

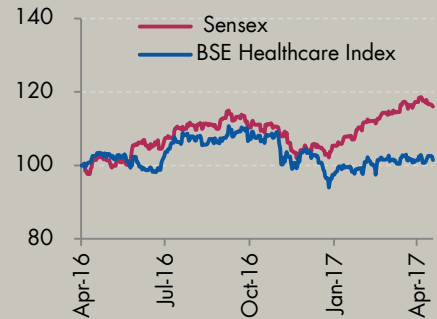
Domestic formulations: Near term hiccups

PHARMACEUTICALS

Despite demonetization (impacting volumes), negative WPI (impacting price) and proposed FDC ban, domestic formulations market grew 10% YoY in FY17. Growth was led by 5% in volume, 2% price increase and 3% NI* (5% volume growth, 5% price hike, 3% NI* in FY16). Chronic segment grew faster at 12% YoY [led by anti-diabetes (19% YoY)] than 9% YoY growth in acute segment (anti-infective 4% YoY). FY18 could see higher price increase (given positive WPI inflation) but implementation of GST by June/July could extend softness in volume (destocking due to FY end/GST).

After interaction with companies, distributors and doctors, we believe, implementation of generics model (in current form) is not feasible. Despite near-term hiccups in IPM[^], we reiterate our preference for companies with strong domestic plays and scale-up in US (Alkem, Cipla), as we believe US headwinds are here to stay. We also like Glenmark (improving US/EM) and Natco (niche R&D).

Relative performance

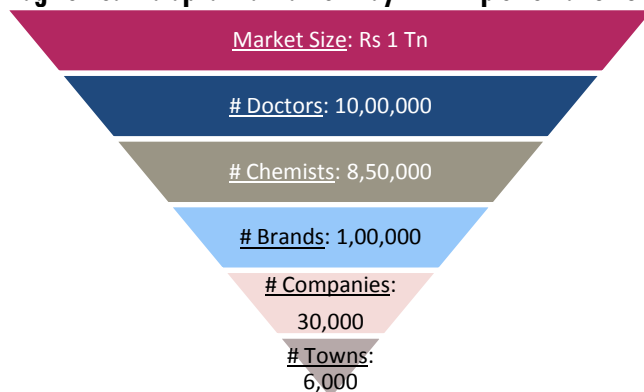


Source: Axis Capital

Proposed generic generics model – can lead to shortage and quality issues

- ◆ **Not feasible in current form:** Implementation of prescribing cheaper generics instead of brands would substantially hit the sales and margin (60-85% gross margin in brands vs. 15-20% in generics) of pharma companies; however, we believe, the model is not feasible in current form in a fragmented industry and would result in poor quality (<0.01% drugs produced are tested for quality) and shortages given lack of infrastructure, quality control at chemists' stores (~850,000 drug retail stores in India, with ~1,800 inspectors) and qualified pharmacists
- ◆ **Shortage of drugs in different SKUs/ lack of infrastructure:** A shift from branded generics to generic generics could lead to significant loss of value in the ~USD 15bn pharma industry. This could lead to non-availability/shortage of drugs and especially drugs with different SKUs. Further, the government infrastructure currently is not sufficient, as there are only few Jan Aushadhi stores (only 2 in Mumbai; 1,205 in India)
- ◆ **Hinder access to new-age drugs:** HepC drugs (still patented in western world) were in-licensed by few companies from Gilead at a relatively lower price compared to its US pricing. Given further lower pricing in generic generics model, domestic companies will desist to in-license such life-saving drugs. Although the move is a major policy initiative by the government toward strengthening its public health system and aims at making healthcare affordable, India is unable to ensure access to many modern medicines.

Exhibit 1: Fragmented Indiapharma market may limit implementation of proposed generic model



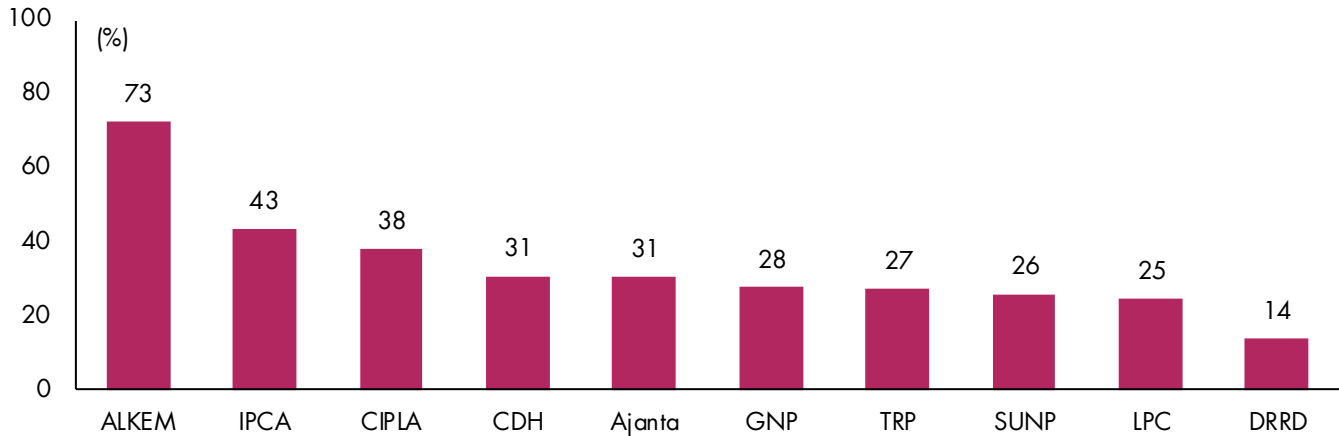
Source: Industry, IPM[^]: India Pharma Market NI* - new introductions

- ◆ **Lack of qualified pharmacists:** Under the proposed model, all chemists’ stores would require a qualified/ trained pharmacist for dispensing generic generics, which would add to costs/ reduce the margin of chemists. Additionally, making pharmacists available at ~850,000 drug retail stores would be a challenge
- ◆ **Loss of jobs of sales representatives/ Marketing Representatives (MRs):** ~1-1.5 mn MR’s or sales representatives help in knowledge dissemination in terms of new science and drugs to doctors (~1mn). Implementation of proposed generics model will substantially cut down MR jobs with pharma companies
- ◆ **Government has initiated steps to ensure better drug safety:** The Ministry of Health and Family Welfare amended the law to strengthen the drug approval process, and made bioequivalence studies compulsory for certain classes of generic drugs (drugs with low solubility, etc)manufactured in India through a notification on April 3, 2017. We believe this amendment is for the greater good of patients; however there is a likelihood that it would increase costs for pharma companies which could result in consolidation

Exhibit 2: India generics push - Timeline of events

Timeline	Initiative
May-10	Government order directing Central government hospitals to provide only generic medicines
Jul-12	The Indian government takes a major step toward its ambitious vision of achieving Universal Health Coverage (UHC) by initiating a USD5.4-bn plan that would allow the government sector doctors to prescribe generic drugs to patients free of cost
Oct-12	Union Health Ministry and MCI issue a directive that generic drugs in India would not be sold under branded names but only by their generic names and all doctors/physicians in the Central/State gov-run hospitals should prescribe only medicines with generic names
Jan-13	MCI asks doctors to prescribe medicines in generic names
Jan-13	Doctors in India defy guidelines on generic drugs
Feb-13	Clarification on use of generic drugs from IMA HQ
Feb-14	Maharashtra government modifies “Model Medicine Prescription format” requiring generic name
Dec-14	Government order directing Central government hospitals to provide only generic medicines
Jun-16	Government to make it compulsory for doctors to prescribe generic medicines
Sep-16	MCI amends Clause 1.5 of the Indian Medical Council (Professional Conduct, Etiquette and Ethics) Regulations, 2002. This clause now reads: “Every physician should prescribe drugs with generic names legibly and preferably in capital letters and he/she shall ensure that there is a rational prescription and use of drugs”. The words “legibly and preferably in capital letters” were added
Oct-16	MCI makes it mandatory for doctors to prescribe both generic and brand names
Nov-16	No takers for MCI guidelines to prescribe generic drugs
Apr-17	The Ministry of Health and Family Welfare amended the law to make bioequivalence studies compulsory for drugs with low solubility, before they are approved. Previously bio equivalence studies were required only for generics seeking approval within a period of 4 years from the date of first approval. Accordingly generic manufacturers entering the market after 4 years from the date of first approval were able to side-step the bio-equivalence requirement; thereby leading to an affordable price of the drugs.

Source: Axis Capital

Exhibit 3: Domestic formulations contribute 15-75% to revenue of most companies


Source: Company, Axis Capital

Exhibit 4: India Pharma – Valuation snapshot

Company	MCAP Rating		CMP (Rs)	TP (Rs)	Upside (%)	EPS CAGR FY16-19E (%)	P/E (x)			RoCE (%)		
	(USD bn)						FY17E	FY18E	FY19E	FY17E	FY18E	FY19E
Aurobindo (ARBP)	5.7	BUY	624	800	28	11	16	14	13	25	23	22
Cipla	6.9	BUY	553	680	23	23	36	25	18	10	13	17
Lupin (LPC)	9.7	HOLD	1,377	1,600	16	14	22	20	18	21	20	20
Cadila (CDH)	7.3	HOLD	457	420	(8)	12	39	29	22	19	23	28
Sun Pharma (SUNP)	24.0	HOLD	643	700	9	19	26	21	18	19	20	20
Dr. Reddy's (DRRD)	6.8	SELL	2,646	2,600	(2)	3	32	25	20	10	12	14
Large Cap							28	22	18	17	18	20
Alkem (ALKEM)	3.7	BUY	1,985	2,200	11	21	26	24	20	23	23	24
Glenmark (GNP)	4.0	BUY	900	1,120	24	20	25	21	15	16	17	20
Strides (STR)	1.5	BUY	1,101	1,365	24	33	30	20	14	9	11	14
NatcoPharma	2.5	BUY	928	870	(6)	57	35	32	20	15	31	39
IPCA	1.2	BUY	594	600	1	46	38	24	18	10	13	15
Alembic (ALPM)	1.8	HOLD	611	625	2	18	29	24	20	27	28	29
Biocon (BIOS)	3.6	HOLD	1,166	1,040	(11)	22	34	34	25	12	12	15
Mid Cap							30	26	19	17	18	20
Generics Avg							28	23	19	17	18	20
Others												
Divi's Lab (DIVI)	2.7	HOLD	647	680	5	(4)	15	18	17	30	23	23
Syngene (SYNG)	1.7	HOLD	547	520	(5)	25	37	33	25	17	17	18

Source: Companies, Axis Capital;

Price as on 25-Apr 2017 * Stride TP includes Rs 58/ sh for R&D, BIOS TP includes Rs 160/ sh for Biosimilar. Natco TP includes Rs 59/ sh for R&D

Steady growth in chronic: Anti Diabetic (19%), Oncology (16.2%), Derma (11.7%), and Cardiac(11.4%) exhibited resilient YoY growth in FY17, whereas Anti-Infective (4%) underperformed the industry. Acute therapy growth was volatile in FY17 owing to various factors (Q1-NLEM/FDC, Q2-favourable seasonal trends, Q3-demonetization; see exhibit 8for details)

Companies (leaders and laggards): Within our coverage companies, Alkem (15.1%), Glenmark (12.3%), ZydusCadila (12.0%), NatcoPharma(11.6%) and Lupin (11.6%) outperformed IPM growth in FY17; Sun Pharma (10.9%) was in line with industry growth, while Dr Reddy (5.2%), Alembic (6.8%) and Cipla (7.6%) underperformed the industry.

Exhibit 5: Modest growth in FY17 across companies

YoY Growth %	FY15	FY16	FY17	Q1FY17	Q2FY17	Q3FY17	Q4FY17
Alkem	15	10	15	6	15	10	8
Alembic Pharma	13	18	7	9	16	3	(1)
Cadila	8	12	12	2	9	15	14
Cipla	15	13	8	6	6	7	4
Dr Reddy's	12	21	5	1	15	3	3
GlenmarkPharma	17	23	12	8	14	11	15
IPCA	18	6	9	4	18	6	6
Lupin	18	17	12	9	15	15	8
Sun Pharma	12	14	11	5	15	14	9
Torrent Pharma	16	15	13	(2)	9	14	12
Ajanta Pharma	29	11	14	11	9	11	14
IPM	13	13	10	6	13	10	9

Source: AIOCD Note: AIOCD#: All India Organization of Chemists and Distributors

Exhibit 6: Mar'17 growth led by improved volume growth

Growth Drivers %	FY17				Q4FY17				Mar'17			
	Vol	Price	NP	Total	Vol	Price	NP	Total	Vol	Price	NP	Total
IPM	5	2	3	10	4	1	3	9	4	2	3	10
Sun Pharma	6	2	3	11	5	2	3	9	7	2	3	11
Cipla	5	1	2	8	4	(1)	1	4	7	(2)	1	6
Zydus Cadila	10	(2)	5	12	14	(5)	5	14	11	(3)	4	12
Lupin	5	2	5	12	1	1	6	8	3	2	6	10
Alkem	14	(1)	2	15	8	(3)	3	8	12	(4)	3	11
Dr.Reddy's Labs	3	(0)	3	5	1	(2)	3	3	10	(2)	3	12
Glenmark Pharma	2	2	8	12	7	1	7	15	7	(0)	8	16
Torrent	5	5	2	13	5	5	2	12	4	4	2	11
Alembic Pharma	(2)	5	4	7	(10)	5	5	(1)	(8)	4	5	1
IPCA	6	2	0	9	4	1	0	6	11	1	0	13
Ajanta Pharma	4	6	5	14	2	6	5	14	1	6	6	14

Source: AIOCD

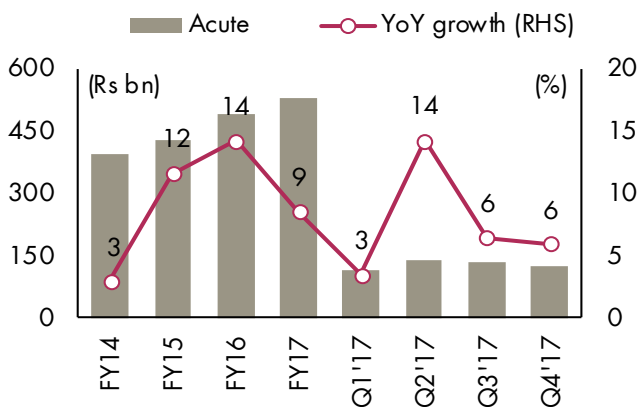
Exhibit 7: Growth in FY17 has been led by chronic therapies namely anti-diabetic, derma, CNS and cardiac therapeutic segments

YoY Growth	% of IPM Total*	FY15	FY16	FY17	Q1FY17	Q2FY17	Q3FY17	Q4FY17	Mar'17
Anti-Infective	15	10	8	4	1	14	(1)	(2)	1
Cardiac	12	14	14	11	7	10	14	11	12
Gastro Intestinal	12	18	15	10	7	11	9	10	9
Vitamins/nutrients	9	16	10	10	7	10	12	8	7
Anti-Diabetic	8	24	21	19	13	18	21	19	23
Respiratory	8	17	11	9	0	25	4	3	8
Pain / Analgesics	7	10	11	10	3	13	8	9	9
Neuro / CNS	6	12	16	10	8	9	9	6	5
Derma	6	23	17	12	8	9	13	15	17
Gynaecological	5	(6)	11	11	6	10	13	12	11
Anti-Malarial	1	(8)	(2)	(4)	15	20	(17)	(22)	(14)
Total IPM (Rs bn)	1,111	13	13	10	6	13	10	9	10

Source: AIOCD, *Note: IPM sales for FY17

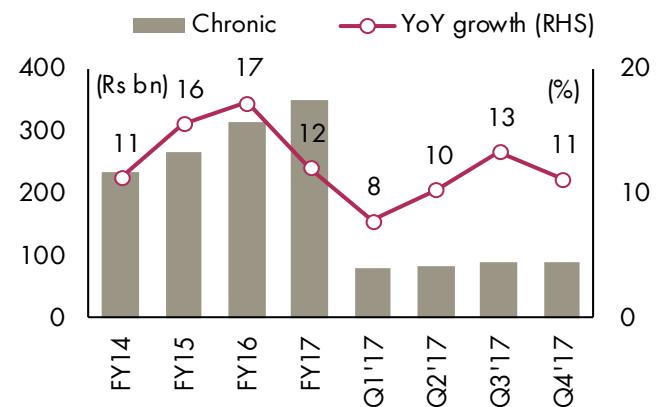
We highlight that the overall growth of 9.6% YoY/8.8%YoY/10.3%YoY in Mar'17/Q4'17/FY17 respectively was led by chronic therapies (specifically anti-diabetic and cardiac segments) given increasing lifestyle disorder. Additionally, these were relatively less impacted by demonetization in recent months. By contrast, acute therapies grew lower primarily owing to slower growth in key anti-infective segment.

Exhibit 8: Acute therapy growth remains subdued



Source: AIOCD

Exhibit 9: Chronic sales continue to drive IPM growth



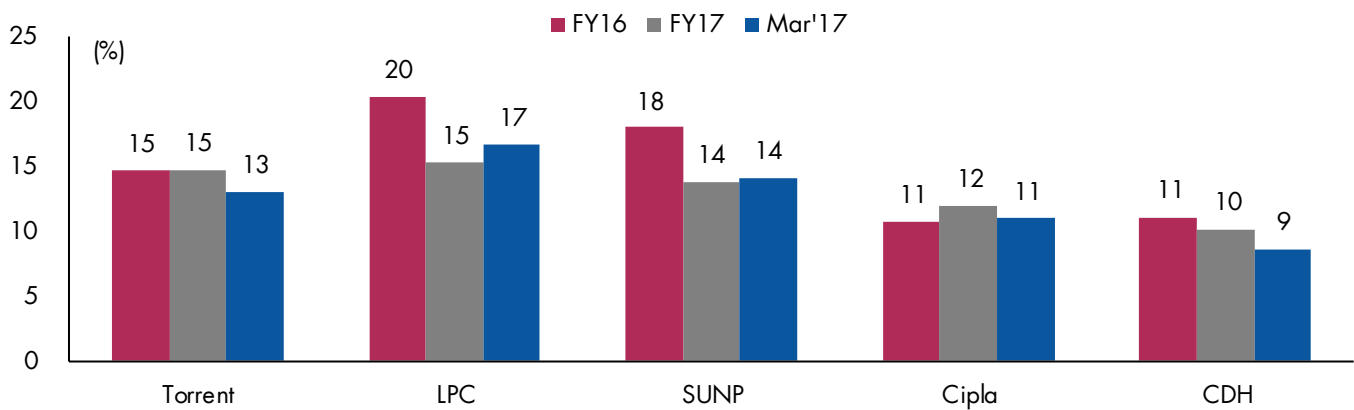
Source: AIOCD

Exhibit 10: Most companies have large proportion of revenue from acute therapies

% of FY17 revenue	Acute	Chronic	Sub Chronic
IPCA	65	28	7
Alkem	64	11	25
Alembic Pharma	57	23	20
Dr Reddy's	52	27	20
Cadila	49	32	19
Cipla	45	42	13
Glenmark Pharma	42	35	24
Sun Pharma	39	47	14
Lupin	32	50	18
Torrent	23	53	24

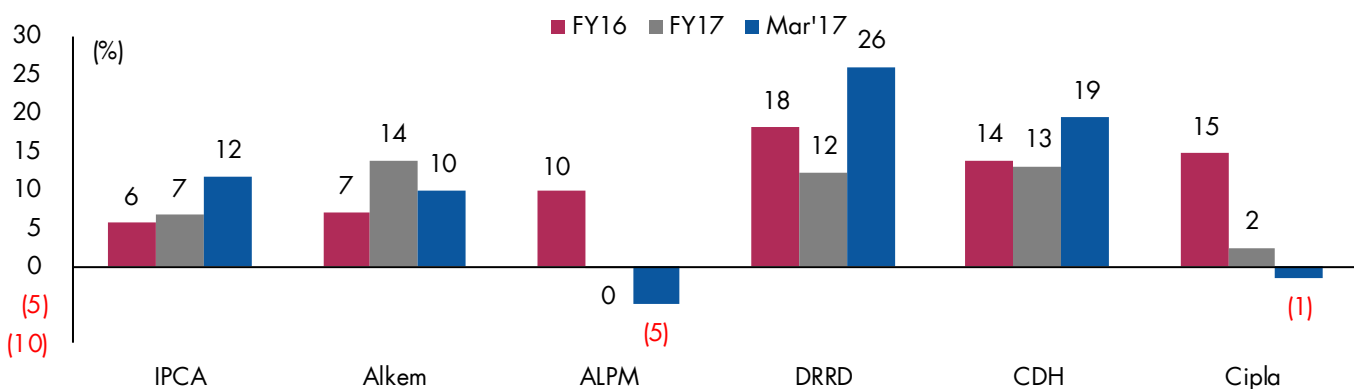
Source: AIOCD

Exhibit 11: Growth has largely remained steady for companies in chronic segment...



Source: AIOCD

Exhibit 12: ...while acute portfolios have seen erratic growth due to seasonal trends as well as impact of demonetization



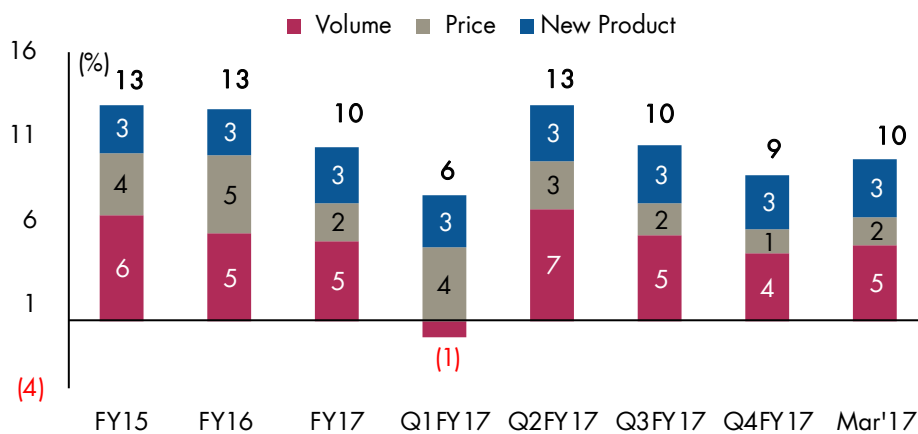
Source: AIOCD

Key sector trends

Exhibit 13: Stronger growth in chronic therapies (anti-diabetic/cardiac) vs. acute in recent quarters

YoY Growth	% of IPM Total*	FY15	FY16	FY17	Q1FY17	Q2FY17	Q3FY17	Q4FY17	Mar'17
Anti-Infective	15	10	8	4	1	14	(1)	(2)	1
Cardiac	12	14	14	11	7	10	14	11	12
Gastro Intestinal	12	18	15	10	7	11	9	10	9
Vitamins/nutrients	9	16	10	10	7	10	12	8	7
Anti-Diabetic	8	24	21	19	13	18	21	19	23
Respiratory	8	17	11	9	0	25	4	3	8
Pain / Analgesics	7	10	11	10	3	13	8	9	9
Neuro / CNS	6	12	16	10	8	9	9	6	5
Derma	6	23	17	12	8	9	13	15	17
Gynaecological	5	(6)	11	11	6	10	13	12	11
Anti-Malarial	1	(8)	(2)	(4)	15	20	(17)	(22)	(14)
Total IPM (Rs bn)	1,111	13	13	10	6	13	10	9	10

Source: AIOCD %* of FY17 total

Exhibit 14: Growth in FY17 impacted by negative WPI led price declines, FDC ban


Volume remained steady in FY17 (despite supply disruption in Q1FY17)

Source: AIOCD

Exhibit 15: Lower volume uptake impacted growth in Q4'17

Growth Drivers %	Q2FY17				Q3FY17				Q4FY17			
	Vol	Price	NP	Total	Vol	Price	NP	Total	Vol	Price	NP	Total
IPM	7	3	3	13	5	2	3	10	4	1	3	9
Sun Pharma	9	3	3	15	9	3	3	14	5	2	3	9
Cipla	3	1	2	6	5	(0)	1	7	4	(1)	1	4
Zyudus Cadila	4	(1)	6	9	13	(4)	6	15	14	(5)	5	14
Lupin	9	1	4	15	8	1	5	15	1	1	6	8
Alkem	13	(1)	3	15	11	(3)	2	10	8	(3)	3	8
Dr.Reddy's Labs	14	(2)	3	15	3	(2)	2	3	1	(2)	3	3
Glenmark Pharma	3	4	7	14	0	3	7	11	7	1	7	15
Torrent	1	6	2	9	5	6	2	14	5	5	2	12
Alembic Pharma	6	6	4	16	(7)	5	4	3	(10)	5	5	(1)
IPCA	16	1	1	18	4	1	(0)	6	4	1	0	6
Ajanta Pharma	1	5	4	9	1	6	5	11	2	6	5	14

Source: AIOCD

Regulatory pricing policy headwinds (NLEM/FDC)

Exhibit 16: Regulatory changes (price control & ban on FDC) – impact (Rs bn)

	Full Value			NLEM - 15 (Till date)		FDC's		WPI	
	MAT VAL	Impact	% impact	MAT VAL	% impact	MAT VAL	% impact	MAT VAL	% impact
IPM	995	49.3	5.0	14.8	1.5	29.1	2.9	5.3	0.5
Sun Pharma	55	1.1	2.0	0.3	0.5	0.5	1.0	0.3	0.5
Cipla	49	2.4	4.8	1.8	3.6	0.2	0.5	0.3	0.7
ZydusCadila	39	1.4	3.7	1.0	2.5	0.2	0.5	0.3	0.7
Lupin	34	1.6	4.6	0.7	2.1	0.7	2.0	0.2	0.5
Alkem	31	1.9	6.1	0.9	3.0	0.7	2.4	0.2	0.7
GSK Pharma	33	1.2	0.0	0.9	0.0	0.0	0.0	0.3	0.9
Dr.Reddy's Labs	24	1.2	4.8	0.8	3.3	0.2	0.9	0.1	0.6
GlenmarkPharma	24	1.6	6.9	0.6	2.4	1.0	4.1	0.1	0.4
Sanofi	24	1.1	0.0	0.8	0.0	0.1	0.4	0.2	0.7
Torrent	23	0.4	1.7	0.1	0.6	0.1	0.5	0.2	0.7
Alembic Pharma	14	0.8	6.0	0.2	1.3	0.6	4.1	0.1	0.5
IPCA	13	0.7	5.8	0.2	1.6	0.4	3.5	0.1	0.7

Source: AIOCD; ban on FDC has been rejected by the Delhi High Court; Govt set to appeal in the Supreme Court

Exhibit 17: Coverage of molecules under NLEM (price control) has increased

Total Molecules in IPM	NLEM 1995	NLEM 2013	NLEM 2015	Current total	% of total molecules
2310	67	233	116	326	14%

Source: AIOCD, NLEM: National List of Essential Medicines

Exhibit 18: NLEM coverage by company has been increasing

% covered under NLEM	1995	2013	2015
IPM	2.9	12.3	19.9
Sun Pharma	2.2	9.8	16.1
Cipla	4.6	17.3	32.4
Zydus Cadila	3.6	16.8	27.2
Lupin	1.6	9.6	23.1
Alkem	4.9	19.1	29.9
Dr.Reddy's Labs	0.1	14.7	22.5
Torrent	2.2	9.9	14.5
Glenmark Pharma	0.0	1.7	13.6
Alembic Pharma	6.0	15.0	14.7
IPCA	3.1	18.3	28.5

Source: AIOCD, NLEM: National List of Essential Medicines

NLEM coverage has been increasing for most companies (more so with higher exposure to acute segments like anti-infectives, etc.)

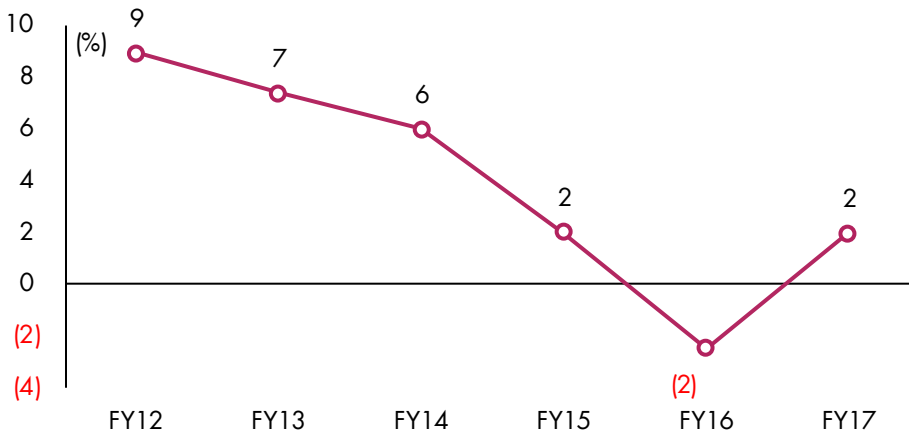
Exhibit 19: Large increase in NLEM coverage across therapy groups

% covered under NLEM	1995	2013	2015
IPM	2.9	12.3	19.9
Anti-Infective	5.3	28.3	37.3
Cardiac (CVS)	1.1	18.3	28.2
Gastro Intestinal (GI)	6.2	10.3	14.9
Vitamins / Minerals / Nutrients	1.4	1.0	2.1
Anti-diabetic	2.2	9.2	12.8
Respiratory	2.5	3.4	12.5
Pain / Analgesics	1.2	5.6	13.6
Derma	1.7	9.8	27.1
Ophthal/Otologicals	1.5	3.4	7.3
Vaccines	2.8	4.3	16.2
Anti-Neoplastics	0.0	26.4	49.0

Source: AIOCD, NLEM: National List of Essential Medicines

Anti-infectives and anti-neoplastics (oncology) are most covered under NLEM

Exhibit 20: Negative WPI in FY16 impacted FY17 growth



Source: Axis Capital, WPI: Wholesale Price Inflation

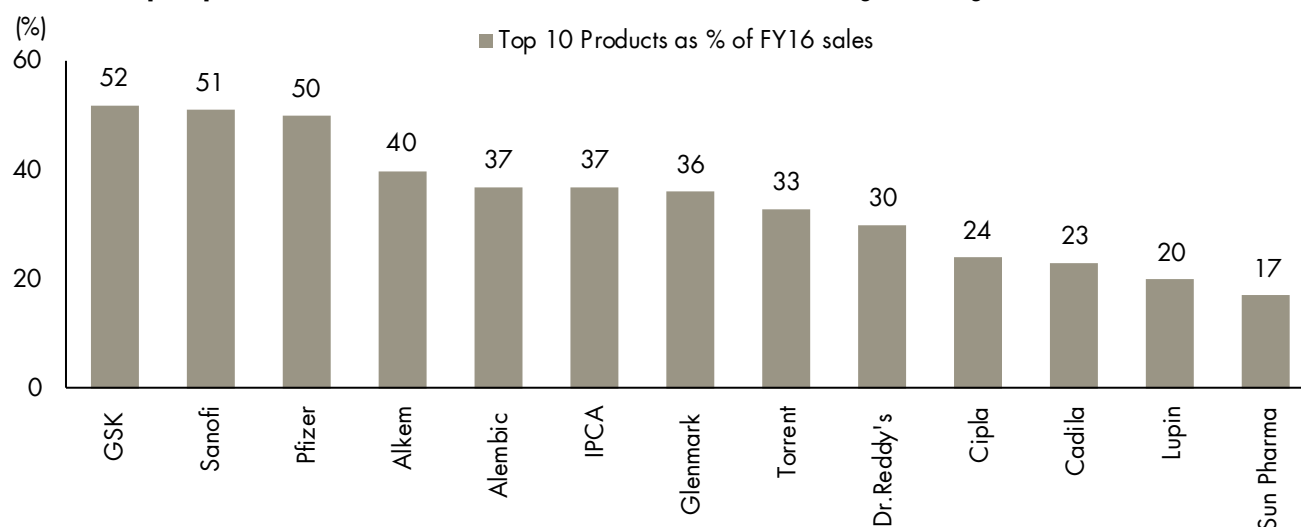
Exhibit 21: Pricing policy measures could put pressure on our growth assumptions

YoY %	FY17E	3 year avg (FY13-16)	5 year avg (FY11-16)
Alembic Pharma	8	10.0	11.0
Cadila	12	12.0	13.0
GlenmarkPharma	10	21.0	19.0
IPCA	12	13.0	12.0
Cipla	14	12.0	13.0
Dr Reddy's	6	10.0	11.0
Lupin	12	15.0	17.0
Sun Pharma	8	6.0	12.0
Alkem	20	16.0	17.0

Source: Companies, Axis Capital

Additional regulatory policy measures could put pressure on consensus and our growth estimates

Volume/ earnings growth to recover by focusing on brands, reducing bonus and improving MR productivity

Exhibit 22: Top 10 products contribute 20-50% to revenue, with concentration higher among MNCs


Source: AIOCD

Exhibit 23: Profit-conscious companies have been reducing bonus offers

Bonus (as % of total sales)	FY16	FY17	Q1FY17	Q2FY17	Q3FY17	Q4FY17
IPM	3.5	3.8	3.8	4.0	3.7	3.7
Alembic Pharma	2.8	2.9	2.9	3.0	2.9	2.7
Alkem	6.5	6.6	6.4	6.9	6.6	6.0
Cadila	7.1	6.9	7.0	6.4	6.7	6.7
Cipla	5.4	4.9	5.4	5.3	4.5	4.4
Dr Reddy's	2.1	3.1	3.2	3.0	2.9	3.2
Glenmark Pharma	3.2	3.9	3.7	4.1	3.8	3.9
IPCA	4.0	3.9	3.7	5.5	3.6	2.5
Lupin	1.5	1.5	1.4	1.7	1.5	1.5
Sun Pharma	1.9	1.5	1.4	1.0	1.5	1.5
Torrent Pharma	1.1	0.6	0.2	0.5	0.8	1.0

Source: AIOCD

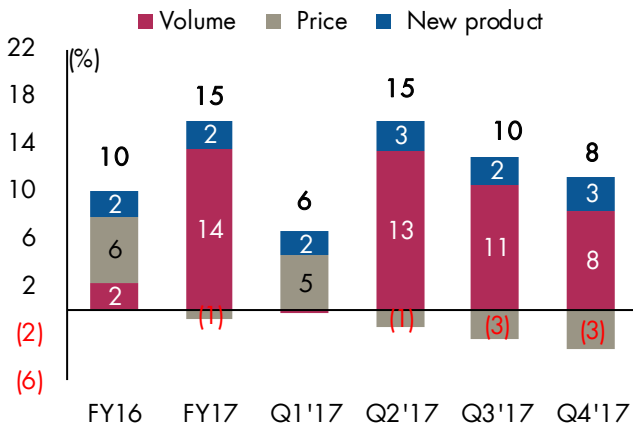
Exhibit 24: MR strength and productivity level have been increasing across companies

	No. of MRs		MR Productivity (Rsmn)	
	FY13	FY16	FY13	FY16
Alembic	2,900	5,000	3.4	2.5
Alkem	4,100	6,000	5.0	5.3
Cadila	4,300	7,000	4.6	5.4
Cipla	6,000	7,500	4.8	6.8
Dr Reddy's	2,700	4,500	3.2	5.3
GlenmarkPharma	2,100	3,700	4.4	5.7
IPCA	3,500	4,000	2.1	3.0
Lupin	4,200	6,600	4.5	5.1
Sun Pharma	6,600	9,200	5.6	7.9
Unichem	2,700	2,500	2.7	3.6

Source: Companies, Axis Capital, MR= Marketing Representative

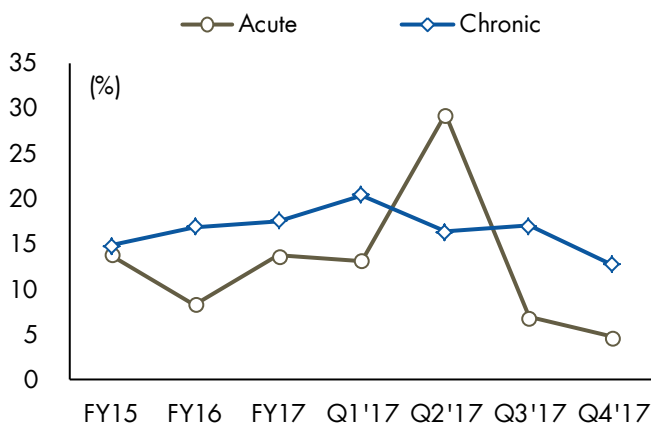
Alkem Laboratories (BUY): TP Rs 2,200 (22x FY19E EPS)

Exhibit 25: Strong 14%YoY volume growth in FY17...



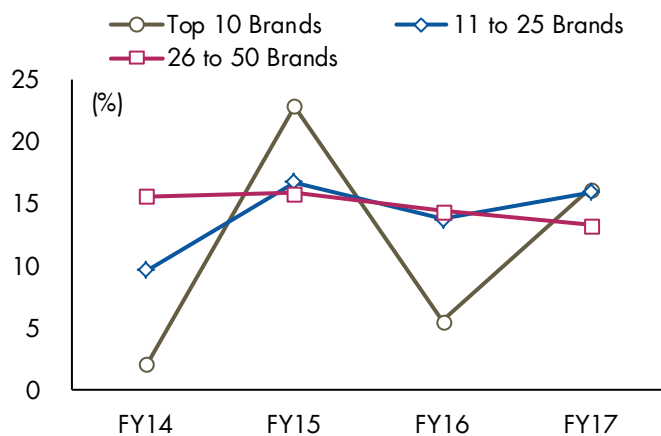
Source: AIOCD

Exhibit 27: Steady growth in chronic therapies



Source: AIOCD

Exhibit 29: Growth across brands has been steady...



Source: AIOCD

Exhibit 26: ...aided by robust growth in GI

YoY growth	% Sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Infectives	41%	1%	17%	0.3%	0.4%
Gastro Intestinal	18%	14%	19%	25%	19%
Vitamins	13%	4%	4%	17%	9%
Pain	8%	7%	29%	24%	12%
Neuro	5%	29%	4%	9%	11%
Derma	3%	8%	1%	18%	-6%
Respiratory	3%	-6%	28%	1%	-6%
Cardiac	3%	8%	9%	23%	22%
Anti-Diabetic	3%	26%	26%	39%	41%
Gynaecological	3%	12%	2%	5%	12%
Total (Rs bn)	39	6%	15%	10%	8%

Source: AIOCD, % of FY17 Sales

Exhibit 28: Cardiac/ Anti-Diabetic segments continue to grow

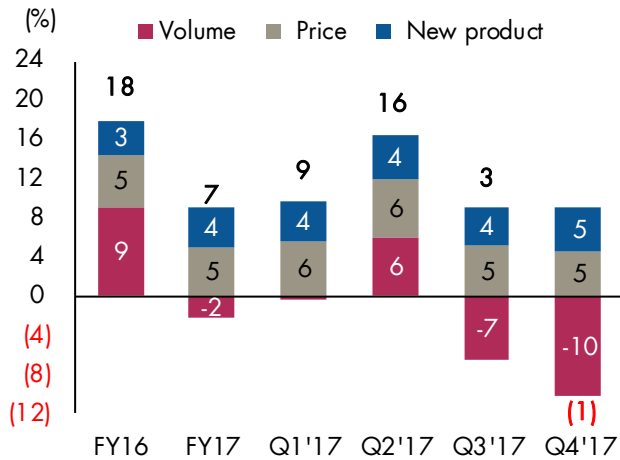
YoY growth	% Sales	FY15	FY16	FY17
Anti-Infectives	41%	14%	6%	10%
Gastro Intestinal	18%	24%	13%	26%
Vitamins	13%	18%	12%	14%
Pain	8%	12%	7%	24%
Neuro	5%	-4%	22%	18%
Derma	3%	21%	20%	3%
Respiratory	3%	12%	8%	8%
Cardiac	3%	24%	23%	21%
Anti-Diabetic	3%	45%	26%	44%
Gynaecological	3%	-12%	22%	11%
Total (Rsbn)	39	15%	10%	15%

Source: AIOCD, % of FY17 Sales

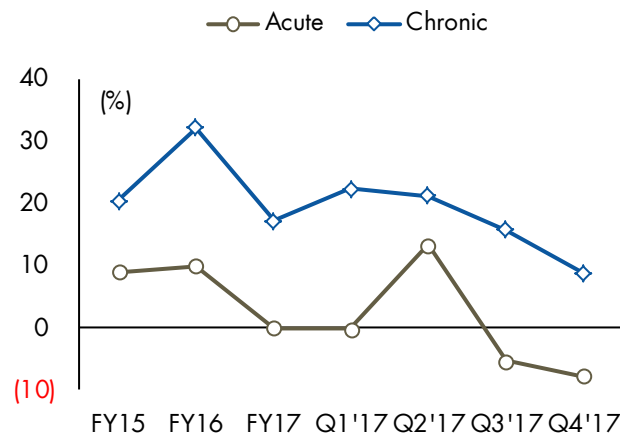
Exhibit 30: ... Top 10 brands continue to grow

Brand	Therapy	(Rs bn)	YoY %	FY17 Sales
Clavam	Anti-Infective	2.8	16%	7%
Pan	Gastro Intestinal	2.5	26%	6%
Pan D	Gastro Intestinal	2.1	30%	5%
Taxim	Anti-Infective	2.0	4%	5%
Taxim O	Anti-Infective	1.5	-6%	4%
Xone	Anti-Infective	1.1	15%	3%
Gemcal	Vit. / Min. / Nut.	1.0	20%	3%
A To Z Ns	Vit. / Min. / Nut.	1.0	25%	3%
Sumo	Pain/Analgesics	1.0	26%	3%
Ondem	Gastro Intestinal	0.9	14%	2%
Total Top 10 (Rs bn)		16	16%	40%

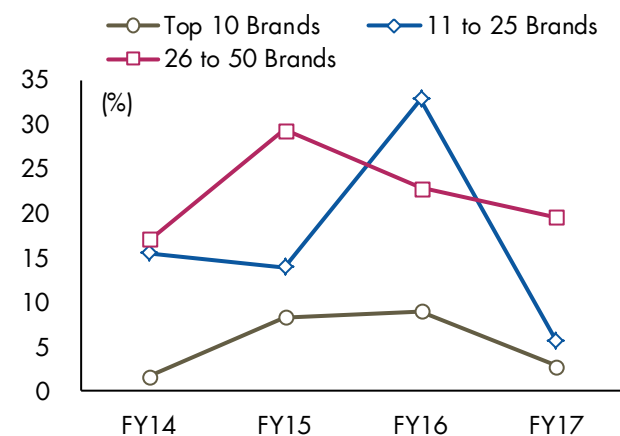
Source: AIOCD

Alembic Pharmaceuticals (HOLD): TP Rs 625 (20x FY19E EPS)
Exhibit 31: Volumes continued to decline...


Source: AIOCD

Exhibit 33: Acute therapies continue to decline in Q4


Source: AIOCD

Exhibit 35: Strong growth across Lower-ranked brands...


Source: AIOCD

Exhibit 32: ...with declining sales in key therapies

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Infectives	22%	-7%	10%	-8%	-10%
Gastro Intestinal	13%	6%	5%	-5%	-7%
Respiratory	13%	-6%	32%	-4%	-6%
Cardiac	15%	23%	19%	11%	8%
Gynaecological	12%	22%	19%	19%	10%
Vit. / Min. / Nut.	8%	30%	29%	18%	-3%
Anti Diabetic	7%	26%	35%	26%	18%
Pain / Analgesics	3%	14%	10%	-7%	-17%
Ophthal / Otologicals	1%	23%	-1%	7%	3%
Total (Rs bn)	15	9%	16%	3%	-1%

Source: AIOCD, % of FY17 Sales

Exhibit 34: Strong growth across Anti-Diabetic, Gynaec therapy

YoY growth	% of sales	FY15	FY16	FY17
Anti-Infectives	22%	2%	1%	-4%
Gastro Intestinal	13%	19%	17%	0%
Respiratory	13%	18%	16%	3%
Cardiac	15%	49%	46%	14%
Gynaecological	12%	33%	31%	20%
Vit. / Min. / Nut.	8%	12%	17%	18%
Anti Diabetic	7%	43%	42%	27%
Pain / Analgesics	3%	28%	27%	0%
Ophthal / Otologicals	1%	60%	3%	8%
Total (Rs bn)	15	13%	18%	7%

Source: AIOCD, % of FY17 Sales

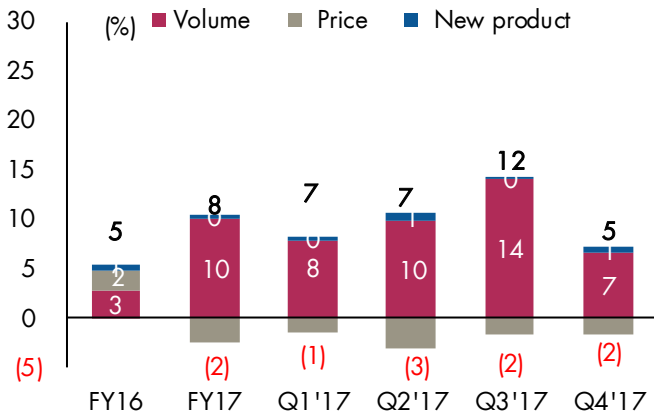
Exhibit 36: ...while top 10 brands have posted muted growth

Brand	Therapy	(Rsbn)	YoY %	FY17 Sales
Azithral	Anti-Infective	1.4	-4%	9%
Althrocin	Anti-Infective	0.8	4%	6%
Gestofit	Gynaecological	0.6	12%	4%
Wikoryl	Respiratory	0.6	26%	4%
Roxid	Anti-Infective	0.5	-9%	4%
Ulgel	Gastro Intestinal	0.3	-9%	2%
Rekool D	Gastro Intestinal	0.3	-4%	2%
Richar	Gynaecological	0.3	42%	2%
Glisen MF	Anti-Diabetic	0.3	1%	2%
Rekool	Gastro Intestinal	0.2	-3%	2%
Total Top 10 (Rsbn)		5	3%	36%

Source: AIOCD

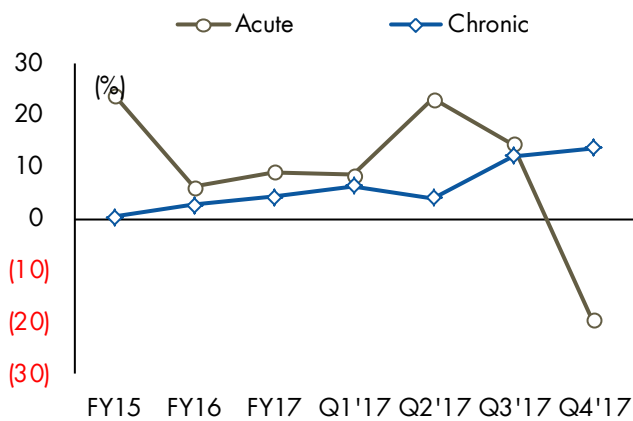
Biocon (HOLD): TP Rs1,040 (22x FY19E EPS + Rs. 160/sh for biosimilar pipeline)

Exhibit 37: Sharp improvement in volumes in FY17



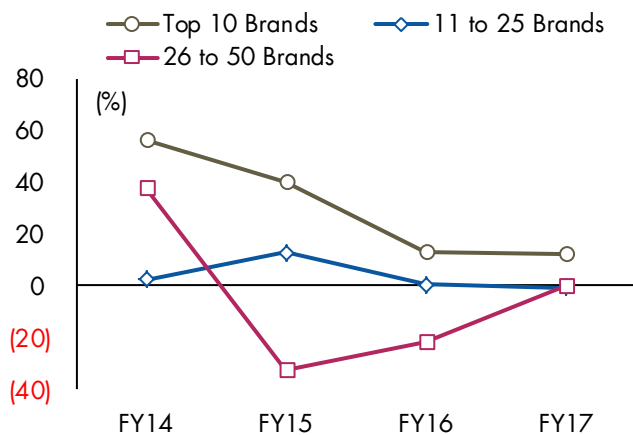
Source: AIOCD

Exhibit 39: Steady growth in chronic therapies



Source: AIOCD

Exhibit 41: Focus has been to grow Top 10 brands...



Source: AIOCD

Exhibit 38: Recent uptick in blood segment continues

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Diabetic	58	5	(1)	2	14
Anti-Neoplastics	21	24	28	15	(22)
Blood	9	17	57	196	50
Cardiac	5	(17)	(8)	(9)	(3)
Derma	3	(3)	10	(9)	14
Anti-Infectives	2	(29)	(7)	15	40
Gastro Intestinal	0	0	(51)	(59)	(37)
Others	1	(2)	22	(2)	3
Vit. / Min / Nut	0	(21)	(38)	(36)	(38)
Pain / Analgesic	0	75	92	45	84
Total (Rs bn)	4	7	7	12	5

Source: AIOCD, % of FY17 Sales

Exhibit 40: Growth consistently led by blood related segment

YoY growth	% of sales	FY15	FY16	FY17
Anti-Diabetic	58	31	8	5
Anti-Neoplastics	21	53	11	8
Blood	9	112	72	73
Cardiac	5	(20)	(38)	(10)
Derma	3	25	2	3
Anti-Infectives	2	(63)	(21)	5
Gastro Intestinal	0	48	209	(48)
Others	1	(2)	(10)	4
Vit. / Min / Nut	0	5	(23)	(33)
Pain / Analgesic	0	(67)	73	68
Total (Rsbn)	4	18	5	8

Source: AIOCD, % of FY17 Sales

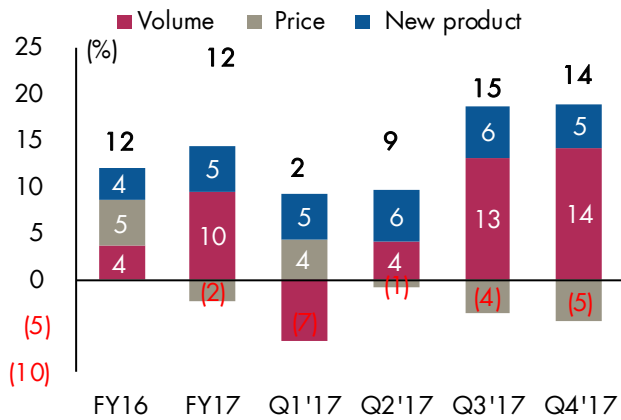
Exhibit 42: ...led by select therapies

Brand	Therapy	(Rsbn)	YoY %	FY17 Sales
Insugen	Anti-Diabetic	0.9	7%	26%
Basalog	Anti-Diabetic	0.6	15%	18%
Erypro	Blood	0.3	70%	9%
Canmab	Anti-Neoplastics	0.2	37%	7%
Insugen R	Anti-Diabetic	0.2	13%	5%
Blisto MF	Anti-Diabetic	0.1	-18%	4%
Abraxane	Anti-Neoplastics	0.1	-29%	3%
Biomab EGFR	Anti-Neoplastics	0.1	29%	3%
Psorid	Anti-Neoplastics	0.1	23%	2%
Insugen N	Anti-Diabetic	0.1	-17%	2%
Total Top 10 (Rsbn)		3	12%	79%

Source: AIOCD

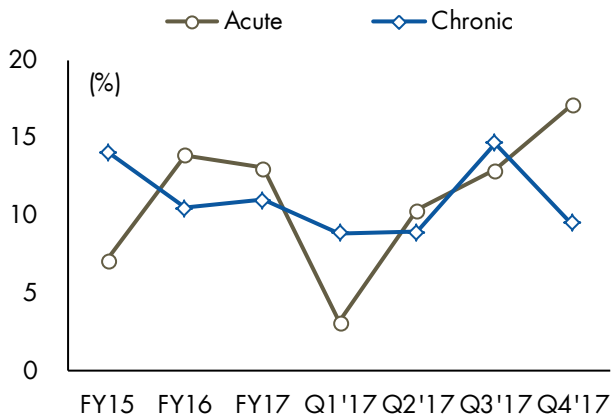
Cadila Healthcare (HOLD): TP Rs 420 (20x FY19E EPS)

Exhibit 43: Sharp uptick in volumes in recent quarters...



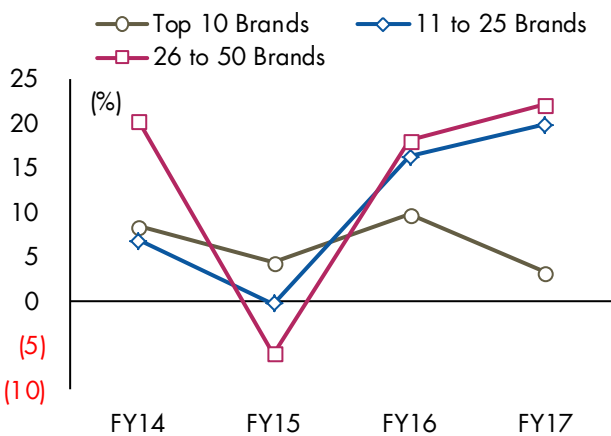
Source: AIOCD

Exhibit 45: Uptick in growth across therapies in recent months



Source: AIOCD

Exhibit 47: Strong growth across lower ranks in FY17



Source: AIOCD

Exhibit 44: ...with improvement in anti-Neoplastic segments

YoY growth	% sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac	15	(0)	(3)	7	7
Gastro Intestinal	12	9	7	7	12
Anti-Infectives	15	5	13	13	6
Gynaecological	10	(13)	(7)	(1)	5
Respiratory	10	3	15	19	10
Pain / Analgesics	9	11	14	20	14
Derma	7	8	6	14	17
Anti-Neoplastics	6	5	36	86	76
Vit. / Min / Nut	4	12	24	23	29
Anti Malarials	1	(29)	(14)	(29)	(41)
Total (Rs bn)	47	2	9	15	14

Source: AIOCD, % of FY17 Sales

Exhibit 46: Consistent growth in anti-infective segment

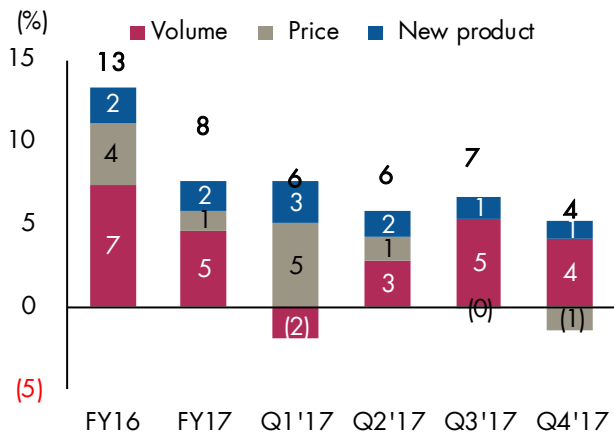
YoY growth	% sales	FY15	FY16	FY17
Cardiac	15	10	12	7
Gastro Intestinal	12	(3)	10	11
Anti-Infectives	15	9	19	16
Gynaecological	10	8	10	(3)
Respiratory	10	14	18	14
Pain / Analgesics	9	5	13	16
Derma	7	27	11	13
Anti-Neoplastics	6	17	10	47
Vit. / Min / Nut	4	18	13	23
Anti Malarials	1	10	14	(26)
Total (Rs bn)	47	8	12	12

Source: AIOCD, % of FY17 Sales

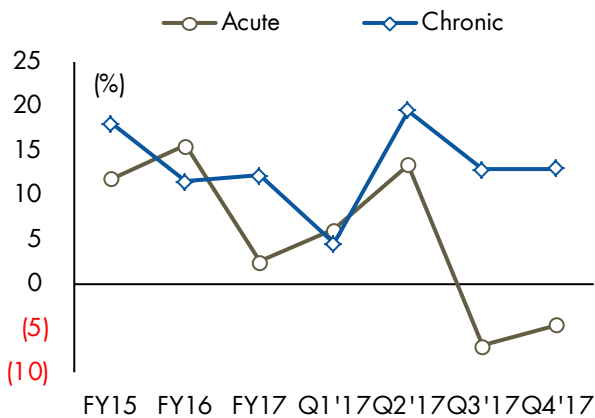
Exhibit 48: Mixed growth across top 10 brands

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Skinlite	Derma	1.9	7%
Deriphyllin	Respiratory	1.1	14%
Atorva	Cardiac	1.1	-14%
Mifegest Kit	Gynaecological	1.1	-13%
Pantodac	Gastro Intestinal	1.1	14%
Zyrop	Blood Related	0.8	23%
Formonide	Respiratory	0.7	13%
Thrombophob	Pain/Analgesics	0.7	15%
Amlodac	Cardiac	0.6	-11%
Amplilox	Anti-Infective	0.6	0%
Total Top 10 (Rsbn)		10	3%

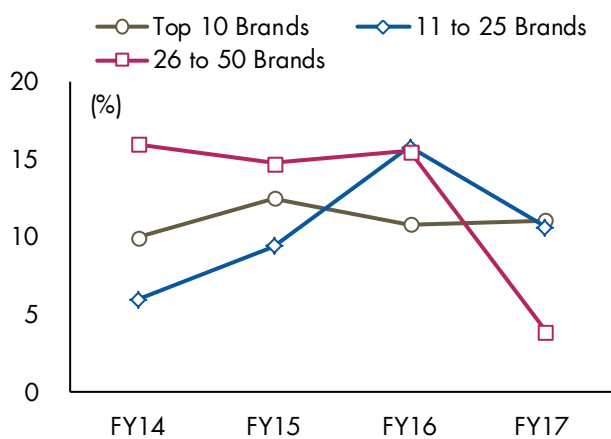
Source: AIOCD

Cipla (BUY): TP Rs680 (22x FY19E EPS)
Exhibit 49: Steady volume growth despite demonetization


Source: AIOCD

Exhibit 51: Sharp decline in acute segment recently


Source: AIOCD

Exhibit 53: Lower-ranked brands exhibited lower growth...


Source: AIOCD

Exhibit 50: Growth in cardiac segment continues

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Respiratory	31%	4%	14%	8%	7%
Anti-Infectives	25%	6%	1%	-12%	-7%
Cardiac	12%	2%	5%	19%	17%
Gastro Intestinal	8%	14%	11%	2%	4%
Ophthal	3%	13%	-3%	6%	10%
Neuro / CNS	4%	-2%	-13%	6%	11%
Pain / Analgesics	3%	15%	10%	3%	3%
Derma	3%	9%	6%	6%	-2%
Gynaecological	2%	1%	-6%	5%	-8%
Vit/Min/ Nut	2%	12%	7%	3%	-6%
Total (Rs bn)	53	6%	6%	7%	4.7%

Source: AIOCD, % of FY17 sales

Exhibit 52: Historically consistent growth across therapy groups

YoY growth	% of sales	FY15	FY16	FY17
Respiratory	31%	13%	12%	12%
Anti-Infectives	25%	19%	14%	-2%
Cardiac	12%	17%	7%	13%
Gastro Intestinal	8%	6%	21%	12%
Ophthal	3%	19%	15%	6%
Neuro / CNS	4%	28%	17%	9%
Pain / Analgesics	3%	21%	31%	12%
Derma	3%	15%	14%	9%
Gynaecological	2%	-25%	8%	-1%
Vit/Min/ Nut	2%	1%	7%	-5%
Total (Rs bn)	53	15%	13%	8%

Source: AIOCD, % of FY17 sales

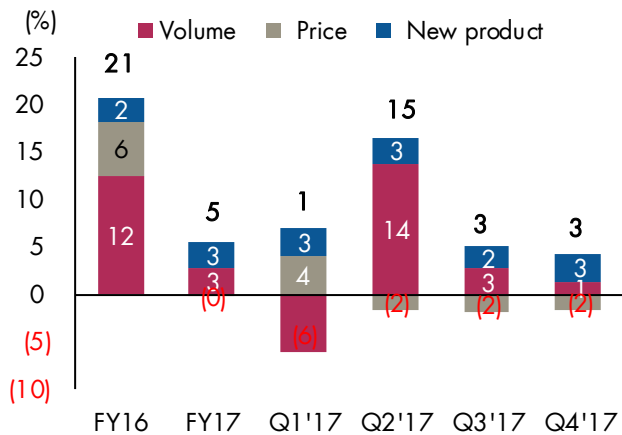
Exhibit 54: ... while Top 10 brands' growth has been steady

Brand	Therapy	(Rs. bn)	YoY % FY17 Sales
Foracort	Respiratory	2.2	14%
Duolin	Respiratory	1.7	34%
Budectort	Respiratory	1.5	-5%
Seroflo	Respiratory	1.5	11%
Asthalin	Respiratory	1.4	4%
Aerocort	Respiratory	1.0	5%
Montair LC	Respiratory	1.0	24%
Dytor	Cardiac	0.9	19%
Azee	Anti-Infectives	0.9	-8%
Urimax D	Urology	0.8	25%
Total Top 10 (Rsbn)		13	11%

Source: AIOCD

Dr. Reddy's Laboratories (SELL): TP Rs 2,600 (20x FY19E EPS)

Exhibit 55: Sluggish growth in H2'17 on lower volumes...



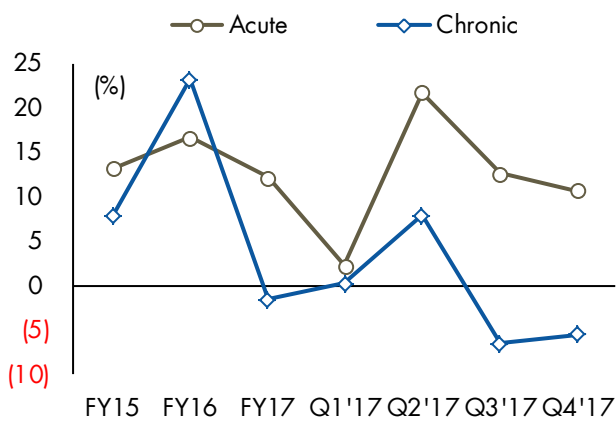
Source: AIOCD

Exhibit 56: ...with weak performance across key segments

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Gastro Intestinal	21%	3	5	(5)	(1)
Cardiac	14%	(9)	(3)	(0)	(5)
Anti-Neoplastics	14%	3	54	44	22
Anti-Infectives	8%	9	30	(5)	5
Pain / Analgesics	7%	(5)	6	(1)	(4)
Derma	6%	3	4	(14)	(16)
Anti-Diabetic	7%	2	5	2	7
Respiratory	9%	3	34	7	11
Stomatologicals	3%	0	0	(4)	(4)
Gynaecological	0%	(3)	8	(2)	6
Total	25	1	15	3	2

Source: AIOCD, % of FY17 sales

Exhibit 57: Chronic therapies declined in H2FY17...



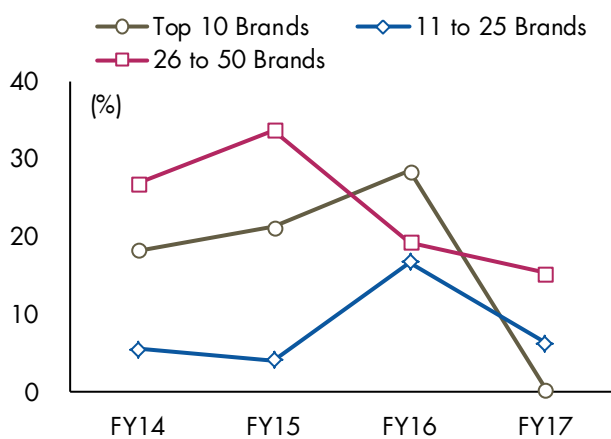
Source: AIOCD

Exhibit 58: ... key Gastro and Cardiac segments declined

YoY growth	% of sales	FY15	FY16	FY17
Gastro Intestinal	21%	12	28	(0)
Cardiac	14%	10	18	(4)
Anti-Neoplastics	14%	12	32	35
Anti-Infectives	8%	20	18	5
Pain / Analgesics	7%	8	11	0
Derma	6%	(0)	21	(6)
Anti-Diabetic	7%	24	18	4
Respiratory	9%	18	11	14
Stomatologicals	3%	11	13	(2)
Gynaecological	0%	(7)	(2)	2
Total	25	12	21	5

Source: AIOCD, % of FY17 sales

Exhibit 59: Muted top 10 brands' growth in FY17 (YTD)



Source: AIOCD

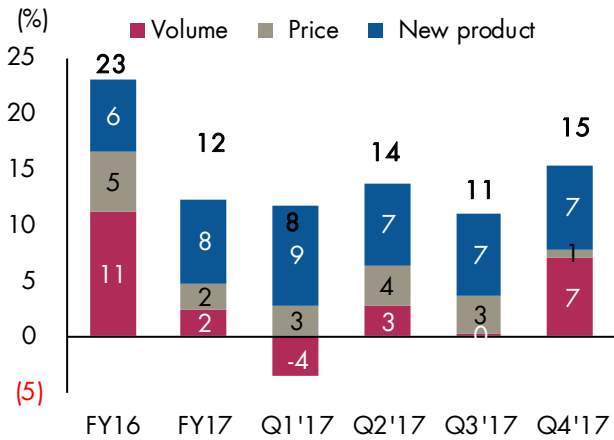
Exhibit 60: Top brands lost ground in FY17

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Omez	Gastro Intestinal	1.1	-15%
Omez D	Gastro Intestinal	1.0	6%
Econorm	Gastro Intestinal	0.6	-11%
Atarax	Respiratory	0.6	41%
Nise	Pain / Analgesics	0.6	-5%
Razo D	Gastro Intestinal	0.6	13%
Stamlo	Cardiac	0.6	-13%
Razo	Gastro Intestinal	0.6	17%
Reditux	Anti-Neoplastics	0.5	3%
Stamlo Beta	Cardiac	0.5	4%
Total Top 10 (Rsbn)		7	0%

Source: AIOCD

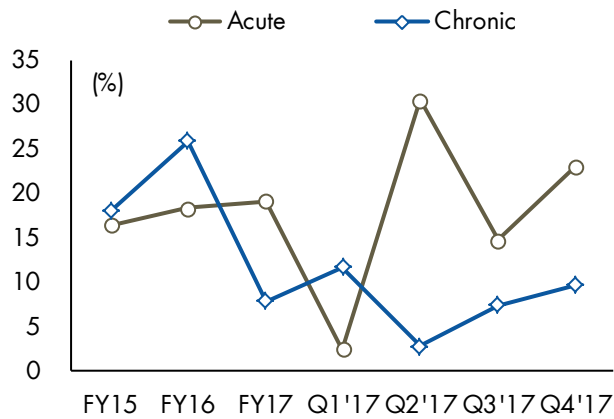
Glenmark Pharmaceuticals (BUY): TP Rs 1,120 (19x FY19E EPS)

Exhibit 61: New launches continue to drive growth...



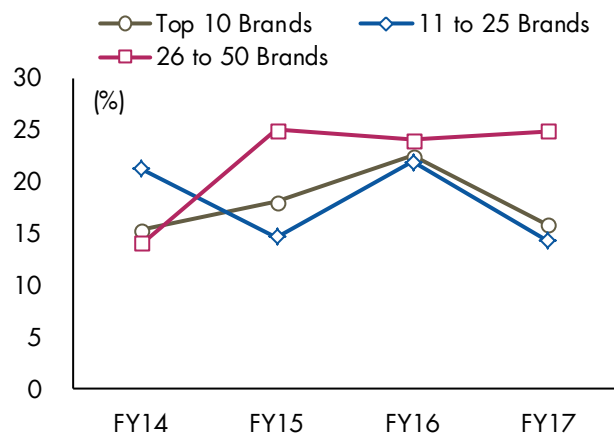
Source: AIOCD

Exhibit 63: Recent improvement across acute and chronic segment



Source: AIOCD

Exhibit 65: Growth has been faster even across lower ranked brands



Source: AIOCD

Exhibit 62: ...with recent improvement in respiratory

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Derma	28%	17%	9%	11%	12%
Cardiac	22%	8%	3%	13%	9%
Respiratory	16%	4%	40%	7%	19%
Anti-Infectives	14%	-3%	23%	9%	24%
Anti-Diabetic	7%	-7%	-26%	-23%	-6%
Gastro Intestinal	3%	8%	59%	85%	68%
Vitamin/ Min / Nut	2%	36%	-10%	-2%	-9%
Pain / Analgesics	2%	7%	-6%	-3%	-10%
Gynaecological	3%	15%	31%	49%	30%
Ophthal/Otologicals	1%	-8%	15%	-6%	6%
Total (Rs bn)	27	8%	14%	11%	15%

Source: AIOCD, % of FY17 sales

Exhibit 64: Steady growth across key therapy groups

YoY growth	% of sales	FY15	FY16	FY17
Derma	28%	15%	25%	13%
Cardiac	22%	13%	23%	8%
Respiratory	16%	17%	23%	19%
Anti-Infectives	14%	19%	15%	13%
Anti-Diabetic	7%	55%	26%	-16%
Gastro Intestinal	3%	32%	24%	56%
Vitamin/ Min / Nut	2%	20%	16%	2%
Pain / Analgesics	2%	5%	7%	-2%
Gynaecological	3%	-10%	13%	30%
Ophthal/Otologicals	1%	15%	23%	2%
Total (Rs bn)	27	17%	23%	12%

Source: AIOCD, % of FY17 sales

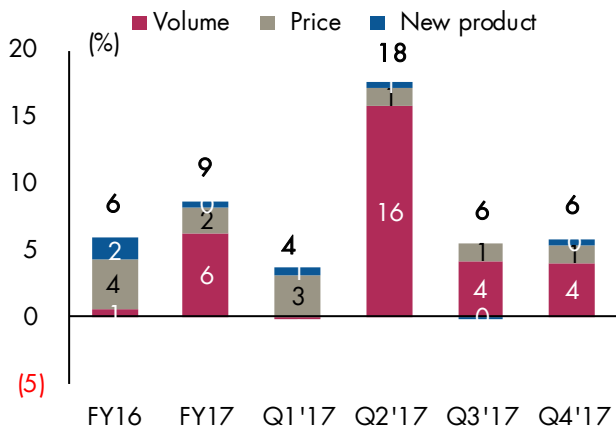
Exhibit 66: Top 10 brands also registering robust growth

Brand	Therapy	(Rsbn)	YoY %	FY17 Sales
Telma	Cardiac	1.6	-8%	6%
Telma H	Cardiac	1.6	18%	6%
Ascoril Plus	Respiratory	1.2	16%	5%
Candid	Derma	1.0	21%	4%
Candid-B	Derma	1.0	11%	4%
Telma Am	Cardiac	0.9	14%	3%
Ascorills	Respiratory	0.6	14%	2%
Onabet	Derma	0.5	31%	2%
Zitamet Plus	Anti Diabetic	0.4	354%	2%
Canditral	Anti-Infectives	0.4	29%	1%
Total Top 10 (Rsbn)		9	16%	35%

Source: AIOCD

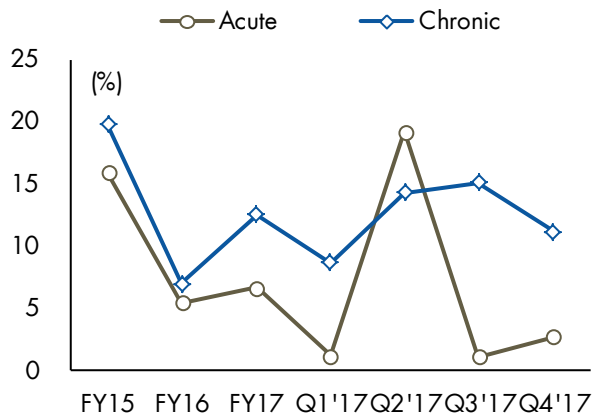
IPCA (BUY): TP Rs 600 (18x FY19E EPS)

Exhibit 67: Revival in volumes seen in FY17



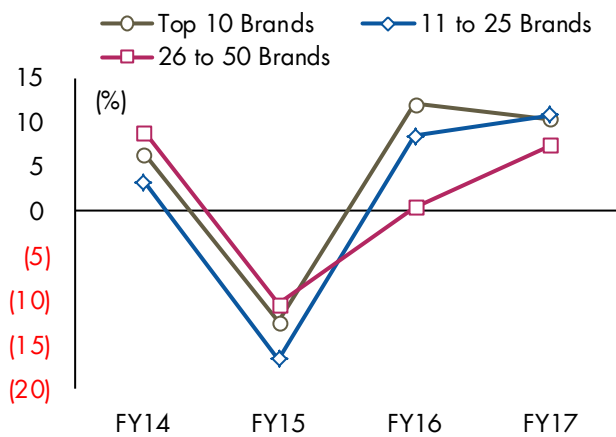
Source: AIOCD

Exhibit 69: Chronic segment grew faster in FY17



Source: AIOCD

Exhibit 71: Growth rebounded for lower ranked brands in FY17



Source: AIOCD

Exhibit 68: Continued slowdown in anti-malarials

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Pain/ Analgesics	26%	9	10	7	7
Anti-Malarials	19%	-3	40	-9	-9
Cardiac	16%	6	4	4	-1
Gastro Intestinal	8%	1	0	-2	6
Anti-infectives	6%	-9	13	13	6
Anti-Diabetic	5%	9	9	5	9
Respiratory	4%	-1	27	0	-6
Derma	3%	4	27	33	46
Neuro / CNS	4%	-10	34	47	40
Anti-Neoplastics	4%	15	22	21	7
Total	14	4	18	6	6

Source: AIOCD, % of FY17 sales

Exhibit 70: Modest growth across most key therapies

YoY growth	% of sales	FY15	FY16	FY17
Pain/ Analgesics	26%	21	20	8
Anti-Malarials	19%	13	-2	8
Cardiac	16%	16	8	4
Gastro Intestinal	8%	13	6	1
Anti-infectives	6%	18	-11	6
Anti-Diabetic	5%	9	3	8
Respiratory	4%	18	0	5
Derma	3%	24	-8	28
Neuro / CNS	4%	33	4	26
Anti-Neoplastics	4%	41	22	16
Total	14	18	6	9

Source: AIOCD % of FY17 sales

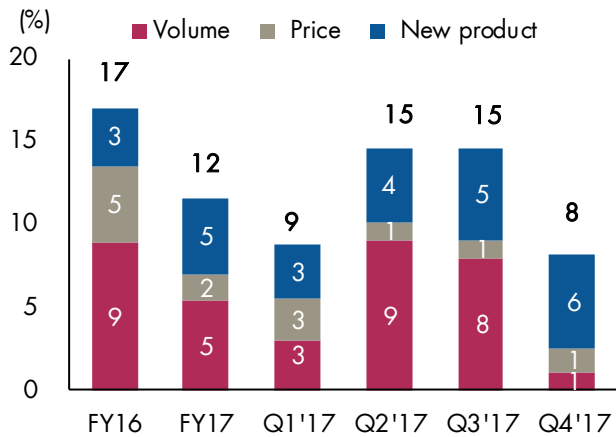
Exhibit 72: Top 10 brands also rebounded on low FY16 base

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
ZerodolSp	Pain / Analgesics	1.0	6%
Zerodol P	Pain / Analgesics	0.8	8%
Hcqs	Anti Malarials	0.7	6%
Larinate	Anti Malarials	0.5	16%
Rapither-Ab	Anti Malarials	0.5	16%
Glycinorm M	Anti-Diabetic	0.4	16%
Lariago	Anti Malarials	0.4	9%
Folitrax	Anti-Neoplastics	0.3	7%
Lumerax	Anti Malarials	0.3	11%
ZerodolTh	Pain / Analgesics	0.3	21%
Total Top 10 (Rsbn)		5	10%
			37%

Source: AIOCD

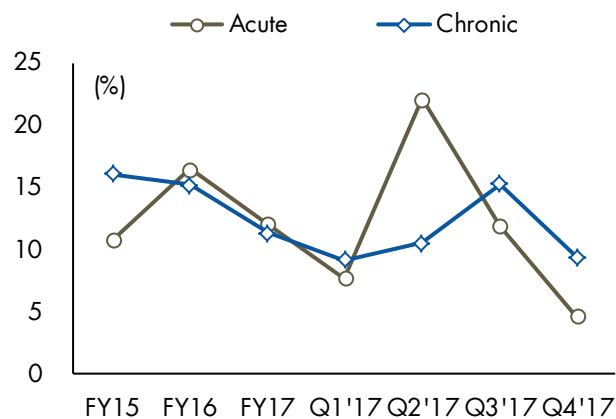
Lupin (HOLD): TP Rs1,600 (21x FY19E EPS)

Exhibit 73: Slower volume growth in FY...



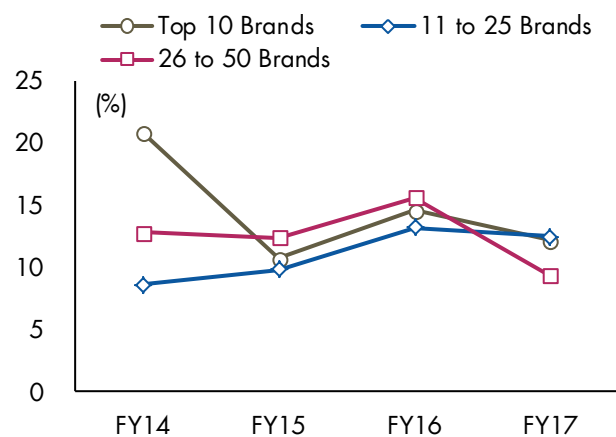
Source: AIOCD

Exhibit 75: Modest growth across segments...



Source: AIOCD

Exhibit 77: Consistent growth across brand rankings...



Source: AIOCD

Exhibit 74: ...led by sharp decline in anti-infective sales

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac	24%	7%	5%	12%	6%
Anti-infective	19%	0%	5%	-5%	-11%
Respiratory	13%	10%	26%	17%	13%
Anti-Diabetic	13%	25%	33%	44%	38%
Gastro Intestinal	8%	8%	14%	19%	13%
Vit. / Min. / Nut.	5%	-5%	-4%	3%	0%
Neuro / CNS	5%	14%	7%	12%	3%
Pain / Anal.	4%	-2%	7%	13%	6%
Gynaecological	4%	21%	15%	35%	19%
Hormones	0%	7%	9%	7%	-8%
Total (Rs bn)	37	9%	15%	15%	8%

Source: AIOCD,% of FY17 sales

Exhibit 76: ...with consistent growth across therapies

YoY growth	% of sales	FY15	FY16	FY17
Cardiac	24%	21%	19%	8%
Anti-infective	19%	9%	7%	-2%
Respiratory	13%	23%	22%	17%
Anti-Diabetic	13%	27%	23%	36%
Gastro Intestinal	8%	14%	20%	15%
Vit. / Min. / Nut.	5%	15%	10%	0%
Neuro / CNS	5%	20%	10%	9%
Pain / Anal.	4%	24%	15%	6%
Gynaecological	4%	39%	48%	25%
Hormones	0%	-1%	4%	4%
Total (Rs bn)	37	18%	17%	12%

Source: AIOCD,% of FY17 sales

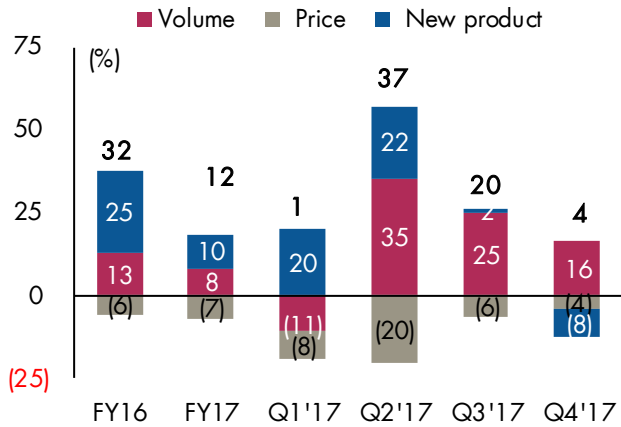
Exhibit 78: ...with strong growth in key Top brands

Brand	Therapy	(Rs bn)	YoY % FY17 Sales
Glucnorm-G	Anti Diabetic	1.8	32
Budamate	Respiratory	1.0	25
Tonact	Cardiac	1.0	-1
Rablet-D	Gastro Intestinal	0.6	19
Rablet	Gastro Intestinal	0.5	7
Esiflo	Respiratory	0.5	1
Telekast-L	Respiratory	0.5	22
Tazar	Anti-Infectives	0.4	8
Ramistar	Cardiac	0.4	-14
R-Cinex	Anti-Infectives	0.4	-8
Total Top 10 (Rs bn)		7	12

Source: AIOCD

NatcoPharmaceuticals (BUY): TP Rs870 (19x FY19E EPS + Rs 59 for R&D)

Exhibit 79: Growth slowed on fewer new products in FY17...



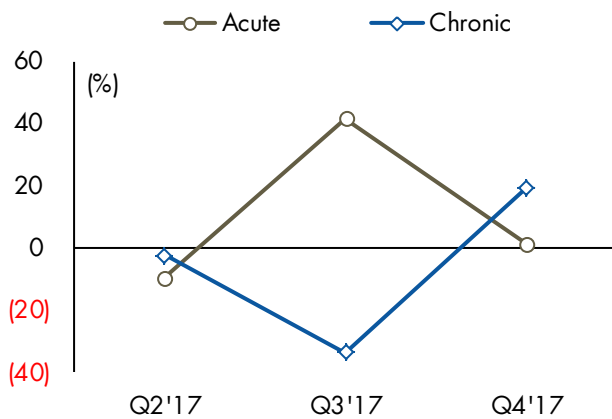
Source: AIOCD

Exhibit 80: Anti-Neoplasticssawrobust growth in recent qtrs

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Neoplastic	63%	-20%	21%	46%	17%
Anti-Infective	32%	74%	65%	43%	-10%
Pain / Analgesics	4%	-23%	28%	-67%	-24%
Gastro Intestinal	0%	-55%	-25%	-80%	-100%
Neuro / CNS	0%	-20%	94%	-72%	-51%
Total (Rs bn)	9.0	1%	37%	20%	4%

Source: AIOCD,% of FY17 sales

Exhibit 81: Chronic segmentgrew 19%YoY in FY17



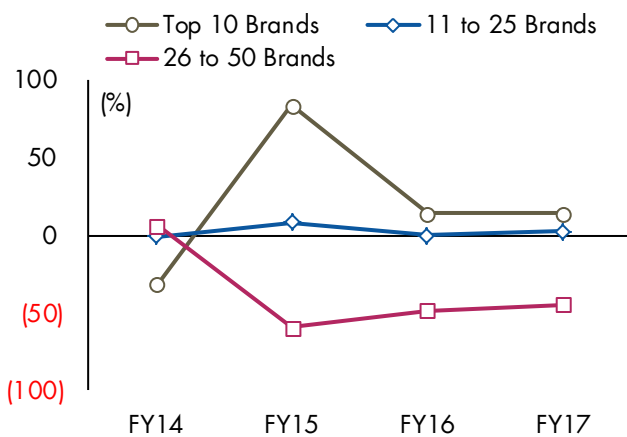
Source: AIOCD

Exhibit 82: Steady growth across key therapies

YoY growth	% of sales	FY15	FY16	FY17
Anti-Neoplastic	63%	24%	-2%	15%
Anti-Infective	32%	-12%	189%	10%
Pain / Analgesics	4%	-23%	2%	-14%
Gastro Intestinal	0%	-24%	7%	-75%
Neuro / CNS	0%	-3%	62%	-53%
Total (Rs bn)	9.0	7%	32%	12%

Source: AIOCD,% of FY17 sales

Exhibit 83: Mixed growth across brand segments



Source: AIOCD

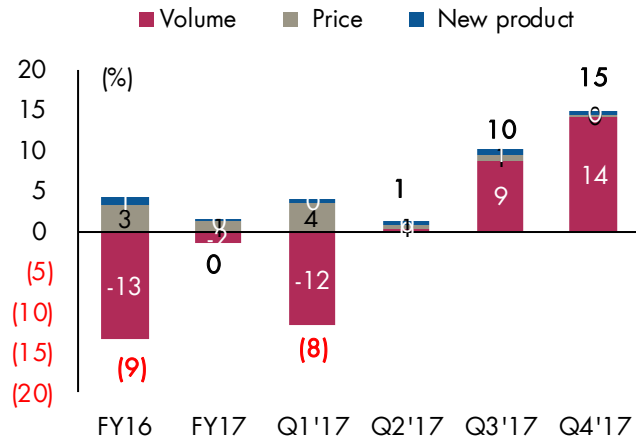
Exhibit 84: High revenue concentration from top 10 brands

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Bortenat	Anti-Neoplastics	1.4	80%
Hepcinat	Anti-Infectives	1.4	-30%
Veenat	Anti-Neoplastics	1.2	-16%
Geffinat	Anti-Neoplastics	1.0	103%
Hepcinatlp	Anti-Infectives	1.0	269%
Lenalid	Anti-Neoplastics	0.6	61%
Erlonat	Anti-Neoplastics	0.5	-51%
Sorafenat	Anti-Neoplastics	0.4	65%
Zoldonat	Pain / Analgesics	0.3	-14%
Tigi	Anti-Infectives	0.2	165%
Total Top 10 (Rsbn)		8.0	14%

Source: AIOCD

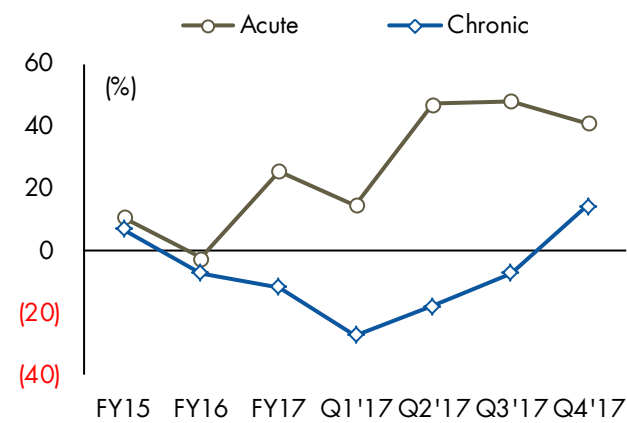
Strides Shasun(BUY): TP Rs1,365 (18x FY19E EPS + Rs 58 for R&D)

Exhibit 85: Sharp volume growth recently...



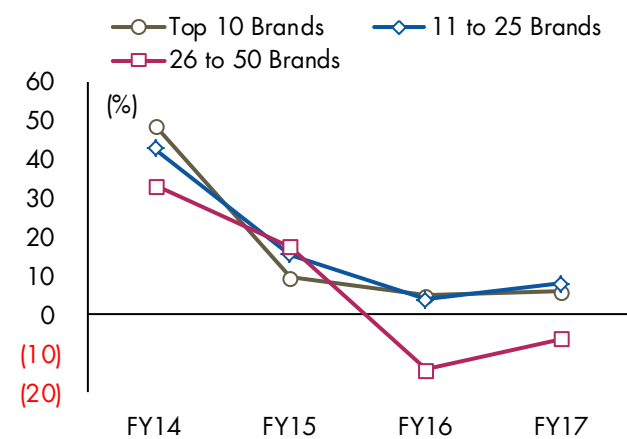
Source: AIOCD

Exhibit 87: Chronic growth rebounded in Q4'17



Source: AIOCD

Exhibit 89: Lower ranked brands continued to decline



Source: AIOCD

Exhibit 86: ... primarily led bygastro-intestinal& CNS

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Vit. / Min / Nut	34	-16%	-26%	-15%	-2%
Neuro / CNS	29	-35%	-10%	6%	48%
Gastro Intestinal	16	125%	176%	85%	13%
Gynaecological	12	-24%	-8%	-6%	18%
Anti-Infectives	2	-72%	-39%	-28%	-64%
Pain / Analgesic	2	1%	64%	42%	37%
Anti-Diabetic	2	-19%	-22%	-12%	-3%
Respiratory	1	0%	131%	38%	-19%
Derma	1	-79%	-85%	-85%	-74%
Cardiac	1	-63%	-60%	-10%	45%
Total (Rs bn)	2.8	-8%	1%	10%	15%

Source: AIOCD, % of FY17 sales

Exhibit 88: Erratic growth across most major therapy groups

YoY growth	% of sales	FY15	FY16	FY17
Vit. / Min / Nut	34	14%	5%	-16%
Neuro / CNS	29	6%	-16%	-4%
Gastro Intestinal	16	19%	65%	50%
Gynaecological	12	-2%	-13%	-6%
Anti-Infectives	2	-1%	-56%	-54%
Pain / Analgesic	2	-11%	-55%	40%
Anti-Diabetic	2	20%	-14%	-14%
Respiratory	1	90%	-2%	39%
Derma	1	18%	-43%	-82%
Cardiac	1	-18%	-47%	-36%
Total (Rs bn)	2.8	7%	-9%	0%

Source: AIOCD, % of FY17 sales

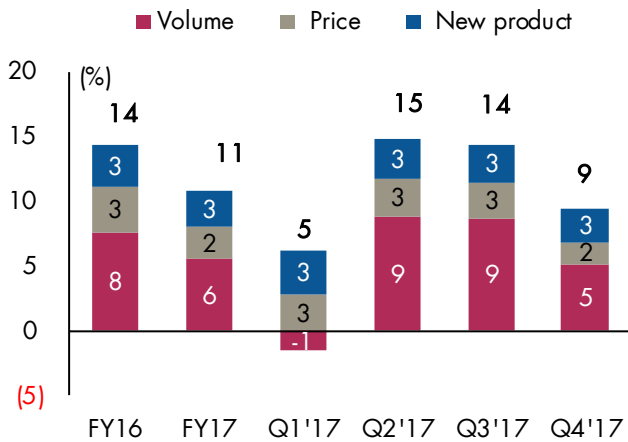
Exhibit 90: Acquired brands exhibited mixed growth

Brand	Therapy	(Rs bn)	YoY %	FY17Sales
Renve Plus	Vit. / Min / Nut	0.5	-20%	16%
Lactovit	G.I.	0.2	38%	6%
Lactogut	G.I.	0.2	31%	5%
DesvalEr	Neuro / CNS	0.1	3%	5%
Serlift	Neuro / CNS	0.1	23%	5%
Raricap	Gynaecological	0.1	-13%	5%
Livliv	G.I.	0.1	125%	4%
Domped	G.I.	0.1	150%	4%
Stugil	G.I.	0.1	-15%	3%
Selzic	Neuro / CNS	0.1	6%	3%
Total Top 10 (Rs bn)		1.6	6%	57%

Source: AIOCD, *Note STR acquired brands from SUN/RBXY, J&J &Medispan during FY16/17

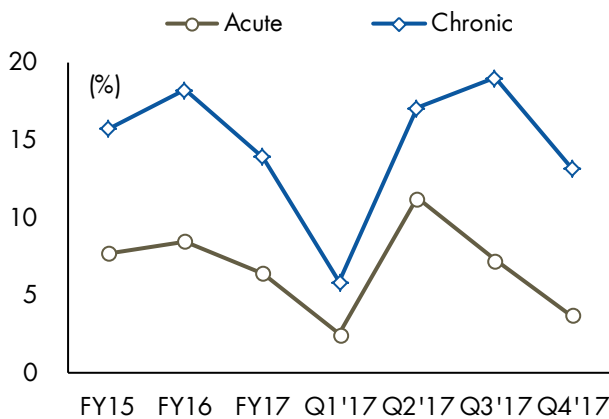
Sun Pharmaceuticals (HOLD): TP Rs 700 (20x FY19E EPS)

Exhibit 91: Volume growth slowed in FY17



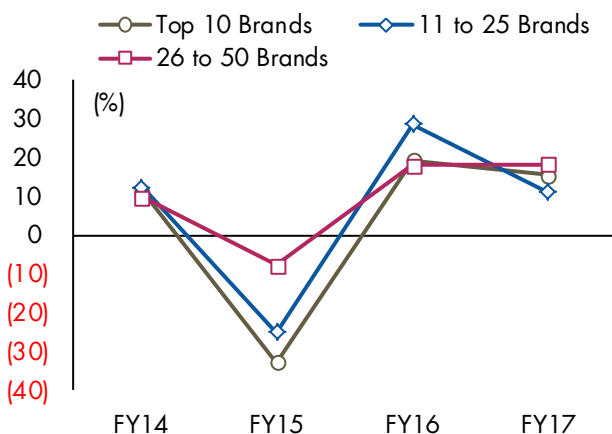
Source: AIOCD, Note: Combined Sun +Ranbaxy from FY15 onwards

Exhibit 93: Chronic therapies continued to grow faster than acute segment



Source: AIOCD, Note: Combined Sun +Ranbaxy from FY15 onwards

Exhibit 95: Growth distributed evenly across brand levels



Source: AIOCD, Note: Combined Sun +Ranbaxy from FY15 onwards

Exhibit 92: Anti-infective sales continued to decline in Q4'17

Therapy	YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac	19%		10	21	23	12
Neuro / CNS	17%		5	15	15	11
Pain/Analgesics	7%		5	15	9	4
Gastro Intestinal	12%		2	10	10	8
Anti-Infectives	11%		0	4	(5)	(5)
Anti-Diabetic	9%		4	17	23	16
Derma	5%		11	20	36	38
Gynaecology	4%		(2)	0	(0)	1
Vit. / Min / Nut	4%		27	22	22	11
Respiratory	4%		(1)	38	21	14
Total (Rs bn)		95	5	15	14	10

Source: AIOCD, % of FY17 sales

Exhibit 94: Steady growth in key therapies

Therapy	YoY growth	% of sales	FY15	FY16	FY17
Cardiac	19%		14	19	16
Neuro / CNS	17%		16	18	11
Pain/Analgesics	7%		2	12	8
Gastro Intestinal	12%		21	19	8
Anti-Infectives	11%		17	12	(2)
Anti-Diabetic	9%		20	21	15
Derma	5%		17	19	26
Gynaecology	4%		(1)	12	(1)
Vit. / Min / Nut	4%		(18)	(5)	21
Respiratory	4%		9	9	19
Total (Rs bn)		95	12	14	11

Source: AIOCD, % of FY17 sales *Note: Combined Sun +Ranbaxy

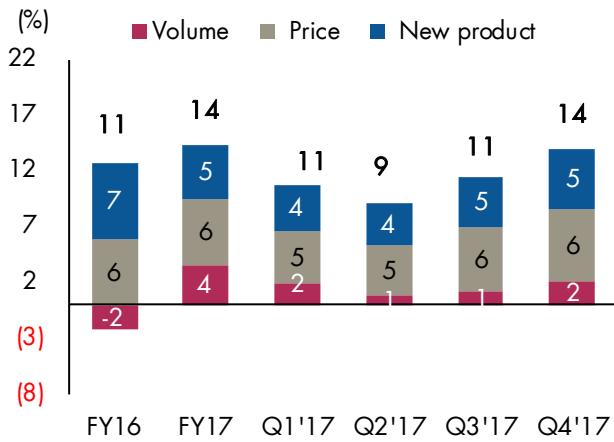
Exhibit 96: Growth was strong among top 10 brands

Brand	Therapy	(Rs bn)	YoY %	FY17 Sales
Volini	Pain / Analgesics	2.5	14%	3%
Istamet	Anti Diabetic	2.1	29%	2%
Rosuvastatin	Cardiac	2.1	23%	2%
Gemer	Anti Diabetic	2.0	24%	2%
Levipil	Neuro / Cns	1.7	17%	2%
Susten	Gynaecological	1.6	5%	2%
Revital H	Vitamins / Minerals / Nutrients	1.5	42%	2%
Pantocid	Gastro Intestinal	1.4	3%	2%
Pantocid Dsr	Gastro Intestinal	1.3	5%	1%
Storvas	Cardiac	1.1	-10%	1%
Total Top 10 (Rs bn)		17	15%	18%

Source: AIOCD

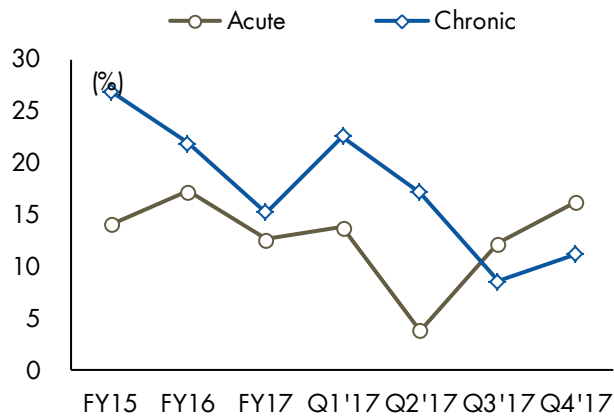
Ajanta Pharmaceuticals (Not Rated)

Exhibit 97: Volume growth recovered in FY17



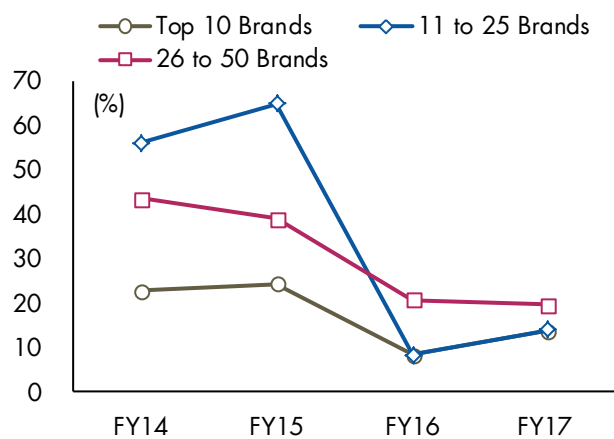
Source: AIOCD

Exhibit 99: Modest growth across segments



Source: AIOCD

Exhibit 101: Growth distributed evenly across brand levels



Source: AIOCD

Exhibit 98: Strong growth in cardiac segment in Q4'17

YoY Growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac (CVS)	38%	20%	18%	16%	24%
Derma	19%	-3%	1%	3%	-4%
Ophthal	24%	12%	6%	10%	16%
Vit. / Min. / Nut.	5%	-6%	-18%	-14%	-10%
Pain / Analgesics	5%	3%	-2%	1%	10%
Gastro Intestinal (GI)	2%	-19%	-9%	-13%	-18%
Neuro / CNS	2%	1%	7%	17%	9%
Anti-Infectives	2%	57%	40%	47%	47%
Respiratory	1%	74%	-7%	42%	29%
Total (Rsbn)	7	11%	9%	11%	14%

Source: AIOCD, % of FY17 sales

Exhibit 100: Strong growth in key cardiac and ophthal segments

YoY Growth	% of sales	FY15	FY16	FY17
Cardiac (CVS)	38%	42%	14%	22%
Derma	19%	15%	2%	5%
Ophthal	24%	27%	13%	13%
Vit. / Min. / Nut.	5%	69%	14%	-5%
Pain / Analgesics	5%	29%	10%	6%
Gastro Intestinal (GI)	2%	7%	-5%	-12%
Neuro / CNS	2%	24%	-3%	15%
Anti-Infectives	2%	57%	134%	54%
Respiratory	1%	-18%	-36%	7%
Total (Rsbn)	7	29%	11%	14%

Source: AIOCD, % of FY17 sales

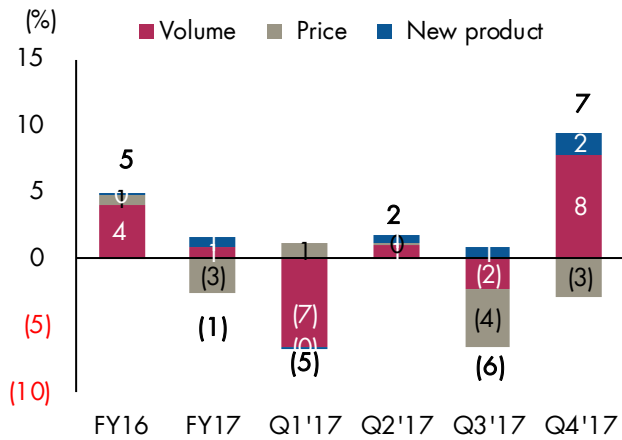
Exhibit 102: Robust growth across high contributing brands

Brand	Therapy	(Rs bn)	YoY % FY17 Sales
Met Xl	Cardiac	0.8	16% 11%
Atorfit Cv	Cardiac	0.5	10% 7%
Melacare	Derma	0.5	-6% 7%
Rosufit Cv	Cardiac	0.2	28% 3%
Feburic	Pain / Analgesics	0.2	18% 3%
Met Xl Am	Cardiac	0.2	29% 3%
Soft Drops	Ophthal / Otologicals	0.2	7% 3%
Rosutor Gold	Cardiac	0.2	58% 2%
Cinod	Cardiac	0.1	33% 2%
Olopat	Ophthal / Otologicals	0.1	0% 1%
Total Top 10 (Rs bn)		3	14% 43%

Source: AIOCD

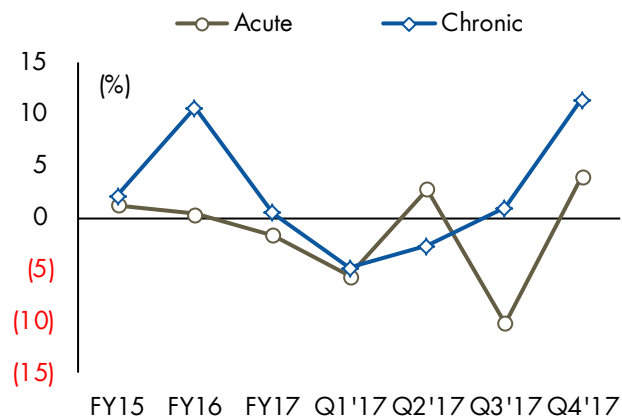
GSK Pharmaceuticals (Not Rated)

Exhibit 103: Muted volume growth in FY17



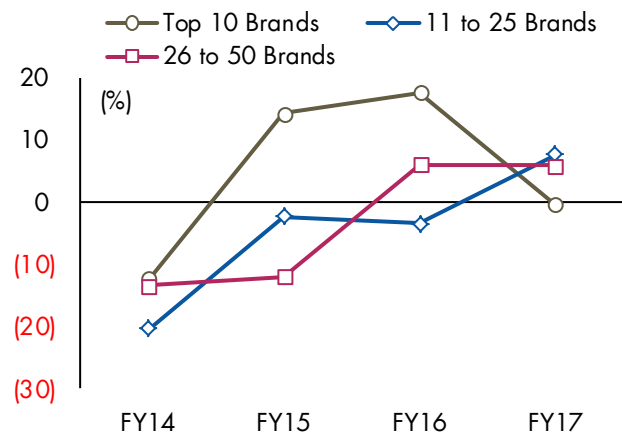
Source: AIOCD

Exhibit 105: Muted growth across segments in FY17



Source: AIOCD

Exhibit 107: Dismal growth among brands...



Source: AIOCD

Exhibit 104: Derma sales growth rebounded sharply in Q4'17

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-infectives	22%	(8)	(2)	(6)	(4)
Derma	18%	(23)	(18)	(18)	26
Vaccines	18%	33	17	(5)	13
Pain/ Analgesics	10%	4	32	(1)	(7)
Hormones	8%	(10)	4	(9)	(1)
Vit. / Min. / Nut.	8%	1	7	9	22
Gastro Intestinal	6%	2	5	5	18
Respiratory	7%	(2)	6	(7)	(9)
Cardiac	2%	(25)	(25)	(16)	(7)
Gynaecological	1%	17	(13)	(30)	(39)
Total (Rs. bn)	33	(5)	2	(6)	7

Source: AIOCD, % of FY17 sales

Exhibit 106: Lacklustregrowth seen across key therapies

YoY growth	% of sales	FY15	FY16	FY17
Anti-infectives	22%	5	(3)	(5)
Derma	18%	13	9	(12)
Vaccines	18%	(2)	21	14
Pain/ Analgesics	10%	(7)	11	7
Hormones	8%	2	25	(4)
Vit. / Min. / Nut.	8%	(11)	6	9
Gastro Intestinal	6%	(6)	(1)	7
Respiratory	7%	0	(1)	(7)
Cardiac	2%	(7)	(22)	(19)
Gynaecological	1%	(11)	(9)	(16)
Total (Rs. bn)	33	1	5	(1)

Source: AIOCD, % of FY17 sales

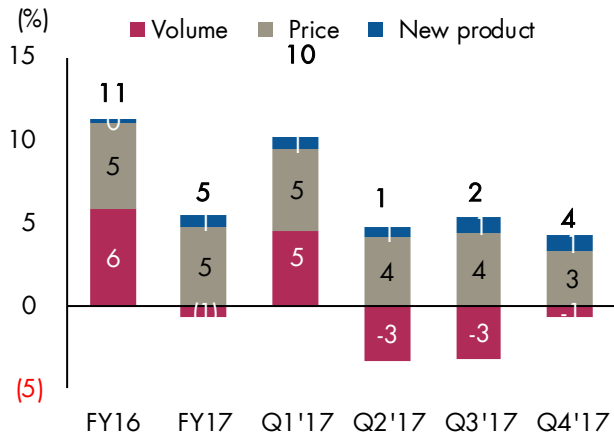
Exhibit 108: Top 10 brands also witnessed muted growth

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Augmentin	Anti-Infectives	2.8	-11%
Synflorix	Vaccines	2.4	22%
Calpol	Pain / Analgesics	2.0	15%
Zinetac	Gastro Intestinal	1.7	10%
Betnovate C	Derma	1.5	-9%
Eltroxin	Hormones	1.5	10%
Betnovate N	Derma	1.4	-7%
Ceftum	Anti-Infectives	1.3	3%
Rotarix	Vaccines	1.0	-19%
Betnesol	Hormones	1.0	-18%
Total Top 10 (Rsbn)		17	0%

Source: AIOCD

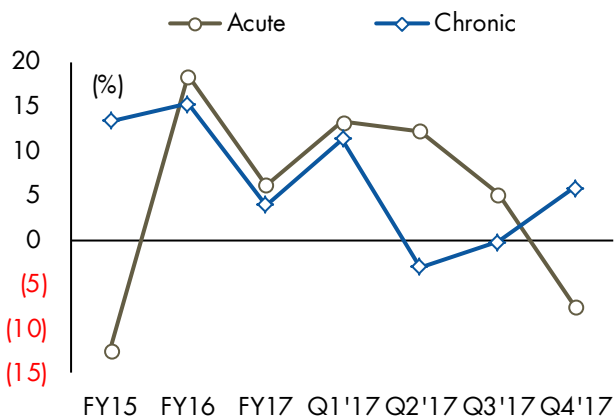
Novartis India (Not Rated)

Exhibit 109: Volumes declined in FY17



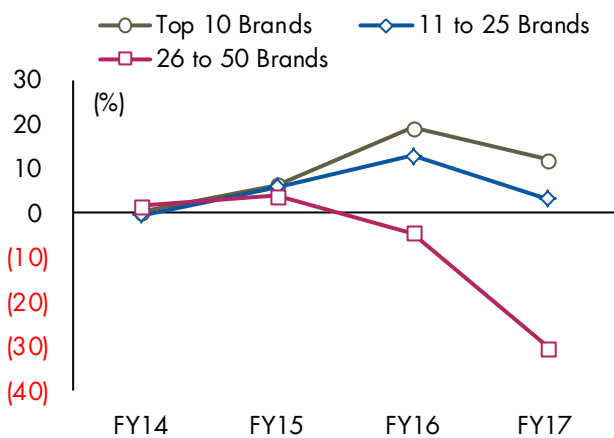
Source: AIOCD

Exhibit 111: Slower growth seen in recent quarters



Source: AIOCD

Exhibit 113: Sharp decline in sales of lower ranked brands



Source: AIOCD

Exhibit 110: Weak growth across segments in Q4'17

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Diabetic	42%	25	9	12	14
Pain/ Analgesics	26%	21	20	14	7
Vit. / Min. / Nut.	10%	9	(11)	(12)	(9)
Respiratory	2%	(17)	2	(13)	(27)
Gynaecological	8%	(2)	(8)	(6)	0
Neuro / CNS	5%	(19)	(21)	(14)	(8)
Anti-infectives	3%	(20)	(22)	(45)	(45)
Ophthal	0%	(12)	(31)	(22)	(69)
Cardiac	1%	(24)	(40)	(42)	(7)
Total (Rs. bn)		11	10	1	2

Source: AIOCD, % of FY17 sales

Exhibit 112: Anti-diabetic and Pain therapy key drivers of growth

YoY growth	% of sales	FY15	FY16	FY17
Anti-Diabetic	42%	31	35	15
Pain/ Analgesics	26%	(12)	18	16
Vit. / Min. / Nut.	10%	9	3	(5)
Respiratory	2%	1	(23)	(10)
Gynaecological	8%	(11)	(4)	(4)
Neuro / CNS	5%	(5)	(6)	(16)
Anti-infectives	3%	(24)	18	(33)
Ophthal	0%	31	8	(34)
Cardiac	1%	(18)	(13)	(28)
Total (Rs. bn)		11	3	11

Source: AIOCD, % of FY17 sales

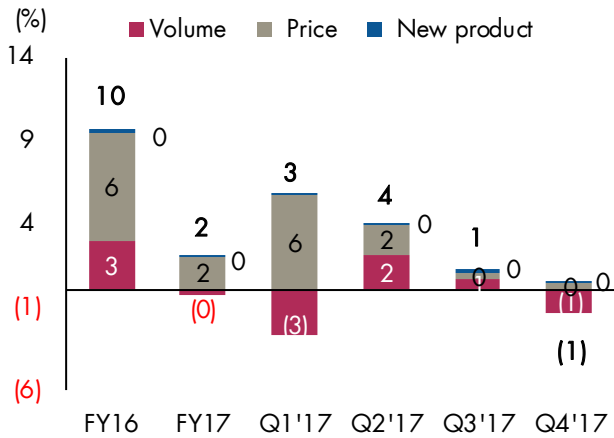
Exhibit 114: Large share of revenue from top 10 brands

Brand	Therapy	(Rsbn)	YoY %	FY17 Sales
Galvus Met	Anti Diabetic	3.3	21%	30%
Voveran	Pain / Analgesics	2.3	22%	21%
Galvus	Anti Diabetic	1.2	2%	11%
Tegrital	Neuro / Cns	0.6	-2%	5%
Voveran	Pain / Analgesics	0.4	8%	4%
Regestrone	Gynaecological	0.3	-12%	3%
Methergin	Gynaecological	0.3	-6%	3%
Syntocinon	Gynaecological	0.3	16%	3%
Calcium Sandoz	Vitamins / Minerals / Nutrients	0.2	-3%	2%
Macalvit	Vitamins / Minerals / Nutrients	0.2	-9%	2%
Total Top 10 (Rsbn)		9	12%	84%

Source: AIOCD

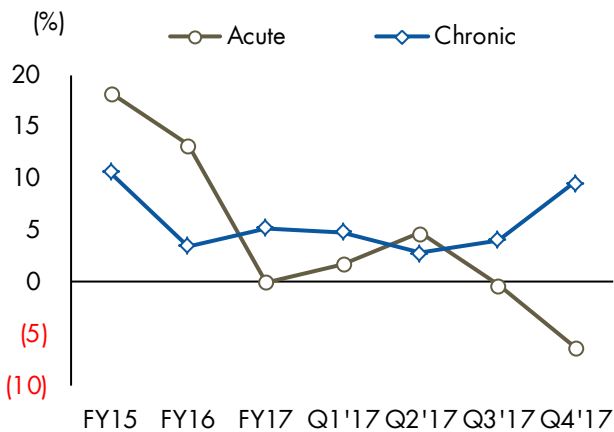
Pfizer India (Not Rated)

Exhibit 115: Muted volume growth in FY17



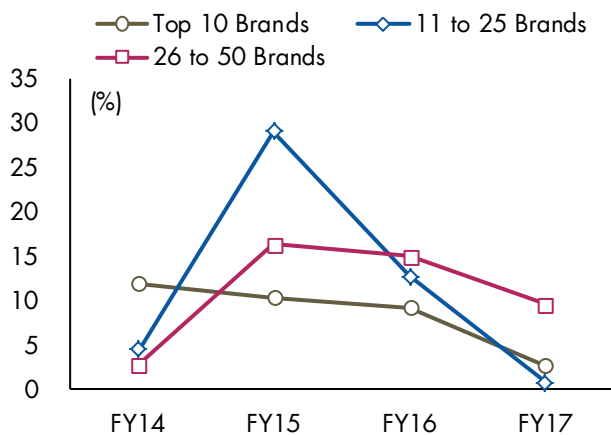
Source: AIOCD

Exhibit 117: Acute segment exhibited muted growth in FY17



Source: AIOCD

Exhibit 119: Top/mid-ranked brands witnessed muted growth



Source: AIOCD

Exhibit 116: Anti-infective & respiratory continued to decline

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-infectives	14%	(13)	(11)	(16)	(14)
Respiratory	11%	17	4	(25)	(50)
Gastro Intestinal	10%	3	5	(2)	(2)
Vit. / Min. / Nut.	10%	(12)	2	1	(1)
Hormones	9%	9	9	16	6
Gynaecological	9%	16	13	10	19
Neuro / CNS	7%	11	(11)	(6)	(3)
Cardiac	7%	4	16	10	24
Pain/ Analgesics	7%	(1)	5	1	3
Vaccines	5%	(5)	77	137	120
Total (Rs. bn)	29	3	4	1	(1)

Source: AIOCD, % of FY17 sales

Exhibit 118: Key therapy sales significantly declined in FY17

YoY growth	% of sales	FY15	FY16	FY17
Anti-infectives	14%	14	9	(14)
Respiratory	11%	6	31	(16)
Gastro Intestinal	10%	22	11	1
Vit. / Min. / Nut.	10%	8	(3)	(3)
Hormones	9%	23	7	10
Gynaecological	9%	19	19	14
Neuro / CNS	7%	20	17	(2)
Cardiac	7%	6	(15)	13
Pain/ Analgesics	7%	16	4	2
Vaccines	5%	92	20	80
Total (Rs. bn)	29	15	10	2

Source: AIOCD, % of FY17 sales

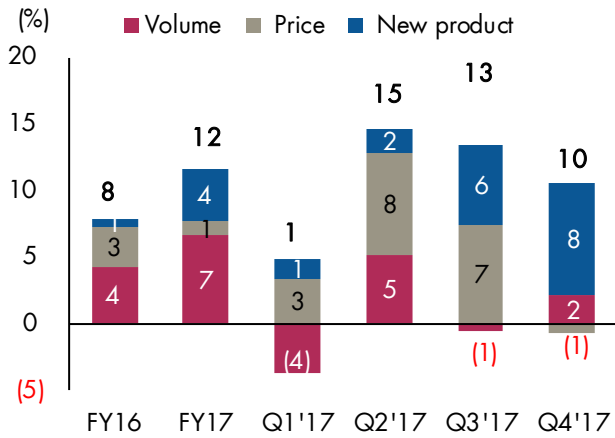
Exhibit 120: FDC ban impacted Corex sales

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Becosules	Vit. / Min. / Nut.	2.2	-3%
Corex	Respiratory	2.2	-30%
Minipress Xl	Cardiac	1.5	21%
Dolonex	Pain / Analgesics	1.4	5%
Magnex	Anti-Infectives	1.4	-5%
GelusilMps	Gastro Intestinal	1.3	-4%
Mucaine	Gastro Intestinal	1.2	11%
Wysolone	Hormones	1.1	19%
Prevenar 13	Vaccines	1.0	162%
CorexDx	Respiratory	0.8	35%
Total Top 10 (Rsbn)		14	3%

Source: AIOCD

Sanofi India (Not Rated)

Exhibit 121: Recent spike in growth from new products...



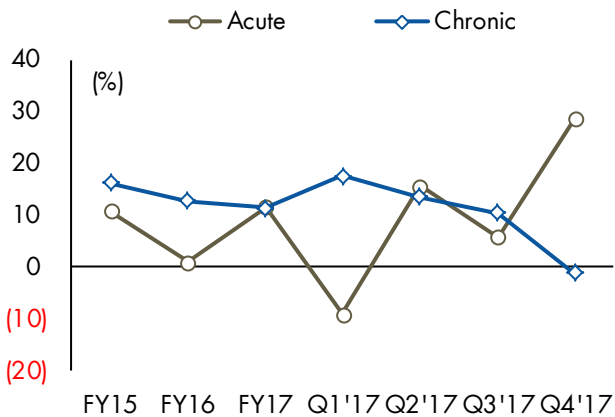
Source: AIOCD

Exhibit 122: ...led by Vaccines, Respiratory and Pain

Therapy	YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Anti-Diabetic	24%	24%	26	28	30	11
Cardiac	20%	20%	15	3	(5)	(13)
Vaccines	11%	11%	(38)	3	(11)	105
Respiratory	10%	10%	13	42	23	23
Pain/ Analgesics	9%	9%	(52)	24	25	42
Neuro / CNS	9%	9%	2	(6)	(10)	(14)
Anti-infectives	5%	5%	(9)	(4)	(10)	(12)
Gastro Intestinal	5%	5%	18	12	(15)	(15)
Vit. / Min. / Nut.	4%	4%	19	36	29	14
Derma	2%	2%	17	5	(7)	(10)
Total (Rs. bn)			26	1	15	13

Source: AIOCD, % of FY17 sales

Exhibit 123: Improvement in acute therapies in Q4'17



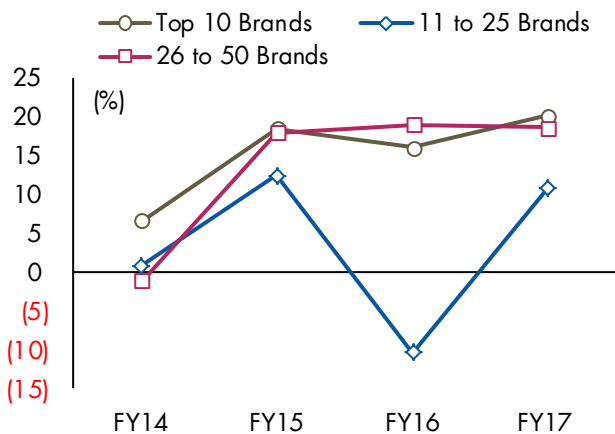
Source: AIOCD

Exhibit 124: Muted growth in cardiac segment in FY17

Therapy	YoY growth	% of sales	FY15	FY16	FY17
Anti-Diabetic	24%	24%	24	17	27
Cardiac	20%	20%	14	13	(0)
Vaccines	11%	11%	(3)	(18)	11
Respiratory	10%	10%	17	19	25
Pain/ Analgesics	9%	9%	14	(2)	18
Neuro / CNS	9%	9%	19	8	(7)
Anti-infectives	5%	5%	28	1	(9)
Gastro Intestinal	5%	5%	20	26	1
Vit. / Min. / Nut.	4%	4%	(5)	23	24
Derma	2%	2%	17	16	1
Total (Rs. bn)			26	14	8

Source: AIOCD, % of FY17 sales

Exhibit 125: Growth picked up for Mid-tier ranked brands



Source: AIOCD

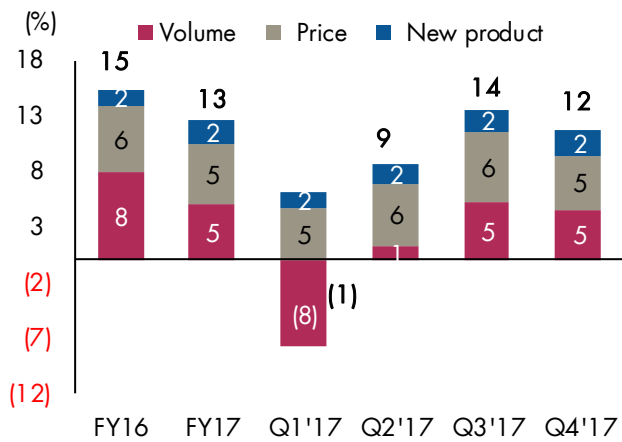
Exhibit 126: Top brands exhibited relatively strong growth

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Lantus	Anti Diabetic	3.4	25%
Combiflam	Pain / Analgesics	1.9	23%
Allegra	Respiratory	1.5	21%
Clexane	Cardiac	1.3	10%
Amaryl M	Anti Diabetic	1.3	61%
Avil	Respiratory	1.0	40%
Enterogermina	Gastro Intestinal	1.0	7%
Cardace	Cardiac	0.9	-9%
Pentaxim	Vaccines	0.9	61%
Frisium	Neuro / Cns	0.7	-21%
Total Top 10 (Rsbn)		14	20%

Source: AIOCD

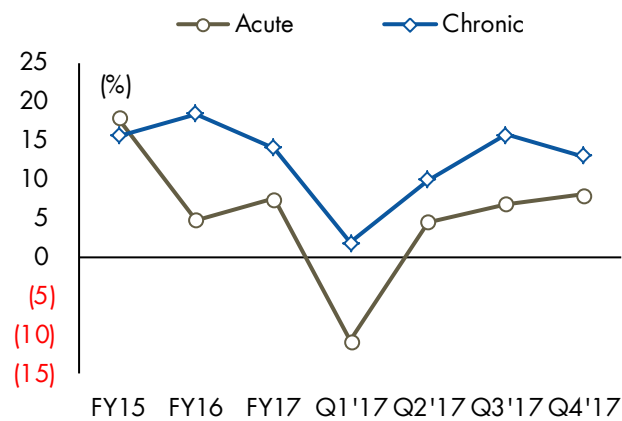
Torrent Pharmaceuticals (Not Rated)

Exhibit 127: Improvement in volumes in recent quarters



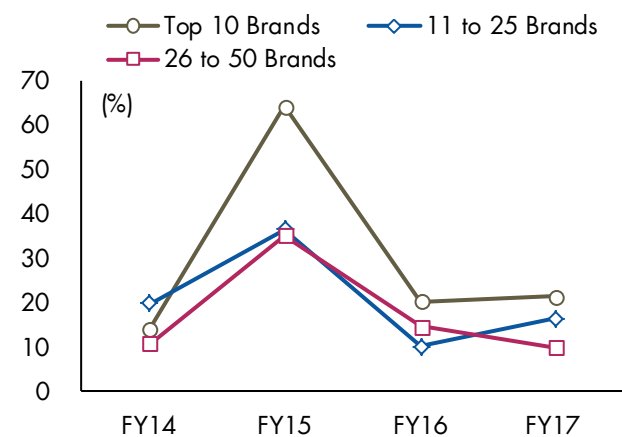
Source: AIOCD

Exhibit 129: Chronic therapies witness modest growth in FY17



Source: AIOCD

Exhibit 131: Top brands continued to grow...



Source: AIOCD

Exhibit 128: Anti-diabetic segment witnessed strong growth

YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac (CVS)	30%	-1%	6%	11%	11%
Neuro / CNS	17%	0%	8%	9%	12%
Gastro Intestinal (GI)	15%	-5%	13%	8%	13%
Vit/ / Min. / Nut.	14%	5%	13%	28%	6%
Pain / Analgesics	7%	4%	11%	28%	18%
Anti-Diabetic	7%	9%	18%	26%	44%
Anti-Infectives	4%	-37%	-14%	-18%	-18%
Derma	3%	21%	27%	38%	18%
Gynaecological	1%	-19%	-13%	-11%	-11%
Others	0%	-14%	0%	13%	67%
Blood Related	0%	-54%	-6%	-5%	28%
Total (Rsbn)	26	-1%	9%	14%	12%

Source: AIOCD, % of FY17 sales

Exhibit 130: High growth in pain&anti-diabetic

YoY growth	% of sales	FY15	FY16	FY17
Cardiac (CVS)	30%	18%	13%	12%
Neuro / CNS	17%	16%	15%	11%
Gastro Intestinal (GI)	15%	29%	9%	14%
Vit/ / Min. / Nut.	14%	771%	32%	12%
Pain / Analgesics	7%	344%	36%	25%
Anti-Diabetic	7%	33%	18%	38%
Anti-Infectives	4%	2%	-24%	-21%
Derma	3%	42%	36%	33%
Gynaecological	1%	79%	3%	-22%
Others	0%	18%	-1%	34%
Blood Related	0%	54%	-5%	-6%
Total (Rs bn)	26	16%	15%	13%

Source: AIOCD, % of FY17 sales

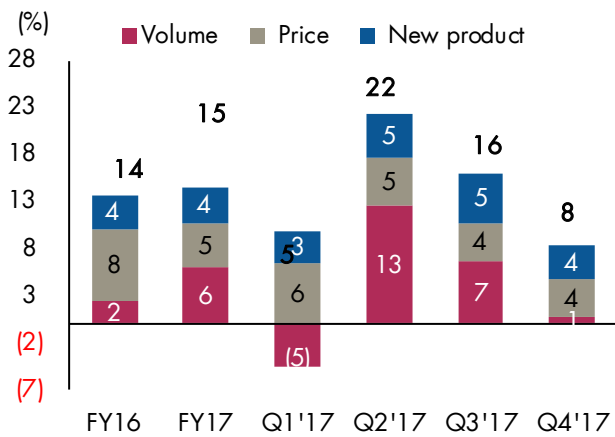
Exhibit 132: ...driven by Chymoraland Azulix - MF

Brand	Therapy	Rs. bn	YoY % FY17 Sales
Shelcal	Vit / Min / Nut	1.8	12%
Chymoral Forte	Pain / Analgesics	1.0	35%
Nikoran	Cardiac	1.0	10%
Azulix-Mf	Anti Diabetic	0.8	65%
Dilzem	Cardiac	0.8	10%
Nebicard	Cardiac	0.7	29%
Nexpro Rd	Gastro Intestinal	0.7	27%
Nexpro	Gastro Intestinal	0.6	16%
Shelcal Ct	Vit / Min / Nut	0.5	20%
Rozucor	Cardiac	0.5	13%
Total Top 10 (Rsbn)		8	21%

Source: AIOCD

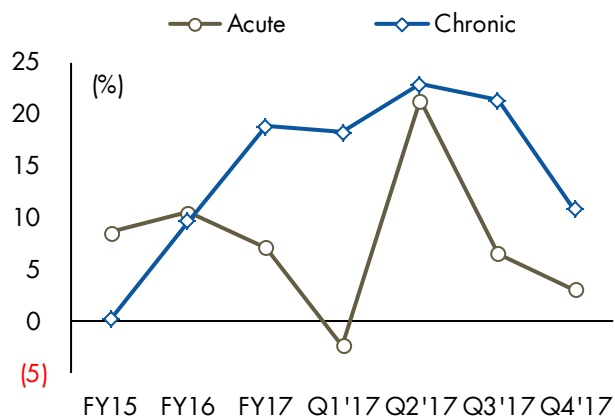
Unichem Laboratories (Not Rated)

Exhibit 133: Improvement in volumes in FY17



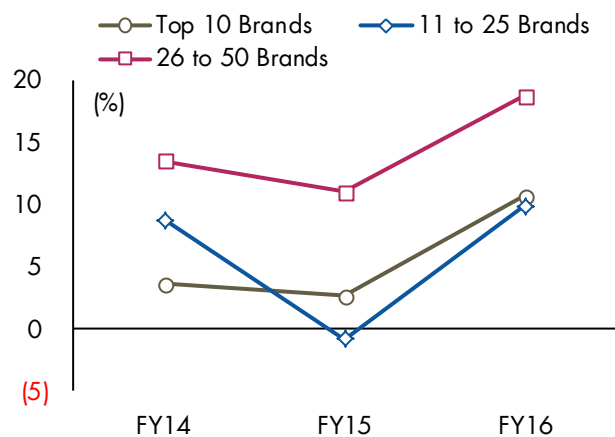
Source: AIOCD

Exhibit 135: Acute therapies growth lagged chronic growth



Source: AIOCD

Exhibit 137: Lower ranked brands outperforming larger brands



Source: AIOCD

Exhibit 134: Continued its strong growth trajectory in Anti-diabetic

Therapy	YoY growth	% of sales	Q1'17	Q2'17	Q3'17	Q4'17
Cardiac	42%		11	20	20	8
Anti-Infective	16%		(14)	21	4	(0)
Neuro / CNS	14%		14	24	18	12
Gastro Intestinal	12%		(10)	12	8	13
Pain / Analgesics	4%		10	36	10	(2)
Anti-Diabetic	5%		40	66	82	49
Vit. / Min. / Nut.	2%		(20)	6	4	8
Respiratory	2%		(15)	26	2	(6)
Derma	2%		62	39	27	(0)
Gynaecological	0%		(25)	(16)	(28)	(45)
Total (Rs. bn)			10	5	22	16

Source: AIOCD, % of FY17 sales

Exhibit 136: Strong growth in Cardiac and Neuro/CNS in FY17

Therapy	YoY growth	% of sales	FY15	FY16	FY17
Cardiac	42%		(3)	9	17
Anti-Infective	16%		7	12	4
Neuro / CNS	14%		5	20	19
Gastro Intestinal	12%		12	15	6
Pain / Analgesics	4%		23	25	15
Anti-Diabetic	5%		(0)	14	67
Vit. / Min. / Nut.	2%		11	35	3
Respiratory	2%		9	3	3
Derma	2%		13	42	31
Gynaecological	0%		(9)	9	(28)
Total (Rs. bn)			10	3	14

Source: AIOCD, % of FY17 sales

Exhibit 138: Stable growth across top 10 brands

Brand	Therapy	(Rsbn)	YoY % FY17 Sales
Losar H	Cardiac	1.0	28%
Amoxin	Anti-Infectives	0.7	0%
Losar	Cardiac	0.7	12%
Unienzyme	Gastro Intestinal	0.6	0%
Vizylac	Gastro Intestinal	0.4	20%
Trika	Neuro / Cns	0.2	-4%
Serta	Neuro / Cns	0.2	7%
Arkamin	Cardiac	0.2	46%
Unistar (Unichem)	Cardiac	0.2	19%
Telsar	Cardiac	0.2	-4%
Total Top 10 (Rsbn)		4	11%

Source: AIOCD

Exhibit 139: India Pharma – Price performance

India Pharma	Price (Rs)	Absolute Performance (%)					Performance Relative to Sensex (%)				
		1 month	3 months	1 year	3 year	5 year	1 month	3 months	1 year	3 yr	5 yr
Aurobindo	626	-9%	-11%	-19%	116%	884%	-11%	-20%	-35%	83%	808%
Alkem	1,975	-10%	20%	62%	N.A	N.A	-13%	11%	46%	N.A	N.A
Alembic	616	2%	4%	0%	101%	NA	0%	-4%	-15%	69%	NA
Biocon	1,141	0%	12%	102%	141%	377%	-3%	3%	86%	108%	301%
Cipla	549	-8%	-6%	1%	39%	77%	-10%	-15%	-14%	6%	1%
Cadila Healthcare	458	3%	28%	40%	135%	212%	1%	20%	24%	103%	136%
Dr Reddy's	2,639	0%	-12%	-15%	0%	48%	-2%	-21%	-31%	-32%	-28%
Divis	639	2%	-5%	-40%	-7%	54%	0%	-14%	-55%	-39%	-22%
Glenmark	893	1%	2%	8%	56%	171%	-2%	-7%	-8%	23%	95%
IPCA	610	4%	13%	23%	-25%	77%	1%	4%	7%	-58%	1%
Lupin	1,371	-8%	-10%	-13%	38%	155%	-10%	-18%	-29%	5%	79%
NatcoPharma	933	19%	44%	91%	470%	999%	17%	35%	75%	437%	924%
Strides	1,088	-5%	-4%	-3%	107%	65%	-7%	-13%	-19%	74%	-10%
Sun Pharma	642	-9%	1%	-21%	3%	114%	-11%	-8%	-37%	-30%	39%
BSE HC	15,142	-1%	1%	-3%	43%	121%	-4%	-7%	-19%	10%	46%
Sensex	30,109	2%	9%	16%	33%	76%					

Source: Bloomberg Note: Price as on 25-Apr 2017; BSE HC: BSE Healthcare Index

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