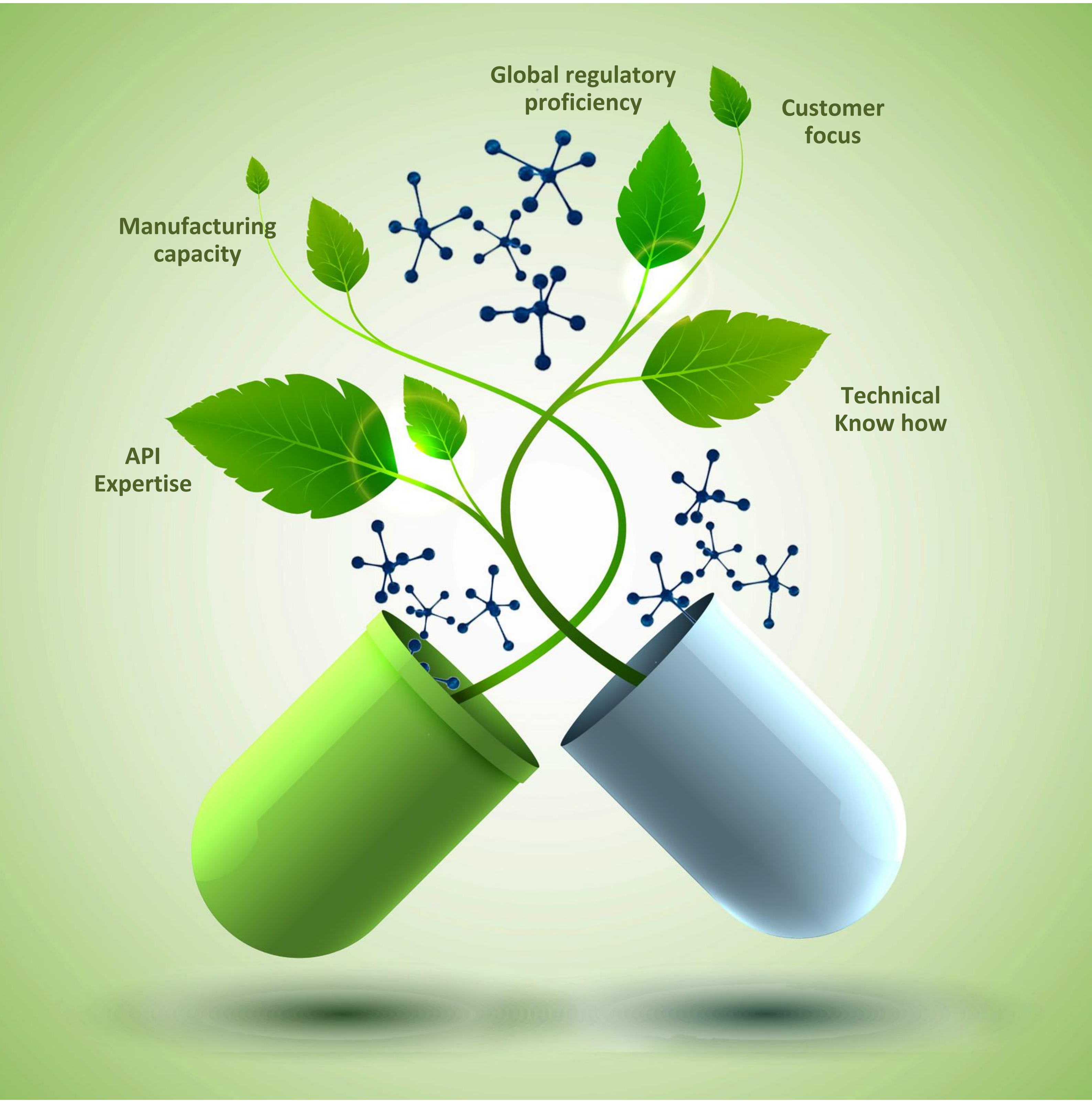
Solara Active Pharma Sciences



'Partner of Choice' in API/CRAMS space

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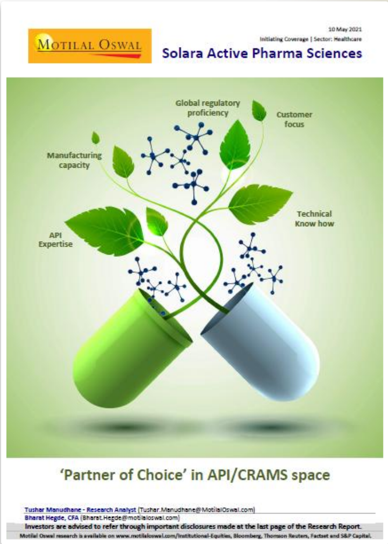


Solara: 'Partner of Choice' in API/CRAMS space

Solara Active Pharma Sciences

BSE Sensex	S&P CNX
49,206	14,823

Bloomberg	SOLARA IN
Equity Shares (m)	36
M.Cap.(INRb)/(USDb)	56.2 / 0.8
52-Week Range (INR)	1685 / 439
1, 6, 12 Rel. Per (%)	17/26/156
12M Avg Val (INR M)	168

Financials & valuations (INR b)

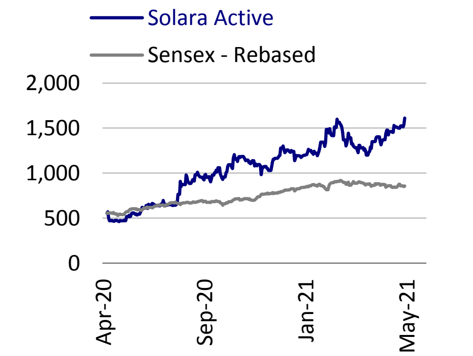
Y/E MARCH	2021	2022E	2023E
Sales	16.2	25.3	29.8
EBITDA	3.9	6.5	7.8
Adj. PAT	2.2	3.9	4.7
EBIT Margin (%)	17.1	20.0	21.3
Cons. Adj. EPS (INR)	45.0	78.4	96.3
EPS Gr. (%)	93.2	74.3	22.8
BV/Sh. (INR)	442.2	529.2	632.2
Ratios			
Net D:E	0.2	0.3	0.15
RoE (%)	16.6	22.1	22.7
RoCE (%)	15.7	20.3	20.4
Payout (%)	13.3	22.5	22.0
Valuations			
P/E (x)	34.6	19.9	16.2
EV/EBITDA (x)	15.3	12.9	10.3
Div. Yield (%)	0.4	1.0	1.2
FCF Yield (%)	(0.3)	(3.0)	8.5
EV/Sales (x)	3.7	3.3	2.69

Shareholding pattern (%)

As On	Mar-21	Dec-20	Mar-20
Promoter	44.1	44.1	44.1
DII	4.0	4.6	4.6
FII	13.7	12.9	12.9
Others	38.3	38.4	38.4

FII Includes depository receipts

Stock Performance (1-year)



CMP: INR1,565 TP: INR2,000 (+28%) BUY

'Partner of Choice' in API/CRAMS space

- **Solara Active Pharma Sciences (SOLARA) has a differentiated business model, formed by demerging the API business of Strides Pharma and integrating it with the Human API business of Sequent Scientific. While young in terms of listing, it has almost three decades of experience, with sales of INR16.2b / an EBITDA margin of 23.9% over the past 12M.**
- **SOLARA has built a multi-pronged strategy through a) capacity expansion in core products, b) enhanced offerings, c) expansion into newer geographies, and d) acquiring new customers – to benefit from formulators' inclination to reduce their dependency on select regions to procure APIs.**
- **In addition to the API base business, the merger of the Aurore Life Science (ALS) business would accelerate SOLARA's CRAMS business –~INR800m over the past 12M v/s INR1.5b for ALS. ALS's established relationships with the innovator for the CRAMS business bodes well for SOLARA to cross-sell its other offerings as well. Additionally, this would enable SOLARA to gain entry into the ARV product segment and strengthen its position in Japan / South Korea, along with improving its footprint in China.**
- **SOLARA has a wide gamut of service offerings across the value chain of new chemical entities, making it suitable for increased CRAMS offerings outsourced by the innovator.**
- **Overall, we expect a 42%/46% CAGR in EBITDA/PAT over FY21–23, led by strong traction in both API/CRAMS, well supported by merger of ALS.**
- **We value SOLARA at 13x 12M forward EBITDA, factoring in a) favourable prospects in the API industry, b) cost efficiency driving market share leadership in base products, c) upside from ALS merger, d) wide portfolio offerings, e) diversified facilities, and f) encouraging CRAMS opportunity.**
- **Initiate with BUY, with Target Price of INR2,000.**

Favorable macro/capacity additions – key to achieve 30% API sales CAGR over FY21–23E

- The primary API demand drivers remain steady, supported by a rising aging population in developed countries, increased affordability in developing countries, and faster genericization. Supply-side disruption due to a) environmental concerns in China and b) de-risking efforts by customers to lower country-specific dependency has significantly improved the business prospects of Indian API companies.
- Given this backdrop, SOLARA's API segment (~89% of sales) is well-placed to benefit from the opportunity on account of a) an established presence (leading market share in base products, coupled with additional capacity to outperform industry growth), b) new launches (10% of API sales in FY21), and c) a growing presence in newer markets.
- The recent merger with ALS a) increases its quantum of product offerings (40+), including some niche products, b) enhances the product pipeline (20+ DMFs filed), and c) increases its knowledge base and production capacity. Accordingly, we expect a 30% sales CAGR for this segment over FY21–23.

Capability/Capacity in place for CRAMS; execution is key

- SOLARA has built capabilities across the value chain, from the pre-clinical to the commercial phases in the CRAMS segment (~11% of sales). It has also set up a dedicated facility for this segment to manufacture higher volumes. Considering the cost advantage, the availability of technical skill sets is the key driver for India's CRAMS industry. Based on the right mix of resources/capacity and addition of ALS CRAMS business, we expect SOLARA to quadruple CRAMS sales in FY23 to INR3.4b.

Valuation and view

- With a focus on new launches, geographical expansion, augmented capacity from the new Vizag plant, better traction in base products and addition of ALS business, we expect a 36%/42%/46% sales/EBITDA/PAT CAGR to INR29.8b/INR7.8b/INR4.7b over FY21–23. We value SOLARA at 13x 12M forward EBITDA, arriving at TP of INR2,000.
- In the Bull case scenario, we factor in faster execution in both API and CRAMS as well as higher market share gains, leading to a 47% EBITDA CAGR over FY21–23. Accordingly, we assign a higher multiple of 14x 12M forward EBITDA to arrive at TP of INR2,190, implying an upside of 47% from current levels.
- Slower execution and the escalation of regulatory issues may lead to a 39% EBITDA CAGR over FY21–23. We assign a lower multiple of 10x 12M forward earnings in our Bear case scenario to arrive at TP of INR1,420, implying a limited downside of 10% from current levels.
- We initiate SOLARA with a **Buy** rating, with a 28% upside from current levels.

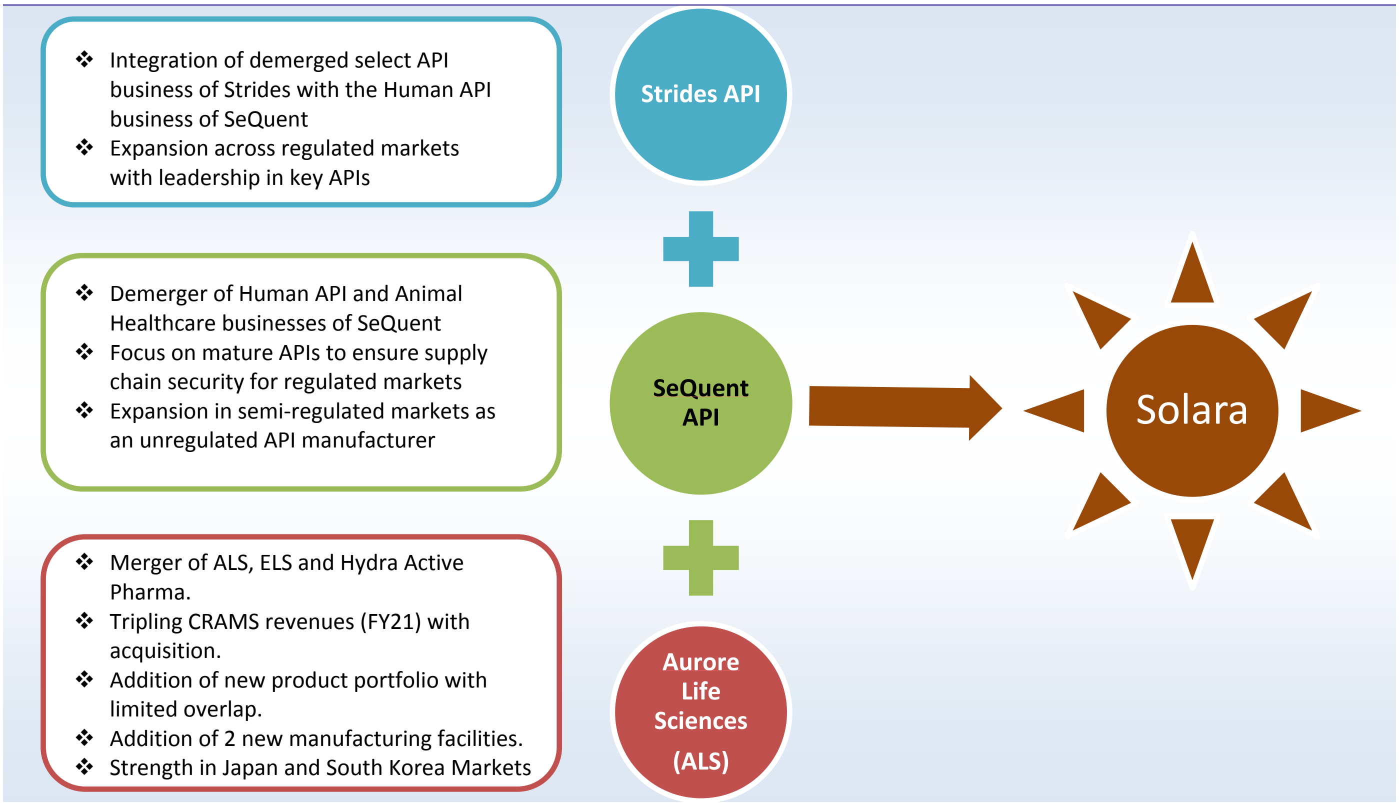
Exhibit 1: Valuation comparison table

Company Name	Price (INR)	Market Cap (INRb)	EPS (INR)			ROE (%)			P/E(x)		EV/EBITDA(x)	
			FY21E	FY22E	FY23E	FY21E	FY22E	FY23E	FY22E	FY23E	FY22E	FY23E
Divi's Lab	4030	1070	76	98	127	25	26	27	41	32	29	22
Laurus Labs	488	262	18	24	29	45	41	36	20	17	12	10
Granules	348	89	22	25	29	27	25	24	14	12	9	7
Ipca	2057	260	94	94	101	29	23	21	22	20	16	13
Shilpa Medicare	442	36	15	18	22	8	9	11	25	20	17	14
Neuland*	2680	34	63	76	97	11	12	13	35	28	20	16
Aarti Drugs*	782	73	32	40	52	37	33	32	20	15	13	10
Caplin Point*	578	44	33	41	44	23	23	22	14	13	10	9
Syngene*	573	229	9	11	14	15	14	17	53	40	29	23
Solara	**1559**	**56**	**45**	**78**	**96**	**17**	**22**	**23**	**20**	**16**	**13**	**10**

Note: * - Bloomberg estimates; Source: MOFSL, Bloomberg

Business description – Building robust base in API/CRAMS segment

Exhibit 2: Solara snapshot



Source: MOFSL, Company

SOLARA = API businesses of Strides Pharma + SeQuent Scientific and API/CRAMS business of ALS

- Solara was established by integrating the API businesses of Strides Pharma with the Human API business of SeQuent Scientific. Thus, SOLARA has **two business segments –** Manufacturing APIs (~90% of sales) and Contract Research and Manufacturing (CRAMS; ~10% of sales).
- Solara's portfolio comprises **API** in the Anthelmintic, Anti-Malarial, Anti-Infective, Anti-Psychotic, Anti-Infective, and Hyperkalemic categories. SOLARA's API capabilities span niche therapeutic categories, and the company also has proven capabilities in complex products such as APIs based on polymers and injectables.
- In the **CRAMS** segment, SOLARA provides manufacturing, analytical, impurity synthesis, and profiling services to global pharma companies. The company provides services during the research as well as commercial phase of the product.
- Although it is a young company (established in 2017 and listed in 2018), SOLARA brings 30+ years of experience in API/intermediates manufacturing and CDMO from the legacy businesses of Strides and SeQuent.
- The recent merger with ALS would further enhance capabilities as well as offerings in both CRAMS as well as API. On a combined basis, Solara would have eight **globally compliant manufacturing plants,** with 3,000kl+ capacity, and capabilities in high vacuum distillation, hydrogenation, halogenation, the Grignard reaction, and polymer chemistry, among others. It would have a 3,200+ strong workforce – this includes a 310+ strong R&D team, which has enabled it to file 150+ DMFs to date.

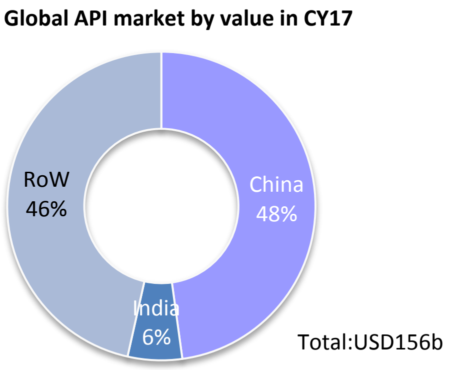
Prospects favorable for Indian API industry

- **Considering the increased demand for medicines, the global API requirement is expected to post a 6.8% CAGR to reach USD275b over FY20–26.**
- **China currently dominates API exports due to the huge cost advantage in the country. However, the tide is gradually shifting toward India due to the consistent quality/compliance offered and formulators' intent to reduce country-specific risk.**
- **Accordingly, API exports are expected to grow faster in India v/s the global average of an 8.6% CAGR expected over FY20–24.**

Multiple factors at play to drive API demand

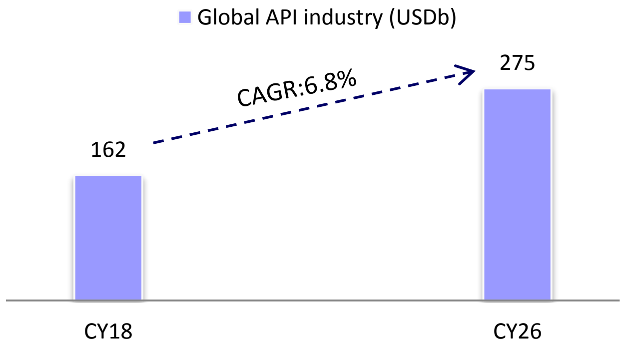
The size of the global API industry stood at an estimated USD156b/USD162b in CY17/CY18. At a potential CAGR of 6.8% over the next six years, it would reach a market size of USD275b by CY26. This would be led by (a) higher demand for medicines, especially in the US, due to the aging population in the country, (b) higher demand of medicines in developing countries such as India, China, and Brazil due to increased affordability, and (c) loss of exclusivity of patented drugs during this period, leading to the availability of generics that are cheaper, yet more effective than existing drugs.

Exhibit 3: Global API market at USD156b in CY17



Source: MOFSL, Company

Exhibit 4: Global API industry to reach USD275b by CY26



Source: MOFSL, USFDA

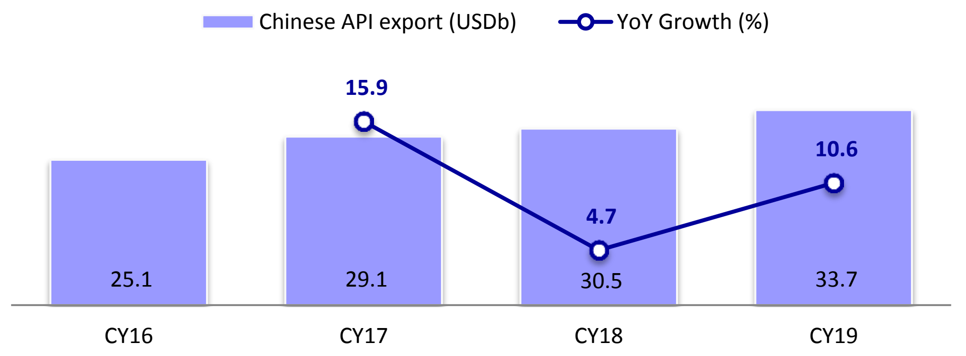
Of the total APIs manufactured in CY17, an estimated ~70% comprises chemically synthesized APIs, while the remaining 30% is estimated to be biological APIs.

India accounts for ~6% of global API supply by value (CY19)

China leads the pack with ~48% share in API supply

With USD75b worth of APIs manufactured, China accounted for 48% of global API supply in CY17. India's API industry is estimated to be ~USD9b in size, accounting for 6% of the total APIs produced worldwide in CY19. All other countries put together manufactured USD76b worth of APIs, 49% of the total APIs produced by value globally in CY17.

Exhibit 5: China's API exports increase at 1.8% CAGR over CY16–19

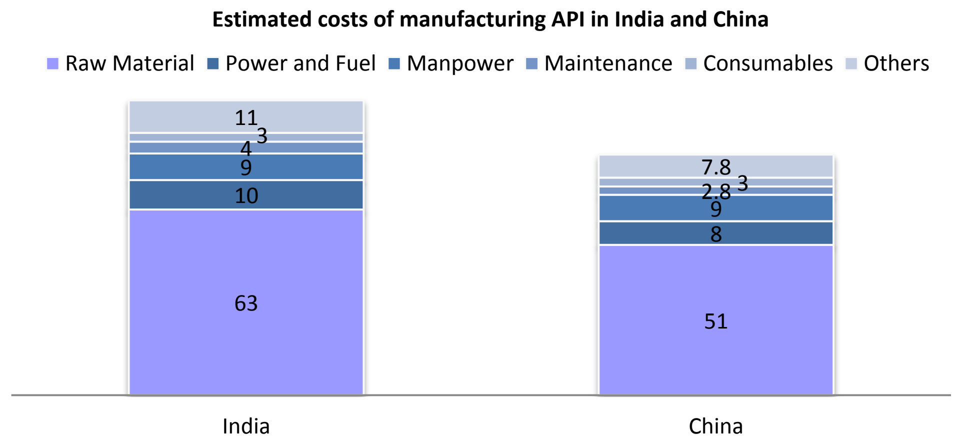


Source: MOFSL, CCMHPIE

Why does China have the lowest cost of production for bulk APIs?

China's dominance in the API industry is largely attributable to (a) economies of scale on account of large production facilities, supported by Chinese government grants and subsidies, (b) lower input costs, such as electricity, (c) lower RM costs of chemicals – also locally manufactured at scale, (d) lower credit costs that support the setting up of these facilities, (e) export subsidies, and (f) favorable regulatory policies. While some of these advantages have started to deplete over the years – minimum wage levels have been raised and stricter environmental norms have been implemented – these factories are expected to continue to produce APIs for the foreseeable future.

Exhibit 6: Cost of manufacturing APIs in India ~25% higher v/s China

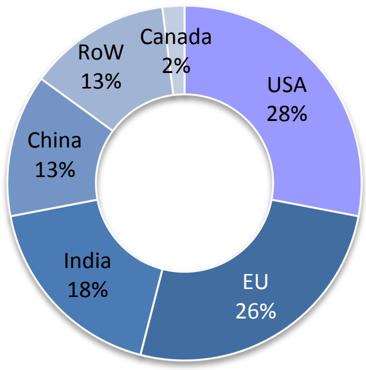


Source: MOFSL, Company

As highlighted in Exhibit 6, China's APIs are estimated to be 25–30% cheaper than those produced in India.

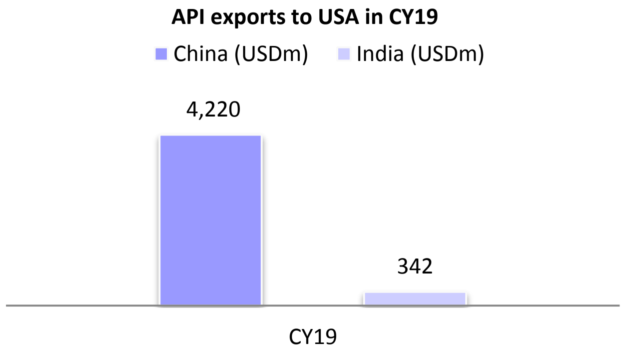
This is also indicative from an FDA report on securing pharmaceutical supply chains in 2019 stating that 13% of the facilities that supply APIs (by number of facilities) were based in China and 18% were based in India. On the other hand, the value of APIs exported to the US from China was estimated at ~USD4.2b – multi-fold ahead of India's API exports to the US, which stood at USD342m in CY2019.

Exhibit 7: India has more USFDA-compliant facilities than China (Aug'19)…



Source: MOFSL, USFDA

Exhibit 8: …yet China's API exports to the US were 12x those of India in CY19



Source: MOFSL, Company

China's cost advantage depleting over past two years

Experts have observed that formulators are inclined to look at ex-China suppliers. Radical environmental policies are being implemented by China to curb the high levels of pollution in the country. This has led to the closure of almost 150 facilities, creating a vacuum in global supply. Moreover, this has translated to a price increase in commonly sourced API/intermediates from China. The outbreak of the COVID pandemic has further intensified the disruption of supply from China.

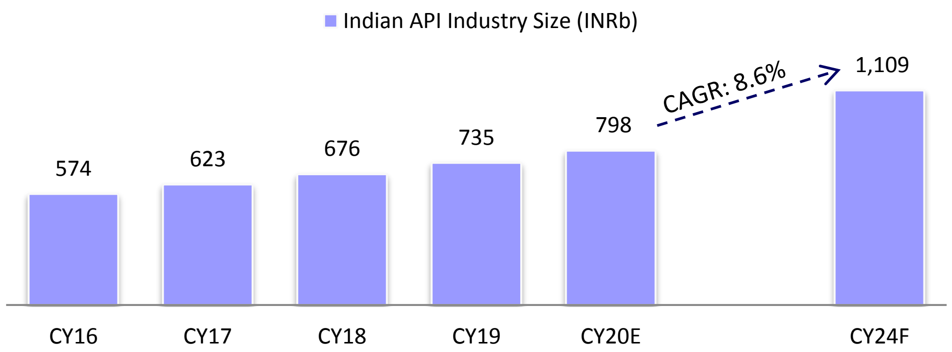
China's loss – India's gain

China+1 strategy to de-risk supply of critical APIs to benefit Indian API players

Despite the size of Chinese manufacturers, we are increasingly seeing concerns among customers and governments over their dependence on a single country for all API needs. On account of the need to de-risk the supply chain and a preference for supply guarantee over price, we are likely to see growing demand for India's APIs. This demand growth would be further complemented by (a) Indian government support announced for API manufacturers, (b) higher demand facilitating the establishment of larger facilities, thereby leading to some cost advantages, and (c) the continued crackdown on Chinese industry due to environmental issues.

India is on par with other countries in terms of technological capabilities and process efficiency. It also has a strong skilled workforce.

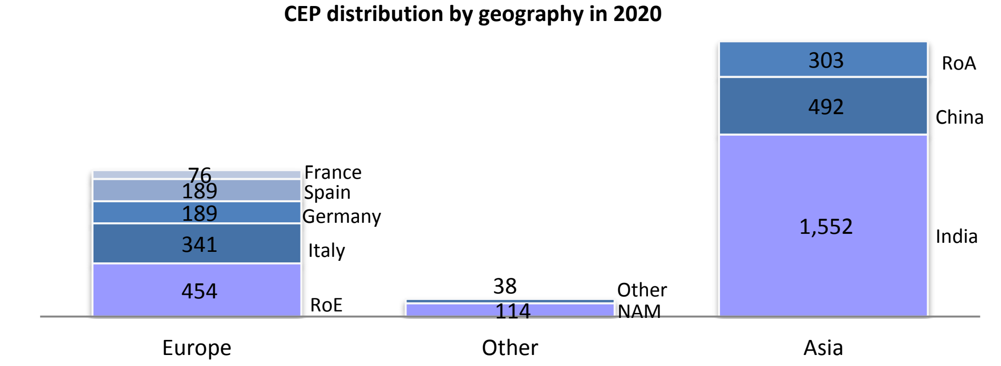
Exhibit 9: India's API export trend



Source: MOFSL, Industry

While global demand would rise moderately, an increasing shift in market share would result in India's API industry posting an 8.6% CAGR over FY20–24.

Exhibit 10: 41% of all Certificates of Suitability (CEPs) with Indian manufacturers, while Chinese manufacturers account for just 13% of all CEPs

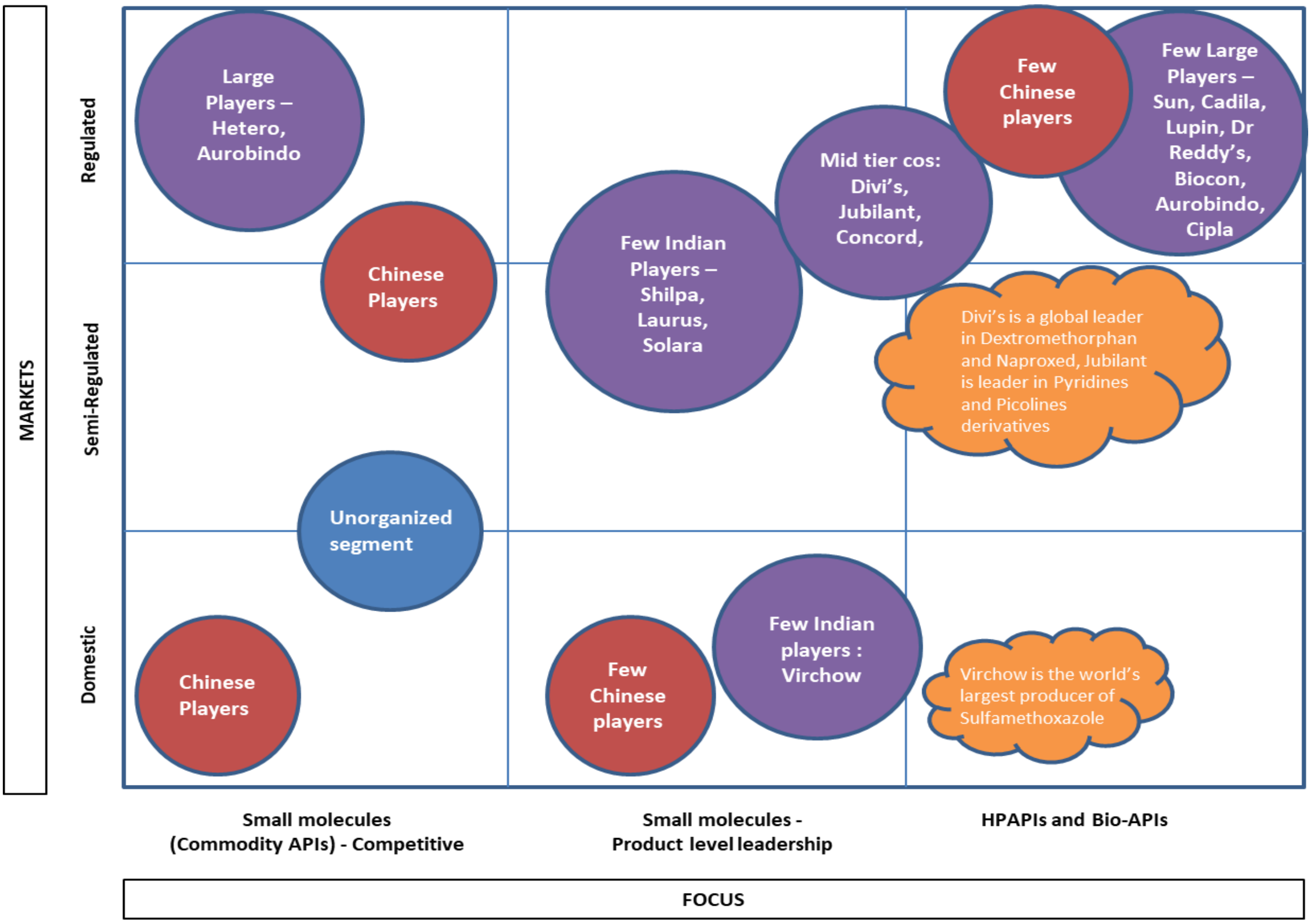


Source: MOFSL, Industry

Indian companies suitably placed to benefit from opportunity

Different API manufacturers span the value chain based on their focus on the type of product as well as their target market.

Exhibit 11: Different companies fall into different categories based on their target markets and product focus



Source: Industry, MOFSL

- Large players such as Aurobindo and Hetero mostly focus on selling commodity small-molecule APIs to regulated markets as they have a better understanding of the regulatory landscape overseas.
- In Exhibit 11, further down the focus path, companies are displaying product-level leadership in some key molecules. The Indian companies in this category either supply to domestic pharma companies or export to semi-regulated and regulated markets. Companies in this category include those that lead in certain therapeutic areas – such as Shilpa Medicare, which has developed a leadership in Onco APIs.
- Other companies in this category include (a) SOLARA, with product-level leadership, and (b) Divi's Labs, with leadership in multiple products through its large-scale manufacturing units.
- Other companies, such as large domestic pharma companies, have the technical capabilities to manufacture not only complex APIs but also bio-APIs. Most of these APIs are for their own consumption; however, they also sell APIs to other customers.

Increased outsourcing paves way for higher CRAMS opportunity

- A continued rise in product development cost and increased challenges from generics have forced the need to outsource to minimize operational cost. Even drugs going off-patent provide the contract manufacturing (CMO)-led outsourcing business. With a skilled technical workforce and low cost of manufacturing, India is well-positioned to benefit from the CRAMS opportunity.

Mutual benefit for innovator as well as CRAMS provider

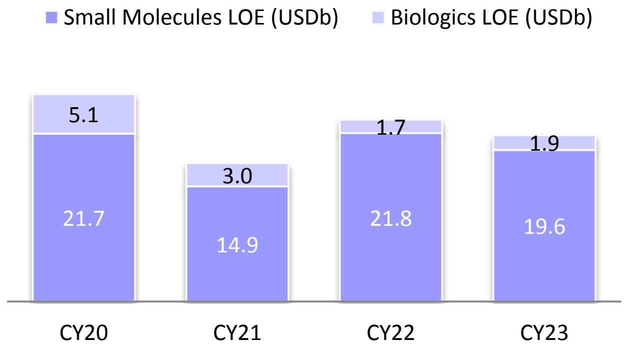
Quality, reliability with better value driving higher adoption of CRAMS

- Global spending on medicines reached USD1.3t in CY19 and is expected to post a 4–5% CAGR to reach USD1.5t over FY19–23E. Within this, the outsourcing of research and manufacturing activity would continue to increase due to increased cost of developing new drugs and reduced probability of success. Also, sharp price erosion at the onset of generics is impacting the profitability of already commercialized drugs.
- Accordingly, companies with strong chemistry skill sets and the capability to manufacture while consistently maintaining compliance would continue to have robust business opportunities. Contract research organizations (CROs) constitute ~40% of the CRAMS segment, with contract manufacturing service providers accounting for the remainder.

India – the right mix of skill set and manufacturing capability/capacity

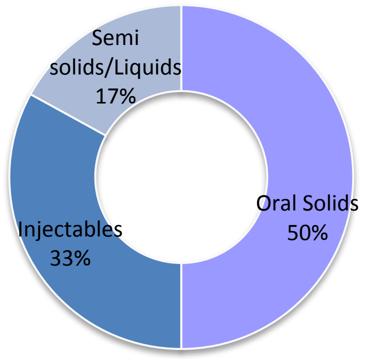
- Indian CRAMS players offer end-to-end services, right from pre-clinical trials to manufacturing finished dosages. India has abundant high-quality lower cost talent to support drug discovery and research processes. Furthermore, the cost of setting up a facility in India is lower by up to 50% v/s the US and Europe.
- ***India's CRAMS segment posted a 48% CAGR over FY15–18 to reach a USD17b market size, and is expected to post a strong CAGR of 25% over FY20–24.***

Exhibit 12: Loss of exclusivity over next four years



Source: MOFSL, IQVIA

Exhibit 13: Contract manufacturing composition by dosage form



Source: MOFSL, Company

Products/Markets/Customers – key for SOLARA's growth

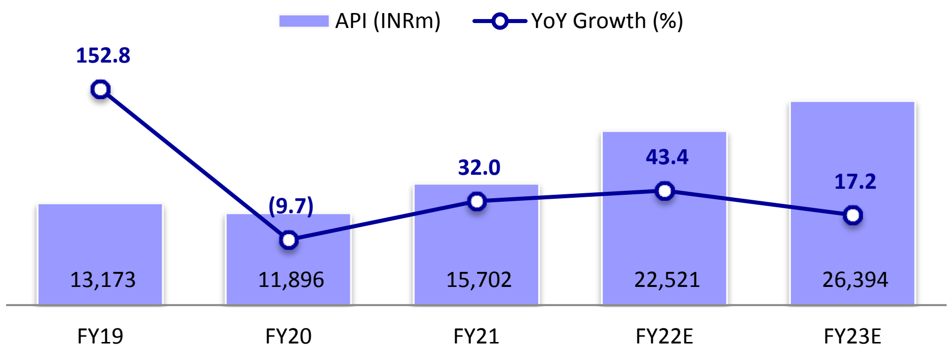
- **SOLARA has 40+ active products covering wide therapeutic areas, with the Top 10 contributing 77% to sales (3QFY21), implying sufficient scope to improve traction in the remaining products.**
- **After establishing a strong presence in regulated markets (~71% of sales), it intends to expand in other important markets as well.**
- **It further intends to enhance the customer base, driving broad-based growth.**
- **Considering these multiple levers, we expect a 36% sales CAGR for SOLARA over FY21–23.**

Base products to drive near-term growth

Generic APIs, new Vizag facility commercialization to drive near-term growth

Solara has developed and produced generics and commercial APIs across niche therapeutic categories, with proven capabilities in complex products, such as APIs based on polymers and injectables. It has 80+ commercial products / 40+ active products and 25+ APIs under development. SOLARA's APIs predominantly belong to the Anthelmintic, Anti-Malaria, Anti-Infective, Neuromuscular Insomnia, and Anti-Psychotic Hyperkalemia segments.

Exhibit 14: API sales to grow at a CAGR of 30% over FY21–23



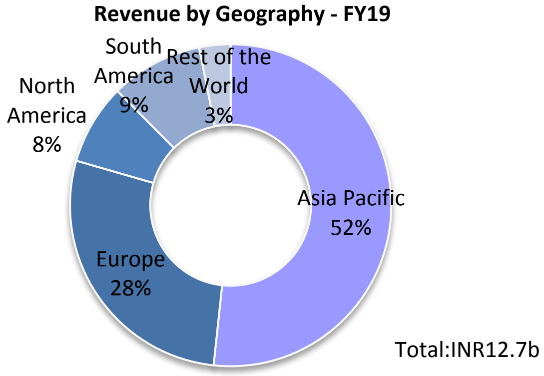
Source: MOFSL, Company

SOLARA is well-placed in the API space, with a global presence and leadership position among the top 10 APIs – Ibuprofen, Praziquantel, Gabapentin, Nizatidine, and Sevelamer Carbonate.

Regulated markets and other select markets to be focus areas for SOLARA

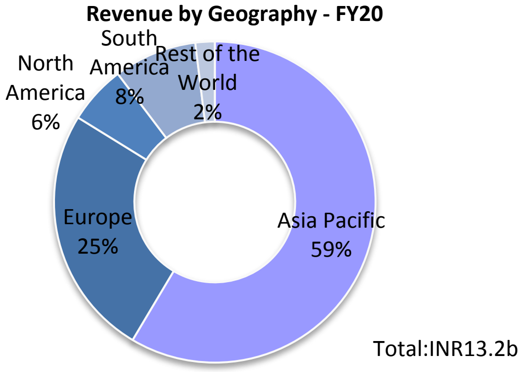
SOLARA derived ~77% of sales from the regulated markets of the US and EU. It also has a foothold in other markets such as SE Asia, LATAM, and MENA. In fact, SOLARA's APAC revenue increased 18% YoY in FY20. The company also supplies APIs under the Institutional segment.

Exhibit 15: APAC accounts for highest sales in FY19



Source: MOFSL, Company

Exhibit 16: APAC posts faster growth v/s other markets in FY20



Source: MOFSL, Company

ALS products to strengthen SOLARA's offering

ALS has good mix of niche products (Nafamostat Camostat, Levothryoxine) as well as high volume products (Amlodipine, Valacyclovir). In addition, ALS has track record of 15+ filings every year. Further, ALS investment to build ARV portfolio would pave SOLARA into new space. Thus, ALS not only provides increased sales potential but also scope for improvement in the profitability over medium term.

With (a) new launches, (b) increased traction in existing products, (c) an expanding customer base, (d) penetration in newer markets, and e) the addition of the ALS API portfolio, SOLARA's overall API business prospects are expected to improve. Overall, we expect a 30% sales CAGR to INR21b over FY21–23.

Ibuprofen – SOLARA set to be second largest by capacity

- **Ibuprofen accounts for ~25–30% of consolidated revenues for SOLARA.**
- **With capacity expansion of 3,600MT now complete, SOLARA is now the second largest Ibuprofen API manufacturer.**
- **Raw material prices for the Ibuprofen API are expected to be benign in the near future, alleviating concerns of margin contraction.**

Increased capex to drive growth in Ibuprofen

Solara has the second highest Ibuprofen API capacity in the world and is the biggest product for the company

Ibuprofen accounts for 25–30% of consolidated revenues. With capacity expansion in place, SOLARA is now the second largest Ibuprofen API manufacturer.

Ibuprofen is a very old drug and has been around for more than 50 years. It is used to treat pain, fever, and inflammation. It is part of a larger category of drugs called Non-Steroidal Anti-Inflammatory Drugs (NSAIDs). Ibuprofen and other NSAIDs are available as OTC products in many countries, including the US. Aspirin and Naproxen are some of the other widely used NSAID products. Pfizer's Advil is one of the largest Ibuprofen products in the US and is ranked #1 according to OTC sales, making Pfizer one of the biggest customers of the Ibuprofen API.

The Ibuprofen API market was estimated at ~USD570m in CY19 and is expected to expand at a CAGR of 5.5% to USD790m by CY25. The larger group of NSAIDs' current finished dosage sales stand at ~USD15b and would grow at a CAGR of ~6% to ~USD24b by CY27.

Exhibit 17: Ibuprofen is an NSAID used to treat pain, fever, and inflammation

Molecule	Year of discovery	Category	Treatment for
Ibuprofen	1961	Non-Steroidal Anti-Inflammatory Drug	Pain, Fever, and Inflammation

Source: Company, MOFSL

80–85% of global Ibuprofen supply by six companies

The current global Ibuprofen market size is estimated to be ~45,000MT and would grow at ~2%, in line with estimated growth in Ibuprofen Finished Dosage. IOL, Solara, Shandong Xinhua, BASF, Granules Biocause, and SI Group are the Top-6 Ibuprofen suppliers in the world, with an estimated 80–85% market share.

Exhibit 18: Current global installed capacity estimated at ~50,000MT

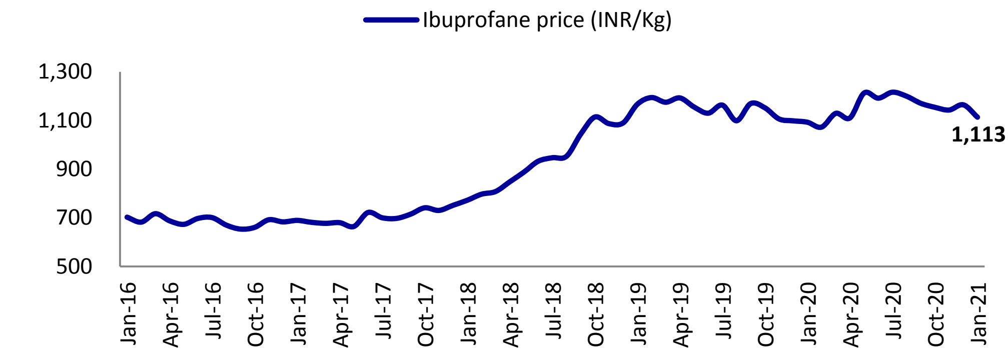
Largest Producers	Capacity (MT)	Comments
IOLCP	12,000	Highest installed capacity
Solara	8,400	Capacity expanded by 3,600MT
Shandong Xinhua	5,000	-
BASF	5,000	EUR200m investment toward a new plant in Germany to come up in 2022; Texas, US facility also expanded from 2020
Biocause	4,800	-
SI Group	~4,500	Capacity increase by 10% already; further 25% expansion plan to be completed in 2020

Source: MOFSL, Company

These six companies also have ~40KMT of installed capacity for the Ibuprofen API. This leads us to believe the total Ibuprofen installed capacity stands at ~50,000MT.

Ibuprofen prices have largely remained stable over the last 2 years

Exhibit 19: Ibuprofen prices have remained stable over last 2 years



Source: MOFSL, Industry

SOLARA increased capacity by 75%

SOLARA has expanded its capacity from 4.8KMT to 8.4KMT, implying improvement of its market share from ~10% to ~14% with better capacity utilization.

BASF announced an EUR200m Ibuprofen plant in Germany, which would go online in CY22. Besides this, BASF is also expanding capacity at its Texas facility. SI Group has already expanded capacity by 1400MT till CY20.

Isobutyl Benzene – key raw material for manufacturing Ibuprofen

Ibuprofen API raw material costs have remained stable and pose low risk to margin in the near-term

Three raw materials used in the production of the Ibuprofen API, accounts for 58% of costs. Isobutyl Benzene (IBB) accounts for ~25%, Sodium Dichromate accounts for 17%, and Aluminum Chloride accounts for 16% of total cost.

Exhibit 20: Key raw material pricing ranges from 'stable' to 'declining' over near-term

Key RM	Proportion of cost	Major suppliers	Pricing trend
Isobutyl Benzene (IBB)	25%	Vinati Organics, IOL Chemicals, Merck and Pharmaceuticals, and SI Group	Stable
Sodium Dichromate	17%	Soda Sanayii (TR), Aktyuninsk (KZ), Lanxess (ZA), Vishnu Chem (IN), NPCC (RU), Nippon Chem (JP), Yinhe Group (CN), Zhenhua Chem (CN), Minfeng Chem (CN), Sing Horn (CN)	Decline
Aluminum Chloride	16%	Gulbrandsen (US), Gujarat Alkalies & Chemicals Limited (India), BASF (Germany), Aditya Birla Chemicals (India), Nippon Light Metal (Japan), Dongying Kunbao Chemical (China)	Stable

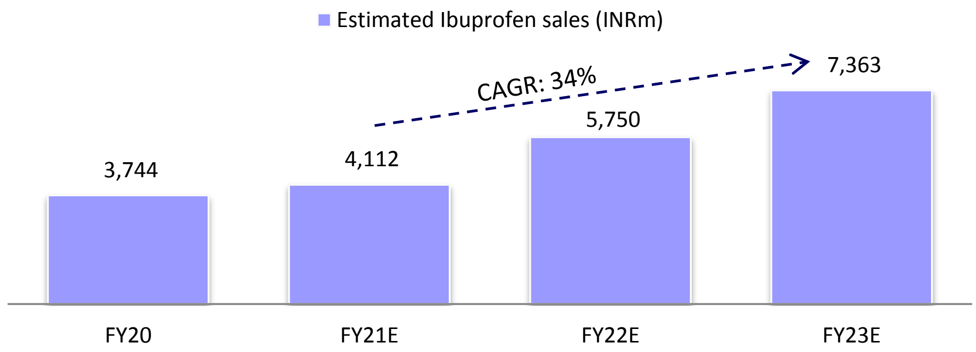
Source: MOFSL, Company

Vinati Organics has considerable global market share in supplying IBB. For other products, there are multiple suppliers and no mentionable supply chain constraints from the dependence on any particular company.

IBB prices have been stable given that the prices of key constituents (Toluene and Propylene) used in manufacturing IBB have been steady. Aluminum Chloride prices have remained stable over the last year, while, as per industry reports, Sodium Dichromate prices have been declining.

Thus, overall raw material prices for the Ibuprofen API are expected to be benign in the near future, alleviating concerns of margin contraction.

Exhibit 21: Expect 34% CAGR for SOLARA's Ibuprofen sales over FY21–23



Source: MOFSL, Industry

Positive outlook for SOLARA'S Ibuprofen franchise

Despite significant capacity additions expected to come online in CY22, we believe SOLARA'S Ibuprofen demand and margins are at minimal risk on account of (a) the company having long-term supply contracts with its top customers, (b) discounted price offered to establish the aforementioned long-term relations, and (c) higher cost of operations expected at new capacities coming up in the US/Europe. Overall, we expect a 34% CAGR for SOLARA's Ibuprofen sales, reaching INR7.4b over FY21–23.

Barring any big supply chain disturbance, we believe raw material prices for Ibuprofen are expected to remain stable or decline marginally in the near term. This makes us believe that margins on the Ibuprofen API are not under any structural pressure, which bodes well for SOLARA.

Gabapentin – another interesting product for SOLARA

- **The growth outlook for Gabapentin is expected to moderate at the global level due to the preference for Pregabalin.**
- **Gabapentin forms about 15% of sales for SOLARA, assuming 80% capacity utilization.**
- **However, with economies of scale and leading capacity, SOLARA is well-placed to outperform the market in this product.**

Global Gabapentin demand to grow at slower rate of 4% over next five years

Global finished dosage demand for Gabapentin is estimated to have grown at a CAGR of 6.6% to 4,073 MT in CY20 from 3,155 MT in CY16. CAGR is expected to slow to less than 4% over CY20–25. As with most generics, the highest demand for Gabapentin comes from the US, which currently stands at ~2,650MT. Domestic growth for Gabapentin is expected to be 9.3% over CY20–25; RoW would grow at 5.3% and the US at 3.5% over the said period.

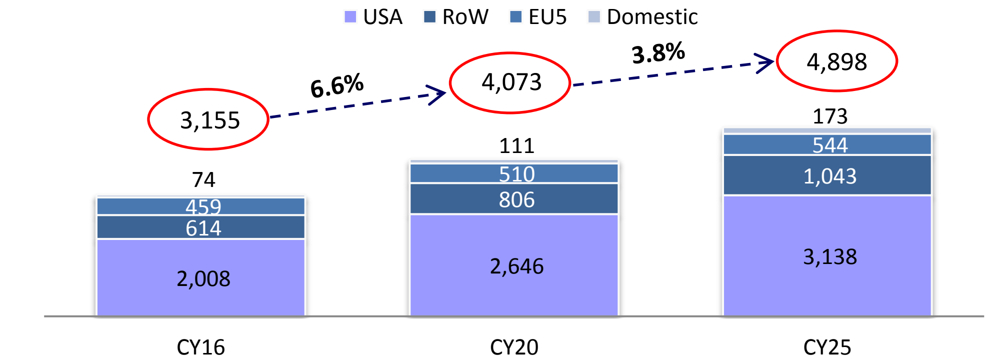
Gabapentin belongs to the class of drugs known as Anticonvulsants and was first discovered in 1993. It is used to treat partial seizures, neuropathic pain, hot flashes, and restless legs syndrome (RLS).

Exhibit 22: Gabapentin is an Anticonvulsant to treat partial seizures, neuropathic pain, hot flashes, and RLS

Molecule	Year of discovery	Category	Treatment for
Gabapentin	1993	Anticonvulsant/Gabapentinoids	Partial seizures, neuropathic pain, hot flashes, RLS

Source: Company, MOFSL

Exhibit 23: Gabapentin market to grow at 3.8% CAGR over CY20–25 (MT)

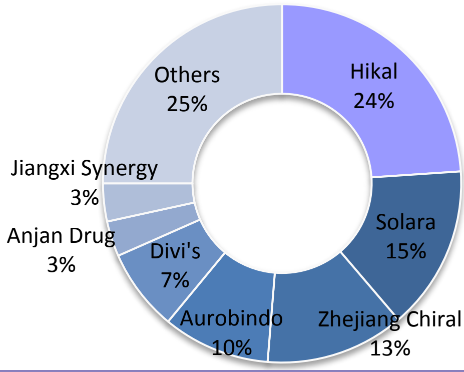


Source: MOFSL, Company

Seven companies account for 75% of capacity

Top-7 manufacturers of the Gabapentin API account for ~3,300MT of production. Hikal is the biggest supplier of the Gabapentin API, with ~1,000MT capacity. Pfizer is the innovator of Neurontin (Gabapentin). SOLARA is the second largest manufacturer of Gabapentin, with ~600MT annual capacity. Zhejiang Chiral is the biggest Chinese supplier of the Gabapentin API, with ~500MT annual production capacity. Indian companies account for 2,500MT of the total ~3,300MT production capacity of the Top-7 manufacturers.

Exhibit 24: SOLARA has second highest capacity for Gabapentin API – ~15% share of ~est. 4,400MT capacity



Source: MOFSL, Company

Pregabalin to decelerate Gabapentin growth

Demand for Gabapentin is also expected to slow going forward due to increased genericization of Pregabalin-post Loss of exclusivity (LoE) in CY19. Both Gabapentin and Pregabalin belong to the class of drugs called Anticonvulsants/Gabapentinoids. Pregabalin is a newer generation drug with better absorption characteristics than Gabapentin. On the other hand, there are some concerns surrounding Gabapentin's interaction with NSAIDs.

Gabapentin outlook, however, appears promising for SOLARA

Gabapentin accounts for ~15% of SOLARA'S total sales, assuming 80% capacity utilization. Despite Gabapentin's slowing growth, we believe there is ample scope for SOLARA to take market share from other competitors. It is the second largest API manufacturer of Gabapentin, with a strong client base. While the industry growth for Gabapentin might moderate due to superior substitute, we expect SOLARA to steadily gain market share in Gabapentin from smaller domestic as well as Chinese players on the back of its low-cost manufacturing and compliance capabilities.

Additional key drivers – other key products / CRAMS

- **We estimate the Praziquantel, Sevelamer Carbonate, and Mycphenolate Mofetil APIs to account for 15–20% of sales for SOLARA.**
- **Rising demand for these products and market share gains would drive business for SOLARA.**
- **SOLARA has capabilities in terms of contract development/manufacturing that span the entire value chain of New Chemical Entities (NCEs). Accordingly, we expect the business segment to be a meaningful growth driver for SOLARA going forward.**

Expanding API basket

SOLARA's other key products include Praziquantel, Mycophenolate Mofetil, and Sevelamer Carbonate.

Exhibit 25: Praziquantel, Nizatidine, and Sevelamer Carbonate other key products

Molecule	Year of discovery/US approval	Class	US DMF Filers	CEP Filers	API Suppliers
Praziquantel	1982	Anthelminitics	8	12	27
Mycophenolate Mofetil	1995	Immunosuppressant	29	13	42
Sevelamer Carbonate	2009	Phosphate binders	17	-	26
Oseltamivir Phosphate	1999	Antiviral	11	3	25

Source: Company, MOFSL

Praziquantel belongs to the class of drugs called Anthelminitics, used to treat infections caused by Schistosoma worms, which enter through the skin from contaminated water. Bayer and Par Pharma are the two approved manufacturers of the Praziquantel formulation in the US and are estimated to be the biggest customers for SOLARA. It is an old molecule, first approved in 1982. Solara, Minachem, Merck, PCAS, Zhejiang Hisun Pharma, Shanghai Desano bio Pharma, Cipla, and Shilpa are some of the major Praziquantel API suppliers.

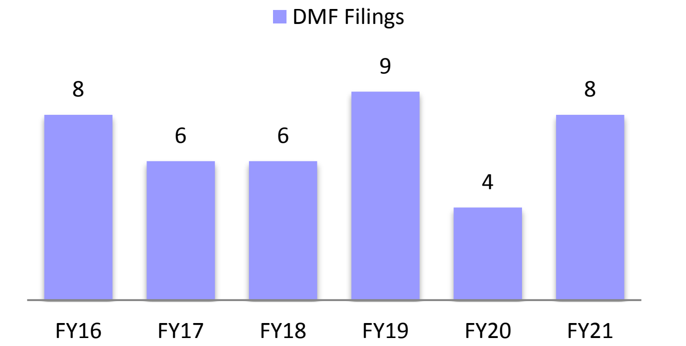
Sevelamer Carbonate, first approved in 2009, is a phosphate binder used to lower high blood phosphorous levels in dialysis patients suffering from severe kidney disease. Genzyme, Aurobindo, Dr Reddy's, Glenmark, Mylan, Sanofi, Amneal, and Cadila are some of the formulators of Sevelamer Carbonate for the US market. SOLARA, Chemo Iberica, Emcure, USV, Sun, and Lupin are some of the API producers for Sevelamer Carbonate.

Oseltamivir Phosphate, popularly known by the brand name Tamiflu, is another key molecule for SOLARA. Tamiflu is a widely used antiviral, also available as an OTC drug. Oseltamivir Phosphate is used to treat seasonal flu. The Oseltamivir Phosphate market was estimated at USD680m in CY2019 and would grow at a CAGR of 4% to reach USD940m up to CY27. We believe the heightened attention that common flu is getting due to COVID and its demand for patients with flu-like symptoms would put upside pressure on the growth of this product.

Mycophenolate Mofetil – among the new additions to the portfolio

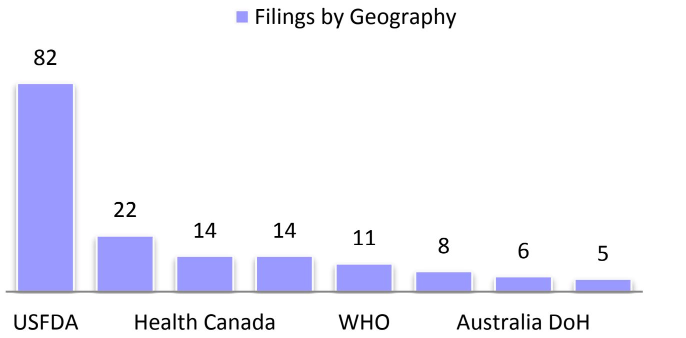
Mycophenolate Mofetil is an immunosuppressant used to treat organ rejection after a transplant. The drug was first approved in 1995 and is now available as a generic drug in the US. SOLARA, Lunan, Concord, Excella, CKD Bio, Livzon, Formosa, and Emcure are some of the biggest API suppliers. Finished dosage sales of Mycophenolate in the US stood at USD96m for the 12M ended Mar'20. Demand for Mycophenolate Mofetil is expected to post a 5.3% CAGR over the next five years.

Exhibit 26: 41 DMF filings in last five years in US market



Source: MOFSL, Company

Exhibit 27: SOLARA has maximum filings with USFDA (FY20)



Source: MOFSL, Company

It filed 8 USDMFs and 3 EU DMF in FY21. It plans to file 10-12 in FY22 as well improving the product offering as well as the revenue visibility from the same. Capex for the Vizag plant is coming to an end, with Phase 1 having already started generating revenues in FY21, and Phase 2 expected to start generating revenues from FY22. As a result, we expect new filings and the extension of previously filed products to newer geographies to drive growth in the near term.

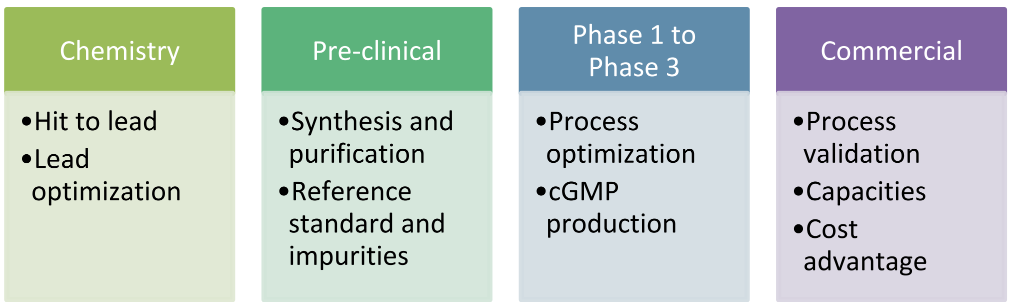
SOLARA – rightly placed to capture CRAMS opportunity

Solara's offerings, capabilities in chemistry and legacy customer base provides organic growth opportunities

From almost nil business in FY18, SOLARA reported ~10% of sales (INR1.3b) from CRAMS in FY20.

SOLARA has a wide gamut of service offerings, including contract development (lead analogs, building blocks), custom synthesis (pilot campaigns, clinical supply), contract manufacturing (APIs / advanced intermediates), and analytical/regulatory support.

Exhibit 28: SOLARA's services span the development chain



Source: MOFSL, Company

Capacity enhancement, new orders, acquisitions to aid growth in CRAMS business

SOLARA has earmarked funds raised through equity subscriptions from the promoter and TPG Capital for inorganic acquisitions. Additionally, it has set up a dedicated capacity for CRAMS at the Vizag facility. Furthermore, it had validation for the supply of new products between May'20 and June'20. Also, it has bid on new proposals and expects to win some enhancing business prospects in the CRAMS business.

We expect CRAMS sales to grow to 4x (INR3.4b) over FY21–23, on the back of revival of own CRAMS business as well as enhancing ALS's CRAMS business.

CRAMS play leapfrogs with ALS acquisition

- **The Aurore Life Sciences (ALS) acquisition would a) boost Solara's CRAMS business by tripling its current revenues, b) provide geographic and customer diversification, and c) add new products to Solara's portfolio.**
- **It would also provide revenue synergies from cross-selling opportunities and cost synergies from ALS' presence in intermediates.**
- **The deal is earnings-accretive to Solara from Year 1.**

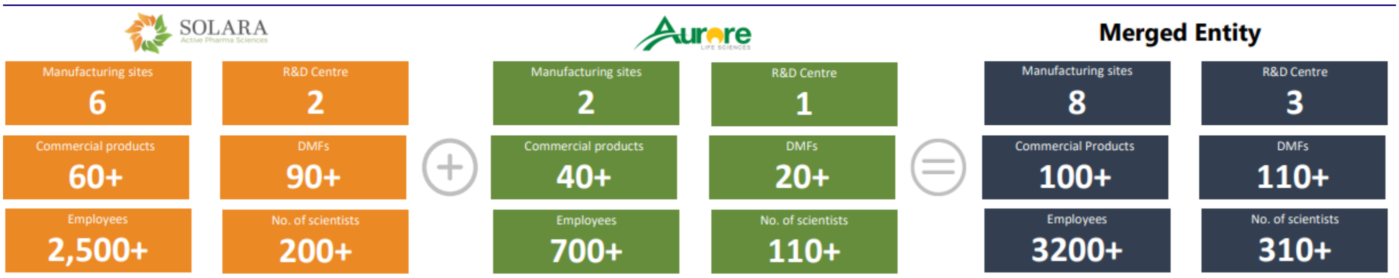
Acquisition strengthens CRAMS/API offering

Solara's organic growth levers for the CRAMS business to be supplemented by Aurore Life Sciences' CRAMS business, with opportunities to cross-sell to each other's customers

ALS brings over 50 years of combined leadership experience in the API space. It has two manufacturing facilities with a combined capacity of 800kl, with the flagship facility located in Hyderabad. The Hyderabad facility is approved by various regulatory authorities – such as USFDA, EDQM, WHO Geneva, COFEPRIS, and KFDA.

The transaction would deliver a 100% stake in ALS, a 100% stake in Empyrean Life Science (ELS), and a 67% stake in Aurore Pharma Private Limited (APPL) in an all-stock deal. Post the completion of the acquisition, Aurore shareholders would hold a 27% stake in the combined entity.

Exhibit 29: Aurore adds R&D, manufacturing and commercial strength to Solara's business



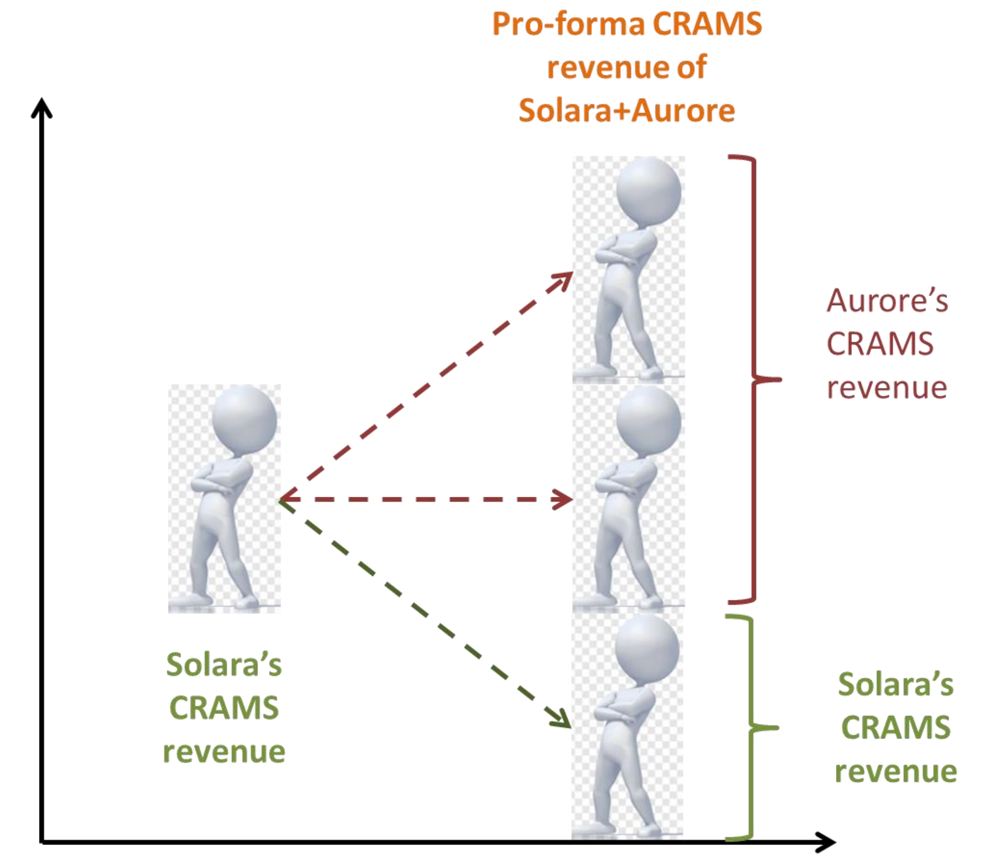
Source: MOFSL, Company

Ramp-up in CRAMS via ALS

While ALS has the capability to fulfill supply – ranging from clinical quantities to commercial supplies – to cater to the CRAMS segment, the contribution is less than 10% in sales. It has been looking to grow the business both organically and inorganically. The CRAMS segment provides multiple upsides to the traditional generic API business, with a) revenue visibility and surety, b) better margins for products, c) a significant upside when molecules move from the clinical to commercial stage, and d) business diversification.

~30% of ALS sales come from the CRAMS segment, adding scale to Solara's CRAMS business. Solara's already existing clientele and the new clients on-boarded through Aurore could be leveraged to considerably enhance the CRAMS business.
ALS already has relations with innovators for high-value molecules – they immediately accrue to Solara upon acquisition.

Exhibit 30: CRAMS size to triple with ALS acquisition



Source: MOFSL, Company

Generic API expansion with little to no overlap with ALS products

Generic API business of Solara also gets a boost from the 20 DMFs filed by Aurore with little overlap in the two product portfolio

- ALS, through its strong R&D capabilities, files 15 products per year; these would complement Solara's own R&D capabilities of ~25 new products every year. The acquisition would diversify Solara's current business by lowering client concentration and adding strength in new geographies/products. ALS' portfolio has little to no overlap with Solara's products, making the acquisition more accretive.
- ALS' investment in ARV APIs would enable Solara to reap the benefits from a new product segment. The acquisition would strengthen Solara's business in Japan and South Korea and double the DMFs submitted in China to 14.
- ALS has filed 20 DMFs with the USFDA to date, including a combination of low-competition and me-too products. Four of these DMFs have been triggered for sourcing from ALS, which would provide for incremental revenues in the near term.
- In addition to new clients and products, the acquisition would provide significant opportunities for cross-selling, expanding the opportunities for the current products of both entities.
- Besides revenue synergies, ALS' presence in intermediates would help Solara lower its cost profile. ALS also has a better asset turnover (~2x), which would increase the asset turn at the combined entity to 1.6–1.7x.
- ALS recorded sales of INR5.5b, EBITDA of INR1.8b (at an EBITDA margin of 32%), and PAT of INR1b in FY21.

Exhibit 31: ALS has 20 DMFs in the US, including some low-competition products

SUBMIT DATE	SUBJECT	Total DMF holders
31-Dec-20	Marbofloxacin	1
30-Nov-19	Tolvaptan Amorphous	1
29-Jan-20	Salsalate USP	2
22-Mar-21	Favipiravir	5
31-Dec-20	Prazosin Hydrochloride USP	5
19-Dec-19	Desvenlafaxine Succinate USP	8
5-Dec-19	Tolvaptan	9
5-Aug-19	Levothyroxine Sodium USP	10
27-Mar-21	Fluphenazine Hydrochloride USP	11
26-Feb-20	Valganciclovir Hydrochloride USP	14
5-Mar-21	Fesoterodine Fumarate	15
31-Jul-19	Verapamil Hydrochloride USP	19
28-Jan-20	Acyclovir USP	20
20-Mar-20	Valacyclovir Hydrochloride USP	21
31-Dec-19	Oxcarbazepine USP	23
8-Aug-19	Celecoxib USP	28
1-Sep-20	Losartan Potassium USP	32
22-Nov-19	Amlodipine Besylate USP	32
12-Oct-20	Levetiracetam Form-I USP	33
26-Aug-19	Levetiracetam USP	33

Source: MOFSL, Company

Manufacturing facilities and regulatory history

- **SOLARA has six diversified facilities with cumulative capacity of 2000+KL.**
- **The Vizag facility was recently added to the list.**
- **Solara has varying reactor capacity and compliant facilities, and is multipurpose, giving it enough headroom to optimize production and be cost-efficient.**

Exhibit 32: Details of Solara's facilities

Facility	Description	Reactor Capacity	Temperature range
Ambernath	Multi-purpose API and intermediate facility	250–8,000L	-20 °C to + 130 °C
Mangaluru	Niche as well as large-volume APIs and advanced drug intermediates	250–6,300L; Glass reactors of 20–250L	-20 °C to + 130 °C
Cuddalore	Multi-purpose API and intermediate facility	250–12,500L	-90 °C to + 200 °C
Puducherry	Multi-purpose API and intermediate facility	1,200–12,500L	-
Vizag	Newly commissioned state-of-the-art greenfield, multi-product facility	-	-
Mysore	Key intermediate manufacturing site	-	-
Bangalore	Research and innovation center	-	-
Chennai	Research and innovation center	-	-

Source: MOFSL, Company

Exhibit 33: Manufacturing locations of some of the main products

Facility	USFDA	Europe	WHO	CDSCO, India	TGA, Australia	MHRA, UK	Pmda, Japan	Regierung von Oberbayern, Germany	MFDS, South Korea
Ambernath	✔	✔	-	✔	-	-	-	-	-
Mangaluru	✔	✔	✔	✔	✔		✔	-	✔
Cuddalore	* *OAI*	✔	✔	✔	✔	✔	✔	-	✔
Puducherry	✔	✔	-	✔	-	✔	✔	✔	✔

Source: MOFSL, Company

Exhibit 34: Inspection history of Solara's plants

Facility	USFDA	EDQM	WHO	TGA, Australia	MHRA, UK	Pmda, Japan	KFDA South Korea	EU-GMP (Danish)	Copferis (Mexico)	AGES (Australia)	Comments
Ambernath	2013, 2019	2017	-	-	-	-	-	-	-	-	-
Mangaluru	2012, 2015, 2018, 2020	2017	2009, 2011, 2014, 2018	2011, 2013	-	-	2018	-	-	-	-
Cuddalore	1999, 2002, 2007, 2010, 2014, 2017, 2019	2003, 2014	2012, 2016	1998	2017	2017	2012	2008	2013, 2014, 2015	-	*Plant Under "OAI" characterization from USFDA; Form 483 issued with 6 observations after inspection from March 2-7, 2020*
Puducherry	1990, 1996, 2000, 2005, 2009, 2013, 2015, 2017, 2020	2007, 2014	-	-	2017	2007	2012, 2017	2008	2013, 2015	2007	-

Source: MOFSL, Company

SWOT ANALYSIS

S

Strengths

- Pure-play API strategy significantly reduces conflict of interest with the formulator
- Technical expertise from the legacy businesses of Strides and SeQuent Scientific Human API
- Legacy client pool that could be leveraged to grow the CRAMS business
- Leadership position in 6 of the Top 10 molecules
- One of the world's biggest suppliers of the Ibuprofen API

W

Weaknesses

- Smaller scale v/s Chinese competitors
- Relatively higher cost of manufacturing v/s Chinese competitors
- Capex-heavy industry requiring continued investments to increase capacity expansion

O

Opportunities

- De-risking led market share opportunity for Indian API players
- Major capex done and available for incremental business
- Addition of customers / Geographical expansion of current products
- Introduction/Filing of new products
- Inorganic growth opportunities for generic APIs and CRAMS (Aurore Acquisition)

T

Threats

- Increased competition from other Indian players
- Risk to API prices if customers go back on their de-risking efforts
- Non-compliance of regulatory standards and sanctions from regulators
- Adverse regulatory impact from environmental agencies

Strong earnings upside led by revenue, product mix, and operating leverage

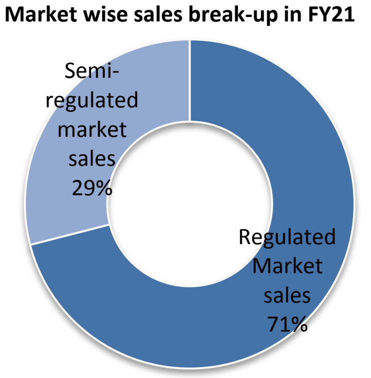
- **Product-specific headwinds impacted FY20 performance.**
- **The easing of the lockdown, streamlining of operations, addition of capacity and ALS acquisition would enable 36% revenue CAGR over FY21–23.**
- **A better product mix and operating leverage would drive a 46% earnings CAGR over FY21–23.**

Revenues to grow at a CAGR of 36% over FY21-23 and earnings to grow at a CAGR of 46% over that period

Ranitidine-led speed bump in FY20 performance

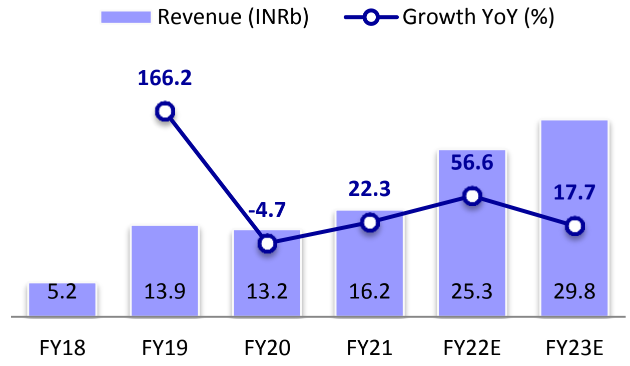
FY19 essentially marked the first full year of operations post the integration of the Human API businesses of Strides and SeQuent Scientific into SOLARA. The company's FY20 revenues declined ~5% due to (a) the discontinuation of Ranitidine in the US market and (b) the COVID impact in the latter part of Mar'20.

Exhibit 35: 70%+ sales came from Regulated markets in FY21



Source: MOFSL, Company

Exhibit 36: Recovery in sales to continue beyond FY21



Source: MOFSL, Company

Post a recommendation from the USFDA, the company had to halt the manufacturing and sale of the Ranitidine API for the US market. Ranitidine was one of SOLARA'S top 10 molecules and accounted for 7% of total sales (~INR1b in FY20). Additionally, toward the latter part of March, the Government of India imposed a series of lockdowns to control the spread of the COVID infection in India. This led to the temporary suspension of manufacturing and disruptions in the supply chain.

SOLARA makes a comeback in FY21 on the revenue front

However, SOLARA made a healthy recovery with 22% YoY revenue growth in FY21 v/s 4.7% YoY decline in FY20. This was led by increased contribution from new launches, geographic extensions of current products, in addition to robust demand for base products.

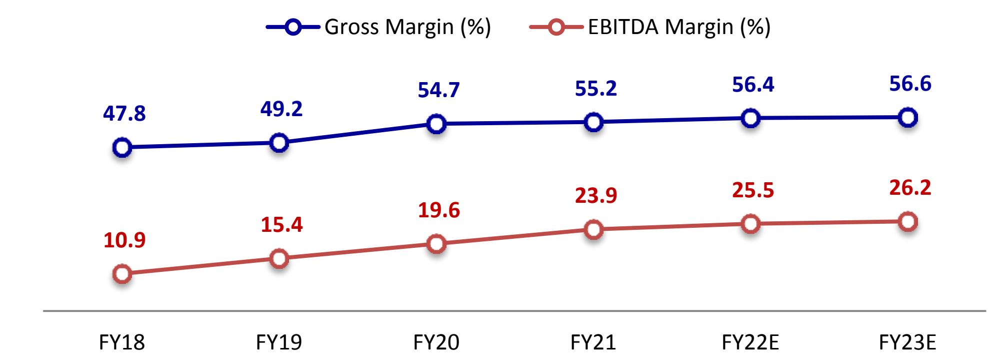
Ibuprofen market is expected to grow at 6-8% and SOLARA already has long-term relationships with branded OTC and prescription players in regulated markets which will drive incremental sales from new facility.

With demand drivers in place for core products, better traction in new launches, an improved order book for the CRAMS segment and merger of ALS, we expect SOLARA to deliver a 36% revenue CAGR to INR29.8b over FY21–23. Our sales estimates for SOLARA includes the upside from the acquisition of ALS

Profitability on strong uptrend

While revenue declined in FY20, the gross margin improved sharply by 550bp YoY to 54.7%. This is largely attributable to a superior product mix and the benefit of favorable raw material prices. Gross margin further improved to 55.2% in FY21.

Exhibit 37: Gross margin/EBITDA margin on up-trend



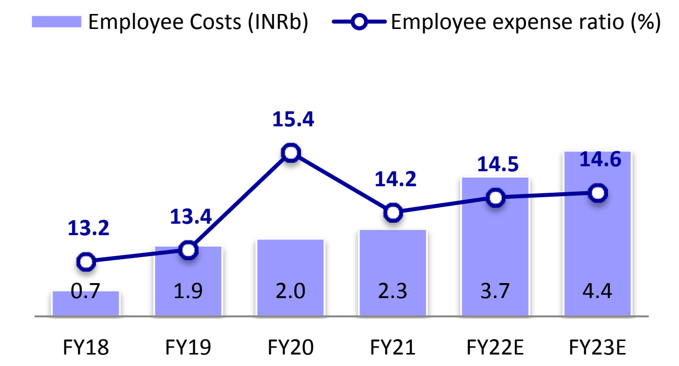
Source: MOFSL, Company

EBITDA margins improved at a lower rate of 420bpsYoY to 19.6% in FY20. However, EBITDA margin improved 380bp over Gross margin expansion (+430bp YoY in FY21) due to better operating leverage from new commissioned Vizag facility in FY21 (employee cost/other expense down 120bp/250bp YoY as a % of sales).

Expect 42% EBITDA CAGR over FY21–23

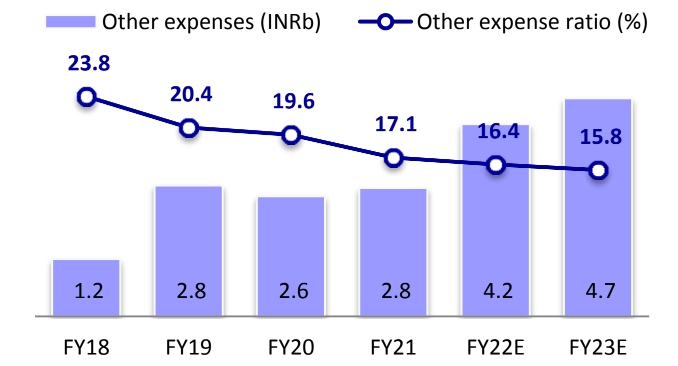
With better capacity utilization at Vizag and the addition of the higher margin ALS business, we expect the EBITDA margin to expand 230bp over FY21–23. Effectively, we expect SOLARA to deliver an EBITDA CAGR of ~42% over FY21–23.

Exhibit 38: Employee cost to be steady at 15% of sales



Source: MOFSL, Company

Exhibit 39: Operating leverage to improve going forward

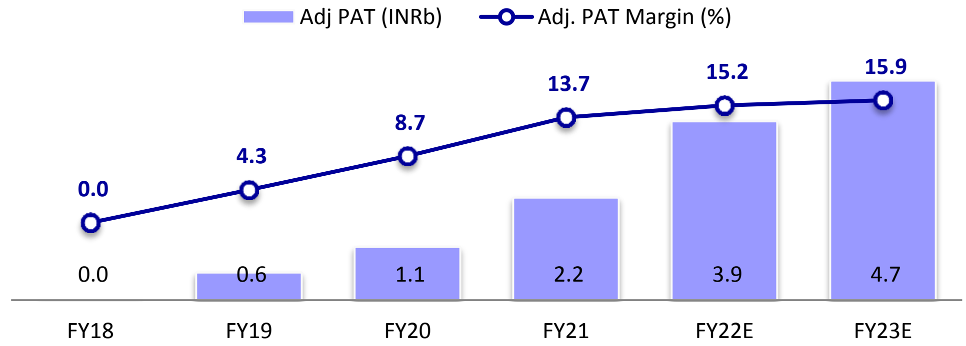


Source: MOFSL, Company

Expect 46% PAT CAGR over FY21–23

Considering the recent fund infusion from the promoter / TPG Capital, we expect a significant net debt reduction, which would thereby lower the net interest outgo. Also, SOLARA has unused tax losses, plus the benefit from setting up a manufacturing unit at an SEZ. Accordingly, we expect the PAT CAGR to be higher at 46% to reach INR4.7b over FY21–23.

Exhibit 40: Expect adj. PAT to grow at 46% CAGR over FY21–23

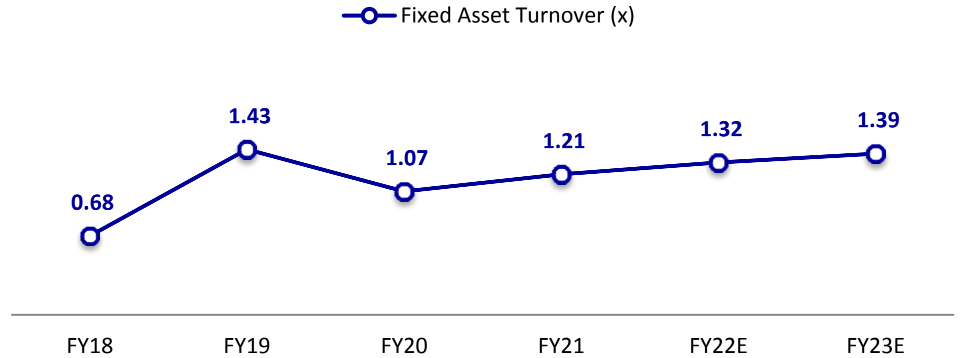


Source: MOFSL, Company

Increased capacity utilization at Vizag to improve overall asset-turn

The fixed asset turnover ratio declined in FY20 due to capex at the Vizag plant, which led to an increase in gross fixed assets. With Phase 1 expected to run at full capacity within the next 12 months and Phase 2 to start generating revenues from FY22, we expect fixed asset turnover to improve over the next 2–3 years. New plant fixed asset turnover is expected to be 1.6–1.7x, driving overall fixed asset turnover in the medium term.

Exhibit 41: Expect asset turnover ratio to witness uptrend from FY21



Source: MOFSL, Company

FCFE generation to improve with capex behind

- **SOLARA has been implementing a major greenfield capacity expansion program at Vizag, with nearly INR2b in investments injected to date.**
- **It continues to spend on debottlenecking at existing facilities as well.**
- **With improving capacity utilization, better CRAMS outlook, we expect positive FCFE to sustain over FY21-23.**

FCFE to sharply increase over FY23

Despite considerable capex in FY20, FCFE has been positive owing to higher borrowing. The company raised INR1.6b in debt in FY20. Equity infusion has kept FCFE at much higher levels in FY21. FCFE stood at INR2b for FY21. Considering the major capex cycle is behind and there is enough generation of cash flow from operations, we expect healthy rate of free cash flow generation going forward.

Exhibit 42: Healthy rate of free cash flow generation FY21 onwards

INR m	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	2	578	1,149	2,215	4,286	5,510
Depreciation	367	837	942	1,087	1,383	1,462
Direct Taxes Paid	(29)	(144)	(243)	(334)	(429)	(771)
(Inc)/Dec in WC	(108)	(253)	(165)	(2,057)	(1,213)	(252)
CF from Operations	232	1,018	1,683	911	4,028	5,949
(Inc)/Dec in FA	(347)	(582)	(2,676)	(1,715)	(2,500)	(2,000)
Inc/(Dec) in Debt	528	(881)	1,618	(1,002)	500	(400)
Equity Infusion	-	-	-	3,840	-	-
FCFE	**447**	**(549)**	**661**	**1,976**	**2,028**	**3,549**

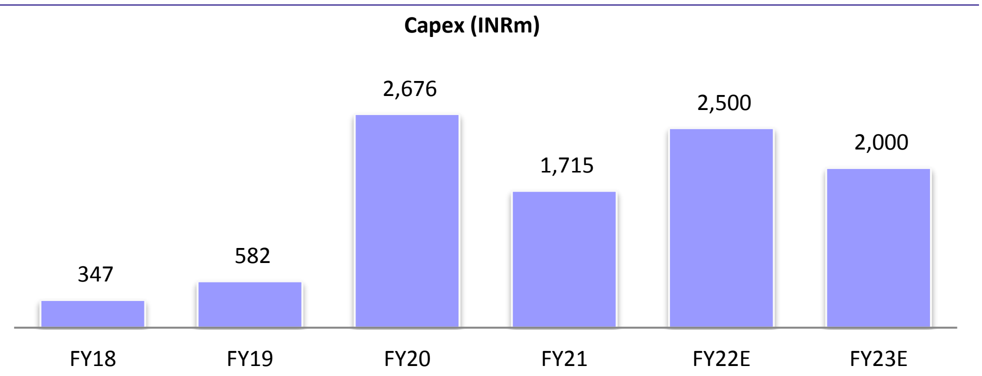
Source: MOFSL, Company

Vizag facility to achieve full commercialization in next 12-15m

Vizag Phase 1 operational

Phase 1 of the Vizag API plant has been completed. The completion of Phase 1 would add an additional 3,600TPA to Ibuprofen capacity, taking the total capacity to 8400TPA. The commercialization process for Phase 1 has commenced and is expected to be ramped up over the next 12–15M. Capex at Vizag also covers the dedicated facility for the CRAMS business. Phase 2 of the Vizag plant would be toward larger volumes of other APIs and niche APIs. Post the completion of Phase 2, the Vizag plant would become the company's flagship facility.

Exhibit 43: Expect Capex to be steady at INR2-2.5b



Source: MOFSL, Company

Equity infusion provides war-chest for inorganic options

- **SOLARA has raised INR3.8b from the promoter group and TPG.**
- **The funds raised would be used for inorganic expansion, especially on the CRAMS side of the business.**

Warrant conversion results in infusion of INR3.8b

SOLARA raised INR3.8b in September 2020 from the promoter group and TPG Capital via the conversion of warrants – INR2b was raised from TPG and INR1.8b from the promoter group.

Exhibit 44: Solara raised INR3.84b from promoter group and TPG through conversion of warrants

	Current # of Shares Held	% Shareholding	Convertible Warrants held	Price per warrant	Total consideration from Warrant Conversion (INR b)	% Holding after conversion from Promoters and TPG	Total shares held after conversion
TPG Growth IV SF Pte ltd	1,466,816	5.46%	4,000,000	500	2	15.42%	5,466,816
Promoter and Promoter Group	1,12,47,370	41.88%	4,600,000	400	1.84	44.69%	1,58,47,370

Source: Company, MOFSL

SOLARA would use this capital for inorganic growth, particularly in the CRAMS business. On the other hand, cash generated from regular operations would support organic growth opportunities.

Per the terms of the ALS merger, Solara would issue 1.3m equity shares to the shareholders of ALS and Hydra Active Pharma Sciences. Post the acquisition, promoter shareholding in the combined entity would increase to 55.2%.

Exhibit 45: Promoter shareholding to increase to 55.2% post ALS transaction

	Pre-transaction	Post-transaction
Public	57.43%	44.85%
Promoters	42.57%	55.15%
Total	**100.00%**	**100.00%**

Source: MOFSL, Company

Earnings sensitivity

- **We estimate a 42% EBITDA CAGR over FY21–23E for our Base Case scenario, 47% for the Bull Case, and 39% for the Bear Case.**
- **We estimate upside of 28% in Base Case, 47% in Bull Case, and downside of 10% in Bear Case.**

Exhibit 46: We expect upsides of 28% in Base Case and 47% in Bull Case

	Base case		Basis of Assumptions
EV/EBITDA basis			
EBITDA (INR m)	7,808	❖	CAGR of 36% in top-line growth over FY21-23E
Target EV/EBITDA (x)	13	❖	EBITDA CAGR of 42% over FY21-23E
Target EV (INR m)	101,508	❖	Margin expansion of 230bp over FY21-23
Net debt (INR m)	(5,922)		
Target Market Cap (INR m)	95,587		
Target price (INR)	2,000		
CMP	1,565		
Potential upside (%)	**28**		

	Bull case		Basis of Assumptions
EV/EBITDA basis			
EBITDA (INR m)	8,380	❖	CAGR of 39% in top-line growth over FY21-23E
Target EV/EBITDA (x)	14	❖	EBITDA CAGR of 47% over FY21-23E
Target EV (INR m)	118,155	❖	Margin expansion of 300bp over FY21-23
Net debt (INR m)	(5,922)		
Target Market Cap (INR m)	112,234		
Target price (INR)	2,290		
CMP	1,565		
Potential upside (%)	**47**		

	Bear case		Basis of Assumptions
EV/EBITDA basis			
EBITDA (INR m)	7,286	❖	CAGR of 36% in top-line growth over FY21-23E
Target EV/EBITDA (x)	10	❖	EBITDA CAGR of 39% over FY21-23E
Target EV (INR m)	75,045	❖	Margin expansion of 180bp over FY21-23
Net debt (INR m)	(5,922)		
Target Market Cap (INR m)	69,123		
Target price (INR)	1,420		
CMP	1,565		
Potential upside (%)	**(10)**		

Source: MOFSL, Company

Base Case

In our Base Case scenario, we expect a 36% revenue CAGR over FY21–23E, with a 42% EBITDA CAGR over the same period and a 230bp margin expansion. With a EV/ABITDA multiple of 13x over FY23 EBITDA of INR7.8b, we arrive at Target Price of INR2,000, an upside of 28% from current levels.

Bull Case

In our Bull Case scenario, we expect a 39% revenue CAGR over FY21–23E, with a 47% EBITDA CAGR over the same period and 300bp margin expansion. With a EV/EBITDA multiple of 14x over FY23 EBITDA of INR8.4b, we arrive at Target Price of INR2,290, an upside of 47% from current levels.

Bear Case

In our Base Case scenario, we expect a 36% revenue CAGR over FY21–23E, with a 39% EBITDA CAGR over the same period and a 180bp margin expansion. With a EV/EBITDA multiple of 10x over FY23 EBITDA of INR7.3b, we arrive at Target Price of INR1,405, a downside of 10% from current levels.

Valuation and view

Favorable industry prospects

- The global API and CRAMS segments are expected to expand at 7% and 9%, respectively.
- Global API demand is expected to see a CAGR of 6.8% over the next six years, reaching an estimated USD275b in CY26 from USD162b in CY18. Demand would be driven by (a) higher demand for medicines, especially in the US, due to its aging population, (b) higher demand for medicines in developing countries – such as India, China, and Brazil – owing to their increased affordability, and (c) loss of exclusivity of patented drugs.
- India's API industry is expected to grow at a faster rate, driven by de-risking efforts in the supply chain by customers across the globe – that are currently over-dependent on Chinese API manufacturers. Increased environment led constraints for Chinese manufacturers is expected to either reduce the volume supply by them or keep the prices at elevated level due to increased cost to comply with the environment norms.
- Indian CRAMS players offer end-to-end services, right from pre-clinical trials to the manufacturing of finished dosages. India has abundant high-quality talent to support drug discovery and research processes. Furthermore, the cost to set up a facility in India is lower by up to 50% v/s the US and Europe. The Indian CRAMS segment posted a 48% CAGR over FY15–18 to reach a USD17b market size; it is expected to witness a strong CAGR of 25% over FY20–24.

SOLARA in the current backdrop

- Considering its strong operational excellence over three decades, we expect SOLARA to further penetrate the core API products space. Additionally, we expect the company to derive higher business from new launches / increase in the customer base and make inroads into newer markets.
- Furthermore, with capabilities to provide the CRAMS spread across the value chain of new chemical entities, SOLARA is well-positioned to gain business from global innovators.
- It has most of the capex in place to cater to growth over the next 2–3 years.

Valuation and view

- With a focus on new filings, geographical expansion, and augmented capacity from the new Vizag plant, we expect a 36% revenue CAGR over FY21–23. With operating leverage and sustained elevated levels of pricing, we expect EBITDA to grow at a 42% CAGR over FY21–23.
- We value SOLARA at 13x EV/EBITDA on 12-month forward EBITDA, arriving at TP of INR2,000.
- We initiate SOLARA with a **Buy** rating, with a 28% upside from current levels.

Management profile

Details of SOLARA's management

Executive	Position	Background
Bharath R Sesha	MD & CEO	❖ Bharath has over 20 years' experience in pharmaceuticals, healthcare, and material sciences, with experience across geographies. He has held management positions in companies such as DSM Sinochem Pharmaceuticals and Royal DSM NV.
Rajendra Rao Juvvadi	MD, Aurore Life Sciences	❖ Rajendra is Co-Founder and MD of Aurore life Sciences. He has also founded RA Chem Pharma in 2003, which posted revenues of INR4b in 2017.
Hariharan S	Executive Director – Finance	❖ Hariharan is a cost accountant with 30+ years' experience in the fields of corporate finance, accounting, and strategic planning.
Subhash Anand	CFO	❖ Subhash is a qualified AICWA (India) and Certified Management Accountant from Institute of Management Accountants (USA), with 30+ years of experience across Indian and multinational companies. Prior to joining Solara, Subhash served as President and CFO of PI Industries. Prior to his stint at PI Industries, he has held positions at Whirlpool, Sterlite, Hindustan Copper, and Calcom.
Rajesh Salwan	COO	❖ Rajesh has more than 20 years of operational leadership experience; he has managed global teams across operations, technology setups, and projects. He is experienced in chemical, biochemical, and fermentation synthesis across Intermediate, API, and Drug products. Rajesh is also well-versed with the dynamics of the CDMO industry.
Roy Joseph	CHRO	❖ Roy has 30+ years of experience in industrial relations, organizational development, performance management, compensation, and change management.
Sundara Moorthy V	CQO	❖ Sundara has 23+ years' experience in the areas of quality management, regulatory affairs, and compliance.
Swaminathan Srinivasan	Head - R&D	❖ Swaminathan has 25+ years' rich experience in the Pharma industry, with a focus on APIs and finished dosage forms.
Sreenivasa Reddy B.	COO	❖ Sreenivasa has 24 years' experience in the Pharma industry. He brings experience in manufacturing, tech transfers, project management in setting up facilities, quality assurance, plant operations, and sales and marketing.

Source: MOFSL, Company

Financials and valuation

Income Statement (INR m)

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Total Income from Operations	**5,210**	**13,867**	**13,218**	**16,169**	**25,313**	**29,803**
Change (%)	NA	166.2	-4.7	22.3	56.6	17.7
Total Expenditure	**4,641**	**11,736**	**10,623**	**12,310**	**18,858**	**21,994**
% of Sales	89.1	84.6	80.4	76.1	74.5	73.8
EBITDA	**569**	**2,131**	**2,594**	**3,859**	**6,455**	**7,808**
Margin (%)	10.9	15.4	19.6	23.9	25.5	26.2
Depreciation	340	831	942	1,087	1,383	1,462
EBIT	**229**	**1,300**	**1,653**	**2,772**	**5,072**	**6,346**
Int. and Finance Charges	251	824	779	845	1,089	1,193
Other Income	25	124	275	288	304	358
PBT bef. EO Exp.	**2**	**600**	**1,149**	**2,215**	**4,286**	**5,510**
EO Items	-18	-6	3	0	0	0
PBT after EO Exp.	**-16**	**594**	**1,152**	**2,215**	**4,286**	**5,510**
Total Tax	-1	6	4	2	429	771
Tax Rate (%)	8.7	1.0	0.3	0.1	10.0	14.0
Minority Interest	0	-1	-1	-1	-1	-1
Reported PAT	**-14**	**589**	**1,149**	**2,214**	**3,859**	**4,740**
Adjusted PAT	**2**	**595**	**1,146**	**2,214**	**3,859**	**4,740**
Change (%)	NA	NA	92.6	93.2	74.3	22.8
Margin (%)	0.0	4.3	8.7	13.7	15.2	15.9

Consolidated - Balance Sheet **(INR M)**

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Equity Share Capital	247	258	269	359	492	492
Total Reserves	7,393	8,261	9,631	15,526	18,517	22,216
Net Worth	**7,640**	**9,559**	**10,859**	**15,885**	**19,009**	**22,709**
Minority Interest	45	44	43	42	42	42
Total Loans	6,329	5,381	7,068	5,157	7,657	7,257
Deferred Tax Liabilities	484	328	118	-256	-256	-256
Capital Employed	**14,497**	**15,311**	**18,088**	**20,829**	**26,453**	**29,752**
Gross Block	7,641	9,697	12,384	13,317	19,221	21,402
Less: Accum. Deprn.	367	1,170	2,066	3,152	4,535	5,997
Net Fixed Assets	**7,274**	**8,527**	**10,319**	**10,165**	**14,686**	**15,404**
Goodwill on Consolidation	3,586	3,651	3,651	3,651	3,651	3,651
Capital WIP	715	404	405	880	1,476	1,295
Total Investments	**8**	**4**	**3**	**4**	**4**	**4**
Curr. Assets, Loans&Adv.	**6,633**	**7,014**	**7,157**	**11,180**	**14,093**	**17,827**
Inventory	1,877	2,139	2,797	2,950	4,547	5,122
Account Receivables	2,625	2,888	2,265	4,839	6,241	6,532
Cash and Bank Balance	470	765	568	1,985	1,280	3,789
Loans and Advances	1,661	1,222	1,527	1,406	2,025	2,384
Curr. Liability & Prov.	**3,718**	**4,289**	**3,447**	**5,051**	**7,457**	**8,430**
Account Payables	3,207	2,532	2,262	3,093	4,392	4,821
Other Current Liabilities	390	1,624	1,053	1,826	2,859	3,366
Provisions	121	133	132	132	206	243
Net Current Assets	**2,915**	**2,725**	**3,711**	**6,129**	**6,636**	**9,397**
Appl. of Funds	**14,497**	**15,311**	**18,088**	**20,829**	**26,453**	**29,752**

Financials and valuation

Ratios

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
Basic (INR)						
EPS	**0.1**	**12.1**	**23.3**	**45.0**	**78.4**	**96.3**
Cash EPS	9.5	39.7	58.1	91.9	145.9	172.7
BV/Share	212.7	266.1	302.3	442.2	529.2	632.2
DPS	NA	NA	0.0	7.0	15.0	18.0
Payout (%)	0.0	0.0	0.0	13.3	22.5	22.0
Valuation (x)						
P/E	25,155.9	128.9	66.9	34.6	19.9	16.2
Cash P/E	163.7	39.3	26.8	17.0	10.7	9.0
P/BV	7.3	5.9	5.2	3.5	2.9	2.5
EV/Sales	1.1	0.3	3.7	3.7	3.3	2.7
EV/EBITDA	10.3	2.2	18.6	15.3	12.9	10.3
Dividend Yield (%)	NA	NA	0.0	0.4	1.0	1.2
FCF per share	NA	NA	-8.7	-4.4	-34.3	97.2
Return Ratios (%)						
RoE	0.1	6.9	11.2	16.6	22.1	22.7
RoCE	3.3	9.8	11.7	15.7	20.3	20.4
RoIC	3.1	9.4	10.5	15.8	21.9	22.6
Working Capital Ratios						
Fixed Asset Turnover (x)	0.7	1.4	1.1	1.2	1.3	1.4
Inventory (Days)	131	56	77	67	66	63
Debtor (Days)	184	76	63	109	90	80
Creditor (Days)	225	67	62	70	63	59
Leverage Ratio (x)						
Current Ratio	1.8	1.6	2.1	2.2	1.9	2.1
Interest Cover Ratio	0.9	1.6	2.1	3.3	4.7	5.3
Net Debt/Equity	0.8	0.5	0.6	0.2	0.3	0.2

Consolidated - Cash Flow Statement

Y/E March	FY18	FY19	FY20	FY21	FY22E	FY23E
OP/(Loss) before Tax	2	578	1,149	2,215	4,286	5,510
Depreciation	367	837	942	1,087	1,383	1,462
Interest & Finance Charges	226	749	723	703	785	836
Direct Taxes Paid	-29	-144	-243	-334	-429	-771
(Inc)/Dec in WC	-108	-253	-165	-2,057	-1,213	-252
CF from Operations	**458**	**1,767**	**2,406**	**1,613**	**4,813**	**6,784**
Others	35	-103	36	-58	0	0
CF from Operating incl EO	**492**	**1,663**	**2,442**	**1,556**	**4,813**	**6,784**
(Inc)/Dec in FA	-347	-582	-2,676	-1,715	-6,500	-2,000
Free Cash Flow	**145**	**1,081**	**-234**	**-160**	**-1,687**	**4,784**
(Pur)/Sale of Investments	0	4	1	1	0	0
Others	-497	-546	-906	653	304	358
CF from Investments	**-844**	**-1,124**	**-3,581**	**-1,063**	**-6,196**	**-1,642**
Issue of Shares	0	440	298	2,982	133	0
Inc/(Dec) in Debt	528	-881	1,618	-1,002	2,500	-400
Interest Paid	-220	-775	-810	-832	-1,089	-1,193
Dividend Paid	0	0	-129	-197	-867	-1,041
Others	369	982	-27	-26	1	1
CF from Fin. Activity	**677**	**-234**	**949**	**925**	**677**	**-2,633**
Inc/Dec of Cash	**326**	**305**	**-189**	**1,417**	**-705**	**2,509**
Opening Balance	145	460	757	568	1,985	1,280
Closing Balance	**470**	**765**	**568**	**1,985**	**1,280**	**3,789**

Annexure

Exhibit 47: Manufacturing locations for some of the main products

Product	Therapeutic Category	Facility
Clomipramine hydrochloride	Antidepressant	Ambernath
Chlorpromazine hydrochloride	Antipsychotic	Ambernath
Dolutegravir Sodium (DTG)	Antiretroviral	Ambernath
Efinaconazole	Antifungal	Ambernath
Flucytosine	Antimycotic	Ambernath
Loratadine	Antihistamine	Ambernath
Mefenamic acid	Anti-inflammatory	Ambernath
Mycophenolate Mofetil	Immunosuppressant	Ambernath
Pentoxifylline	Hemorrheologic agent	Ambernath
Tioconazole	Antifungal	Ambernath
Zileuton	Anti-Asthmatic	Ambernath
Levetiracetam	Antiepileptic	Ambernath
Aprepitant	Antiemetic	Cuddalore
Bumetanide (Inj)	Loop Diuretic	Cuddalore
Celecoxib	Anti-inflammatory	Cuddalore
Colesevelam hydrochloride	Antihyperlipidemic	Cuddalore
Colestipol hydrochloride	To treat primary hypercholesterolemia	Cuddalore
Cycloserine	Antitubercular	Cuddalore
Dabigatran etexilate mesylate	Anticoagulant	Cuddalore
Dextromethorphan polistirex	Antitussive	Cuddalore
Gabapentin	Anticonvulsant	Cuddalore
Isradipine	Cardiovascular Agent	Cuddalore
Lanthanum carbonate Octahydrate	For the treatment of Hyperphosphatemia	Cuddalore
Lanthanum carbonate Tetrahydrate	For the treatment of Hyperphosphatemia	Cuddalore
Loxoprofen sodium	Anti-inflammatory	Cuddalore
Methohexital	Anesthetics	Cuddalore
Mirabegron	OAB Treatment	Cuddalore
Nizatidine	Antiulcerative	Cuddalore
Olanzapine	Antipsychotic	Cuddalore
Pitavastatin calcium	Antihyperlipoproteinemic	Cuddalore
Ranitidine hydrochloride	Antiulcer	Cuddalore
Sevelamer carbonate	Hypophosphatemic agent	Cuddalore
Sevelamer hydrochloride	Hypophosphatemic agent	Cuddalore
Levetiracetam	Antiepileptic	Cuddalore
Ibuprofen sodium dihydrate	Anti-inflammatory	Cuddalore

Source: MOFSL, Pharmacompass

Exhibit 48: Manufacturing locations for some of the main products

Product	Therapeutic Category	Facility
Acitretin	Antipsoriatic	Mangaluru
Acyclovir sodium	Antiviral	Mangaluru
Albendazole	Anthelmintic	Mangaluru
Artemether	Antimalarial	Mangaluru
Artesunate	Antiprotozoal agent	Mangaluru
Cetirizine dihydrochloride	Antihistamine	Mangaluru
Chlorthalidone	Antihypertensive	Mangaluru
Citicoline Sodium	Neuro Protective	Mangaluru
Colchicine	Antigout agent	Mangaluru
Disulfiram	Chronic Alcoholism	Mangaluru
Etomidate	Anesthetics	Mangaluru
Felbamate	Anticonvulsant	Mangaluru
Flecainide Acetate	Anti-arrhythmic agent	Mangaluru
Hydralazine hydrochloride	Antihypertensive	Mangaluru
Imiquimod	Topical anti-infective	Mangaluru
Labetalol hydrochloride	Anti-hypertensive	Mangaluru
Mesna	Antineoplastic detoxifying agent	Mangaluru
Methoxsalen	Antipsoriatic	Mangaluru
Oseltamivir phosphate	Antiviral	Mangaluru
Praziquantel	Anthelmintic	Mangaluru
Rifaximin	Antibiotic	Mangaluru
Succinylcholine chloride	Skeletal muscle relaxant	Mangaluru
Cinacalcet	Calcimimetic agent	Puducherry
Ethacrynic acid	Cardiovascular Agent	Puducherry
Ibuprofen	Anti-inflammatory	Puducherry
S-Ibuprofen	Anti-inflammatory	Puducherry
Ibuprofen Lysine	Anti-inflammatory	Puducherry
Lurasidone hydrochloride	Antipsychotic	Puducherry
Milnacipran hydrochloride	Central Nervous System Agent	Puducherry
Posaconazole	Antifungal	Puducherry
Ibuprofen sodium dihydrate	Anti-inflammatory	Puducherry

Source: MOFSL, Pharmacompass

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Best Overall Sales

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Best Analyst ESG

Best Sales Person

Best Overall Research 2nd Rank

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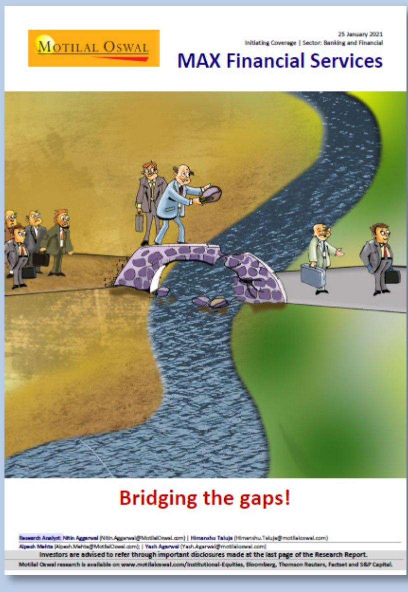

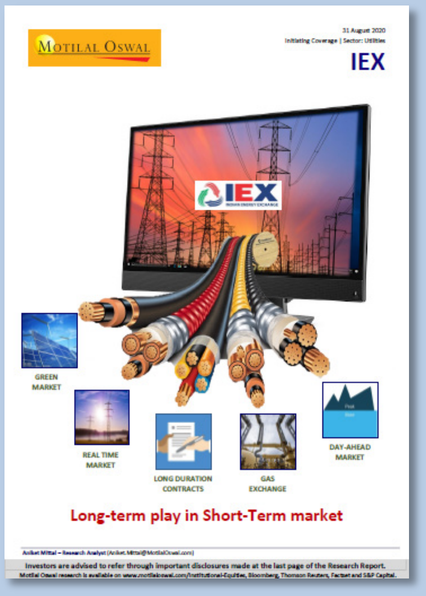

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