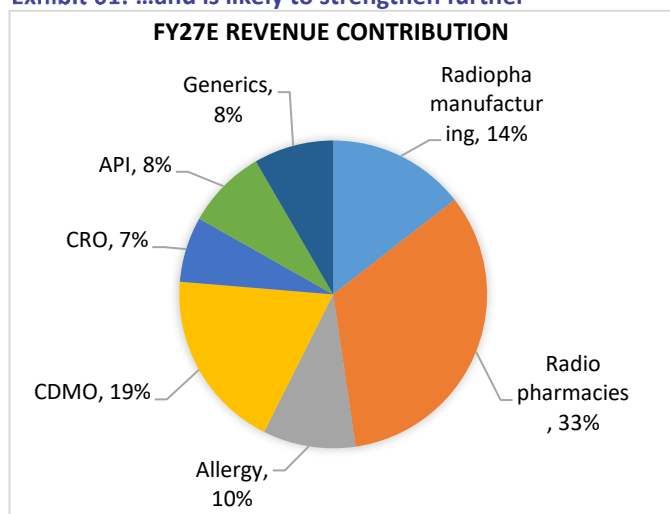
Jubilant Therapeutics is involved in the proprietary novel drugs business and is an innovative biopharmaceutical company developing breakthrough therapies in oncology and for auto-immune disorders.

**Exhibit 60: Radiopharma dominates revenue contribution...**



Source: Company, Nuvama Research

**Exhibit 61: ...and is likely to strengthen further**



Source: Company, Nuvama Research

### Radiopharmaceuticals

Radiopharmaceuticals contributed ~14% to JPL's FY24 revenue and ~53% to its FY24E EBITDA. This segment has a diversified product portfolio spread across SPECT and PET diagnostics, apart from therapeutics. The company's product portfolio includes products such as MAA, DTPA, HICON Sodium Iodine I-131 and Ruby-Fill Rubidium 82 generator and emulsion systems, all of which have been consistently gaining market share.

MAA is used in perfusion phase of a ventilation/perfusion (V/Q) scan to diagnose pulmonary embolism. JPL is market leader in the US for this product. DTPA is used to assess pulmonary ventilation function in association with MAA to perform a ventilation/perfusion (V/Q) scan. Jubilant is the sole supplier for DTPA in the US market. HICON is a radioactive therapeutic agent indicated for treatment of



hyperthyroidism and selected cases of carcinoma of the thyroid. Jubilant has no direct competition in the US market for this product. Ruby-Fill Rubidium 82 Generator contains accelerator produced Strontium-82 that decays to Rubidium-82. It is used for cardiac PET scan, a non-invasive imaging procedure of the myocardium, to evaluate regional myocardial perfusion in adults with suspected or existing coronary artery disease. Ruby-Fill is installed in the top 80% US cardiac networks.

**Exhibit 62: Market leadership in MAA, DTPA and I-131**



Source: Company, Nuvama Research

**Exhibit 63: Ruby-Fill Rubidium-82 gaining market share consistently**



Source: Company, Nuvama Research

The onshore manufacturing facility for this business segment is located in Montreal. The facility was inspected by the USFDA in Jun-22 and received an Establishment Inspection Report with Voluntary Action Indicated status in Aug-22. The facility was inspected again in Apr-24, with the USFDA issuing five observations. In Jul-24, the inspection was classified as 'Voluntary Action Indicated'.

## Radio pharmacies

Radio pharmacies contributed ~31% of FY24 revenue, but—being a low-margin business—contributed only ~6% to FY24E EBITDA. Jubilant Pharmova has the second largest radio pharmacy network in the US with 43 SPECT pharmacies and three PET pharmacies. It caters to 1,800 hospitals with 99%-plus on-time deliveries. Jubilant delivers six customised doses every minute.

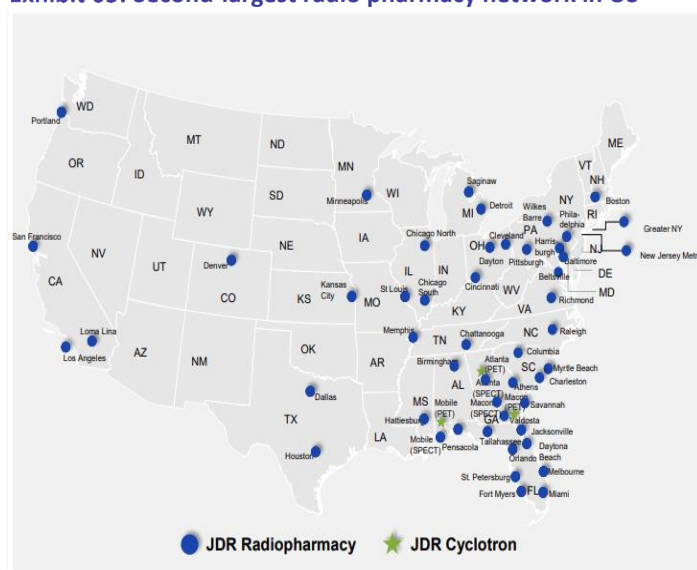
The company had acquired a 25.8% stake and become a strategic partner to Sofie Biosciences in 2020, giving it access to 14 commercial radio pharmacies in the US focused on PET tracers. In 2024, the entire stake was sold for USD142.9mn (of this, USD25.8mn is contingent on future milestones), generating multi-fold returns for JPL. The company plans to use USD50mn generated from this divestment to strengthen its PET radio pharmacy network, by adding six new sites in the US, targeting operationalisation by FY28.

**Exhibit 64: SPECT and PET radio pharmacy**



Source: Company, Nuvama Research

**Exhibit 65: Second-largest radio pharmacy network in US**



Source: Company, Nuvama Research

## Allergy immunotherapy

Allergy immunotherapy segment contributed ~10% to Jubilant Pharmova's FY24 revenue, but an outsized ~30% to its FY24 EBITDA. Jubilant is the number 2 player in the US subcutaneous allergy immunotherapy market and the sole supplier of venom immunotherapy in the US since 2018. The company's product portfolio includes six different insect venom products and more than 200 allergenic extracts and skin testing devices. Jubilant Pharmova serves 2,000-plus customers.

The venom extracts include products for honeybee, white-faced hornet, yellow hornet, wasp, yellow jacket and mixed vespid allergies. The allergenic extracts include products for dog, cat, mite, tree pollen and a combination of specialised and standardised extracts. The multiple skin test system includes ComforTen, Quintest and Quintip.

## CDMO – Sterile injectables

Jubilant Pharmova earned one-sixth of FY24 revenue and one-fifth of FY24 EBITDA from the CDMO – sterile injectables segment. The company has onshore manufacturing facilities in Spokane (US) and Montreal (Canada), and can handle vial sizes from 2ml to 100ml with batch sizes up to 2,000 litre. The company is focused on the sterile fill-and-finish and ophthalmic sterile products, and has a repeat customer business rate exceeding 90%.

Its core portfolio at Spokane is stable due to multiple products having patent protection with limited competition. The Spokane facility witnessed an eight-day USFDA audit in Jun-24, which closed with three observations and a VAI classification, while the Montreal CMO facility had a USFDA audit in the same month with 15 observations. The Montreal facility contributed less than 10% to FY24 CDMO sterile injectables revenue. The company is currently implementing a corrective and preventive action plan, and the plant is likely to remain shut during this period.

## CRDMO: Drug discovery services, CDMO and CRDMO – API

The CRDMO segment's FY24 revenue/EBITDA's contribution stood at 16%/19%. In the drug discovery segment, the company has the following:

- i) An integrated drug discovery centre with 250-plus scientists and more than 85 integrated programmes already delivered. Pre-clinical services i.e. from identifying targets to candidate selection take place here.
- ii) A chemistry research innovation centre (CIRC) with more than 700 scientists. Synthetic, medicinal, analytical and computational chemistry are part of this. CIRC has serviced nearly 40 clients in the last three years.
- iii) The API contract development and manufacturing centre operates with 300 scientists, engaged in process research chemistry and manufacturing. The centre supports scale-up up to 20kg. The CRDMO-API facility, which has 900-plus MT reactor capacity and is spread over 41 acres, is approved by the USFDA, Japan PMDA, Korea KFDA, Brazil ANVISA and Australia TGA.
- iv) The company has potent API expertise with OEB Class 1-3 API potency (class 1: not harmful, not irritating, low pharmacological activity; class 2: harmful, possible irritant, mid pharmacological activity; class 3: moderate toxicity, high pharmacological activity).

**Exhibit 66: End-to-end CRDMO services for drug substance in small molecules provided by Jubilant Pharmova**



Source: Company, Nuvama Research

The drug discovery services segment has six centres of excellence providing PROTAC, SPPS and carbohydrate chemistry, lipids, photo redox and electrochemistry, solid-state chemistry and library synthesis. Jubilant Pharmova's API portfolio comprises APIs catering to various therapies such as CNS, cardiovascular system, anti-infective and anti-diabetic. Jubilant is among the largest producers of APIs such as oxcarbamazepine, carbamazepine, pinaverium, resperidone, donepezil, lamotrigine, meclizine, azithromycin and valsartan.

## Generics

The generics business, which is operating at an EBITDA loss, contributed ~12% to FY24 revenue. The broad therapeutic areas covered by Jubilant Pharmova include the cardiovascular system, central nervous system, gastrointestinal, antibiotics and

multispecialty. The company has a global presence and serves more than 50 countries including the US, the UK, Europe, Canada, Japan, Australia, South Africa and the UAE. Jubilant is currently building the branded generics business in India in the fields of cardiovascular, diabetes and multi-speciality.

The company has a manufacturing facility for generics in Roorkee, and is developing a network of globally available contract manufacturers (arrangement in place with more than five manufacturers) to have cost-effective manufacturing facilities as well as to de-risk the product supplies.

The Roorkee facility is approved by the USFDA, Federal Agency for Medicines and Health Products Belgium, Pharmaceuticals and Medical Devices Agency Japan, Therapeutic Goods Administration Australia, the MHRA UK and South African Health Products Regulatory Authority.

The USFDA classified the Roorkee facility as Voluntary Action Indicated (VAI) in Apr-24 after four observations in the inspection conducted in Feb-24. In FY22, the Roorkee facility was also placed under import alert after a warning letter in FY19. The company shuttered its Salisbury (US) manufacturing operations in Q1FY25, and plans to start exports to the US through the Roorkee facility in H2FY25.

JPL has also started outsourcing manufacturing to USFDA-approved contract manufacturers, and they are likely to commence production in this fiscal itself.

## Proprietary novel drugs

Jubilant Pharmova's subsidiary Jubilant Therapeutics is involved in the proprietary novel drugs business and is an innovative biopharmaceutical company developing breakthrough therapies in oncology and for auto-immune disorders. It is a clinical-stage precision therapeutics company advancing potent and selective small molecule modulators to address unmet medical needs. Its discovery engine integrates structure-based design and computational algorithms to discover and develop novel, precision therapeutics against both first-in-class and validated but intractable targets in genetically defined patient populations.

The company's pipeline consists of i) a first-in-class dual coREST modifier—Dual LSD1/HDAC6 inhibitor (JBI-802), currently in a Phase I/II clinical trial in multiple tumours, ii) a novel brain-penetrant modulator of PRMT5 (JBI-778) for which an IND has been accepted, iii) brain penetrant and gut restrictive PDL1 inhibitors and iv) PAD4 inhibitors for oncology and inflammatory indications. The segment is currently investing in its programmes and operating at EBITDA losses, which is par for the course in this business.

**Exhibit 67: Two clinical stage drugs under development; plans afoot to address unmet needs in oncology, auto-immune diseases**

Program	Mechanism	Indications	Lead optimisation	Pre-clinical (IND)	Phase I/II	Milestones
JBI-802	coREST inhibitor/ Epigenetic modulating agent	ET (Essential thrombocythemia)/ MPN (Myeloproliferative neoplasms), NSCLC (Nonsmall cell lung cancer)			●	Phase I data suggests therapeutic potential. Early Phase II data in ET/MPN in H2CY24
JBI-778	PRMT5 inhibitor brain penetrant	EGFR (Epidermal growth factor receptor) refractory NSCLC, ACC (Adenoid cystic carcinoma), High grade glioma			●	Phase I / II initiation under progress
JBI-2174	PD-L1 inhibitor brain penetrant	Brain tumour and metastases		●		IND enabling
JBI-1044	PAD4 inhibitor	Oncology and auto-immune disease		●		IND enabling
Others	Various	Various	●			Undisclosed research programs

Source: Company, Nuvama Research

## Exhibit 68: Company history – A chronological snapshot

Fiscal year	Event/milestone
2003	Acquires API business – Nanjangud, Karnataka
2005	Acquires Pharmaceutical Services Incorporated N.V. and PSI Supply N.V. (Belgium)
	Sets up R&D centre for solid dosage formulations
2006	Acquires majority stake in Cadista Holdings Inc. with a USFDA approved manufacturing facility for solid dosage formulations
2008	Acquires HollisterStier Laboratories LLC in US (a CMO service provider)
2009	Acquires Draxis Pharma Inc. in Canada (manufacturer of sterile products, nonsterile products and radiopharmaceuticals)
2010	Commissions Roorkee dosage facility
2015	Acquires balance of minority stake in Cadista Holdings Inc.
	Consolidates pharmaceutical business under JPL
2018	Completes acquisition of Triad's Radiopharmacies in US
2021	Enters into a strategic partnership with SOFIE Biosciences
2022	USFDA places Roorkee facility under import alert (exempted Meclizine tablets, Olanzapine orally disintegrating tablets, Risperidone orally disintegrating tablets, Spironolactone tablets, and Valsartan tablets)
	Jubilant HollisterStier's 50,000 sq. ft. (USD92mn) expansion for high-speed filling line and lyophilizers, which shall increase the facility's sterile injectable capacity by 50%
2023	Jubilant HollisterStier enters into cooperative agreement of USD149.6mn with US government to expand critical vaccine manufacturing capacity
	Jubilant HollisterStier announces CAD100mn expansion of CMO manufacturing facility at Montreal (Canada)
	USFDA removes olanzapine orally disintegrating tablets, spironolactone tablets, and valsartan tablets from the list of excepted products from the 'Import Alert' at the Roorkee facility
	USFDA completes audit of solid dosage manufacturing facility at Roorkee with six observations, later classified as OAI
	EIR (VAI) receives from USFDA for radiopharmaceuticals manufacturing facility at Montreal (Canada)
	USFDA concludes inspection of API manufacturing facility at Nanjangud with eight observations, later classified as VAI
2024	Receives NDA approval [505(b)(2)] for Technetium Mertiatide injection
	USFDA classifies Montreal, Canada CMO facility as OAI
	Leadership changes - Mr Hari Bhartia steps down as MD and Mr Priyavrat Bhartia replaces him along with Mr Arjun Shanker Bhartia, who is appointed as Joint MD; Mr Arvind Chokhany takes on additional position as CFO of the company, apart from being the Group CFO of the Jubilant Group
	Radiopharma business receives ANDA approval for: Technetium Sulphur Colloid injection (CGT/180 day exclusivity)
	Jubilant Pharmova's wholly owned subsidiary to sell its entire 25.8% stake in Sofie Biosciences for aggregate proceeds of ~USD139.43mn (including preferred returns)
	USFDA concludes inspection of solid dosage formulations facility at Roorkee with 4 observations, later classified as VAI
2025	Jubilant Cadista Pharmaceuticals to close the manufacturing operations of solid dosage formulation facility at Salisbury (US)
	USFDA concludes audit of radiopharmaceuticals manufacturing facility at Montreal, Canada with 5 observations, later classified as VAI
	JPL receives USD115.9mn as part of consideration
	USFDA audit completion of contract manufacturing facility at Spokane, Washington, USA with three observations, later classified as VAI
	Radiopharma business announces USD50mn investment to add 6 PET radiopharmacies
	USFDA audit completion of contract manufacturing facility at Montreal, Canada with 15 observations, later classified as OAI
	Jubilant Biosys to add drug discovery and preclinical development capabilities in biologics and ADC (EUR4.4mn over two years)
	USFDA audit completion of allergy immunotherapy facility and CMO facility in Spokane with no observations

Source: Company, Nuvama Research

## Management Overview



### Mr Shyam S Bhartia, Chairman

Mr Bhartia, together with his brother Mr Hari Bhartia, is the founder and Chairman of Jubilant Bhartia Group headquartered in New Delhi. He is the Chairman of Jubilant Pharmova Limited, Jubilant Ingrevia Limited and Jubilant FoodWorks Limited. He is also Chairman and Managing Director of Jubilant Pharma Limited, Singapore (a 100% wholly owned subsidiary of Jubilant Pharmova). The Group, through its investments by Jubilant Pharmova, has a presence in the US and Canada.

Mr Bhartia is a Bachelor of Commerce from St. Xavier's College affiliated with University of Calcutta, and is a qualified Cost and Works Accountant and a fellow member of the Institute of Cost & Works Accountants of India. He has been associated with various institutions and has served as a Member of the Board of Governors, IIT, Mumbai and IIM, Ahmedabad. He has also served as a Member of the Executive Committees of the FICCI and the CII and was also a member of the Task Force on Chemicals appointed by the Government of India.

Mr Bhartia is a regular participant at the World Economic Forum Annual Meeting in Davos. He is also a member of Governors for Chemistry and Advanced Materials of the World Economic Forum.

His immense contributions have been recognised through various awards. CHEMEXCIL conferred on him the Lifetime Achievement Award. He, along with his brother, was felicitated with the Entrepreneur of the Year Award at the prestigious AIMA Managing India Awards, presented by the President of India. The duo also shared the Ernst & Young Entrepreneur of the Year Award for Life Sciences & Consumer Products category.

Mr Bhartia serves on the Board of Chambal Fertilisers and Chemicals Limited, India and is the Chairman of FICCI Singapore Council. He was also a Director on the Board of Air India.



### Mr Hari S Bhartia, Co-Chairman

Mr Bhartia, together with his brother Mr Shyam S Bhartia, is the founder and Co-Chairman of Jubilant Bhartia Group headquartered in New Delhi, India. Mr Bhartia is the Co-Chairman, Non-Executive Director of Jubilant Pharmova Limited, Co-Chairman of Jubilant Ingrevia Limited and Jubilant FoodWorks Limited. He is a BE in Chemical Engineering from the Indian Institute of Technology, Delhi. He was conferred with the Distinguished Alumni award by his alma mater in 2000. He has been associated in various capacities with the IIT system and with the Ministry of Human Resource Development, Government of India.

Mr Bhartia is a former President of the CII (2010–11) and a member of several educational, scientific and technological programmes of the Government of India. He is a former Chairman of the Board of Governors of IIM Raipur and IIT Kanpur. He is currently a Member of the International Advisory Board of McGill University, Canada; Chairman of Board of Governors – IIM Visakhapatnam and Chairman of CII-Jubilant Food & Agriculture Centre of Excellence.

He is a member of several CEOs' forums, prominent being the India-US CEO Forum and India-France CEO Forum. He is a regular participant at the World Economic Forum Annual Meeting in Davos and is a member of the World Economic Forum's International Business Council; Community of Chairpersons; Global Health and Healthcare Governors Community; Family Business Community. He was the Co-Chair of the Davos Annual Meeting of the World Economic Forum in 2015. Mr Bhartia is also a Founding Member of the Centre for Social and Economic Progress.



## **Mr Priyavrat Bhartia, Managing Director**

Mr Bhartia has ~26 years of industry experience. He is a Bachelor of Arts (Economics) from Dartmouth College (US) and an MBA from Stanford University, US. He has served as a Non-Executive Director on Jubilant Pharmova's board since May-17.

Mr Bhartia has demonstrated strong leadership capabilities, strategic acumen, deep business and industry understanding, and provides strategic commitment to the company's long-term vision. He is also on the Board of Jubilant Ingrevia Limited, Jubilant Industries Limited, HT Media Limited, Digicontent Limited, The Hindustan Times Limited, Jubilant Enpro Private Limited and Hindustan Media Ventures Limited.



## **Mr Arjun S Bhartia, Joint Managing Director**

Mr Bhartia graduated from Brown University, Providence, RI, US in 2008. He worked as an Associate Consultant with Bain & Company during 2008–10 and as an Analyst in varied industries. He has served as a Non-Executive Director on the Board of Jubilant Pharmova since May-17. He has a deep understanding of the company's business and industry, and shall provide direction for strategy execution.

Mr Bhartia is also on the boards of Jubilant Ingrevia Limited, Jubilant Consumer Private Limited and Jubilant Enpro Private Limited.



## **Mr Arvind Chokhany, Group CFO and Whole-time Director**

Mr Chokhany is Group Chief Financial Officer for Jubilant Bhartia Group and Whole-time Director for Jubilant Pharmova, responsible for Governance, Corporate Finance and Treasury, Investments and M&A, Legal & Risk, Finance Operations, Digital and Information technology and Investor Relations, among other Group functions.

Mr Chokhany is a merit holder Chartered Accountant and Cost Accountant with 30 years of experience. Prior to joining Jubilant Group, he was CFO for different infrastructure businesses of Tata Group for seven years. Prior to this, he spent 18 years managing operations for various corporate and investment banking global businesses of Deutsche Bank, Standard Chartered Bank and HDFC Bank.

Mr Chokhany has significant experience in the domain of strategic and portfolio investments origination, portfolio and asset/risk management, finance operations, capital and balance sheet management, development of technology platforms, mergers & acquisitions for elevated return on capital, working closely with boards and global investors in successfully steering investor goals through C-suite collaboration.



## **Dr Tushar Gupta, SVP – Corporate Strategy and Chief of Operations - CRDMO**

Dr. Tushar Gupta has been heading the global strategy for JPL since Oct-21. In his role, he has worked closely with the management team in designing and driving key strategic initiatives for JPL. Before joining JPL, he spent eight years in management consulting across McKinsey and BCG in US, UK and India. He was a Senior Principal with Boston Consulting Group in India and was Senior Expert with McKinsey in their New Jersey and Miami office. He started his career with McKinsey where he worked with a broad range of pharmaceutical and medical products clients ranging from pre-IPO venture backed companies to large, multinational, diversified healthcare players in USA, Europe and India. Some of his clients included Eli Lilly, Merck, Stryker Health, BMS-Celgene, J&J, Dr Reddy's, Cipla and leading PE players globally. He is a medical doctor by training from University of Health Sciences, Haryana and did his MBA from Indian Institute of Management, Calcutta. He also served as a resident doctor in the department of Paediatric Surgery with Dr. RML Hospital, New Delhi.



## **Mr Harsher Singh, CEO – Jubilant Radiopharma**

Mr Harsher Singh was appointed CEO of Jubilant Radiopharma in Apr-24. Prior to joining the Jubilant team, Mr Singh was Senior Vice President at Amneal Biosciences, wherein he led the biosimilar, biologic and injectable business lines and served as Amneal's strategic leader for AvKare Distribution business. Prior to Amneal, he worked for American Regent, Inc. and McKinsey & Company. He is an MBA from Northwestern University (Kellogg School of Management) and a Bachelor of Science in Economics from the London School of Economics and Political Science.



## **Mr Kyle Ferguson, CEO – Allergy Business**

Mr Ferguson has over 35 years of leadership experience in building, launching and growing businesses in the pharmaceutical industry. He joined HollisterStier Allergy from Sun Pharma, wherein he was Senior Vice President with P&L responsibilities for three businesses. Previously, Mr Ferguson held global and US domestic leadership roles with Janssen Pharmaceuticals (part of Johnson & Johnson) and Bristol-Myers Squibb. He is a graduate of St. Francis Xavier University with a degree in Marketing and Management, and has attended various leadership development executive programmes, including one at the London School of Economics.



## **Mr Chris Preti, CEO – CDMO**

Mr Preti has 25 years of pharmaceutical experience in research & development, marketing, sales and operations. He is an MSc in Chemistry from Furman University and a Masters in International Business Studies from the Darla Moore School of Business, South Carolina University. He has also completed Wharton's School of Business Transformational Leadership for Executives programme in Pennsylvania.



## **Mr Giuliano Perfetti, CEO – CRDMO, Biosys**

Mr Perfetti has over 25 years of experience in the global pharmaceuticals industry, focusing on strategy, organisation, and business development. He began his career in strategy consulting at Accenture, developing innovative go-to-market plans for pharmaceutical and industrial clients. He then moved to AstraZeneca, wherein he held leadership roles in strategy and business development, sales and marketing, managing various franchises and gaining extensive industry experience.

In the CDMO sector, he contributed significantly to the growth and expansion of leading CDMO players such as Euticals and FIS, serving as Chief Commercial Officer and establishing several strategic collaborations with Big Pharma and Innovative companies. Since 2019, Mr Perfetti has been the Chairman of the European Innovation Committee and a Board Member at EFCG. Since 2021, he has served as the Official co-rapporteur for the European Innovation stream in the EU's dialogue on medicine supply security.

Since 2021, he has been the CEO and Managing Director of Jubilant Biosys, wherein he has led the transformation of the Drug Discovery and API units by creating a full-fledged CRDMO platform with 2,400 employees. He has focused on strong differentiation in innovation, particularly in Integrated Drug Discovery, and has driven expansion in fast-growing segments such as CDMO and emerging technologies. He is a postgraduate in Economics with a thesis in Financial Mathematics from the University of Tor Vergata in Rome and has completed management courses at INSEAD and Cranfield University.





## Dr Jaidev Rajpal, CEO – Jubilant Generics

Mr Jaidev Rajpal was appointed as Managing Director & CEO of the company's wholly-owned subsidiary Jubilant Generics Limited (in Sep-22), which is involved in the development, manufacturing and distribution of formulations to the US and non-US markets, and is also involved in the India Branded Pharmaceuticals business.

He has over two decades of experience in management consulting, advising and transforming leading generic pharmaceutical companies in India and global markets. He has a track record of delivering business transformation projects. He joined Jubilant from McKinsey & Company, wherein he was working as a Partner in the Pharmaceuticals and Life Sciences practice.



## Dr Syed Kazmi, CEO – Jubilant Therapeutics

Mr Syed Kazmi is President and Chief Executive officer of Jubilant Therapeutics Inc., a subsidiary of Jubilant Pharmova. Previously, he worked as the Vice President and Global Head of Oncology Business Development and Licensing at Novartis, leading all BD&L efforts for Novartis Oncology, including search and evaluation, transactions, due diligence and alliance management.

Prior to Novartis, Mr Kazmi worked as the Executive Director of Business Development at Amgen, responsible for corporate mergers & acquisitions, global licensing and strategic collaborations; he also served as the Head of International Business Development.

Before joining Amgen in 2012, Mr Kazmi served as Vice President and Head, business development and strategic planning, at Ligand Pharmaceuticals. He also worked for Johnson & Johnson as Principal Scientist in the R&D organisation. He is Ph.D. in Life Sciences (Biochemistry) and an executive MBA.

### Exhibit 69: Board of Directors

Name	Designation
Mr Shyam S. Bhartia	Chairman
Mr Hari S. Bhartia	Co-Chairman
Mr Sushil Kumar Roongta	Independent Director
Mr Vivek Mehra	Independent Director
Mr Arun Sheth	Independent Director
Shirish G Belapure	Independent Director
Dr Harsh Mahajan	Independent Director
Ms Shivpriya Nanda	Independent Director
Mr Priyavrat Bhartia	Managing Director
Mr Arjun Shanker Bhartia	Joint Managing Director
Mr Arvind Chokhany	Group CFO and Whole-time Director
Dr Ramakrishnan Arul	Whole-time Director

Source: Company, Nuvama Research

## Industry Outlook

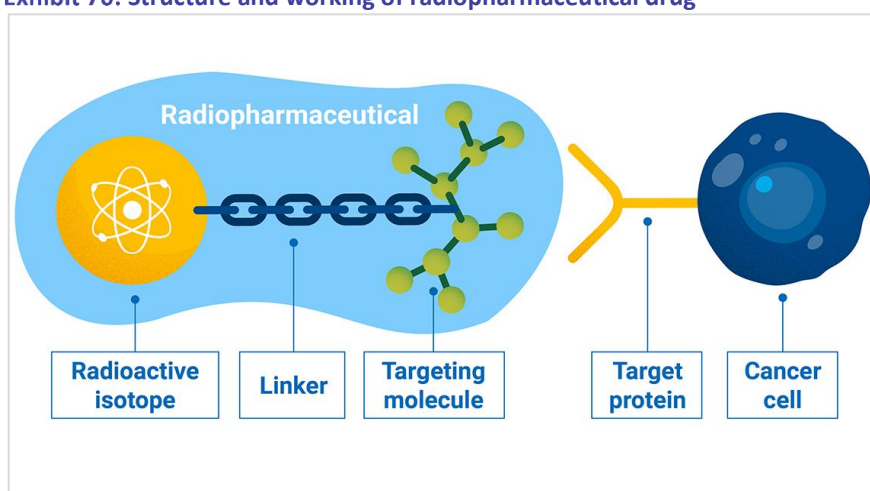
### Radiopharmaceuticals

#### What are radiopharmaceuticals? An explainer

Radiopharmaceuticals are a combination of radioactive isotopes (radioactive forms of chemical elements) and pharmaceutical drugs. Radiopharmaceuticals are used to diagnose and treat life-threatening diseases such as cancer, cardiac disorders and neurological disorders. Radiopharmaceuticals are given to patients by injection, or orally, and can be monitored and analysed with external medical devices and tests.

Radiopharmaceuticals can be made by combining a radioactive compound that emits radiation, a tailored targeting molecule that varies to address specific organs or tissues, and a linker that ensures stable attachment. This radiation could be gamma photons for diagnostic use or particles, alpha or beta, for therapy.

#### Exhibit 70: Structure and working of radiopharmaceutical drug



Source: International Atomic Energy Agency, Nuvama Research

There are three types of procedures that use radiopharmaceuticals, viz., SPECT imaging, PET imaging and therapeutics.

#### Exhibit 71: Comparative analysis — SPECT imaging versus PET imaging versus Radiopharmaceutical therapeutics

	Single-photon Emission Computed Tomography (SPECT imaging)	Positron Emission Tomography (PET Imaging)	Radiopharmaceutical Therapeutics (Tx)
Description	Uses 'low-energy' radio isotopes that emit gamma rays, detected by SPECT cameras	Uses 'high energy' radio isotopes that emit positrons, detected by a PET scanner	Radiation is systemically or locally delivered using pharmaceuticals that either bind preferentially to targeted cells or accumulate physiologically
Key facts	<ul style="list-style-type: none"> <li>Longer half-lives</li> <li>Images blood flow</li> <li>Specialised but legacy products, &gt; 90% generics</li> </ul>	<ul style="list-style-type: none"> <li>Shorter half-lives</li> <li>Images blood flow and metabolic processes</li> <li>Superior image quality</li> <li>Mostly innovative, few generics</li> </ul>	<ul style="list-style-type: none"> <li>Specialised/new generation isotopes</li> <li>Targeted therapies with higher efficacies</li> <li>Minimal off target toxicity vs. conventional treatments</li> </ul>
Market trends	<ul style="list-style-type: none"> <li>Large and Stable market</li> <li>Robust supply chain management</li> </ul>	<ul style="list-style-type: none"> <li>High growth market</li> <li>More expensive vis-à-vis SPECT</li> </ul>	<ul style="list-style-type: none"> <li>High no. of clinical trials in the space</li> <li>Accelerating M&amp;A activity in therapeutics space with multiple &gt; USD 1 Bn. deals in 2023</li> </ul>
Key products and isotopes	<ul style="list-style-type: none"> <li>MAA, DTPA, Exametazime, Sulfur Colloid, Mertiatide</li> <li>Isotopes - Tc99</li> </ul>	<ul style="list-style-type: none"> <li>Ruby-Fill®, Pylarify, Illuccix, Neuraceq, FDG</li> <li>Isotopes - Rb82, F18, Cu64</li> </ul>	<ul style="list-style-type: none"> <li>Products - HICON® Sodium Iodine I 131, Pluvicto, Lutathera</li> <li>Isotopes - Lu177, Ac225, Pb202</li> </ul>

Source: Company, Nuvama Research

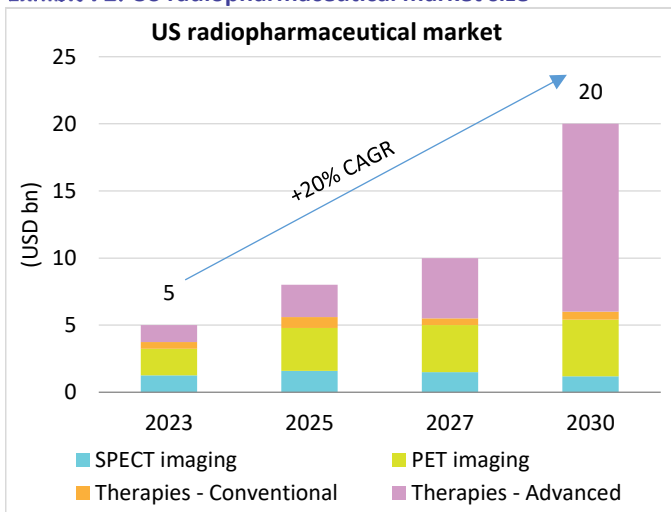
## Radiopharmaceutical industry trends and growth drivers

The US radiopharmaceutical market stood at ~USD5bn in 2023, and is likely to grow to ~USD20bn in 2030 (~20% CY23–CY30E CAGR). This growth is likely to be driven by superior imaging and therapeutics profiles, new emerging isotopes with low off-target toxicity and increasing use cases for unmet needs.

The PET imaging market growth is being fuelled by novel products (e.g. PSMA sales exceeded USD1bn in less than two years of launch). PET market growth is being driven by strong fundamentals such as better imaging, significantly lower false negatives and faster examination time, and its applications extend beyond oncology to cardiology scans and Alzheimer's, for instance.

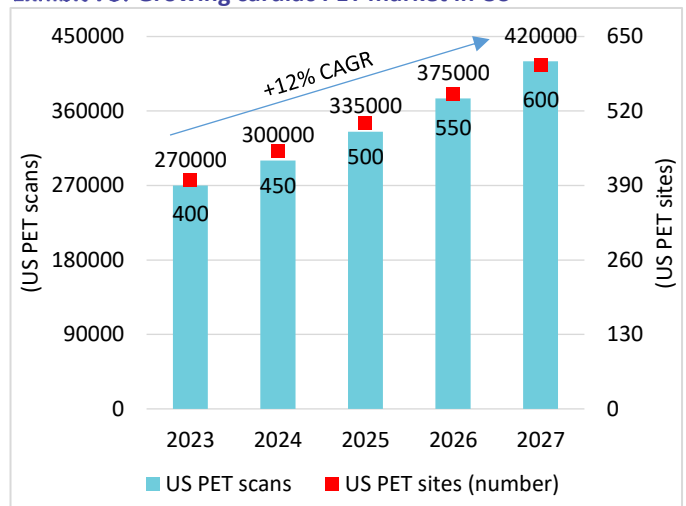
The advanced radiopharmaceutical therapy market is witnessing the launch of differentiated, high value and high efficacy products, e.g. Pluvicto used for prostate cancer exceeding USD1bn sales. Key trends include favourable pharmacological profiles with lower toxicity and higher efficacy, especially in areas with unmet needs, new/emerging isotope profiles with targeted effects, and lower off-target impacts (such as Lu177 and Ac225) and application in therapeutic areas beyond oncology such as neurological conditions.

Exhibit 72: US radiopharmaceutical market size



Source: Company, Nuvama Research

Exhibit 73: Growing cardiac PET market in US



Source: Company, Nuvama Research

## Radio pharmacies

A radio pharmacy dispenses and distributes radiopharmaceutical products. Radio pharmacies operate within a close distance of the healthcare provider due to short half-life. Due to just in time ordering, radio pharmacies need to manage an intricate and agile distribution network. The compounding process, a practice in which a licensed pharmacist, physician, or, in the case of an outsourcing facility, a person under the supervision of a licensed pharmacist, combines, mixes, or alters ingredients of a drug to create a medication tailored to the needs of an individual patient, is intensive and carried under strict cGMP practices.

The handling, preparation, and storage of radiopharmaceutical agents requires specialised training and facilities. Hence, radio pharmacies have high operating costs due to the complexity and specialised staffing requirements. Radio pharmacies are overseen by several regulatory bodies including UN Nuclear Regulatory Commission, USFDA, US Department of Energy, US Department of Transportation, etc, not to mention compliance with stringent regulations. The US radio pharmacy market is a consolidated with top-three radio pharmacy networks dispensing and distributing 70%-plus products.

**Exhibit 74: Consolidated market with high entry barriers**

	Number of radiopharmacies in the US	SPECT pharmacies	PET pharmacies	Number of hospitals served in the US
Jubilant Radiopharma	46	✓	✓	1800
Sofie	14		✓	200
CardinalHealth	160+	✓	✓	4100
Siemens Healthineers	41		✓	700
RLS	31	✓		900
PharmaLogic	42	✓	✓	200

Source: Company, Nuvama Research

Demand for novel PET diagnostics products (e.g. Cyclotron based pharmacies for F-18 PSMA, Alzheimer’s products) is on the rise. Furthermore, SPECT pharmacies can handle generator-based PET products, (e.g. Ga-68 PSMA). The therapeutics-dispensing share of pharmacy networks is expected to grow, driven by stringent USP 825 regulations (standards for the preparation, compounding, dispensing, and repackaging of radiopharmaceuticals, including all sterile radioactive material that must maintain sterility through manipulations prior to administration).

Most clinics and hospitals do not want to invest in the clean room infrastructure for dispensing and big pharma companies have limited capabilities in distributing and handling radioactive waste. This bodes well for existing players. Emerging radioisotopes landscape such as Rb-Sr, Ga-68, Cu-64, Lu-177 and Ac-225 are also leading to development of new PET imaging and theranostic products, which would further fuel radio pharmacies’ share of dispensing and distributing these products.

**Exhibit 75: Summary of radiopharmaceutical process**



Source: International Atomic Energy Agency, Nuvama Research

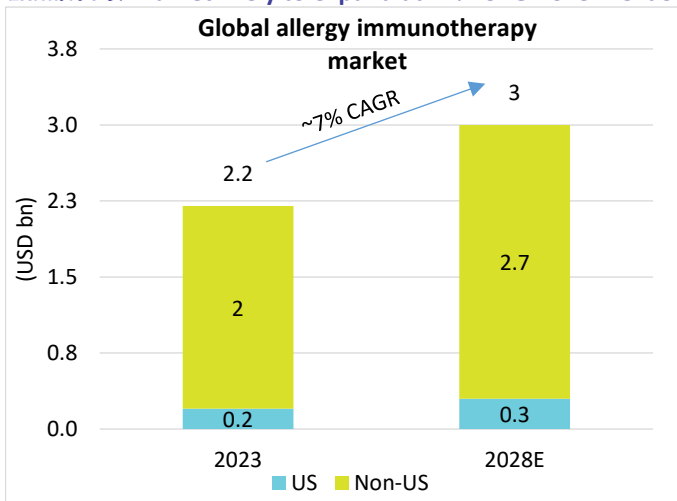
## Allergy immunotherapy

Allergy immunotherapy refers to the treatment for allergic reactions against a variety of allergens including pollen, mould, PET dander, food and insect (treated by venom immunotherapy). In this treatment, repeated shots of allergic antigens are provided to develop immunity and eventually cure allergy over a period. There are two kinds of delivery mechanisms: sublingual and subcutaneous.

- Sublingual immunotherapy procedure involves placing an allergen under the tongue. Immunotherapy treats the condition itself, unlike other medications or antihistamines, which treat the symptoms.
- Subcutaneous immunotherapy treatment involves injecting specific allergens, commonly known as an allergy shot, and are mainly recommended for patients with asthma and allergic rhinitis.

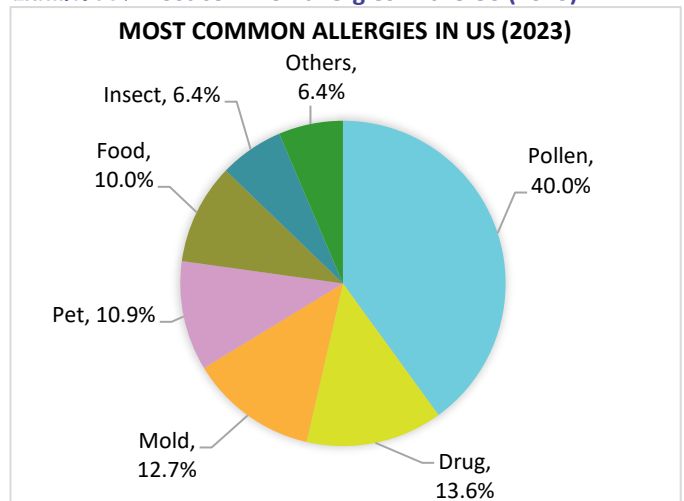
The global market is poised to reach ~USD3bn by 2028, expanding at a CAGR of ~7% (from CY23) led by increasing allergy cases, growing awareness of allergy treatment and advancement in treatment options. In the US, more than 50mn people suffer from some type of an allergy annually and there are more than 50 deaths in the US annually due to Anaphylaxis, a medical emergency and a life-threatening acute hypersensitivity allergic reaction.

**Exhibit 76: Market likely to expand at ~7% CAGR over next 5Y**



Source: Company, Nuvama Research

**Exhibit 77: Most common allergies in the US (2023)**

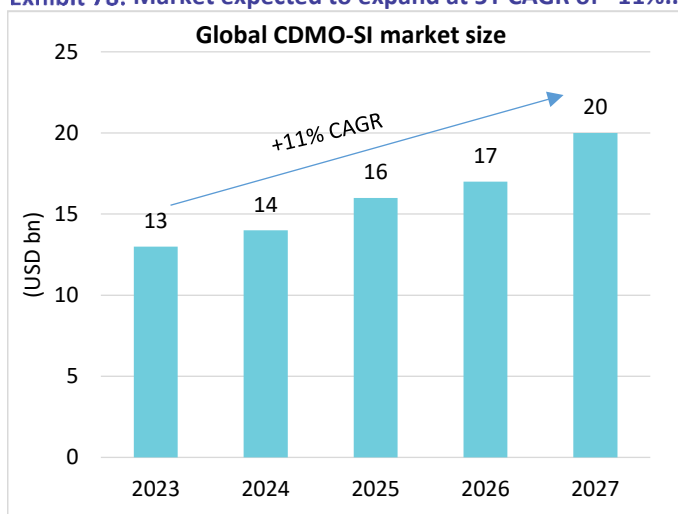


Source: Company, Nuvama Research

## CDMO – sterile injectables

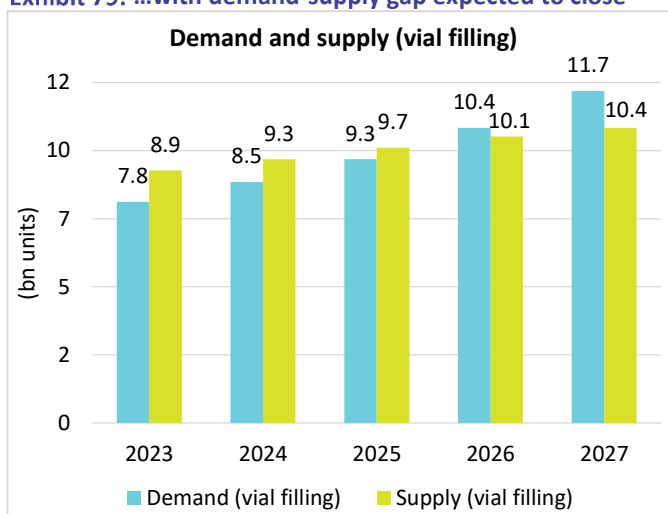
The business is engaged in fill-and-finish for sterile injectables, where a sterile drug is transferred from a filling needle into a sterile vial and then a stopper is applied, except in cases, where the drug requires sterile lyophilisation. The global industry is likely to touch the USD20bn mark in 2027, expanding at a CAGR of ~11% (from CY23). The increasing number of drugs/injectables in the development pipeline led by biologics (65%-plus of pipeline) and LOEs, likely increase in outsourcing driven by limited internal capacities and capabilities, cost-reduction initiatives, drug shortages and the closing of the wide demand-supply gap are some industry growth drivers.

**Exhibit 78: Market expected to expand at 5Y CAGR of ~11%...**



Source: Company, Nuvama Research

**Exhibit 79: ...with demand-supply gap expected to close**



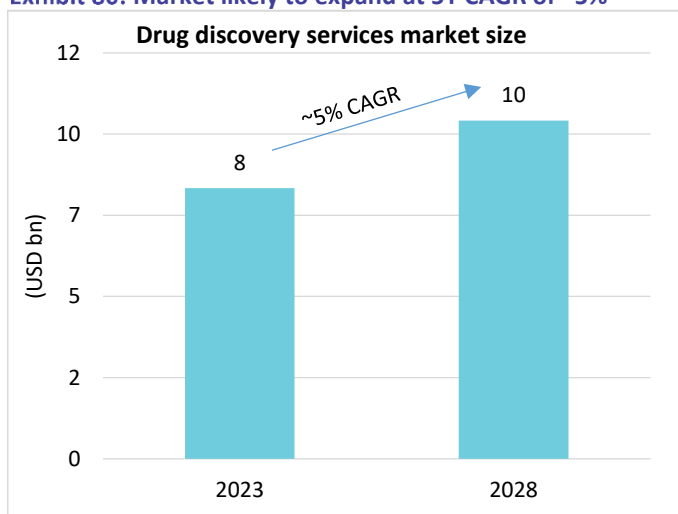
Source: Company, Nuvama Research

## CRDMO: Drug discovery, CDMO and API

The drug discovery services market size is likely to go up to ~USD10bn by 2028 (from ~USD8bn in 2023). This should be driven by the fact that large pharma companies are looking to de-risk their supply chain by adding ‘friend-sourcing’ locations, given the BIOSECURE Act recently passing muster in the House of Representatives in the US. Moreover, early signs of recovery are there in the biotech funding scenario with further recovery likely in late FY25, alongside a rise in specialised discovery technologies such as ADCs and oligonucleotides.

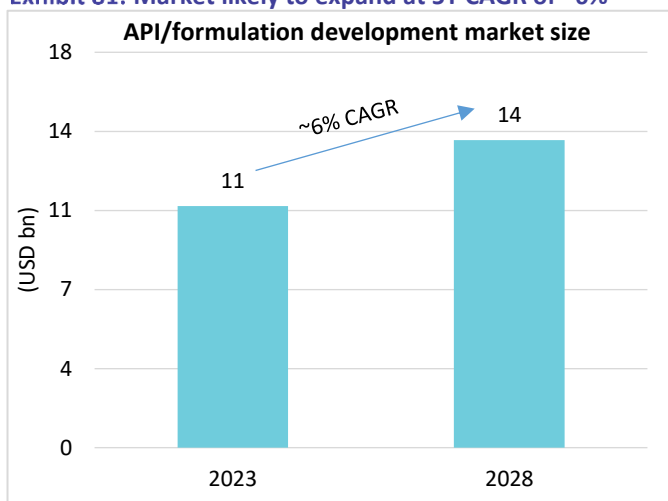
The API/formulation development market, which stood at ~USD11bn in 2023, is expected to expand at a five-year CAGR of ~6% to ~USD14bn in 2028. The growth drivers for this sector are an increased focus on integrated service offering ranging from discovery to development, rapid momentum in specialised CDMO services to support increasing number of clinical trials and rising share of biologics along with increasing investments in biologics for new niche modalities.

**Exhibit 80: Market likely to expand at 5Y CAGR of ~5%**



Source: Company, Nuvama Research

**Exhibit 81: Market likely to expand at 5Y CAGR of ~6%**

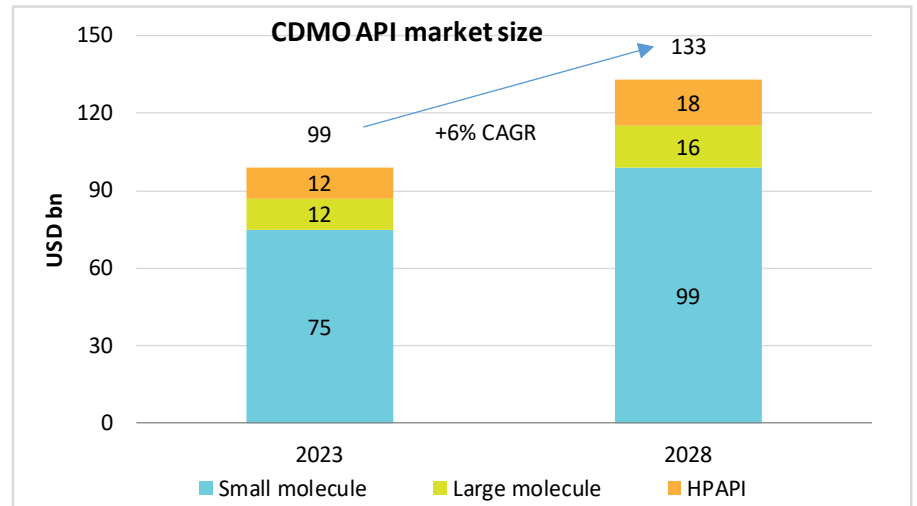


Source: Company, Nuvama Research

The CDMO API market is expected to cross the ~USD130bn mark in 2028, expanding at a 6% CAGR over CY23–28 with high-potent API likely to outpace at a CAGR of 8%. The market is currently dominated by small molecules.

Cost competitiveness is key in this industry, including backward integration into major KSMS to mitigate pricing pressures on the finished good formulation companies. The rising interest of companies in manufacturing custom generics for innovators, ensuring higher margins and the move towards friend sourcing becoming increasingly apparent (reducing concentration risk of generics API manufacturing) are further positives for this sector.

**Exhibit 82: CDMO API market likely to breach USD130bn mark by 2028**



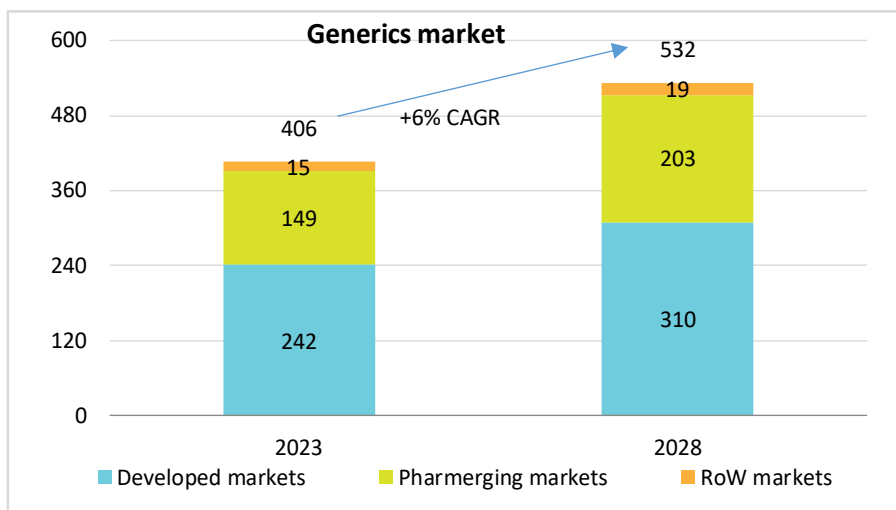
Source: Company, Nuvama Research

## Generics

Generic drugs accounted for ~25% of the total pharmaceutical market by sales value in 2023 and are likely to expand at a CAGR of 5–6% between 2023 and 2028 to a value of ~USD532bn. Regulatory initiatives and the push from public and private payers have led to generics market's growth.

The overall market is growing on the back of an increase in chronic disease prevalence, loss of exclusivity for innovator products but negated by pricing pressure in select markets. Among developed markets, the US is likely to grow ~2% with early signs of narrowing price reductions. Legacy generics are expecting price reduction of ~7% in FY24 versus 12% in FY23. The non-US market is likely to grow by 5–7% with margins and regulatory approval timelines varying by market. The India market is likely to grow in excess of 10% with the key differentiators being brand building and in-clinic effectiveness of sales team.

Exhibit 83: Global generics market likely to post reasonable growth till 2028

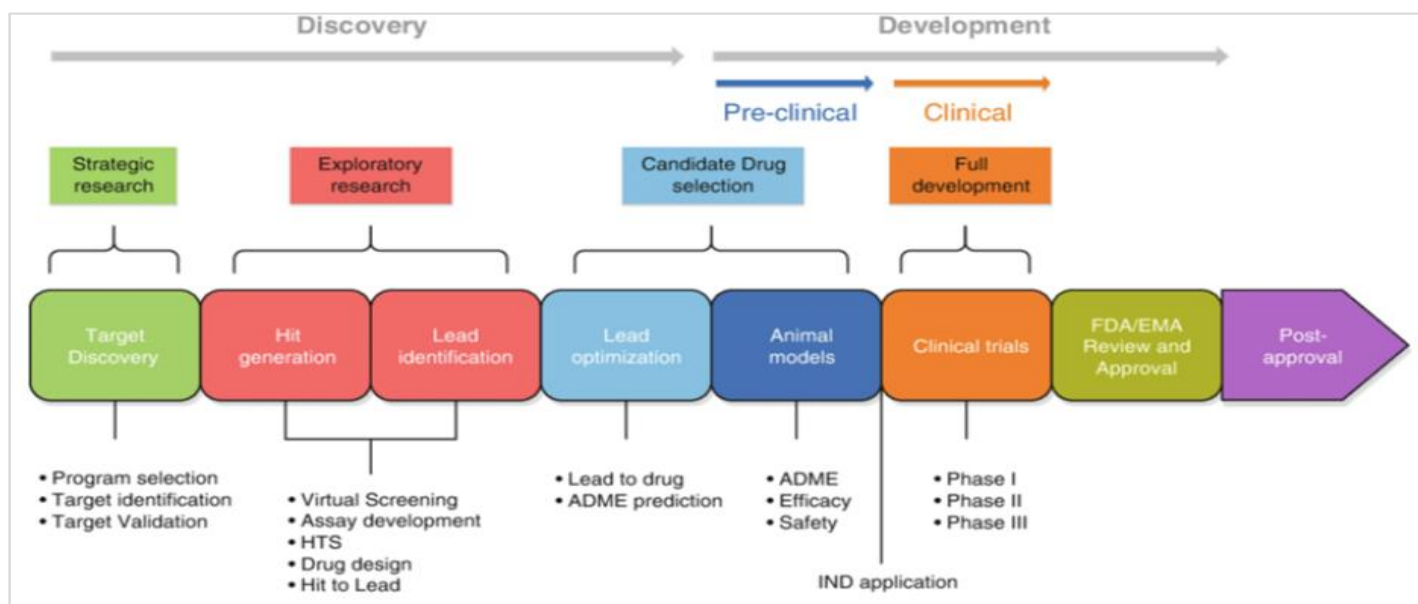


Source: Company, Nuvama Research

## Proprietary novel drugs

Several core steps are carried out during the drug discovery and development process. The discovery process includes strategic research (target discovery) and exploratory research (hit generation and lead identification) followed by lead optimisation. The development process includes processes such as animal models, clinical trials, regulatory approvals and—finally—post-approval processes.

Exhibit 84: Drug discovery and development process



Source: Company, Nuvama Research



## Additional Data

### Management

Chairman	Shyam S. Bhartia
Co-Chairman	Hari S. Bhartia
Managing Director	Priyavrat Bhartia
Joint Managing Director	Arjun S Bhartia
Auditor	Walker Chandiook & Co. LLP

### Holdings – Top 10\*

	% Holding		% Holding
East Bridge Cap	7.34	Vanguard Group	1.92
Rekha Jhunjhunw	6.57	Abakus Emergin	1.20
Norges Bank	3.74	Dimensional Fun	1.10
Miller Holdings	3.28	Blackrock	0.87
Quant Money Man	1.92	Kotak AMC	0.37

\*Latest public data

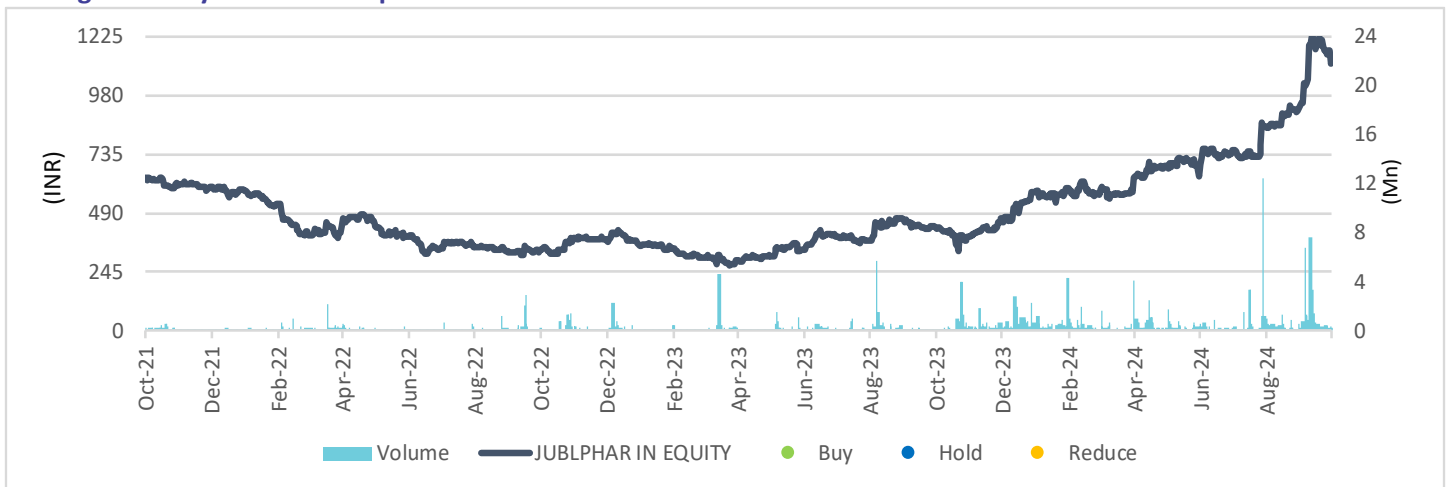
### Recent Company Research

Date	Title	Price	Reco

### Recent Sector Research

Date	Name of Co./Sector	Title
23-Sep-24	Aurobindo Pharma	New opportunities on the horizon; <i>Visit Note</i>
19-Sep-24	Ajanta Pharma	Building sustainable efficiencies; <i>Company Update</i>
03-Sep-24	Alkem Laboratories	Margin expansion key priority; <i>Company Update</i>

### Rating and Daily Volume Interpretation



Source: Bloomberg, Nuvama research

### Rating Rationale & Distribution: Nuvama Research

Rating	Expected absolute returns over 12 months	Rating Distribution
Buy	15%	215
Hold	<15% and >-5%	65
Reduce	<-5%	26

## DISCLAIMER

Nuvama Wealth Management Limited (defined as "NWML" or "Research Entity") a company duly incorporated under the Companies Act, 1956 (CIN No L67110MH1993PLC344634) having its Registered office situated at 801- 804, Wing A, Building No. 3, Inspire BKC, G Block, Bandra Kurla Complex, Bandra East, Mumbai – 400 051 is regulated by the Securities and Exchange Board of India ("SEBI") and is licensed to carry on the business of broking, Investment Adviser, Research Analyst and other related activities. Name of Compliance/Grievance officer: Mr. Atul Bapna, E-mail address: [complianceofficer.nwm@nuvama.com](mailto:complianceofficer.nwm@nuvama.com) Contact details +91 (22) 6623 3478 Investor Grievance e-mail address: [grievance.nwm@nuvama.com](mailto:grievance.nwm@nuvama.com)

This Report has been prepared by NWML in the capacity of a Research Analyst having SEBI Registration No.INH000011316 and Enlistment no. 5723 with BSE and distributed as per SEBI (Research Analysts) Regulations 2014. This report does not constitute an offer or solicitation for the purchase or sale of any financial instrument or as an official confirmation of any transaction. Securities as defined in clause (h) of section 2 of the Securities Contracts (Regulation) Act, 1956 includes Financial Instruments and Currency Derivatives. The information contained herein is from publicly available data or other sources believed to be reliable. This report is provided for assistance only and is not intended to be and must not alone be taken as the basis for an investment decision. The user assumes the entire risk of any use made of this information. Each recipient of this report should make such investigation as it deems necessary to arrive at an independent evaluation of an investment in Securities referred to in this document (including the merits and risks involved), and should consult his own advisors to determine the merits and risks of such investment. The investment discussed or views expressed may not be suitable for all investors.

This information is strictly confidential and is being furnished to you solely for your information. This information should not be reproduced or redistributed or passed on directly or indirectly in any form to any other person or published, copied, in whole or in part, for any purpose. This report is not directed or intended for distribution to, or use by, any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction, where such distribution, publication, availability or use would be contrary to law, regulation or which would subject NWML and associates, subsidiaries / group companies to any registration or licensing requirements within such jurisdiction. The distribution of this report in certain jurisdictions may be restricted by law, and persons in whose possession this report comes, should observe, any such restrictions. The information given in this report is as of the date of this report and there can be no assurance that future results or events will be consistent with this information. This information is subject to change without any prior notice. NWML reserves the right to make modifications and alterations to this statement as may be required from time to time. NWML or any of its associates / group companies shall not be in any way responsible for any loss or damage that may arise to any person from any inadvertent error in the information contained in this report. NWML is committed to providing independent and transparent recommendation to its clients. Neither NWML nor any of its associates, group companies, directors, employees, agents or representatives shall be liable for any damages whether direct, indirect, special or consequential including loss of revenue or lost profits that may arise from or in connection with the use of the information. Our proprietary trading and investment businesses may make investment decisions that are inconsistent with the recommendations expressed herein. Past performance is not necessarily a guide to future performance. The disclosures of interest statements incorporated in this report are provided solely to enhance the transparency and should not be treated as endorsement of the views expressed in the report. The information provided in these reports remains, unless otherwise stated, the copyright of NWML. All layout, design, original artwork, concepts and other Intellectual Properties, remains the property and copyright of NWML and may not be used in any form or for any purpose whatsoever by any party without the express written permission of the copyright holders.

NWML shall not be liable for any delay or any other interruption which may occur in presenting the data due to any reason including network (Internet) reasons or snags in the system, break down of the system or any other equipment, server breakdown, maintenance shutdown, breakdown of communication services or inability of the NWML to present the data. In no event shall NWML be liable for any damages, including without limitation direct or indirect, special, incidental, or consequential damages, losses or expenses arising in connection with the data presented by the NWML through this report.

We offer our research services to clients as well as our prospects. Though this report is disseminated to all the customers simultaneously, not all customers may receive this report at the same time. We will not treat recipients as customers by virtue of their receiving this report.

NWML and its associates, officer, directors, and employees, research analyst (including relatives) worldwide may: (a) from time to time, have long or short positions in, and buy or sell the Securities, mentioned herein or (b) be engaged in any other transaction involving such Securities and earn brokerage or other compensation or act as a market maker in the financial instruments of the subject company/company(ies) discussed herein or act as advisor or lender/borrower to such company(ies) or have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of research report or at the time of public appearance. (c) NWML may have proprietary long/short position in the above mentioned scrip(s) and therefore should be considered as interested. (d) The views provided herein are general in nature and do not consider risk appetite or investment objective of any particular investor; readers are requested to take independent professional advice before investing. This should not be construed as invitation or solicitation to do business with NWML (e) Registration granted by SEBI and certification from NISM in no way guarantee performance of NWML or provide any assurance of returns to investors and clients.

NWML or its associates may have received compensation from the subject company in the past 12 months. NWML or its associates may have managed or co-managed public offering of securities for the subject company in the past 12 months. NWML or its associates may have received compensation for investment banking or merchant banking or brokerage services from the subject company in the past 12 months. NWML or its associates may have received any compensation for products or services other than investment banking or merchant banking or brokerage services from the subject company in the past 12 months. NWML or its associates have not received any compensation or other benefits from the Subject Company or third party in connection with the research report. Research analyst or his/her relative or NWML's associates may have financial interest in the subject company. NWML and/or its Group Companies, their Directors, affiliates and/or employees may have interests/ positions, financial or otherwise in the Securities/Currencies and other investment products mentioned in this report. NWML, its associates, research analyst and his/her relative may have other potential/material conflict of interest with respect to any recommendation and related information and opinions at the time of publication of research report or at the time of public appearance.

Participants in foreign exchange transactions may incur risks arising from several factors, including the following: ( i) exchange rates can be volatile and are subject to large fluctuations; ( ii) the value of currencies may be affected by numerous market factors, including world and national economic, political and regulatory events, events in equity and debt markets and changes in interest rates; and (iii) currencies may be subject to devaluation or government imposed exchange controls which could affect the value of the currency. Investors in securities such as ADRs and Currency Derivatives, whose values are affected by the currency of an underlying security, effectively assume currency risk.

Research analyst has served as an officer, director or employee of subject Company: No

NWML has financial interest in the subject companies: No

NWML's Associates may have actual / beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report.

Research analyst or his/her relative has actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report: No

NWML has actual/beneficial ownership of 1% or more securities of the subject company at the end of the month immediately preceding the date of publication of research report: No

Subject company may have been client during twelve months preceding the date of distribution of the research report.

There were no instances of non-compliance by NWML on any matter related to the capital markets, resulting in significant and material disciplinary action during the last three years. A graph of daily closing prices of the securities is also available at [www.nseindia.com](http://www.nseindia.com)

## Analyst Certification:

The analyst for this report certifies that all of the views expressed in this report accurately reflect his or her personal views about the subject company or companies and its or their securities, and no part of his or her compensation was, is or will be, directly or indirectly related to specific recommendations or views expressed in this report.

## Additional Disclaimers

### Disclaimer for U.S. Persons

This research report is a product of NWML, which is the employer of the research analyst(s) who has prepared the research report. The research analyst(s) preparing the research report is/are resident outside the United States (U.S.) and are not associated persons of any U.S. regulated broker-dealer and therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.

This report is intended for distribution by NWML only to "Major Institutional Investors" as defined by Rule 15a-6(b)(4) of the U.S. Securities and Exchange Act, 1934 (the Exchange Act) and interpretations thereof by U.S. Securities and Exchange Commission (SEC) in reliance on Rule 15a 6(a)(2). If the recipient of this report is not a Major Institutional Investor as specified above, then it should not act upon this report and return the same to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any U.S. person, which is not the Major Institutional Investor.

In reliance on the exemption from registration provided by Rule 15a-6 of the Exchange Act and interpretations thereof by the SEC in order to conduct certain business with Major Institutional Investors, NWML has entered into an agreement with a U.S. registered broker-dealer, Nuvama Financial Services Inc. (formerly Edelweiss Financial Services Inc.) ("NFSI"). Transactions in securities discussed in this research report should be effected through NFSI.

### Disclaimer for U.K. Persons

The contents of this research report have not been approved by an authorised person within the meaning of the Financial Services and Markets Act 2000 ("FSMA").

In the United Kingdom, this research report is being distributed only to and is directed only at (a) persons who have professional experience in matters relating to investments falling within Article 19(5) of the FSMA (Financial Promotion) Order 2005 (the "Order"); (b) persons falling within Article 49(2)(a) to (d) of the Order (including high net worth companies and unincorporated associations); and (c) any other persons to whom it may otherwise lawfully be communicated (all such persons together being referred to as "relevant persons").

This research report must not be acted on or relied on by persons who are not relevant persons. Any investment or investment activity to which this research report relates is available only to relevant persons and will be engaged in only with relevant persons. Any person who is not a relevant person should not act or rely on this research report or any of its contents. This research report must not be distributed, published, reproduced or disclosed (in whole or in part) by recipients to any other person.

### Disclaimer for Canadian Persons

This research report is a product of NWML, which is the employer of the research analysts who have prepared the research report. The research analysts preparing the research report are resident outside the Canada and are not associated persons of any Canadian registered adviser and/or dealer and, therefore, the analysts are not subject to supervision by a Canadian registered adviser and/or dealer, and are not required to satisfy the regulatory licensing requirements of the Ontario Securities Commission, other Canadian provincial securities regulators, the Investment Industry Regulatory Organization of Canada and are not required to otherwise comply with Canadian rules or regulations regarding, among other things, the research analysts' business or relationship with a subject company or trading of securities by a research analyst.

This report is intended for distribution by NWML only to "Permitted Clients" (as defined in National Instrument 31-103 ("NI 31-103")) who are resident in the Province of Ontario, Canada (an "Ontario Permitted Client"). If the recipient of this report is not an Ontario Permitted Client, as specified above, then the recipient should not act upon this report and should return the report to the sender. Further, this report may not be copied, duplicated and/or transmitted onward to any Canadian person.

NWML is relying on an exemption from the adviser and/or dealer registration requirements under NI 31-103 available to certain international advisers and/or dealers. Please be advised that (i) NWML is not registered in the Province of Ontario to trade in securities nor is it registered in the Province of Ontario to provide advice with respect to securities; (ii) NWML's head office or principal place of business is located in India; (iii) all or substantially all of NWML's assets may be situated outside of Canada; (iv) there may be difficulty enforcing legal rights against NWML because of the above; and (v) the name and address of the NWML's agent for service of process in the Province of Ontario is: Bamac Services Inc., 181 Bay Street, Suite 2100, Toronto, Ontario M5J 2T3 Canada.

### Disclaimer for Singapore Persons

In Singapore, this report is being distributed by Nuvama Investment Advisors Private Limited (NIAPL) (Previously Edelweiss Investment Advisors Private Limited ("EIAPL")) (Co. Reg. No. 201016306H) which is a holder of a capital markets services license and an exempt financial adviser in Singapore and (ii) solely to persons who qualify as "institutional investors" or "accredited investors" as defined in section 4A(1) of the Securities and Futures Act, Chapter 289 of Singapore ("the SFA"). Pursuant to regulations 33, 34, 35 and 36 of the Financial Advisers Regulations ("FAR"), sections 25, 27 and 36 of the Financial Advisers Act, Chapter 110 of Singapore shall not apply to NIAPL when providing any financial advisory services to an accredited investor (as defined in regulation 36 of the FAR. Persons in Singapore should contact NIAPL in respect of any matter arising from, or in connection with this publication/communication. This report is not suitable for private investors.

### Disclaimer for Hong Kong persons

This report is distributed in Hong Kong by Nuvama Investment Advisors (Hong Kong) Private Limited (NIAHK) (Previously Edelweiss Securities (Hong Kong) Private Limited (ESHK)), a licensed corporation (BOM -874) licensed and regulated by the Hong Kong Securities and Futures Commission (SFC) pursuant to Section 116(1) of the Securities and Futures Ordinance "SFO". This report is intended for distribution only to "Professional Investors" as defined in Part I of Schedule 1 to SFO. Any investment or investment activity to which this document relates is only available to professional investor and will be engaged only with professional investors." Nothing here is an offer or solicitation of these securities, products and services in any jurisdiction where their offer or sale is not qualified or exempt from registration. The report also does not constitute a personal recommendation or take into account the particular investment objectives, financial situations, or needs of any individual recipients. The Indian Analyst(s) who compile this report is/are not located in Hong Kong and is/are not licensed to carry on regulated activities in Hong Kong and does not / do not hold themselves out as being able to do so.

INVESTMENT IN SECURITIES MARKET ARE SUBJECT TO MARKET RISKS. READ ALL THE RELATED DOCUMENTS CAREFULLY BEFORE INVESTING.

---

Abneesh Roy

Head of Research Committee

Abneesh.Roy@nuvama.com

---



Nuvama Institutional Equities, Inspire BKC, G Block, 8th Floor, Bandra Kurla Complex, Mumbai 400 051  
Tel: +91 22 6620 3030. Email: [research@nuvama.com](mailto:research@nuvama.com)