

China health care

Pharma sector comes of age



Strong growth visibility: We expect health-care spending to account for a growing share of China's economy: over 8% of GDP by 2020, from the current 5%. In the US, only two sectors – health care and entertainment – have claimed a larger share of the household wallet in the past 50 years. We believe this trend could also apply to China. China's multiple secular drivers – ageing population, widening insurance coverage, and improving innovation capabilities – should underpin strong growth in its health-care sector and drive investor return, in our view.

Climbing the wall of policy worry: We believe the main risks to the sector are regulatory and competitive. Contrary to popular perception, our research shows that health-care affordability in China has improved since the mid-2000s. We expect this trend to eventually lower the risk of state-mandated price cuts. Provincial tenders for medicines and the opening up of the health-care service sector will increase competition but should also allow industry leaders to gain market share, in our view.

Our picks: We see growing potential at both ends of the value curve in health care: pharmaceuticals and health-care services. Since the private health-care provider sub-sector is at an early stage of development, our report focuses on pharmaceuticals. Our proprietary framework, which is based on analysis of a 'smiley curve' trend, selects stocks based on products, financials, corporate governance, valuations and potential earnings upside. Accordingly, we initiate coverage of five stocks: Sihuan Pharma (OP), The United Laboratories (TUL, OP), China Shineway (OP), Lee's Pharm (IL) and CSPC Pharma (IL). Our top picks are Sihuan and TUL. Click [here](#) to get the Scoop, an audiovisual summary of the report.

Click for The Scoop

Su Zhang

+852 3983 8526
Equity Research
Standard Chartered Bank (HK) Limited

Important disclosures can be found in the Disclosures Appendix

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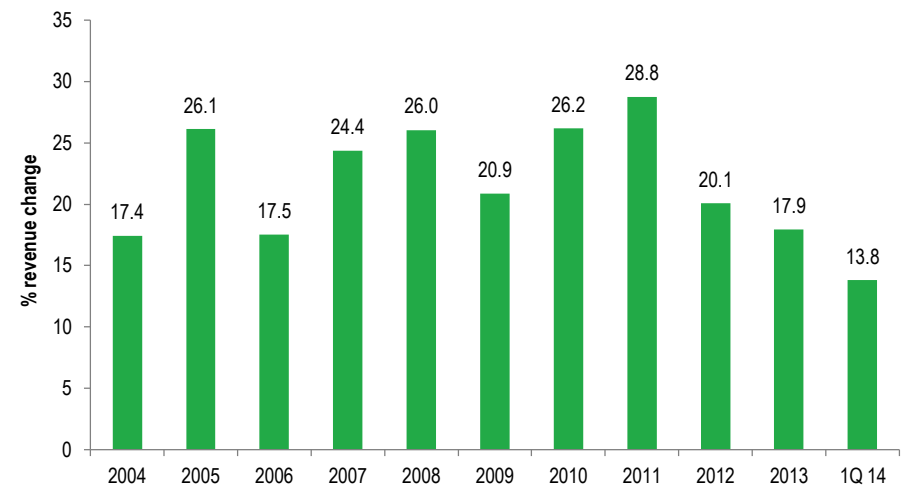


Executive summary

Solid fundamentals:
We expect health-care spending to rise to 8% by 2020, from 5%

China's health-care market registered a strong 20% CAGR in value terms in 2008-12, and we expect a CAGR of 16% in 2013-17. Admittedly, the sector is not immune to a macro slowdown – pharma industry sales growth slowed to 14% YoY in 1Q14 from 17-29% in the past decade, according to the National Bureau of Statistics (NBS). Nevertheless, we believe the health-care sector stands out for its strong growth visibility in the next few decades. We expect the ageing of China's population to match Japan's pace and push health-care spending to 8% of GDP by 2020 (from the current 5%). Medical insurance coverage expanded to 96% of the population in 2012 from 56% in 2006. We observe that domestic companies are gradually climbing the value chain and taking market share from multinationals. These trends bode well for investors.

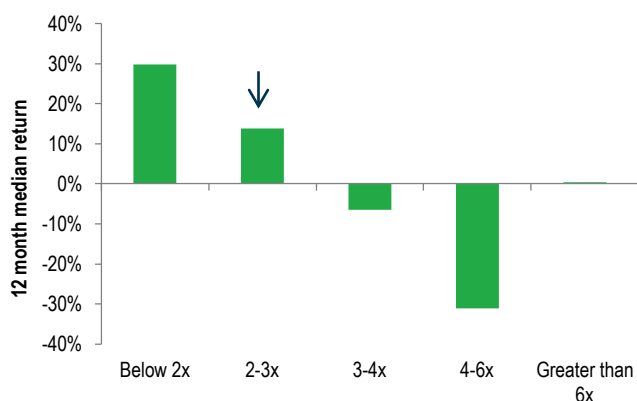
Figure 1: China pharma – Sales growth



Source: NBS

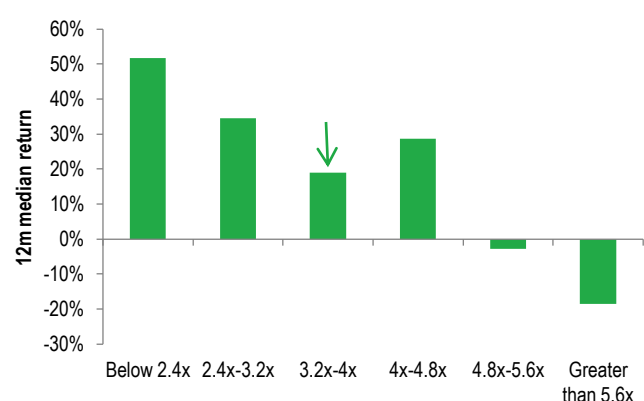
The sector trades at 2.8x trailing PBR on the MSCI China Health-care Index and 3.9x on the WIND China Health-care Index, a decent performance compared with 15-20% trailing ROE and low betas. Its valuations are also consistent with a 10-20% return on the index in the next 12 months, as we indicate in Figures 2 and 3. We would start to be concerned about overheating only if the valuation gauge exceeded 4-5x PBR.

Figure 2: MSCI Health-care – Trailing PBR vs. subsequent 12M median return



Source: Bloomberg, Standard Chartered Research estimates

Figure 3: WIND China – A-share trailing PBR vs. subsequent 12M median return



Source: WIND, Standard Chartered Research estimates



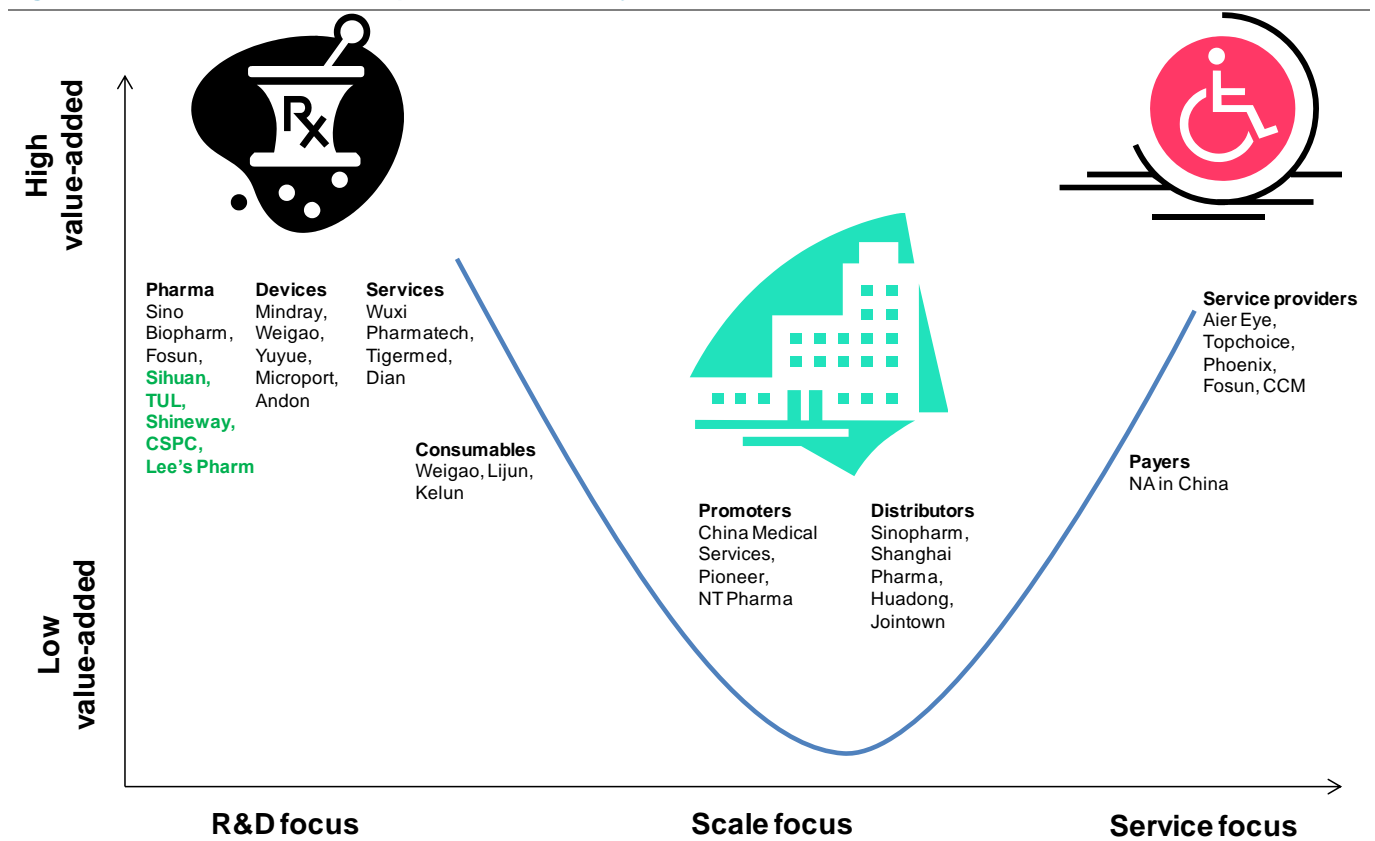
Balanced risk

The main risks to our positive thesis are regulatory and competitive pressure. However, we believe rising disposable income and expansion of insurance coverage have improved health-care affordability for China's households since the mid-2000s, and this could lower the risk of future state-mandated price cuts. Provincial tenders for medicines and the opening up of health-care services would increase competition, but they should also allow market leaders to thrive in their own sub-sectors.

Proprietary stock selection approach

To pick the right stocks, we use a framework based on a 'smiley curve'. Our research shows that sub sectors with the highest long-term growth potential cluster at both ends of the health-care value chain: pharma, device and service companies at one end, and health-care operators at the other. Their relevance could be explained in this way: the former group of sub-sectors drives innovation, and the latter controls points-of-sales in medicine and services. As China's private health-care operator sub-sector is still at an early stage of development, we place it under review for now, and focus on pharmaceuticals.

Figure 4: China health care – Companies on the smiley curve of the value chain



Company names in green are under our coverage

Source: Standard Chartered Research

First, we apply a proprietary 'franchise score' based on each company's products, financials and corporate governance credentials, and cross-check those with its historical mean valuation multiples. Then, we anticipate how much the franchise score could change in the next five years, and assign target multiples accordingly, based on a premium or discount to its historical mean multiple. Lastly, we build a stock selection grid to compare potential valuation upside (relative to our target multiples) and our potential earnings upside (relative to consensus). The next chapter details the rationale behind our framework.

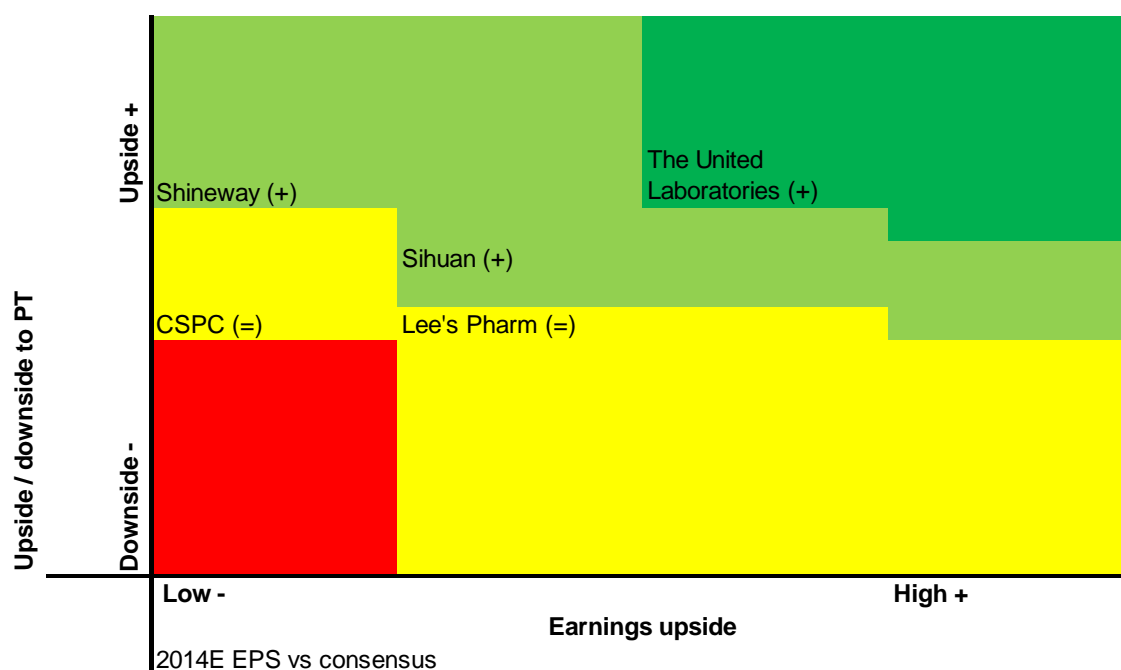
Figure 5: Franchise score table

	*Sihuan	Sino Biopharm	*Lee's Pharm	Tongrentang	*Shineway	Fosun	*TUL	*CSPC
Products: 30/60								
Market share (5/60)	5	4	3	4	3	4	4	4
Top sellers (10/60)	8	10	5	8	6	7	6	7
Diversification (5/60)	2	4	2	4	2	4	2	4
Pipeline (10/60)	6	9	6	6	4	8	8	10
Product score	21	27	16	22	15	23	20	25
Financials: 20/60								
Margin (5/60)	4	3	3	2	4	4	1	2
Efficiency (5/60)	3	4	4	2	2	2	3	3
Free cash flow & dividend (5/60)	4	4	5	4	4	2	2	3
Leverage (5/60)	4	4	4	4	4	3	2	3
Financial score	15	15	16	12	14	11	8	11
Governance: 10/60								
Listing history (3/60)	1	3	3	3	3	1	2	2
Major shareholder (3/60)	3	3	3	1	3	3	3	2
Transparency of business model & disclosure (4/60)	2	3	4	1	2	2	3	3
Governance score	6	9	10	5	8	6	8	7
Franchise score	42	51	42	39	37	40	36	43

*Under our coverage

Source: Standard Chartered Research

Figure 6: China pharma – Our stock selection grid



Source: Standard Chartered Research



In conclusion, we recommend that investors build positions in **Sihuan Pharma** (OP), **The United Laboratories** (TUL, OP) and **China Shineway** (OP), which we believe have significant valuation and/or earnings upside, relative to consensus. We initiate coverage on the stocks, as well as **Lee's Pharm** (IL) and **CSPC Pharma** (IL), which should appeal to long-term investors, as they lack near-term valuation potential in the next 6-12 months, in our view.

Figure 7: China pharma – Our stocks

	Ticker	Mkt cap (USD mn)	Price (lc)	Rating			PT (lc)		PT (lc)	Up/(Dn) side (%)	PER (x)		EV/EBITDA (x)		Div yield (%)	
				New	Old	Rec	New	Chg (%)			FY1E	FY2E	FY1E	FY2E	FY1E	FY2E
China Shineway Pharmaceutical [^]	2877 HK	1,472.2	-	OP	-	OP	18.00	-	18.00	-	12.3	10.7	6.4	5.2	3.3	3.8
CSPC Pharmaceutical [^]	1093 HK	4,611.0	6.05	IL	-	IL	6.60	-	6.60	9.1	29.6	23.1	15.9	12.9	1.0	1.3
Lee's Pharmaceutical [^]	950 HK	695.7	10.02	IL	-	IL	9.90	-	9.90	(1.2)	30.0	23.2	20.2	16.0	0.9	1.2
Sihuan Pharmaceutical [^]	460 HK	6,350.6	4.75	OP	-	OP	5.90	-	5.90	24.2	23.9	17.8	17.6	12.8	1.2	1.7
The United Laboratories International [^]	3933 HK	1,064.1	5.07	OP	-	OP	6.70	-	6.70	32.1	16.9	13.6	8.8	7.3	0.0	0.0

[^] Initiations. Share prices as of 26 June 2014

Source: Companies, FactSet, Standard Chartered Research estimates



Proprietary investment framework: smiley curve, franchise scores, rotation map

Rationale for investing in the smiley curve

It is understandable if investors feel a little lost when it comes to picking stocks in China's health-care sector, as this enormous market of RMB 2.8tn by revenue comprises many sub-sectors (see the table below). We counted over 180 listed companies with a market cap greater than USD 500mn. Where should one start?

Figure 8: China health-care value chain – Main sub-sectors

Sub-sectors	Retail revenue value (RMB bn)	% of revenue
Pharma manufacture		
Chemical (inc. API)	831	47%
TCM	507	28%
Biological	178	10%
Devices	157	9%
Consumables	112	6%
Total pharma	1,785	100%
Distribution		
Distribution - wholesale	840	78%
Distribution - pharmacies	227	21%
Distribution - promotions	10	1%
Total distribution	1,076	100%
Services		
Hospitals	1,391	76%
Primary clinics	293	16%
Others	146	8%
Health-care providers	1,831	100%

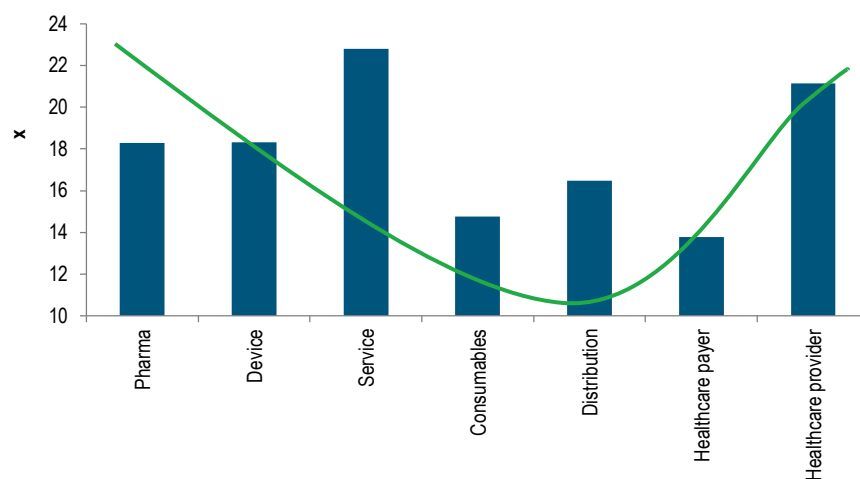
Source: SFDA South, Standard Chartered Research

To get an idea, we looked at the largest health-care market in the world: the US. The 55 constituent companies of the US S&P500 Health-Care Index together have 10 times the market cap of China's health-care sector. Our observations of the US market help throw some light on the investment paradigm in China health care.

*The US health-care stocks trend
appears as a smiley curve*

Drilling down current S&P500 health-care performance by sub-sector, a 'smiley curve' pattern emerges, in which stocks at both ends of the US health-care value chain – pharma companies and service companies at one end and health-care providers at the other – are trading at higher multiples than the rest.

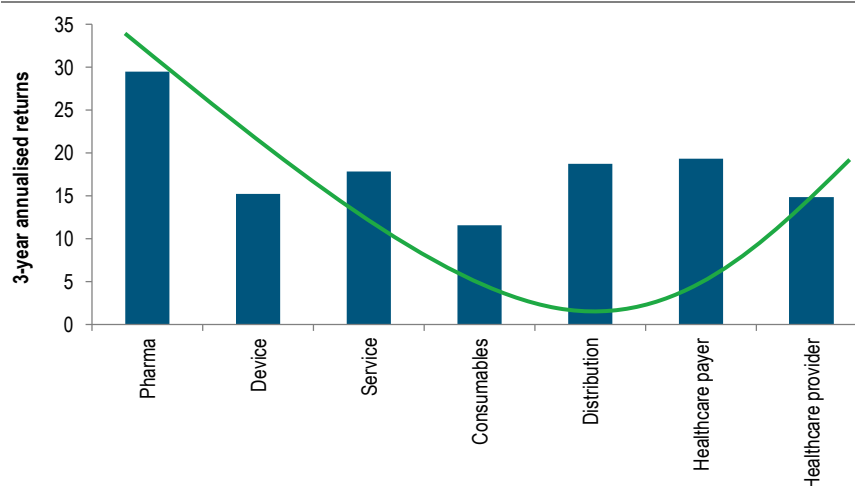
Figure 9: US S&P500 Health-care Index – 2014E market-cap weighted PERs



Source: Bloomberg

Looking at market-cap adjusted returns in the past three years, the smiley curve slightly alters its shape. From this longer perspective, pharma still stands out, but US distributors and health-care payers perform better than health-care providers, perhaps due to their efforts in sector consolidation.

Figure 10: US S&P500 Health-care Index – 3-year market-cap weighted annualised total returns



Source: Bloomberg

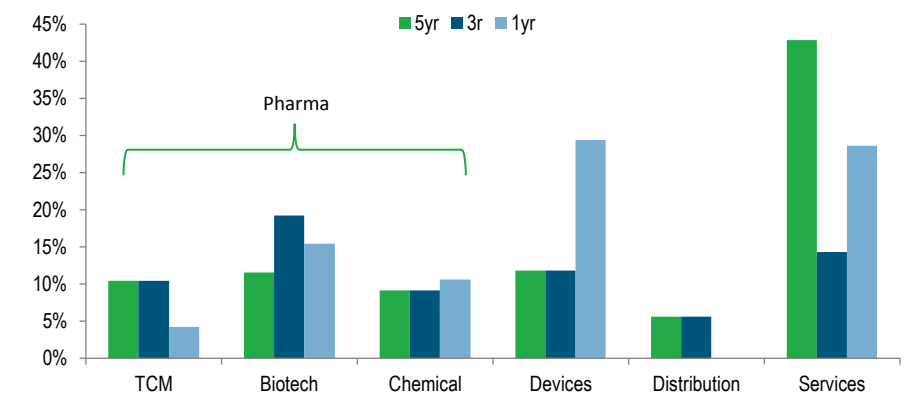
Multi-baggers cluster at both ends of the smiley curve

We used the same lens on China's health-care sector to search for stocks that have increased in value multiple times – multi-baggers – and arrived at similar findings. We measured total returns of 182 China health-care companies listed in China, Hong Kong and the US that have a current market cap greater than USD 500mn. Among them, 52 stocks have more than doubled their value in the past five years, and 13 have grown more than five times. Appendix 1 carries a list of these multi-baggers.

Once again, multi-baggers are concentrated at both ends of the smiley curve, and they tend to be in the **services, devices and pharma** sub-sectors, rather than in distribution.



Figure 11: Top 20 multi-baggers in China health care
Sub-sector representation over 1Y, 3Y and 5Y periods



Source: Bloomberg

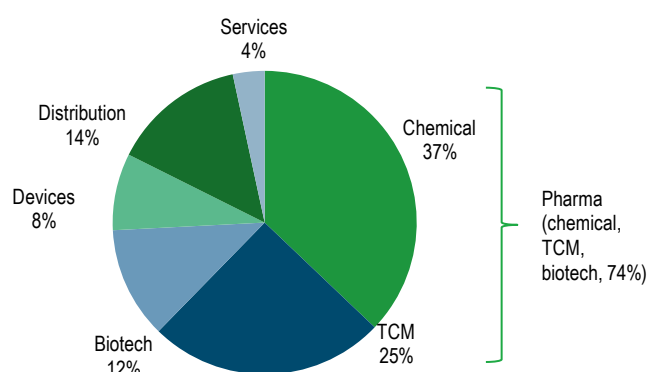
We would explain the smiley curve pattern in this way:

- **Innovators:** At one end of the smiley curve are innovators, including pharma companies that have accumulated vast knowledge and expertise over long periods. Others are laboratories and CROs (contracted research organisations), which specialise in innovation and benefit from the outsourcing of other companies' main functions, from diagnosis and biologics manufacturing to R&D.
- **Health-care service providers:** Hospitals, clinics, doctors are the main points-of-sales for the medicine and services sub-sectors. They exert an important influence on sales and have first-hand intelligence on large numbers of patients. These companies should be able to capitalise on strengths to generate returns for investors.
- **Consumables and distributors:** We find these sub-sectors in the value chain less attractive. Despite entry barriers related to scale, knowledge or regulations, their business is too distant from the areas where real innovation is fostered or services are rendered. While they employ the latest technologies to improve efficiency, newer technologies could disrupt their value proposition. For instance, smart medical devices containing diagnostic sensors, such as Dexcom's continuous glucose monitoring devices, facilitate information flow between patients, physicians and pharma companies; their use diminishes the value of the middle man – distributors.

Device companies are under-represented in China, compared with the US

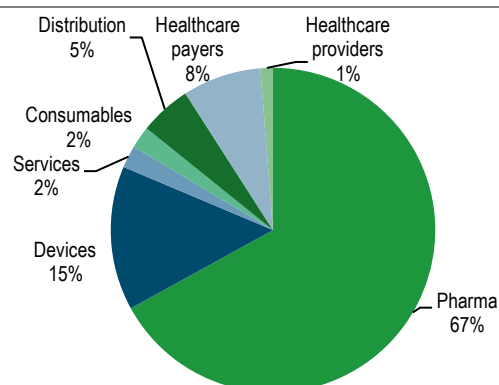
Will China's health-care market trend be similar to the US? If so, it would strengthen our case for investing in both ends of China's smiley curve. Comparing the composition of China's listed health-care companies with market caps above USD 500mn against the S&P500 Health-care Index, China's device sub-sector is under-represented (8% in China vs. 15% in the US), suggesting its strong growth potential. In comparison, distribution is over-indexed (14% in China vs. 6% in the US), implying less headroom for growth.

Figure 12: China health-care companies with market cap above USD 500mn – Sub-sectoral breakdown



Source: Bloomberg, Standard Chartered Research

Figure 13: US S&P500 Health-care Index – Sub-sectoral breakdown



Source: Bloomberg, Standard Chartered Research

The franchise score forms the core of our selection framework

Franchise score

Our approach focuses on the franchise value of companies because we view this factor as the main long-term driver of investor return. We analyse the products, financials and corporate governance of major pharma companies listed in Hong Kong, and score them based on the following criteria.

Product franchise criteria

Score weight: 30 out of 60 points

- Do the company's main drugs have a strong market share (above 20%)?
- Is the product portfolio diversified across different large therapeutic areas? The table below compares the main Hong Kong-listed pharma companies' exposure to large therapeutic areas.

Figure 14: Main HK-listed pharma companies – Revenue exposure to large therapeutic areas

Company	Bloomberg Ticker	Cardiology	Respiratory	Hepatitis	Diabetes	Anti-bacterial, anti-viral, vaccines	CNS	Oncology	Blood and blood forming organs	Gynaecology	Alimentary	API and intermediate products	Other medicines
Sihuan	460 HK	95%	1%			1%						2%	1%
Sino Biopharm	1177 HK	10%	1%	49%	1%	4%	3%	8%			7%		17%
Lee's Pharm	950 HK	8%							82%	7%			3%
China Shineway	2877 HK	48%				29%							23%
Shanghai Fosun	2196 HK	5%			13%	9%	8%		3%			9%	18%
The United Laboratories	3933 HK				2%	24%						67%	7%
CSPC Pharmaceutical	1093 HK	13%				25%	6%					18%	38%
China Medical System	867 HK	10%	8%		0%	14%	28%				25%		15%

Source: Companies, Standard Chartered Research

- Does the company have a robust new-drug pipeline?
- Does the portfolio include commercially successful drugs?

For pharma companies, we believe the most important parameter is their products. Accordingly, we assign 30 out of 60 points to the product franchise score. Conclusion: Sino Biopharm and **CSPC** stand out from their peers. We will elaborate on product franchise in the following chapters and in the company profiles.



Financial franchise criteria

Score weight: 20 out of 60 points

- What are the company's margin levels and trends: relative to its own history, and relative to peers? What are the SG&A ratio and R&D ratio trends: relative to its own history, and relative to peers?
- How do the companies compare in terms of efficiency ratios: asset turnover, working capital ratio, and revenue per staff? Are they consistent with the company's business model?
- Is the company generating positive free cash flow, and does it pay out appropriate dividends?
- Is the company's level of leverage appropriate?

We assign 20 out of 60 points to the financial franchise score. Our key benchmarking metrics are listed in Appendix 4. Conclusion: **Sihuan, Lee's Pharm, Shineway**, and Sino Biopharm score above average.

Governance franchise criteria

Score weight: 10 out of 60 points

- Does the company have a long listing history? Is the mode of listing an IPO or a reverse/back-door merger? Has it had an overseas de-listing?
- What is the background of the largest shareholder? Private or state-owned? Is the shareholding concentrated?
- Is the business model transparent? Is disclosure adequate?

We assign 10 points out of 60 to corporate governance. Conclusion: **Shineway, Lee's Pharm** and Sino Biopharm stand out on this score.

The following table shows how main Hong Kong-listed pharma companies compare in our franchise scoring system. Our framework excludes device and health-care provider stocks, since these sub-sectors have limited candidates.

Figure 15: China pharma – Franchise scores

	*Sihuan	Sino Biopharm	*Lee's Pharm	Tongrentang	*Shineway	Fosun	*TUL	*CSPC
Product – 30/60								
Market share (5/60)	5	4	3		4	3	4	4
Top sellers (10/60)	8	10	5		8	6	7	7
Diversification (5/60)	2	4	2		4	2	4	4
Pipeline (10/60)	6	9	6		6	4	8	10
Product score	21	27	16		22	15	23	25
Financials – 20/60								
Margin (5/60)	4	3	3		2	4	1	2
Efficiency (5/60)	3	4	4		2	2	3	3
Free cash flow & dividend (5/60)	4	4	5		4	4	2	3
Leverage (5/60)	4	4	4		4	4	2	3
Financial score	15	15	16		12	14	8	11
Governance – 10/60								
Listing history (3/60)	1	3	3		3	3	1	2
Major shareholder (3/60)	3	3	3		1	3	3	2
Transparency of business model & disclosure (4/60)	2	3	4		1	2	3	3
Governance score	6	9	10		5	8	6	7
Franchise score	42	51	42		39	37	40	43

*Under our coverage

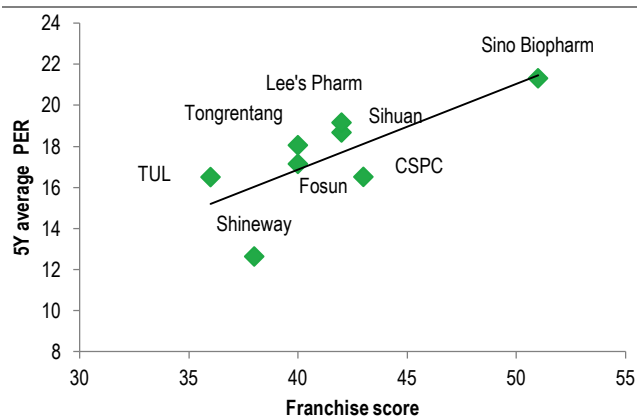
Source: Standard Chartered Research



The charts below depict a generally close correlation between our franchise scores and the companies' five-year mean PER multiples, which are based on average monthly forward PER. This strengthens our view that franchise value is the foundation of a stock's valuation framework. The scores' low correlation with five-year annualised returns, however, suggests investment return is often as much about having the right price as finding a good franchise.

Figure 16: Franchise score vs. 5Y mean PER

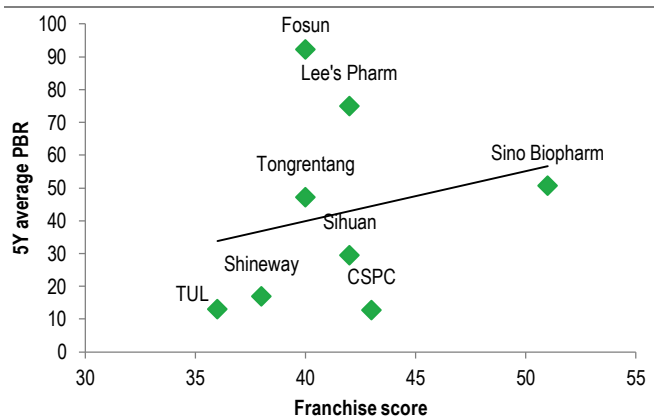
Five-year mean PER captures franchise quality well



Source: Bloomberg, Standard Chartered Research

Figure 17: Franchise score vs. 5Y annualised total returns

Franchise score is not the best proxy for returns



Source: Bloomberg, Standard Chartered Research

Potential changes in franchise are just as important

Along with the franchise score, we place equal importance on changes in franchise and their drivers. The charts above show that equity performance has low correlation with the franchise score. They indicate that changes in franchise, rather than the franchise score itself, primarily drives return. For instance, Fosun, which has been active in hospital M&A since its listing, was subsequently re-rated when the market perceived it as a hospital play rather than a pharma/distribution play.

We identify two indicators of potential changes in franchise: turnaround stories (TUL, Shineway) and room-for-appreciation stories (Sihuan). Although the stocks in these categories may appear flawed to some investors, we believe in their potential to change market perception.

We are less sanguine about state-owned enterprises (SOE) and would hesitate to grant them a valuation premium to their historical average solely in anticipation of a potential change in ownership and/or management incentives. We would rather wait for concrete signals as their ability to improve results is uncertain.



Our price target is based on a company's five-year mean multiple, which in our view captures its franchise quality well, plus a discretionary premium or discount to reflect potential changes in the franchise score.

Figure 18: Target multiples on forward earnings

	Franchise score	Current PER	5Y average PER	Highest quintile	Target PER
Sihuan	42	18	19	24	22
Lee's Pharm	42	23	19	23	23
China Shineway	38	11	13	16	15
The United Laboratories	36	16	17	21	18
CSPC	44	23	17	27	25

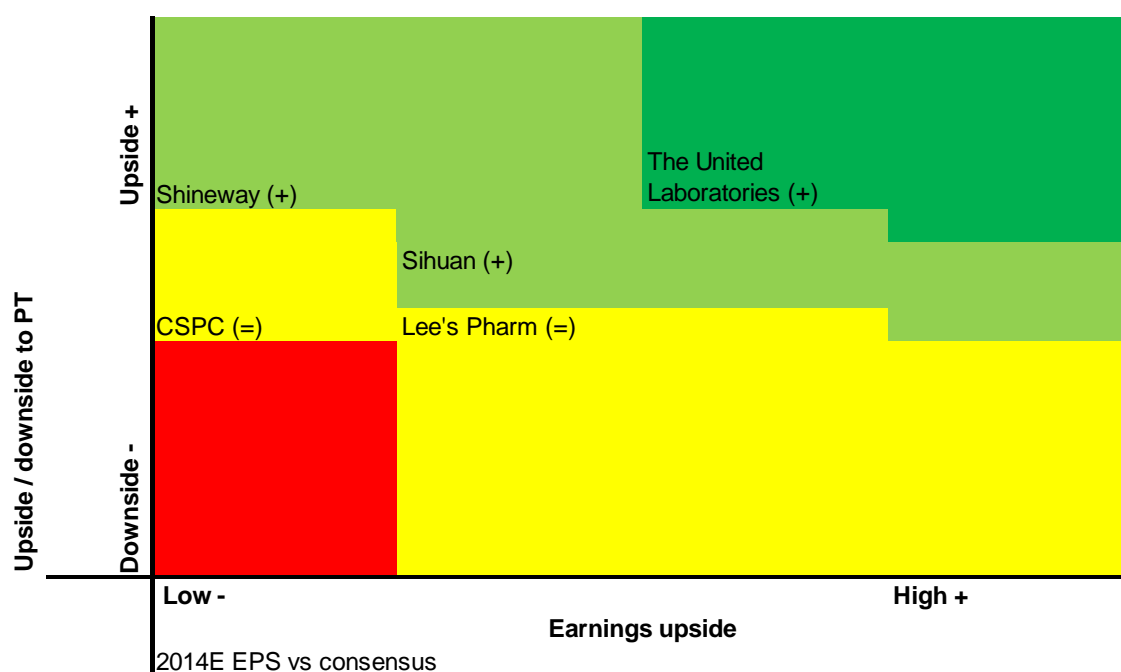
Source: Standard Chartered Research

We integrate value and earnings into our stock selection grid

Rationale for our stock selection grid

We then compare the companies' valuation potential upside with our target multiples, and with their potential earnings upside, based on our estimates versus consensus. The stock selection grid below summarises the results. The top-right quadrant indicates stocks with the potentially highest earnings upside and valuation upside.

Figure 19: China pharma – Our stock selection grid



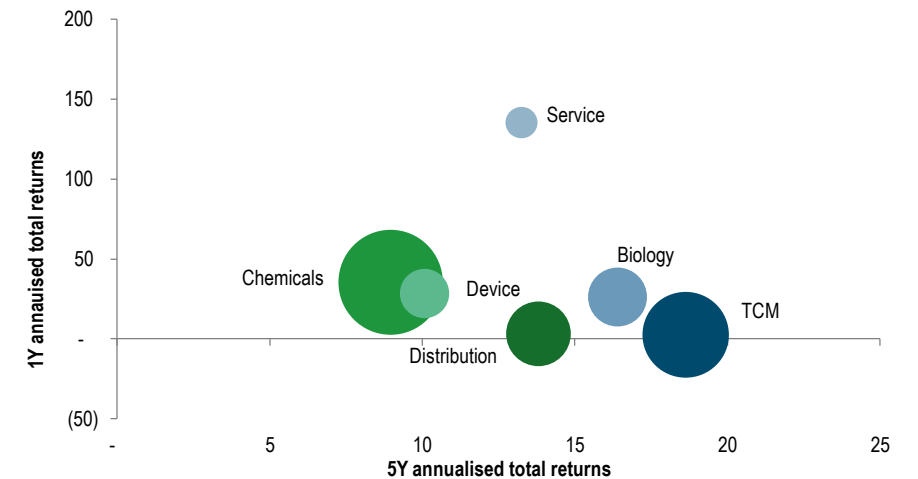
Source: Standard Chartered Research



Rationale for our rotation map

We include a rotation map for investors who are more inclined towards tactical investments. It shows market-cap weighted total returns of each sub-sector on a one-year scale versus a five-year scale.

Figure 20: 1Y vs. 5Y total market cap weighted returns by sub-sector



Size of bubble reflects the sub-sector's market cap
Source: Bloomberg, Standard Chartered Research

Tactically, service stocks are in favour, but TCM stocks are not. Is there room for a reversal?

The rotation chart shows a marked separation of 'old economy' stocks (traditional Chinese medicine, or TCM) and 'new economy' stocks (health-care service providers). Service stocks have outperformed TCM by 120% in the past 12 months, but over a five-year period, both sub-sectors showed a similar performance level. We believe services have benefited most from health-care reform, and will elaborate on this in the next few chapters. We note that market concern over potential price cuts by the state has weighed heavily on TCM stocks.

While we currently see no imminent catalysts to change this perception, we are mindful that underlying changes could trigger a reversal in this trade. For instance, if the price-cut overhang is removed in the next 12 months, TCM-related stocks could again outperform the health-care sector, and perhaps do so at the cost of some service stocks. We would thus advise tactical investors to overweight selected TCM stocks in case of such a reversal. In our view, the inexpensively valued Shineway (OP) is an ideal TCM play on this investment theme.

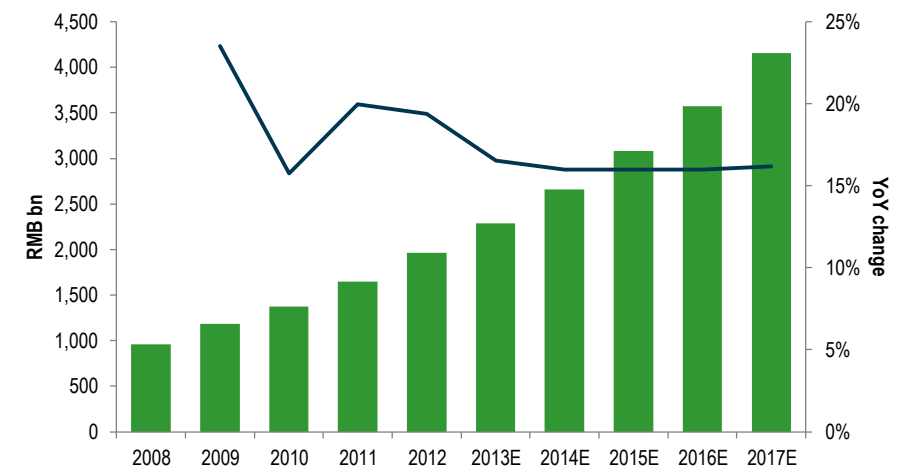
We caution that investors should not confuse a tactical trade based on the rotation map with our fundamental investment case. As we have mentioned, we seek over-exposure to the service sector as well as pharma in the long term.



China health care: uniquely positioned for 'growth certainty'

China's health-care market is known for its enormous size and fast growth. It is the third-largest in the world with RMB 2.8tn sales in 2012, and expanded at a 20% CAGR in 2008-12. Industrial consultant Frost & Sullivan projects a 16% CAGR in 2013-17. We believe China stands out for its strong growth visibility for decades to come, as we will discuss below.

Figure 21: China health-care market – Strong visible growth



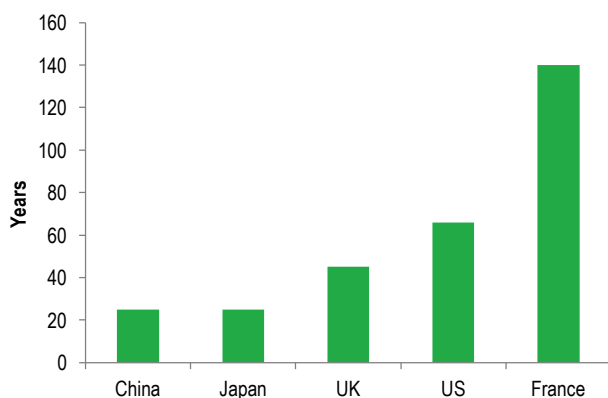
Source: Frost & Sullivan

Each year, China's elderly population grows by the size of the total Austrian population

China has a rapidly greying economy

That China will have a challenging demography in the next few decades is well known. Nevertheless, the ageing pace of its population could still catch many unprepared. By the government's reckoning, China's ageing pace almost matches Japan's and would be faster than all other major industrialised economies in modern history (see the charts below). In 2011-15, it expects China to have 8.6mn p.a. more senior citizens (defined as older than 60), the size of the total population in Austria.

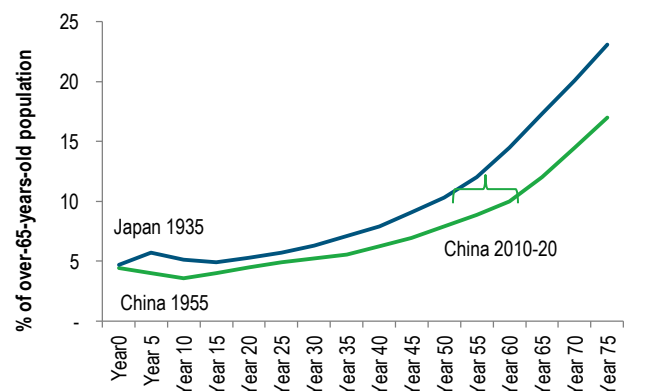
Figure 22: Above-60 population size – Number of years for ratio* to grow from 9% to 18%



*Population of above-60 senior citizens as a percentage of the total population

Source: Ministry of Health, MENET

Figure 23: China vs. Japan – Change in proportion of above-65 population



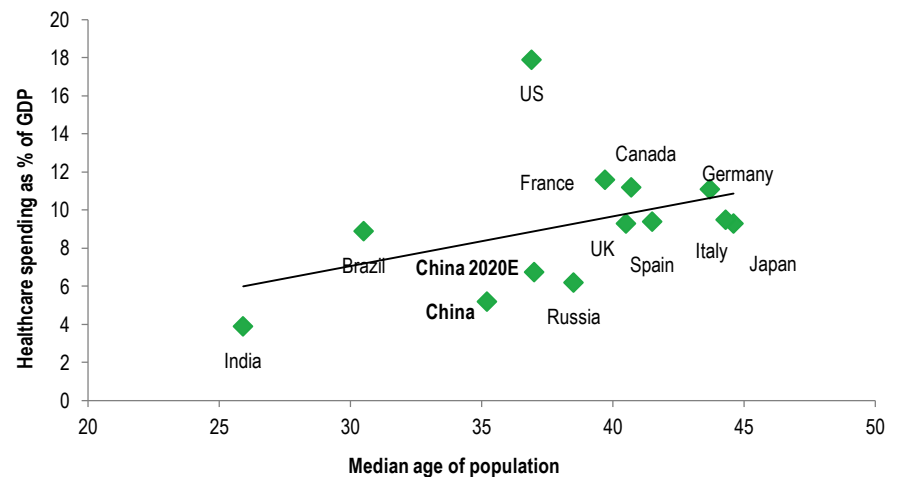
Source: Centre for Population and Development Studies, Renmin University of China



Yet China spends a smaller portion of GDP on health care than Brazil, a much younger economy

With age comes wisdom and medical bills. Unsurprisingly, the elderly economy spends a greater proportion of GDP on health care (see the chart below). China, which currently spends 5% of its GDP on health care, aims to increase this ratio to 6.5-7% by 2020 (source: *Healthy China 2020*, a 2012 white paper by the Ministry of Health). In our view, however, China is likely to overshoot this target to spend 8% of GDP on health care by 2020. It does not make sense to us that in 2020, it would be spending a smaller percentage of GDP on health care than Brazil today (9%), considering the latter's much younger demography.

Figure 24: Health-care spending correlates with median age of population*



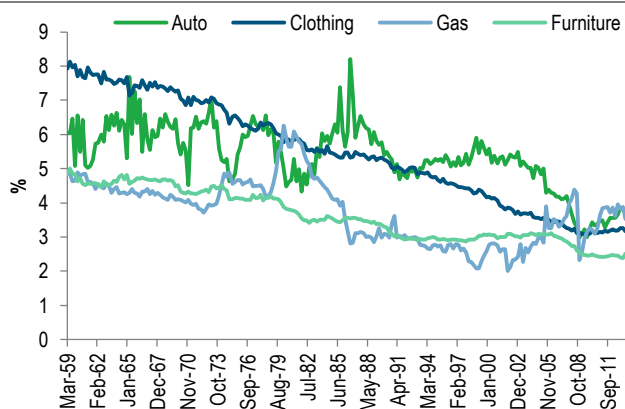
2011 data

Source: WHO, Standard Chartered Research estimates

Healthcare spending is set to increase its share of the wallet in China, just as in the US

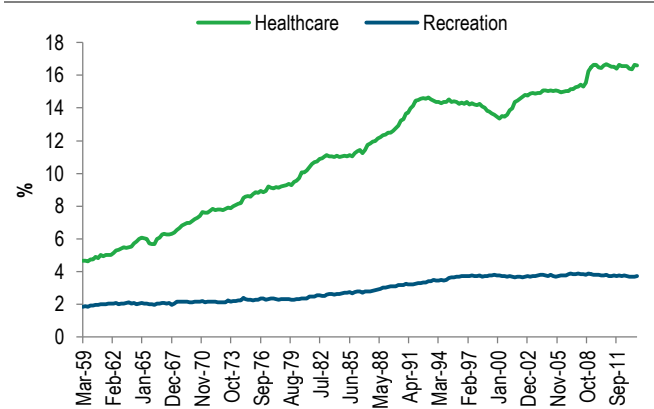
Among China's industries today, health care is among the very few that would almost certainly claim a growing share of the wallets of Chinese people 50 years from now. A good benchmark is the US. It seems incredible that six decades ago, the US spent less on health care than on furniture. Since then, US health-care spending, as a proportion of personal consumption expenditure (PCE), has grown from 5% in the 1950s to 17% in 2013. Today, Americans spend more on health care than on cars, clothing and petrol combined.

Figure 25: US household spending – Wallet share of most industries have shrunk



Source: US census

Figure 26: US household spending – Health care and entertainment are two large exceptions, claiming a larger wallet share



Source: US census



China targets universal healthcare insurance coverage by 2020

Medical insurance reimbursement is rising rapidly

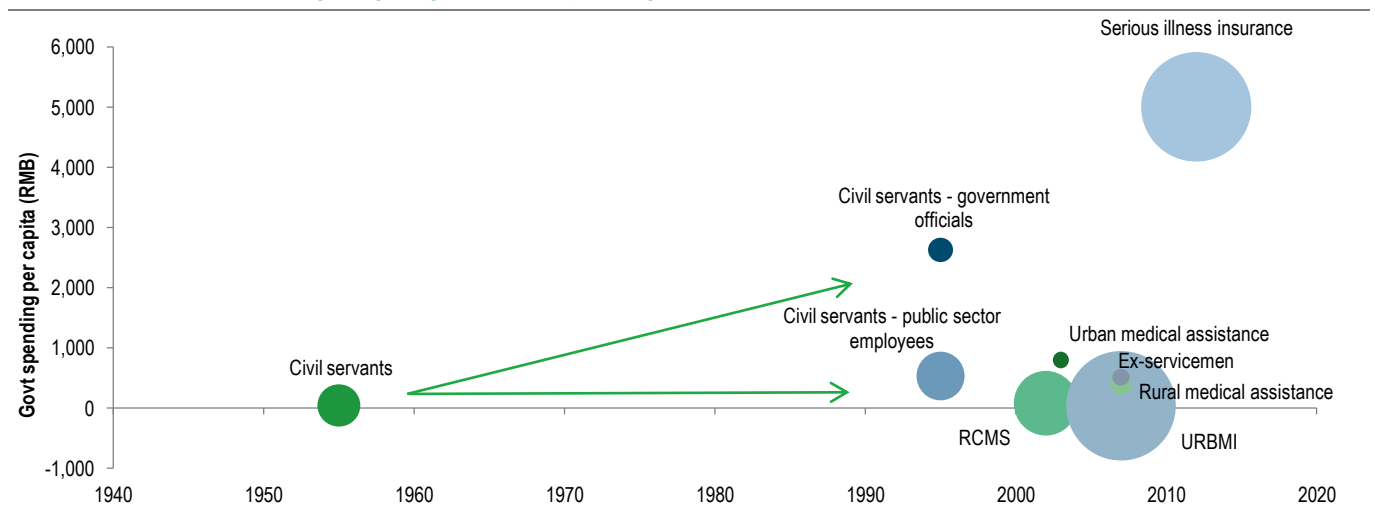
Starting in 2002, the previous China administration undertook a series of initiatives to extend its limited state-sponsored medical insurance system to the majority of population. Progress has been rapid: insurance coverage reached 96% of the population in 2012, versus 56% in 2006. The target is to provide universal health-care coverage to all residents by 2020.

- The state funds two major insurance schemes: Urban Residents Basic Medical Insurance Plan (URBMI, introduced in 2007) and the Rural Cooperative Medical Service (RCMS, introduced in 2002), also known as New Rural Cooperative Medical Service, or NRCMS. The state, represented by both local and central governments, funds 60-80% of these plans.
- A third plan, Urban Employees Medical Insurance (UEMI), is funded three ways by industry, employees and the state to a ratio of 6% of the wage from urban employers, 2% from the employee, and the state subsidising the rest.
- Other plans cover civil servants, public sector employees, and ex-servicemen.
- China also provides two financial assistance plans (urban and rural) for the impoverished, and recently introduced a serious illness insurance plan to cover over 50% of medical expenses that are not covered by existing plans.

The following chart illustrates the evolving structure of China's state-financed medical insurance system.

Figure 27: China medical insurance – Evolution of reimbursement system*

The direction is wider coverage, higher government spending



Size of bubble reflects the population size at the time of introduction

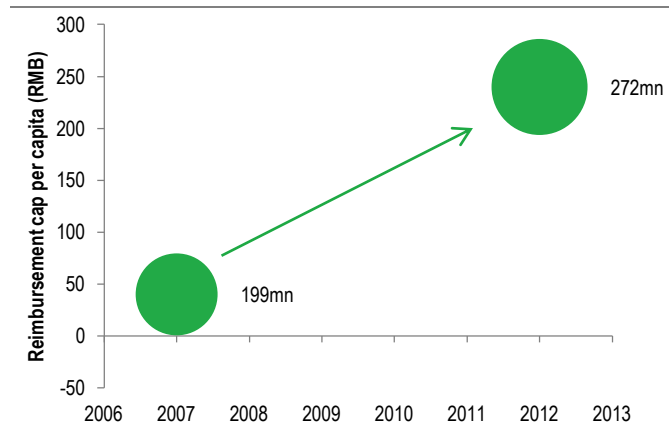
Source: World Bank, Standard Chartered Research



We expect upward pressure on reimbursement caps

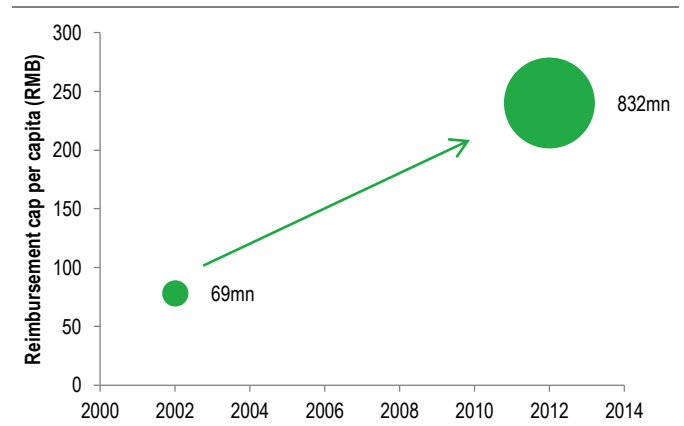
It is worth noting that the plans vary greatly in coverage size and per-capita spending. China's target to homogenise its insurance plans creates constant pressure to increase the reimbursement cap, particular on two of the largest plans, RCMS and URBMI. For instance, China quadrupled RCMS public spending over 2008-14 from RMB 78 per capita to RMB 320, far below RMB 2,600 per capita for civil servants. Thus, even if coverage expansion slows in the next few years, rising reimbursement caps could continue to drive demand growth in China's health care.

Figure 28: URBMI – Higher reimbursement cap, larger coverage



Size of bubble reflects the covered population
Source: MOH, Standard Chartered Research

Figure 29: RCMS – Higher reimbursement cap, larger coverage



Size of bubble reflects the covered population
Source: MOH, Standard Chartered Research

As to how China will continue financing reimbursements, we estimate only 31% of funding comes directly from the state's coffers, as health care accounts for only 13% of the state budget, according to the Ministry of Finance. This proportion is fairly similar to other countries'. Considering the low public debt to GDP ratio in China, we believe the ministry would have no issue with continuing to finance the increase in reimbursement caps in the near to medium term.

Continuous import substitution

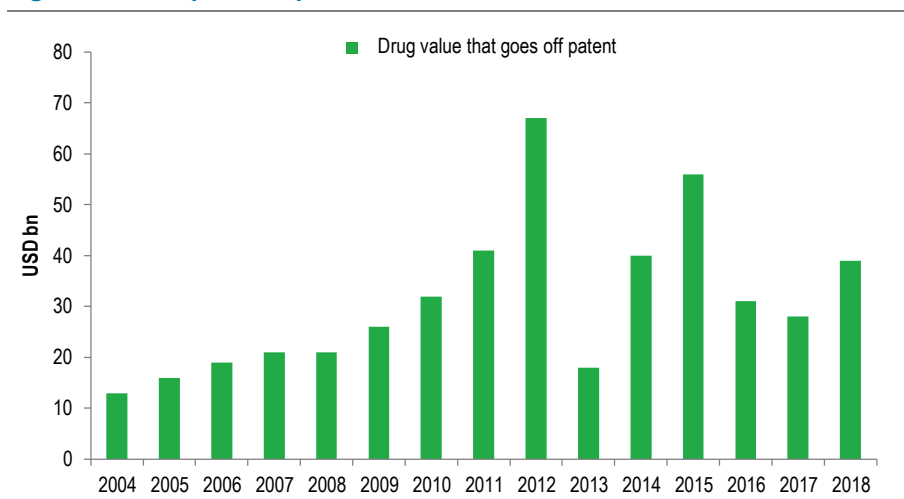
Big pharma multinational corporations (MNCs) still hold dominant market positions in China, dominating six out of the top 10 companies by sales. However, local companies' market share has crept up from 49% in 2005 to 55% in 2012. China companies now account for 9 of the top 20 pharma companies by market share.

We believe their market share growth will accelerate. MNCs have yet to fully recover from patent cliffs (when a large proportion of the portfolio nears patent expiry). China's policy encourages the wider use of low-priced EDL, which is dominated by domestic generics in higher-tier hospitals. China companies' R&D skills are catching up very quickly with multinationals, due to the brain drain caused by steep cuts in the research budgets of international big pharmas following large-scale acquisitions. Many China pharmas have scooped up R&D talent as a result.

China pharmas gained market share against international peers



Figure 30: MNC patent expiries – Timeline

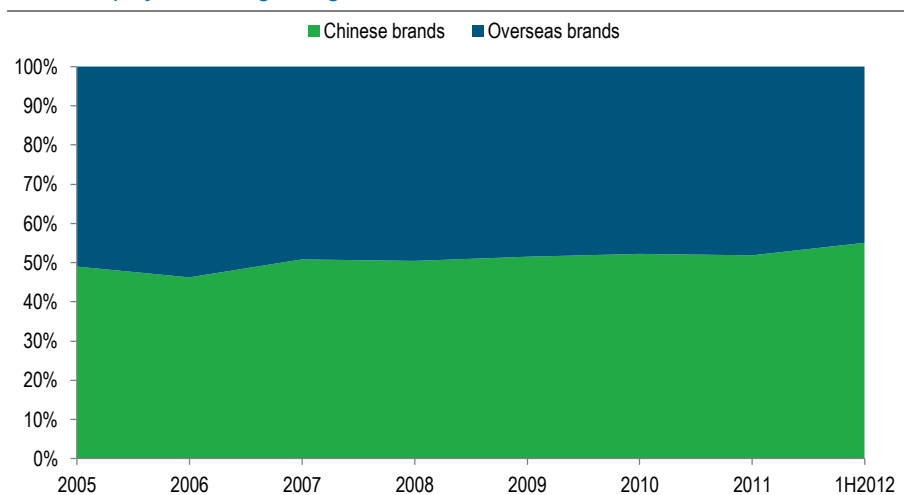


Source: EvaluatePharma

We believe that the chart below, which reflects changes in market share between MNCs and domestic companies, is unable to fully capture underlying changes in some major treatment areas. Some China companies (North China, Haerbin, CSPC, TUL) have been disproportionately affected by the government's curbs on antibiotic use since 2010, others (Sino Biopharm, Salubris) have emerged strong challengers in higher-growth areas, such as cardiovascular and hepatitis.

Figure 31: Prescription drugs – Market share

Domestic players have growing market share

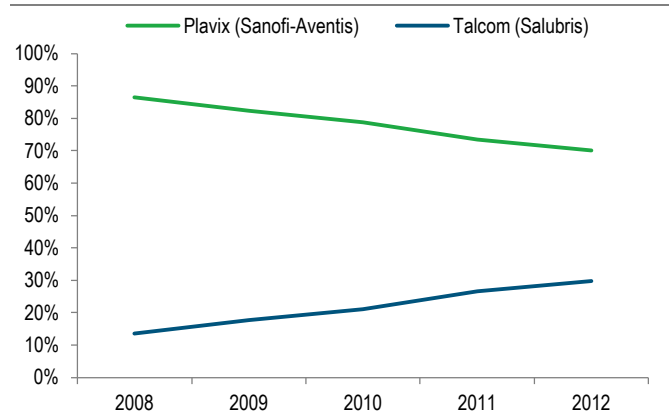


Source: PICO

Typical examples are Plavix and Crestor, two global blockbuster drugs that occupied a dominant position in their respective molecule markets. Marketed by BMS and Sanofi, Plavix (Clopidogrel) is an oral thienopyridine-class antiplatelet agent used to inhibit blood clots in cerebral-cardiovascular diseases. Crestor (Rosuvastatin), marketed by AstraZeneca, is used to treat high cholesterol and related conditions, and prevent cardiovascular diseases. In recent years, the brands have had their market share chipped away by China companies such as Shenzhen Salubris, Lunan Beite and Sino Biopharm, which launched generic versions of these patented drugs.

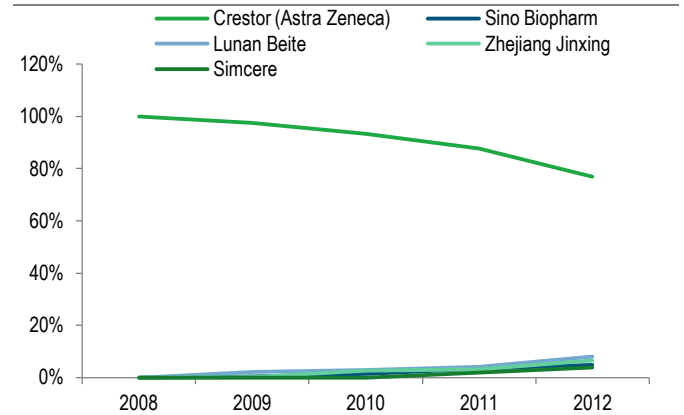


Figure 32: Clopidogrel – Market share



Source: MENET

Figure 33: Rosuvastatin – Market share



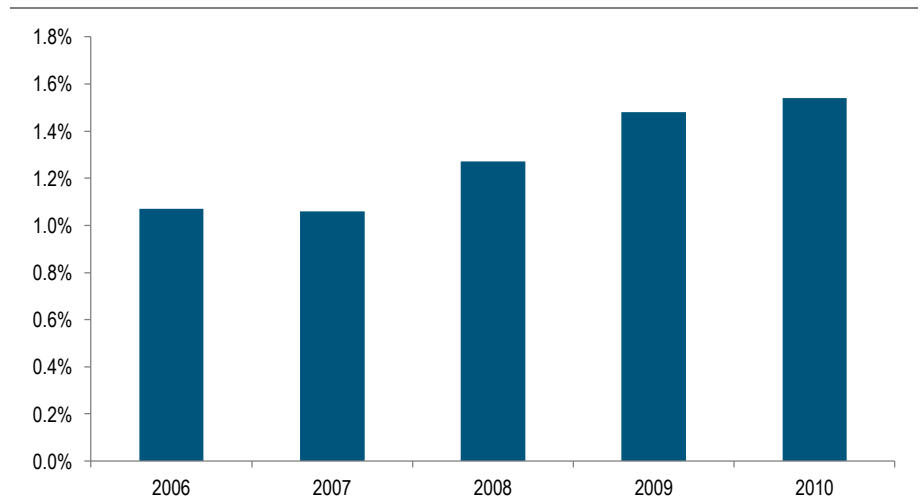
Source: MENET

China pharma are less competitive than India pharma

We reckon that China companies pale in comparison with their Indian peers in global competitiveness for three reasons:

- First, China companies have traditionally not invested enough in innovation. On average, China pharma spend 1.5% of sales on R&D, compared with 16% for international big pharma and 2.5-5.5% for India companies.

Figure 34: China pharma – R&D as % of sales is still small

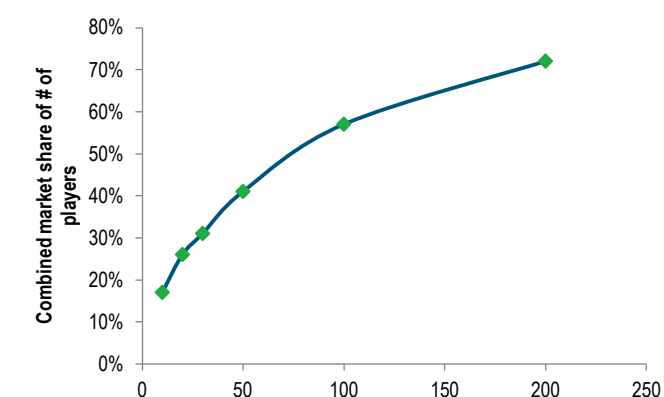


Source: China Pharmaceutical Technology Association

- Second, a policy of strong regional protectionism that favoured local manufacturers has slowed consolidation in the sector. For instance, many provinces rolled out an additional EDL list (EDL Plus) that substantially favours local drug manufacturers. The result is a fragmented industry: The top 20 China pharma companies account for only 20% market share by sales (represented as CR20 in the following chart) versus 65% in India.

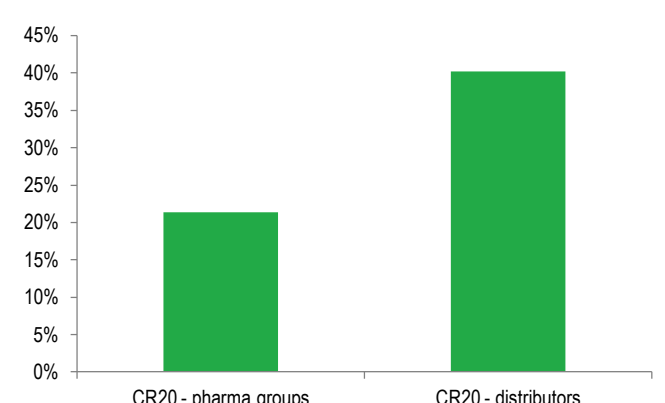


Figure 35: China pharma – Combined market share of top pharma companies, including foreign companies



Source: Standard Chartered Research

Figure 36: Pharmas vs. distributors – Combined market share of top 20 companies in China



Source: Standard Chartered Research

- Lastly, China's pharma market is large enough for domestic companies. The USD 70bn market, in terms of total invoiced sales, is the third largest in the world, more than 6 times India's equivalent market. China players are naturally slower than their India peers to venture abroad. Only 4% of China's drugs (mainly in API) by value were exported in 2012, versus over 15% in India.

That said, we believe domestic leaders are following the strategy of India companies, and improving their competitiveness in all these areas:

- Several large companies' R&D to sales ratios are already comparable with or superior to those of India companies. For instance, Sino Biopharm's R&D ratio was 8.9% in 2013 and Lee's Pharm's (including capitalised amount) was 10.3%, compared with leading listed India companies' 5%.
- Several generic and API manufacturers, including CSPC, Huahai, Luye and TUL, are focusing increasingly on the international market, achieving US and EU Good Manufacturing Processes (GMP) and obtaining US Abbreviated New Drug Applications (ANDA).
- Many listed companies, such as Fosun and Sihuan, have become increasingly acquisition minded and contributed to the consolidation of the sector. Given time, they could be serious challengers to big pharma MNCs and India companies. For a perspective of the pharma sector in India, please read the SCout report by our India team, *The third wave – Global scalability key* (13 January 2014).



Climbing the wall of policy worry

In almost any country, public policy debates centre on health-care policy. This is understandable as this industry is capable of either generating large external benefits (for instance, investing in a good primary care system could achieve substantial savings for the economy) or incurring steep external costs (for instance, ineffective control of pandemics could incur high social cost). We hope this chapter will provide insights into the policy landscape of the China health-care industry.

China's healthcare system shares many important features with Germany and Japan

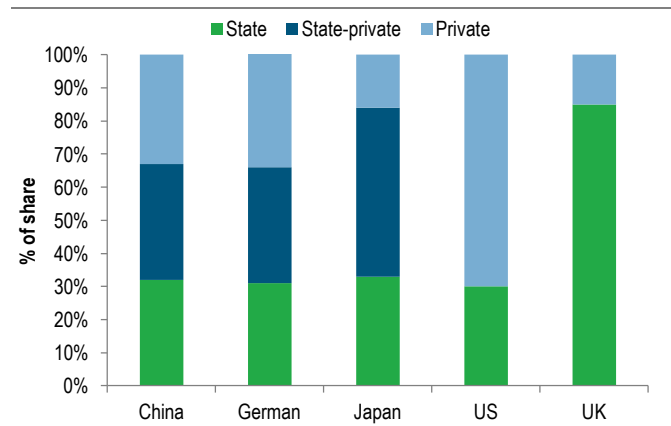
Price control is eminent when the government is a major health-care payer

Medicine price controls are not unique to China; they are a common feature in countries where the state is an important health-care payer* as well as a major health-care provider*. The government has a strong interest in keeping prices down.

* We define health-care payers as entities other than the patient that finances or reimburses the cost of health services, including insurance carriers and health plan sponsors (state, employers or union). We define health-care providers as institutions that provide preventive, curative, promotional or rehabilitative health care in a systematic way to individuals, families or communities.

Figure 37: Health-care payers – A cross-country health-care system comparison

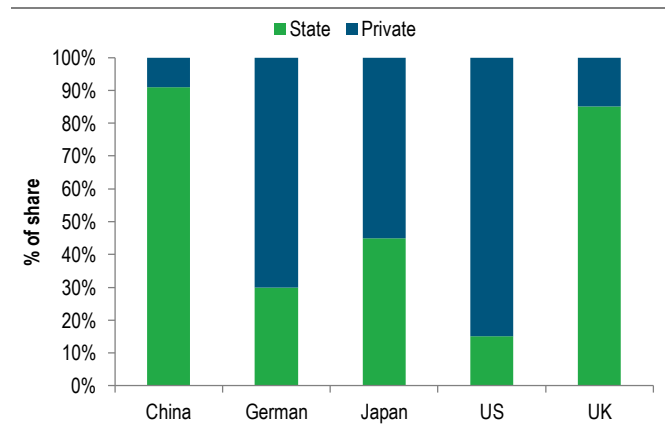
China's health-care payment system is similar to Germany's and Japan's



Source: Standard Chartered Research

Figure 38: Health-care providers – A cross-country health-care system comparison

China's health-care provider system is similar to the UK's



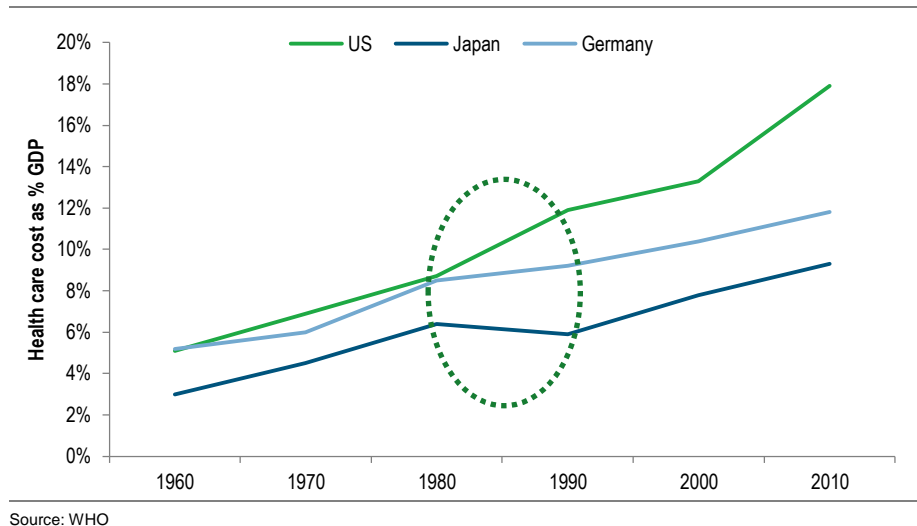
Source: Standard Chartered Research

Germany responded to its rapid rise in health-care expenses in the 1960s-70s by enacting the Health-care Cost Containment Act in 1977, in an attempt to benchmark medical spending growth to wages and inflation. In Japan, all medical bills since the 1990s have been strictly regulated under a uniform fee schedule for reimbursement. The Ministry of Health and physicians negotiate health-care fees every two years, and drug prices fall c.6% every two years.

These practices contrast with the US, where private payers account for the majority of health-care expenses and the state shows no intention of controlling prices of drugs and medical services. As a result, Germany and Japan curtailed medical expenses under 10% of GDP by 2010, well below 13% in the US.



Figure 39: Health-care cost as % of GDP



In China, we believe health care will claim an increasing proportion of state funding as its population ages (see the chart below). Hence, Japanese or German-style price controls could be here to stay.

Figure 40: China's health-care spending by payers

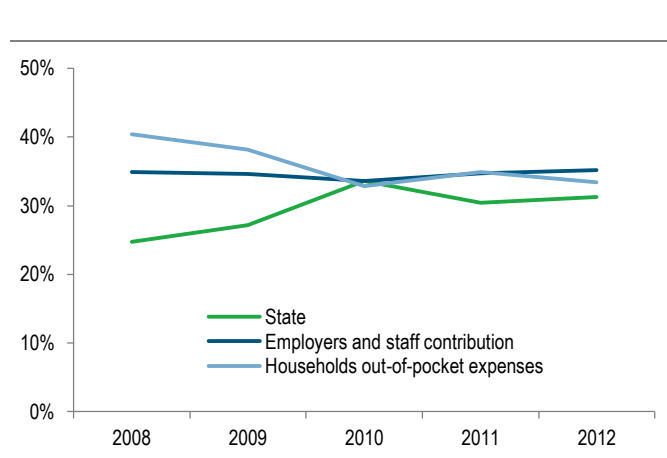
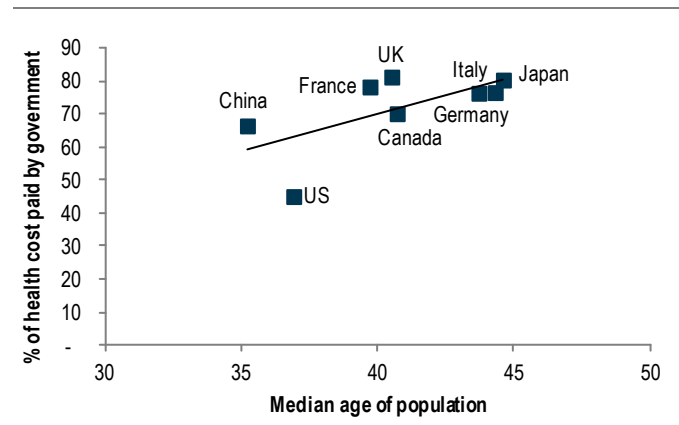


Figure 41: % of state and joint funding in health-care cost vs. median age



Price controls have not had much impact on the growth of medical spending in Germany and Japan

We think it is overly optimistic to expect China's ratio of health-care spending to GDP ratio to eventually rise to the current level in the US, as the two health-care systems vary in their set-up. That said, we believe health-care spending in China could record GDP-plus growth similar to Germany or Japan, and our macro assumptions suggest mid-teen growth in the next decade. As the above chart shows, price control measures in Germany and Japan have not completely changed the trajectory of health-care costs with GDP-plus growth in the past three decades.

The NDRC started to address high medicine prices in the late 1990s

China govt intervenes actively via direct price controls, anti-corruption drive

Are medicine prices too high in China? The government appears to think so. Since the late 1990s, the National Development and Reform Commission (NDRC) has implemented 31 rounds of direct cuts in drugs' retail price caps, covering almost all segments of the market (Appendix 2).



The current hospital-centred drug distribution system comes with risks

That imported patented drugs are pricier in China than when bought overseas reflects partly the China Food and Drug Administration's (CFDA) lengthy approval process (longer than in the US or EU). This leaves China pharma companies with much less time to sell the drugs during the patent period. At the same time, generic drugs in China are inexpensive, if not cheaper than imported drugs bought overseas.

China's medicine distribution system appears to contain irregularities. Health-care professionals are not paid well: their salaries are just marginally above the pay of average white-collar employees in China. As we show below, almost half of the money spent on drugs is channelled back to hospitals in one way or another.

Figure 42: Layered distribution channels

	RMB
Pharma company's invoice price	20
National wholesaler's mark-up	10
Regional wholesaler's mark-up	10
Pharma reps' commission	6
Hospital pharmacy's commission	4
Doctor's prescription commission	30
Pharma rep's marketing expenses	5
Hospital's purchase invoice price	85
Hospital's mark-up (15% of purchase price)	13
End price	98

Source: Xinhua News Agency

While this system may help China health-care professionals claim a 'fairer' share of the health-care pie (close to 50% of the drug price, according to an investigative report by Xinhua News Agency), it also creates twisted incentives, such as encouraging over-prescription of medicines and evading proper oversight of the health-care budget.

China launched three anti-graft campaigns in 2006, 2011 and 2013 to address these issues. The past two campaigns had little lasting impact on drug sales. Short of an overhaul of the hospital sector, widespread irregularities in the sector appear difficult to stamp out. This ties in with our cautious view of the distribution sub-sector.

EDL, NRDL and provincial tenders aimed at fostering competition

Provincial tenders were introduced to instill more competition in the sector

Perhaps aware of the ineffectiveness of price controls and anti-corruption campaign, China's health-care authority has come to understand the role of competition in creating strong incentives for pharmaceutical companies and health-care professionals to lower drug prices and improve quality.

China updates the National Reimbursement Drug List (NRDL) every five years and the Essential Drug List (EDL) every three years. In 2009, it implemented a provincial tender system for EDL as well as the Non-Essential Drug List (non-EDL). The process ensures continuous price concessions amid intense competition among pharmaceutical groups. Since 2010, the government has repeatedly stated its intent to foster competition among health-care providers by opening up the sector to private groups. Such processes may negatively affect pharma companies in general, but should help industry leaders to gain market share.

To view a timeline of EDL and non-EDL provincial tenders, please refer to Appendix 3.



Several policy factors may pose considerable risks in 2014

What are policy risks in 2014-15?

Much of China's policy presents a price risk for the pharma sub-sector. We highlight three measures that could pose a considerable risk this year.

- A quicker pace in provincial tenders could drive down medicine prices more aggressively than we expected. The street expects price to decline about 15% but so far this year, it has been in line or fallen by a smaller magnitude. But with more provinces taking a tough stance on pricing, this assumption could be at risk.
- Another round of NDRC-led price cuts could target TCM, particularly the more expensive intravenous injection liquids category, which has escaped a close scrutiny in recent years. Even so, such a move could well be a process of elimination that removes vulnerable small companies and benefits large ones, in our view.
- The roll-out of a DRG-based budget control, if combined with an NRDL update this year or in 2015, could be a powerful weapon to contain medical expense inflation. DRG – diagnosis-related group – is a system intended to replace the cost-based system. DRG classifies patients into diagnostic groups for the purposes of payment; it calculates their reimbursement cap based on the illness category rather than treatment method. This system of budget control has proven cost effective in many OECD countries and in tier 1 cities that are test-running the programme.

The equity implication of these policy risks is that investors should focus on companies that market innovative or first-to-market (FTM) drugs, which often command a separate price bracket (as 'exclusive' drugs) in regional tenders. Investors should also be selective in their TCM portfolio. Within our stock coverage, we think Sihuan and TUL are subject to lower risk of price cuts than their peers, as their main products tend to be 'exclusive' or high-quality drugs.

3 reasons to invest in China healthcare, despite policy risk

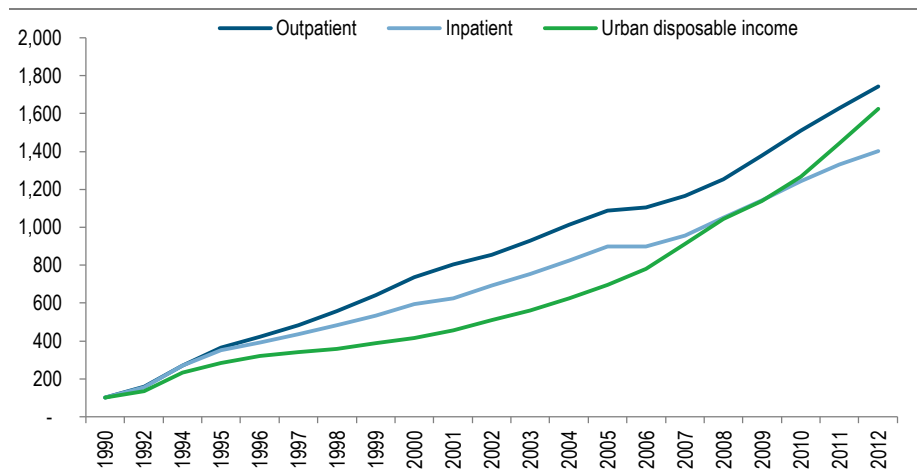
Long-term investors may find it worthwhile to climb the wall of policy worry

Our medium-term view of policy risk is sanguine. We advise long-term investors to look past policy concerns and stay invested in the sector for these three reasons:

- The fundamental drivers we illustrated in the first chapter – ageing demography, rising insurance coverage, market share gains – should help drive volume growth to offset price headwinds.
- Contrary to media rhetoric, affordability of health-care services has improved since the mid-2000s in China, which implies a lower risk of price-centric policy intervention in the future. The chart below illustrates total medical expenses in China, which outgrew household income in the late 1990s to early 2000s, have shown a slower growth trend than household income in recent years.



Figure 43: Medical expenses per head vs. urban household income
Rebased to 1990



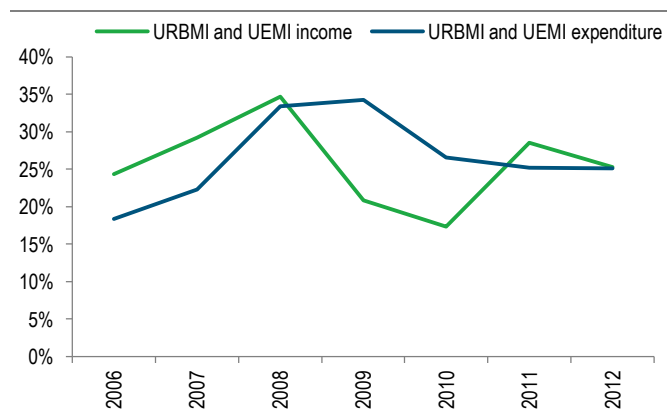
Source: Ministry of Health

- We think fears of an imminent depletion in China's medical insurance surplus are unfounded. This again argues for a sanguine scenario of medical expense controls.

We simulated that if annual insurance fee income (contributed by the state and private sector) grows 5% slower than reimbursement expenditure, China would run into its self-mandated alarm threshold of 9 months only from 2019 (the threshold is measured by accumulative surplus divided by reimbursement expenditure). Such an event would call for state intervention, in our view.

In recent years, however, insurance fee income and reimbursement expenditure appear to have moved in parallel. This could be mainly because private sector contribution is a function of wage growth, which has been at c.15% p.a., and because the state budget has been growing faster than nominal GDP. We believe wages and state spending will continue to outgrow nominal GDP, and support our projected 16% health-care spending growth in the next five years.

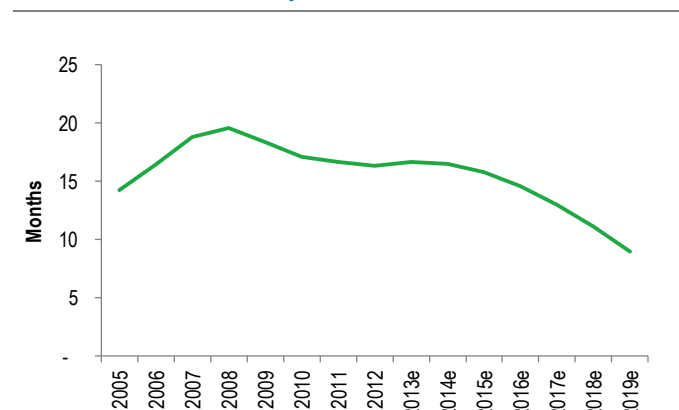
Figure 44: URBMI and UEMI income and expenditure
Income and expenditure of these plans are still moving hand-in-hand



Source: Ministry of Health, Standard Chartered Research

Figure 45: URBMI and UEMI surplus measured in months of reimbursement

Assuming income vs. expenditure growth gap of 5% p.a., which is not the case today

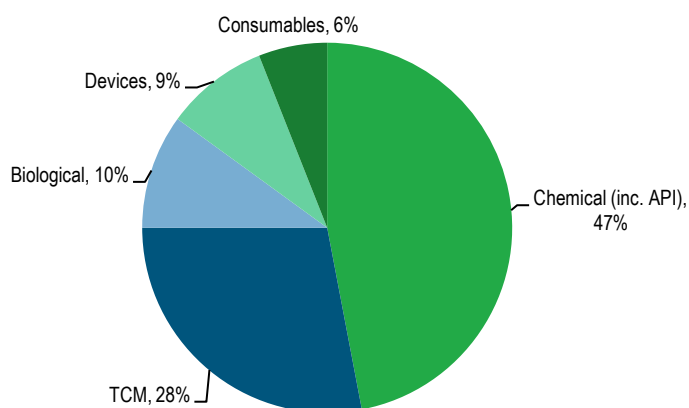


Source: Ministry of Health, Standard Chartered Research

Innovative and generic drugs: choose the real leaders

This chapter discusses the main pharma companies in China's chemical and biological drug sub-sectors, which together account for 57% of total pharma revenue. The leaders include Sihuan and CSPC, which we now cover. In the next chapter, we discuss TCM companies (including Shineway), which have very different characteristics.

Figure 46: China pharma – Revenue breakdown by sub-sector, 2012

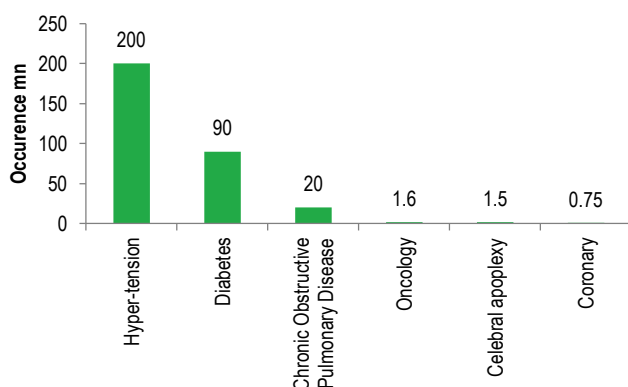


Source: CFDA South

Which companies own top-selling drugs in China?

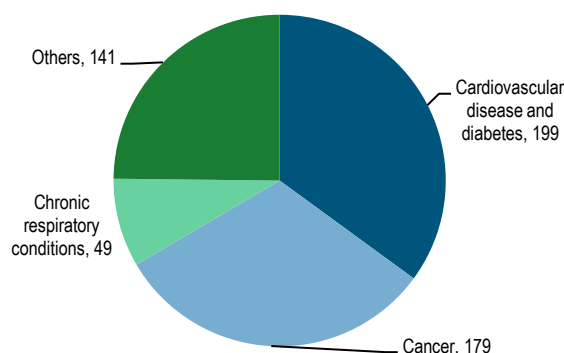
Dominating China's medical bill are the top four killer diseases that are demography driven: cardiovascular diseases (including hypertension), diabetes, cancer and chronic respiratory diseases, according to the World Health Organisation (WHO). Together, they account for 75% of mortality cases and about 70% of medical spending in China, based on WHO data. Being a leader in any large therapeutic area thus generally implies good growth potential. As we show below, most of the major therapeutic areas have grown more than 20% p.a. in the past four years. We project continuing growth in the next few years.

Figure 47: Main demography-driven diseases – Occurrence data per 100,000 people in China in 2010



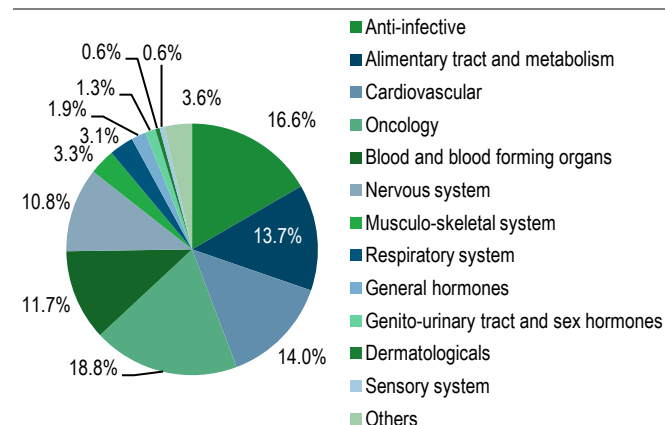
Source: WHO

Figure 48: China mortality rate – Age-standardised by cause per 100,000 people in China (2008)



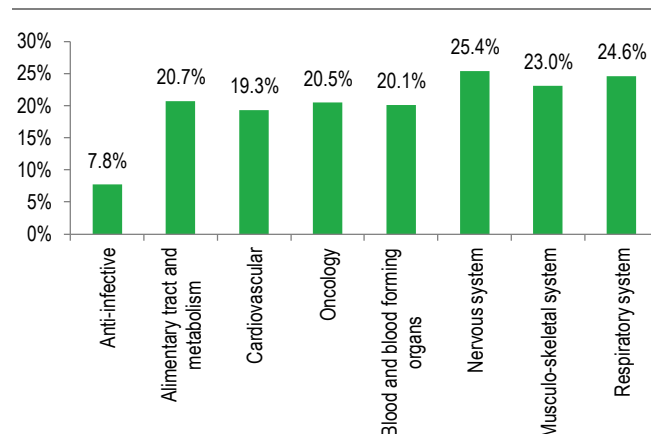
Source: WHO

Figure 49: Chemical drugs – Top therapeutic areas by market share (2012)



Source: MENET

Figure 50: Chemical drugs – 2009-12 CAGR by therapeutic area



Source: MENET

Using data extracted from our database, the table below shows China's 10 top sellers in chemical drugs. Note that we use the term 'top sellers' rather than 'blockbusters' – even China's No. 1 selling chemical drug Shenjie, which had RMB 2.5bn sales in 2012, falls short of the global industry's 'blockbuster' threshold of USD 1bn.

Among the companies who own top sellers, Sino Biopharm has a strong hepatitis franchise, Huadong has a good franchise in diabetes, and Humanwell is a domestic leader in analgesia. Hengrui (oncology) and **Sihuan** (cerebral-cardiovascular, or CCV) are leaders in their respective therapeutic areas. Many of these companies are also on the multi-bagger list in Appendix 1.

Figure 51: China chemical drugs – Top 10 companies by sales

Ranking	Medicine	Molecule	Main application area	Company
1	Shenjie	Ganglioside	CCV	Qilu
2	Aodejin	Deproteinised calf serum	Central nervous system	Fosun
3	Xianlisu	Cefathiamidine	Antibiotics	Guangzhou Baiyunshan
4	Xintailin	Cefazolin	Antibiotics	China Resources Sanjiu
5	Kaishi	Alprostadil	CCV	Sino Biopharm
6	Sodium chloride	Sodium chloride	Injection liquid	Kelun
7	Beiqingxing	Oxiracetam	Central nervous system	Guangdong Shixin
8	Zuoke	Levofloxacin Hydrochloride	Antibiotics	Yangzijiang
9	Beikeneng	Coenzyme complex for injection	Alimentary tract	SL Pharma
10	Kelinao	Cinopazide	CCV	*Sihuan

*Under our coverage. Names in bold are listed companies.

Source: Standard Chartered Research



Real innovation is rare

Which companies have strong pipelines?

We believe innovative capability is essential for pharma companies to maintain a good long-term franchise. However, the majority of drugs sold in China are generic ones, since it is only in recent years that China pharma companies have started focusing on innovation.

Here, we use the CFDA's class 1 chemical drugs and class 1-6 biological drugs to define what we believe to be real innovative drugs. The broad definition of class 1 chemical drugs and class 1-6 biological drugs are products that have not been marketed domestically or overseas. We summarise the detailed definitions of these categories below. Note that many pharma companies' definitions of innovative drugs also include class 2 (new route of administration) and class 5 (new dosage form), an approach we do not share.

Figure 52: Chemical drugs – CFDA registration categories

	Definition
Class 1	New drugs not yet marketed in any country
Class 2	Drugs seeking approval for a new route of administration not marketed in any country
Class 3	Drugs marketed in other countries but not in China
Class 4	Drugs made by changing the acidic or alkaline radicals or metallic elements of the salt of a drug approved in China without changing the original pharmacological effects
Class 5	Changed dosage form of a drug approved in China without changing the route of administration
Class 6	Generic form of a drug with existing national standards in China

Source: CFDA

Figure 53: Biological drugs – CFDA registration categories

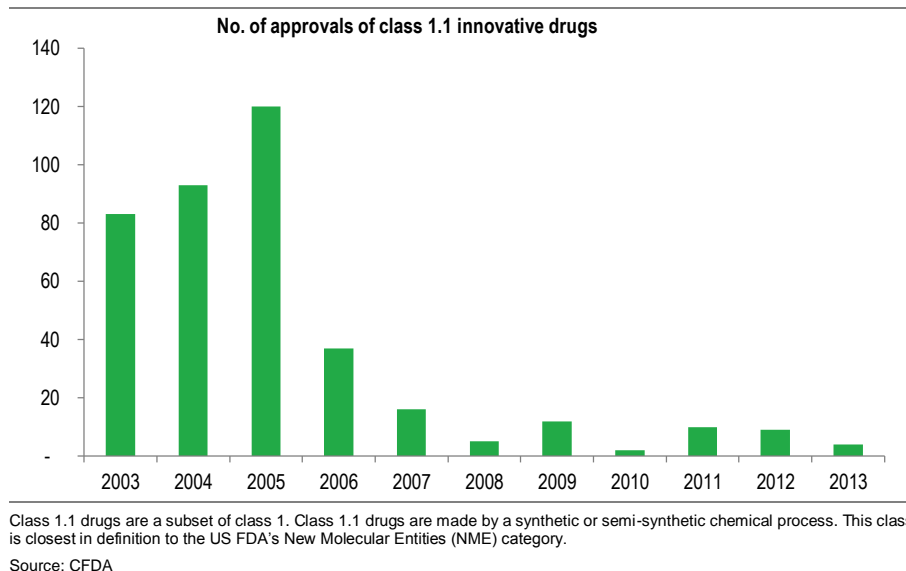
Category	Definition
Class 1	New biological products not yet marketed in any country
Class 2	Monoclonal antibody
Class 3	Gene therapy, human somatic cell therapy and its products
Class 4	Allergen products
Class 5	Biologically active multi-component products extracted from human or animal tissues or body fluids, or prepared from the fermentation process
Class 6	New compound products from marketed biological products
Class 7	Biological products marketed in other countries but not in China
Class 8	Probiotic products containing unapproved bacteria
Class 9	Biological products that are structurally different from marketed products and not yet marketed in any country
Class 10	Biological products that are prepared differently from marketed products
Class 11	Using recombinant DNA technology for the first time
Class 12	Changed route of administration from non-injection to injection, or from local administration to systemic administration
Class 13	Changed dosage form but not changed the route of administration
Class 14	Changed route of administration (but not including class 12)
Class 15	Biological products with existing national standards in China

Source: CFDA



The chart below summarises CFDA approvals since 2007: each year, it has approved an average of seven class 1.1 drugs and accepted about 20 drugs for clinical trials. The approval process became more stringent after regulatory changes in 2006, which negatively affected companies with an R&D focus.

Figure 54: Approvals of real innovative drugs are few and far between



Hengrui, Hisun, CSPC and Sino Biopharm are leading innovation companies

We compare approvals and pipelines of major pharma companies, based on their pipelines of class 1 chemical drugs and class 1-6 biological drugs.

Figure 55: Pipelines – Which companies carry the most innovative drugs?

Rank	Company	Ticker	NDA approvals in past 10 years	Year approved	NDA applications	IND approvals	IND applications	**Score
1	Hengrui	600276 CH	1	2011	2	9	8	55
2	Haosen		1	2013	1	12	2	52
3	Citic - Guojian		2	2005, 2011	3	4		46
4	Simcere		2	2004, 2011		5		31
5	Hisun	600267 CH			1	7	4	31
6	*CSPC	1097 HK	1	2008		5	7	30
7	Sino Biopharm	1177 HK	1	2004		4		20
8	Lvye		1	2004		2	1	15
9	HCM	HCM LN				5		15
10	*Sihuan	460 HK				5		15
11	Fudan Zhangjiang	1349 HK	1	2013		2		14
12	Fosun	2196 HK	1	2007		1	3	14
13	*Lee's Pharm	950 HK	1	2006		1	2	13
14	Huadong	000963 CH	1	2013		1	2	13
15	Weixin				1	2		12

NDA: New Drug Application, the final licence required before production can begin; IND: Investigative New Drug, a licence that permits clinical trials to begin.

*Under our coverage. ** Our innovative drug scoring system grants 8 points for NDA approvals, 3 points for NDA applications, 3 points for IND approval and 1 point for IND applications, broadly in line with the odds of the potential commercial launch of a drug.

Source: CDE, Standard Chartered Research

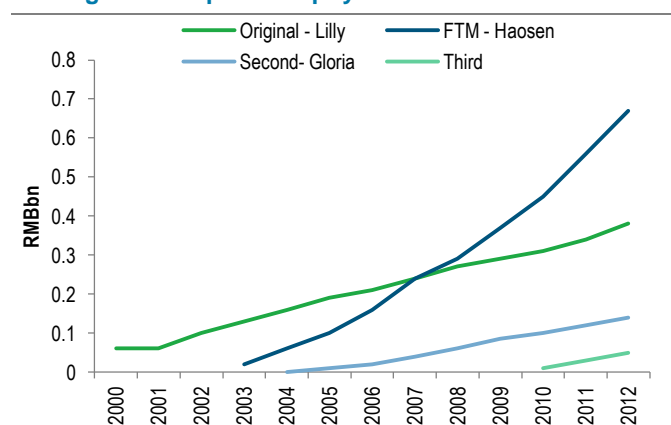


The preceding table shows that most of the companies have ramped up a large pipeline of new class 1 chemical drugs or class 1-6 biological drugs in the past decade, compared with the number of approved innovative drugs. Even assuming a modest approval rate, this suggests innovative leaders should be able to register strong growth over the next decade.

Many China majors compete on FTM generic capability

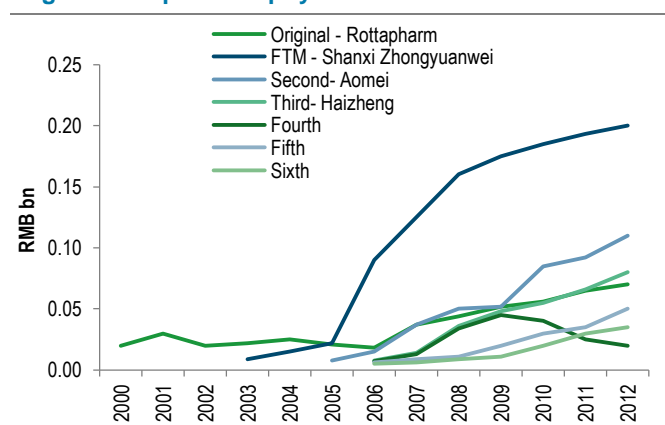
Most major pharma companies compete fiercely to achieve FTM launches of generic drugs once the patent expires. These are defined by the CFDA as class 3 innovative drugs, and carry a lot less weight in innovation terms than class 1 drugs. This strategy has generally good chances of winning market share; in many cases they surpassed the ex-patent drugs and started to lead the market (see the chart below). The existing tender system builds in a very strong incentive for FTM generics, allowing them to be priced 20-30% higher than other generics in provincial tenders.

Figure 56: Gemcitabine – An FTM drug quickly overtook the original after patent expiry



Source: IMS

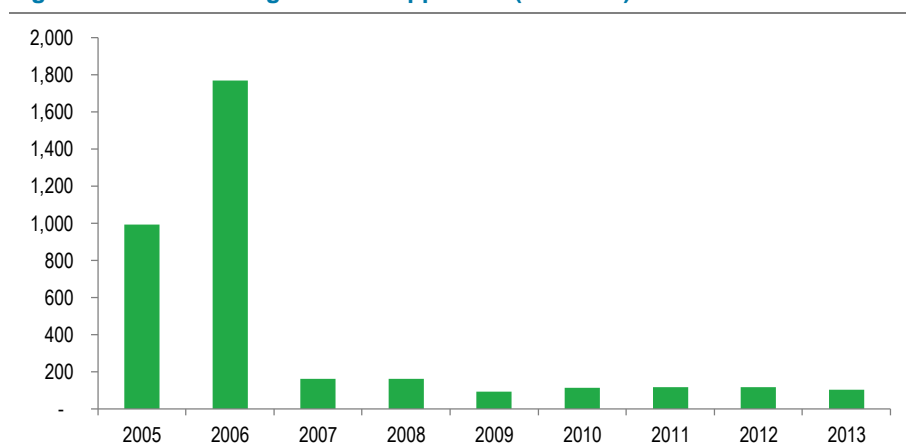
Figure 57: Glucosamine – An FTM quickly overtook the original after patent expiry



Source: IMS

Protection for FTMs is generally inferior to that for class 1 innovative drugs; for instance, FTMs are allotted a lower price bracket than innovative drugs in provincial tenders. However, we think the variance may narrow in the future. We observe that FTM competition has intensified over the years.

Figure 58: Generic drugs – CFDA approvals (class 3-4)



Y axis data indicates the number of approvals
Source: Standard Chartered Research



Battle for FTMs

The table below illustrates that leading companies are well prepared to benefit from MNCs' patent cliffs. In the R&D race to manufacture generic versions of global blockbusters whose patents will expire over 2010-18, China pharma leaders either achieve FTM or are frontrunners to do so.

Figure 59: Battle for FTM generic drugs – China frontrunners are well armed for MNC blockbusters' patent cliffs

	Patented brand	Company	2013 global sales (USD bn)	Peak sales (USD bn)	FTM frontrunners in China	No. of applications
1	Landus	Sanofi	7.9	7.9	Ganli	1-5
2	Crestor	AstraZeneca	6.0	7.0	Xinshidai	10-20
3	Abilify	Otsuka/BMS	5.3	7.4	Nhwa, Huahai	5-10
4	Cymbalta	Eli Lilly	5.2	5.2	Nhwa	5-10
5	Gleevec	Novartis	4.7	4.7	Sino Biopharm	20-30
6	Lyrica	Pfizer	4.6	4.6	Saiwei	5-10
7	Revlimid	Celgene	4.3	4.3	SL Pharma	5-10
8	Nexium	AstraZeneca	3.9	5.2	Chongqing Laimei	Over 50
9	Atripia	Gilead/BMS	3.7	3.7	Sino Biopharm, Beike	10-20
10	Diovan	Novartis	3.5	6.1	Suzhou No 4 Pharma	Over 50
11	Truvada	Gilead	3.1	3.2	Sino Biopharm, Beike	10-20
12	Plavix	BMS	2.4	9.3	Salubris	50-100

Names in bold are listed companies

Source: EvaluatePharma, Standard Chartered Research

The heat of competition has been so intense that it has spilled over to global top-selling blockbusters whose patent expiry is not yet imminent (see the chart below).

Figure 60: Battle for FTM generic drugs – China frontrunners well armed for patent expiries that are NOT yet imminent

	Patented brand	Company	2013 global sales (USD bn)	Peak sales (USD bn)	FTM frontrunners in China	No. of applications
1	Humira	Sanofi	10.7	10.7	Huahai	10
2	Enbrel	Angene/Pfizer	8.3	8.3	Hisun	3-10
3	Herceptin	Roche	6.8	6.8	Citic Guojian	3
4	Avastin	Roche	7.0	7.0	Huahai	4
5	Rituxan	Roche /Biogen Idec	8.9	8.9	Hisun	4

Names in bold are listed companies

Source: Standard Chartered Research

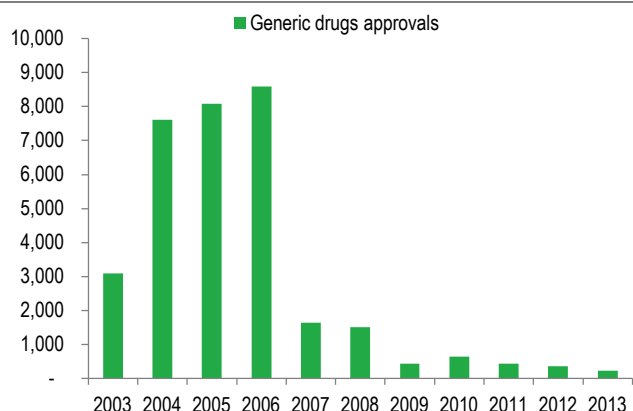
Our lists provide a basis for analysis and are by no means complete. Apart from Nhua, SL Pharma, Sino Biopharm, and Huahai, we reckon Qilu, Hengrui, Haosen, and Harbin Gloria could be strong contenders in the battle to manufacture generic FTM versions of blockbuster drugs.

Commodity generics do not add much to franchise value

The majority of new drugs are 'commodity' generics (which the CFDA defines under as classes 5-6). They are required to undergo a lengthy ANDA approval process of about 34 months. If approved, the majority may not even reach the market as they risk being edged out by competitors – more than 80% of licences have been granted to just about 20 generic competitors. Thus, investing in research for 'commodity' generic drugs does not appear to add much value to a company's franchise.

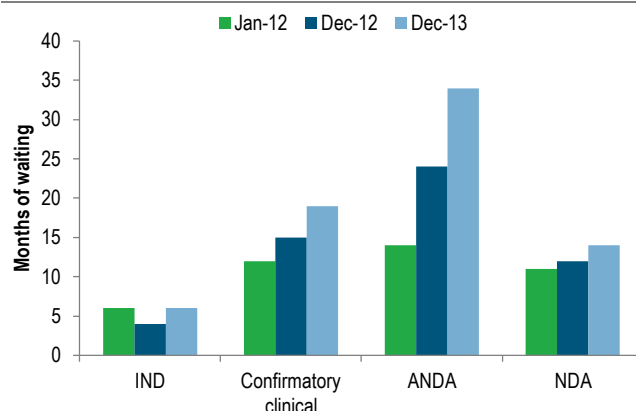


Figure 61: Generic drugs – Difficulty of gaining ANDA has increased over the years



Source: CFDA-CDE

Figure 62: Applications – Turnaround time for each step



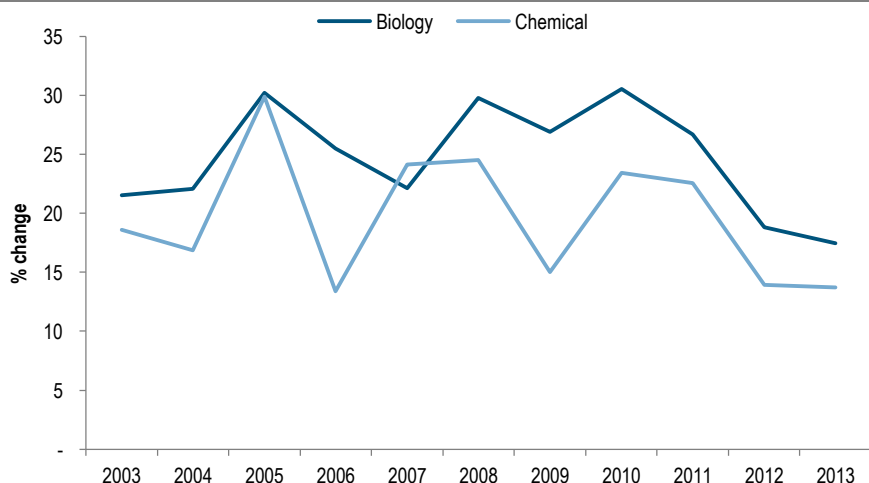
Source: CFDA-CDE

Which companies are biotech leaders?

Biotech companies are well represented in our top 20 multi-baggers list. This is perhaps not surprising as biological drugs have many merits:

- Biological sector growth has registered a 22% CAGR in the past decade, outpacing chemical drugs by 6% p.a.
- The good news for innovative pharma companies is that biological drugs such as monoclonal antibody (mAb) have a higher chance of FDA approval (twice that of a chemical molecule in the US).
- The difficulty of researching and obtaining approval for generic versions of biological drugs (there is no ANDA process for bio-similars in China, for instance) has led to a higher entry barrier for patented biological companies than for chemical drug companies.

Figure 63: Biological vs. chemical drugs – Sales growth



Source: CEIC

Companies that have a head start in China's biotech sub-sector include Citic Guojian (a frontrunner in mAb), Shanghai Fosun (owns Fuhong Hanling, a challenger in mAb), and Fudan Zhangjian, a leader in the niche photodynamic category.

Leaders in chemical, biological sub-sectors

Combining the above three criteria (top sellers, pipeline, biological), we arrived at the following short list of leaders in the chemical and biological category.

Figure 64: Chemical and biological multiples

Company	Bloomberg Ticker	Mkt cap (USD mn)	PER		PBR	EV/Sales		ROE (%)		Net gearing (%)
			2014E	2015E		2014E	2015E	2014E	2015E	
China Resources Shuanghe	600062 CH	1,563.1	13.2	11.2	1.6	1.7	1.5	12.2	12.4	-22.5
Tonghua Dongbao	600867 CH	2,111.8	41.1	28.8	5.8	9.0	7.1	13.8	17.4	16.0
Hengrui	600276 CH	7,871.9	32.4	26.7	6.3	6.3	5.1	20.0	20.0	-32.2
Hisun	600267 CH	1,980.3	33.5	26.1	2.4	1.7	1.4	6.7	7.8	60.2
Huadong	000963 CH	3,664.3	30.5	24.0	7.2	1.2	1.1	24.6	25.2	33.5
Huahai	600521 CH	1,346.1	21.6	18.9	2.6	3.5	2.9	11.6	12.9	3.9
Nhwa	002262 CH	1,379.3	37.7	30.0	8.5	3.2	2.8	23.1	23.0	-7.7
SL Pharma	002038 CH	3,247.5	26.5	20.9	6.2	12.8	10.1	23.5	23.6	NA
Salubris	002294 CH	3,112.9	18.2	14.6	4.7	6.6	5.5	26.7	26.4	-22.1
Humanwell	600679 CH	487.4	NA	NA	NA	NA	NA	NA	NA	-13.4
*CSPC	1093 HK	5,742.0	26.1	28.4	4.3	3.4	3.0	14.0	16.6	5.6
Sino Biopharm	1177 HK	4,937.6	24.1	20.5	4.2	2.4	2.1	21.3	21.4	-42.2
Shanghai Fosun	2196 HK	9,219.2	22.5	19.3	3.0	4.1	3.3	14.1	14.4	15.1
*Sihuan	460 HK	7,908.5	23.9	17.8	4.2	7.0	5.4	17.8	19.7	-15.9
Fudan Zhangjian	1349 HK	1,003.8	48.4	32.2	NA	NA	NA	21.6	24.7	-50.3
Lee's Pharm	950 HK	875.1	29.0	21.8	5.8	5.4	4.2	20.8	23.3	-36.3
Average China		3,769.7	28.9	22.7	4.9	4.7	3.9	19.1	20.1	-8.9

*Under our coverage. Share prices as of 24 June 2014

Source: Bloomberg (non-rated stocks), Standard Chartered Research estimates



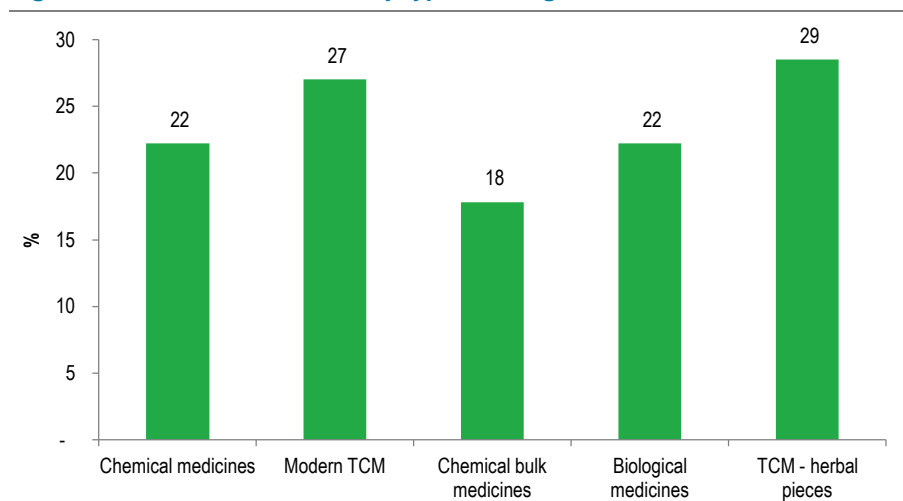
TCM: unique risk and reward

Superior growth to other sub-sectors

Fastest-growing sub-sector

The traditional Chinese medicine market is one of the fastest-growing in China health care at a CAGR of 27% over 2008-12, surpassing the sector average by 4%. We attribute this to its strong appeal to Chinese doctors and patients, particularly those in lower-tier cities and rural areas. TCM companies account for five out of 20 multi-baggers over a five-year period in our list (Appendix 1). We expect this market to continue a 20% CAGR trend over 2013-17.

Figure 65: CAGR of retail value by types of drugs over 2008-12



Source: Standard Chartered Research

A unique risk-reward equation

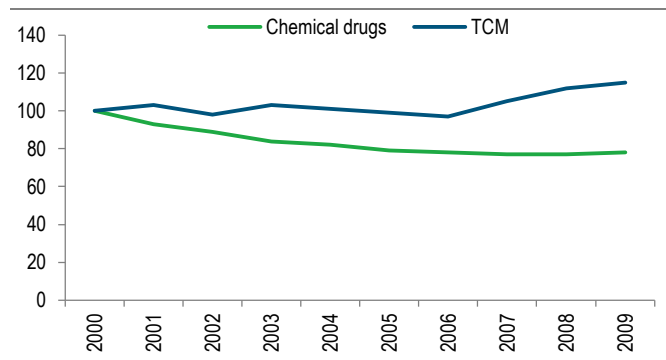
Idiosyncratic risks

TCM is a highly fragmented market with relatively low entry barriers. Over 1,500 TCM companies currently vie for market share. In addition, this sub-sector is not without its idiosyncratic risks. We name a few:

- Intellectual property protection is particularly weak in TCM, mainly because its long and complex history has obscured ownership information. China's patent law also do not protect unique treatment methods, an integral aspect of TCM therapy.
- Many TCMs have not been subject to evidence-based pharmacological reviews and may contain unidentified risks to patients. A conventional manufacturing process often renders inconsistent quality.
- Many companies have started to modernise TCM manufacturing, a process that identifies and extracts effective ingredients to be packaged into modern dosage forms, such as tablets, capsules and granules, to improve delivery. These efforts have increased price points over the years. An industry concern is that the state could mandate price cuts of highly priced TCMs in the future.
- Many TCMs face potential exhaustion of important herbal and animal resources. Significant price rises of the ingredients could squeeze profitability (see below).

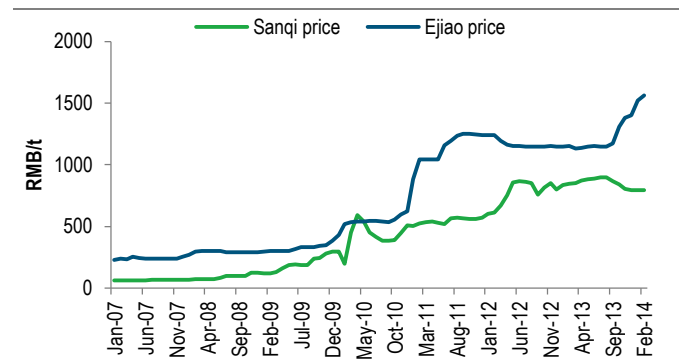
Figure 66: TCM – Average prices

Rebased to 2000



Source: IMS

Figure 67: TCM – Prices of ingredients



Sanqi and Ejiao are widely used natural ingredients in TCM. Sanqi is a herbal ingredient used to promote blood circulation. Ejiao is made from animal skin and used for a nutritious effect.

Source: ZYCTD

Our model focuses on top-selling drugs and the modernisation factor

A good place to start is manufacturers that have top-selling TCM medicines, which usually indicates sales capability.

Which companies have top-selling products?

We list below China's top 10 TCMs in the OTC market and top 10 prescription drugs in 2012. It is perhaps unsurprisingly that many of the companies – Tongrentang (NR), Baiyunshan (NR), Tasly (NR), and Pienzaihuang (NR) – are on our multi-baggers list.

Figure 68: TCM – China's top 10 OTC products

Ranking	Medicine	Main application area	Companies
1	Chuanbei Pipa Gao	Respiratory system	Nianci'an (promoted by Kingworld), Guangzhou Baiyunshan
2	Fufang danshen	Cardiovascular	Tasly
3	Donge ejiao	Nutrition	Donge ejiao
4	Jinshuibao tablet	Kidney	Jimin Kexin
5	Angong Niu Huang tablet	Central nervous system	Tongrentang
6	Pianzaihuang	Dermatology	Pientzhuang
7	Qizheng	Analgesic	Cheezheng
8	Yunnan baiyao	Hemostatic	Yunnan Baiyao
9	Fufang ejiao	Nutrition	Dong-E E-jiao
10	Huoxiangzhengqi	Respiratory system	Tongrentang, *Shineway

*Under our coverage. Names in bold are listed companies.

Source: IMS

Figure 69: TCM – China's top 10 prescription medicines

Ranking	Medicine	Main application area	Companies
1	Xueshuantong	Cardiovascular	Wuzhou Zhongheng
2	Beitong	Blood circulation	Buchang
3	Xiyanping	Respiratory system	Qingfeng
4	Shuxuetong	Cardiovascular	Youbo
5	Danshen duofen	Cardiovascular	Green Valley
6	Kangai	Oncology	Changbaishan
7	Chuangongqin	Cardiovascular	Guizhou Baite
8	Tanreqing	Respiratory system	Kaibao
9	Xingnaojing	Blood detoxification	Jimin Kexin
10	Shuxuening	Cardiovascular	Zhenbaodao, *Shineway

*Under our coverage. Names in bold are listed companies.

Source: IMS



While we appreciate the fact that an approach focusing on existing top sellers may miss the next big one, we observe that new hits in TCM tend to be few and far between. This reflects the companies' low investment in R&D and the low approval rate of new TCM drugs by the CFDA, in our view. Hence, to seek growth, large TCM companies could try to extend existing portfolios to new indications, new OTC markets or even household products.

Companies that have inherited a large portfolio and strong heritage have an advantage in the sub-sector. Among them, Tongrentang has a strong OTC franchise built on its extensive heritage portfolio of over 100 TCM medicines. Baiyunshan has over 70 protected TCM medicines, but its OTC franchise lags behind Tongrentang's.

Which companies are leaders in modernisation?

Being a leader in TCM modernisation also provides an advantage. Tasly stands out in this way. Its Fufang Danshen (CCV) is sold in drops, a modernised dosage form, and has a share of over 70% of the Danshen market, due to its ease of use and concentrated release effect. With the introduction of stricter GMP standards, which affect thousands of TCM companies, companies with large modern facilities would be better positioned to win market share.

We present below a list of the main companies in the TCM category, based on exposure to top sellers and progress in TCM modernisation.

Figure 70: TCM – Leaders' multiples

Company	Ticker	Mkt cap (USD mn)	PER		PBR	EV/Sales		ROE (%)		Net gearing (%)
			2014E	2015E		2014E	2015E	2014E	2015E	
Tasly	600535 CH	6,557.2	28.4	22.3	8.4	3.3	2.8	30.5	29.9	55.3
Pientzehuang	600436 CH	1,945.1	23.7	19.8	4.1	6.6	5.7	16.9	17.5	-31.9
Yunnan Baiyao	000538 CH	8,456.8	19.1	15.5	4.3	2.7	2.3	22.6	22.0	-16.1
Dong-E E-jiao	000423 CH	3,447.2	14.6	12.3	3.4	4.2	3.5	24.4	23.8	-43.5
Qizheng	002287 CH	1,287.5	30.4	24.4	4.9	5.7	4.8	16.0	17.1	NA
Tibet Cheezheng	600252 CH	2,073.0	13.9	11.3	2.9	2.4	1.9	21.1	22.2	3.6
Shanghai Kaibao	300039 CH	1,249.4	18.9	14.5	3.8	4.1	3.3	22.1	23.0	-50.7
Tongrentang Science	1666 HK	1,870.3	23.5	19.3	2.9	2.9	2.3	13.3	14.9	-54.2
Guangzhou Baiyunshan	874 HK	4,968.1	19.4	15.7	3.2	1.4	1.2	17.8	19.0	-18.4
*China Shineway	2877 HK	1,408.2	11.7	10.3	2.4	3.9	3.3	15.3	15.1	-43.8
Average China		3,502.3	20.4	16.5	4.0	3.6	3.0	20.0	20.4	-21.8

*Under our coverage. Price data as of 26 June 2014

Source: Bloomberg (non-rated stocks), Standard Chartered Research estimates



Health-care services: journey has just begun

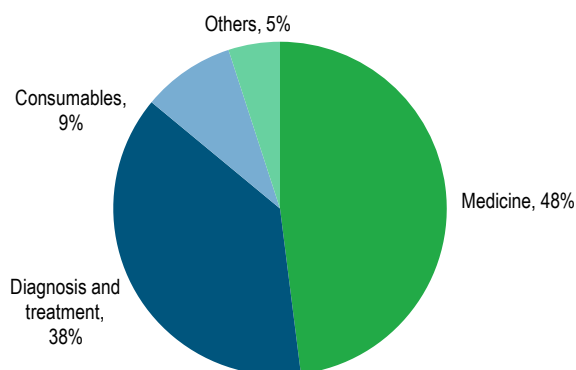
Unique risk-reward equation in service companies

The potential

From a top-down perspective, it is relatively easy to understand why health-care providers appeal to investors:

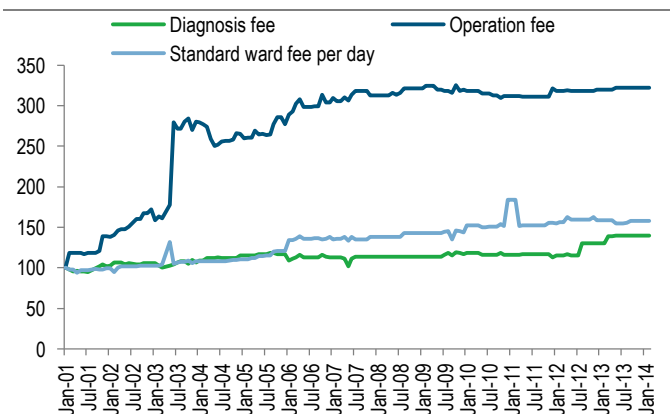
- Hospitals are the main points-of-sales for both medicines and services in China, giving them the advantage to source growth and diversify risk.
- Health-care providers' addressable market is twice the size of pharmas' (Figure 72). 38% of the health-care market comprises services (diagnostic and treatment). This sub-sector should outgrow medicines and consumables in the coming decades, we believe, as China steps up in health-care reform.
- Private hospitals only had a 9% market share by revenue in 2011. China announced that one target on its reforms is to open up the hospital sector to private investors and increase its ratio to 20% by 2020. This suggests industry growth could be many percentage points higher than health-care spending growth in 2013-20, in our view.
- With China aiming for more effective control over medical spending (as discussed earlier in the chapter, *Climb the wall of policy worry*), a health-care provider would be in a better position to protect its profitability than a pharma company. While many hospitals are subject to heavily regulated pricing and services, China allows private ones to increase diagnostic and operation fees. They can also pass on the cost pressure to pharma companies. A successful hospital chain has many features similar to utility companies, such as predictable income streams and strong cash flow. Its low beta holdings could help investors achieve better diversification in their portfolios.

Figure 71: Hospitals – Segmental breakdown of income



Source: PICO

Figure 72: Hospitals – Service charges in 36 China cities
Rebased to 2001



Source: CEIC



The risks

Investment in hospitals is subject to several risks:

- Hospitals could be subject to 'Baumol's cost disease', which refers to strong staff wage increases without comparable productivity gains in the service sector, since their wages need to catch up with those in the more productive manufacturing sector. Over time, this could translate into shrinking margins and weak earnings growth for investors of service industries.

Indeed, many hospital operators we spoke to described their business as a 'people business', where the need to have qualified professional staff often outweighs financial concerns. The risk is that, without proper checks and balances, wage growth of insiders may put pressure on profit growth in the long term.

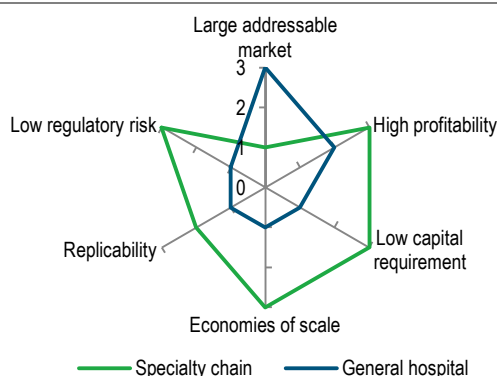
- A successful hospital chain could have difficulty replicating its business model outside its region, due to constraints in professional staff and investment requirements.
- The information asymmetry between health-care providers and payers could lead to heavier regulatory constraints to address the imbalance. (An example of asymmetry is a health-care provider with better intelligence on a patient's medical condition than an insurance company.) Like utilities, hospitals are subject to state regulation of their fee structures.

Getting the business model right is a challenge

Competitive business models

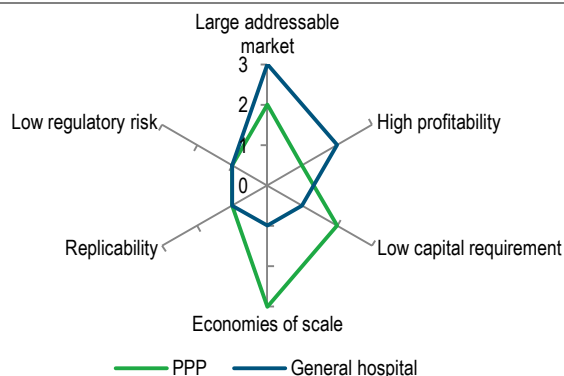
Three business models are typical in private hospitals: (1) general hospitals, (2) private-public-partnership (PPP) hospitals, and (3) specialty chains. We debate each model's merits and flaws on five key measures: profitability, capital requirement, economies of scale, replicability and regulatory risk (see the chart below).

Figure 73: Specialty chain model vs. general hospital



Source: Standard Chartered Research

Figure 74: General hospital model vs. PPP hospital



Source: Standard Chartered Research

Private general hospital model

The private general hospital model is employed by several hospitals: Fosun, China Resources Group and Hengda. Their business model generally involves acquiring public hospitals and converting them into private hospitals.

We see upside risk in the significant headroom for acquisitive growth. Fosun estimates 30,000 of these hospitals have the potential to be privatised.



We see the following downside risks:

- Substantial capital commitment: It costs RMB 1-1.5bn to acquire a new hospital with 400 beds, and even more to build one.
- Regulatory hurdles: These are difficult to overcome. Conversion to a non-for-profit hospital is less difficult than conversion to one that is for profit.
- Resistance from hospital insiders, who may prefer the pension scheme, academic recognition and perks imbedded in the public system.

We have reservations about general hospital operators

We believe it makes sense for conglomerates to own general hospitals. They have the political capital to overcome regulatory hurdles (related to regional protectionism) and may derive good upside from the synergy of their hospital assets with other business – for instance, their commercial properties portfolio being developed for China's ageing population. However, investors from a minority shareholder standpoint may need to consider whether this applies to them.

Private specialty hospital chain

The private specialty hospital chain model includes dental hospital chains (Top-choice), ophthalmology chains (Aier) and diagnostic labs and centres (Di An, iKang).

We prefer the specialty hospital model

We like this model for being relatively asset-light, highly replicable and profitable. Many of the hospitals run a hub-and-spoke model across branches to maximise efficiency. They hold reasonable pricing power as patients pay 80-90% of expenses out of pocket. The incentive system for management often aligns with company performance. Lastly, they do not have to jump the same regulatory hurdles as general hospitals and PPP hospitals, since the areas in which they operate are relatively open to private investors. As a result, many hospitals are able to deliver consistently high ROEs with strong growth trajectories.

Concern could lie with growth headroom, however. Their addressable market after all is a small fraction of the health-care market (a reflection of their specialty treatment areas). Some hospitals recently developed adjacent industries; an example is Topchoice, which is penetrating the in-vitro fertilisation market. Another concern could lie with the difficulty of achieving external growth when hospitals expand beyond their home base.

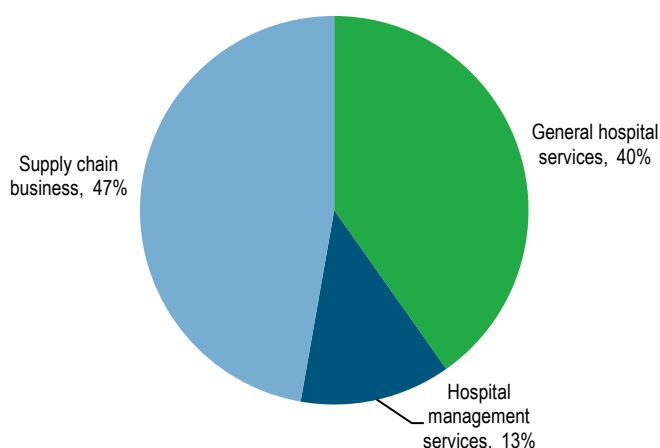
Public-private-participation model

The public-private-participation (PPP) model, with its many variations, is an attempt to combine the attractive features of other models, i.e. a large addressable market (general hospitals) or better efficiency, less regulatory uncertainty and lesser capital requirement (specialty hospital chains).

Phoenix Health-care, which runs all of the hospitals in its chain except one, is a typical example. It profits from its model of invest-operate-transfer (IOT) contracts in two ways: outsourcing the pharmacies and logistics function to a distributor (under its supply-chain business); and a small performance-based fee from public hospitals under its chain over 19-48 years (under its hospital management services division).



Figure 75: Phoenix Health-care – Gross profit breakdown in 2013



Source: Company

A variation of the PPP model is the 'entrusted pharmacies' model, used by Kangmei and Jinling Pharmaceuticals. Pharma companies manage hospitals' pharmacies in return for a share of the profit of the pharmacies.

We expect the PPP model to transform into something else

We think this model is generally marked by transience. Policy makers are split on how to divide up the value chain within hospitals: the National Development and Reform Commission (NDRC) appears supportive of entrusted pharmacies but the National Health and Family Planning Commission (NHFP) is less sanguine. Depending on how far the authorities want to push the privatisation agenda, companies may eventually evolve into several different businesses, with some perhaps providing independent specialty services similar to US pharmacy benefit managing companies (PBM), diagnostic centres or laboratories. Some could become private hospital operators.

In conclusion, we think specialty hospitals (Aier, Topchoice, iKang) have a more visible and transparent business model that indicates better growth sustainability in the long term.

We present below a list of the main companies in the hospital category.

Figure 76: Hospitals – The main companies

Company	Bloomberg Ticker	Mkt cap (USD mn)	PER		PBR	EV/Sales		ROE (%)		Net gearing (%)
			2014E	2015E		2014E	2015E	2014E	2015E	
Phoenix Health-care Services	1515 HK	1,508.2	39.7	30.9	3.9	6.0	4.7	8.9	9.9	-63.1
Topchoice	600763 CH	1,031.2	51.9	40.3	10.1	10.7	8.4	19.0	20.0	-37.2
Aier Eye Hospital	300015 CH	2,503.3	51.2	37.8	8.1	6.1	4.9	15.6	17.4	-38.7
Dian Diagnostics	300240 CH	329.7	24.0	18.7	2.0	0.7	0.6	6.8	8.3	NA
iKang Health-care	KANG US	1,118.5	NA	NA	NA	NA	NA	NA	NA	NA
Chindex International	CHDX US	69.7	NA	NA	NA	NA	NA	NA	NA	-1.7
Town health	3886 HK	1,023.7	NA	NA	NA	NA	NA	NA	NA	NA
Hua Xia Health-care Services	8143 HK	70.2	NA	NA	NA	NA	NA	NA	NA	17.5
Concord Medical Services	CCM US	360.0	18.2	15.4	NA	3.0	2.7	NA	NA	33.0
Average China		1,723.4	34.6	27.1	5.4	5.1	4.1	12.9	14.0	(10.7)

Price data as of 24 June 2014. Source: Bloomberg



Appendix 1: Top 20 multi-baggers in China

Figure 77: Stocks that have increased in value over 1Y, 3Y and 5Y periods

	Company	Ticker	5Y total return (%)	Type	Company	Ticker	3Y total return (%)	Type	Company	Ticker	1Y total return (%)	Type
1	Bloomage Biotechnology Corp Ltd	963 HK	1,624	Biotech	Bloomage Biotechnology Corp Ltd	963 HK	886	Biotech	Town Health International Medical Group Ltd	3886 HK	1,113	Service
2	Lee's Pharmaceutical Holdings Ltd	950 HK	1,482	Chemical	Town Health International Medical Group Ltd	3886 HK	474	Service	Hunan Er-Kang Pharmaceutical Co Ltd	300267 CH	259	Chemical
3	Shanghai Fudan-Zhangjiang Bio-Pharmaceutical Co Ltd	1349 HK	970	Biotech	Tianjin Chase Sun Pharmaceutical Co Ltd	300026 CH	265	Chemical	Hybio Pharmaceutical Co Ltd	300199 CH	189	Biotech
4	Sino Biopharmaceutical Ltd	1177 HK	720	Chemical	Guangzhou Baiyunshan Pharmaceutical Holdings Co Ltd	874 HK	256	Distribution	Inner Mongolia Furui Medical Science Co Ltd	300049 CH	182	TCM
5	Dawnrays Pharmaceutical Holdings Ltd	2348 HK	672	Chemical	Lee's Pharmaceutical Holdings Ltd	950 HK	230	Chemical	Grandhope Biotech Co Ltd	300238 CH	178	Biotech
6	Tong Ren Tang Technologies Co Ltd	1666 HK	607	TCM	Tong Ren Tang Technologies Co Ltd	1666 HK	227	TCM	Xiamen Kingdomway Group Co	002626 CH	164	Chemical
7	Shinva Medical Instrument Co Ltd	600587 CH	556	Device	Shanghai Fudan-Zhangjiang Bio-Pharmaceutical Co Ltd	1349 HK	224	Biotech	Guangzhou Improve Medical Instruments Co Ltd	300030 CH	159	Device
8	Guangzhou Baiyunshan Pharmaceutical Holdings Co Ltd	874 HK	547	TCM	Xiangxue Pharmaceutical Co Ltd	300147 CH	221	TCM	Dawnrays Pharmaceutical Holdings Ltd	2348 HK	141	Chemical
9	Pengxin International Mining Co Ltd	600490 CH	513	Chemical	Sihuan Pharmaceutical Holdings Group Ltd	460 HK	206	Chemical	China Animal Health-care Ltd	940 HK	134	Chemical
10	Hengchang Medical Group Co Ltd	002219 CH	462	Device	China Animal Health-care Ltd	940 HK	195	Chemical	Harbin Gloria Pharmaceuticals Co Ltd	002437 CH	124	Chemical
11	China Traditional Chinese Medicine Co Ltd	570 HK	447	TCM	Andon Health Co Ltd	002432 CH	185	Device	Shanghai Fosun Pharmaceutical Group Co Ltd	2196 HK	124	Chemical
12	Guizhou Yibai Pharmaceutical Co Ltd	600594 CH	429	TCM	China Traditional Chinese Medicine Co Ltd	570 HK	180	TCM	Lifetech Scientific Corp	1302 HK	118	Device
13	Town Health International Medical Group Ltd	3886 HK	411	Service	Sino Biopharmaceutical Ltd	1177 HK	172	Biotech	Andon Health Co Ltd	002432 CH	108	Device
14	Tasly Pharmaceutical Group Co Ltd	600535 CH	393	TCM	Shinva Medical Instrument Co Ltd	600587 CH	160	Device	Zhejiang Dian Diagnostics Co Ltd	300244 CH	107	Service
15	Changchun High & New Technology Industries Inc	000661 CH	376	Biotech	Da An Gene Co Ltd Sun Yat-Sen University	002030 CH	156	Biotech	Shanghai Kinetic Medical Co Ltd	300326 CH	102	Device
16	Topchoice Medical Investment Corp	600763 CH	350	Service	Dawnrays Pharmaceutical Holdings Ltd	2348 HK	156	Chemical	China Bio-Med Regeneration Technology Ltd	8158 HK	98	Biotech
17	Zhejiang Jingxin Pharmaceutical Co Ltd	002020 CH	336	Chemical	Jiangsu Kanion Pharmaceutical Co Ltd	600557 CH	154	TCM	Sihuan Pharmaceutical Holdings Group Ltd	460 HK	98	Chemical
18	Lijun International Pharmaceutical Holding Co Ltd	2005 HK	334	Chemical	Zhejiang Jolly Pharmaceutical Co Ltd	300181 CH	151	TCM	Da An Gene Co Ltd Sun Yat-Sen University	002030 CH	93	Biotech
19	WuXi PharmaTech Cayman Inc	WX US	330	Service	Lijun International Pharmaceutical Holding Co Ltd	2005 HK	146	Chemical	Beijing Bohui Innovation Technology Co Ltd	300318 CH	92	Device
20	Huadong Medicine Co Ltd	000963 CH	328	Distribution	Inner Mongolia Jinyu Group Ltd	600201 CH	145	Biotech	Jinling Pharmaceutical Co Ltd	000919 CH	91	TCM

*Under our coverage

Source: Bloomberg



Appendix 2: Medicine price cuts mandated by the NDRC

Figure 78: NDRC-driven retail price cuts

Date	Categories	Number of drugs	Average scope of price cuts
Oct-97	15 antibiotics, 32 biological drugs	47	-15%
Apr-98	38 types		-10%
Apr-99	21 types		-20%
Jun-99	150 imported drugs	150	-5%
Aug-99	Biological drugs	2	-15%
Jan-00	Biological drugs	12	-10%
Jun-00	9 types		-15%
Oct-00	21 types		-20%
Apr-01	Antibiotics	69	-20%
Jul-01	TCM in EDL	49	-15%
Dec-01	Oncology, metabolism, nervous, psychiatric drugs in EDL	383	-20%
Jul-02			-10%
Jan-03	Digestive, blood forming organs, specialty and diagnostic drugs	199	-15%
Mar-03	TCM	267	-10%
June-04	TCM	107	-10%
Jul-04	Antibiotics	24	-30%
Oct-05	Antibiotics	18	-40%
June-06	Antibiotics	22	-40%
Aug-06	Oncology	67	-23%
Aug-06	Anti-infection	99	-30%
Nov-06	32 TCM		-15%
Jan-07	354 CCV, blood		-20%
Mar-07	278 TCM (General)		-15%
Apr-07	TCM		-16%
May-07	10 types	260	-19%
Nov-10	17 types	74	-19%
Mar-11	Antibiotics; CCV	162	-21%
Aug-11	Hormone, Endocrine; CNS	71	-14%
Apr-12	Digestive	53	-17%
Oct-12	Oncology; vaccine; hormone	95	-17%
Mar-13	20 types	400	-15%

Source: IMS, Bloomberg, Standard Chartered Research



Appendix 3: Provincial tenders – Timeline

Figure 79: China's provincial tenders over the years

	2008	2009	2010	2011	2012	2013	2014E
Beijing		Non-EDL				EDL	
Tianjin		Non-EDL		EDL			
Shanghai			EDL, Non-EDL				
Chongqing				EDL, Non-EDL			
Hebei			Non-EDL	EDL			
Shanxi			Non-EDL	EDL			
Inner Mongolia				EDL, Non-EDL			
Jilin	Non-EDL			EDL			EDL
Heilongjiang			Non-EDL	EDL, EDL+			EDL
Liaoning		Non-EDL		EDL			
Zhejiang		EDL	Non-EDL	EDL			EDL+
Jiangsu		Non-EDL		EDL		EDL	
Fujian		EDL		Non-EDL			Non-EDL
Jiangxi		Non-EDL		EDL	EDL+		EDL
Anhui			EDL, EDL+		Non-EDL		EDL
Shandong		Non-EDL		EDL, EDL+	EDL		EDL+
Hubei	Non-EDL			EDL, Non-EDL			EDL
Hunan		Non-EDL		EDL			EDL, Non-EDL
Henan			Non-EDL	EDL			EDL
Guangdong		Non-EDL		EDL			EDL, Non-EDL
Guangxi			Non-EDL	EDL			
Hainan		Non-EDL		EDL	Non-EDL		
Sichuan				EDL			
Yunnan				EDL, Non-EDL			
Guizhou			EDL, Non-EDL				
Shaanxi		EDL	EDL+	Non-EDL			
Gansu				EDL, Non-EDL			EDL
Ningxia		EDL		EDL	NRDL		EDL
Qinghai				EDL, Non-EDL		EDL	
Xinjiang				EDL	Non-EDL		EDL+
Tibet					Non-EDL		
Total provincial tenders	2	13	10	26	7	3	12?

EDL: Essential Drug List; Non-EDL: Non-Essential Drug List; NRDL: National Reimbursement Drug List; EDL+: EDL Plus list

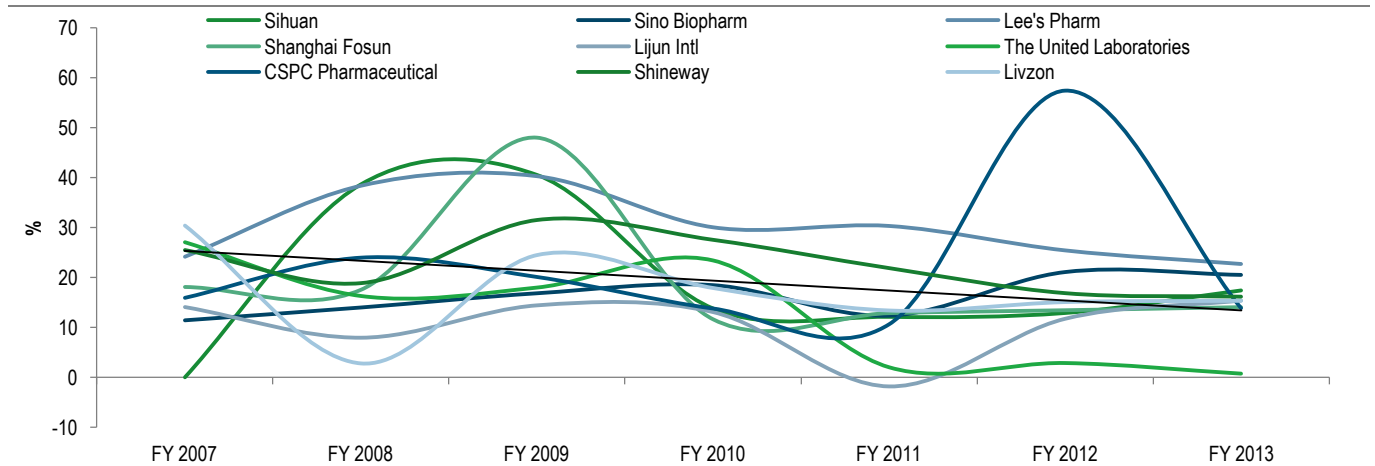
Source: Provinces' tender websites, Standard Chartered Research estimates



Appendix 4: HK-listed peers – Financial comparison

Figure 80: ROE trends – Volatile trends

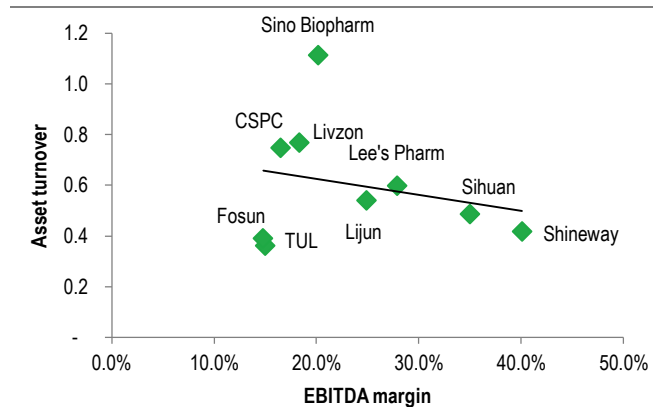
Lee's Pharm stands out



Source: Bloomberg

Figure 81: Operating margin vs. asset turnover in 2013

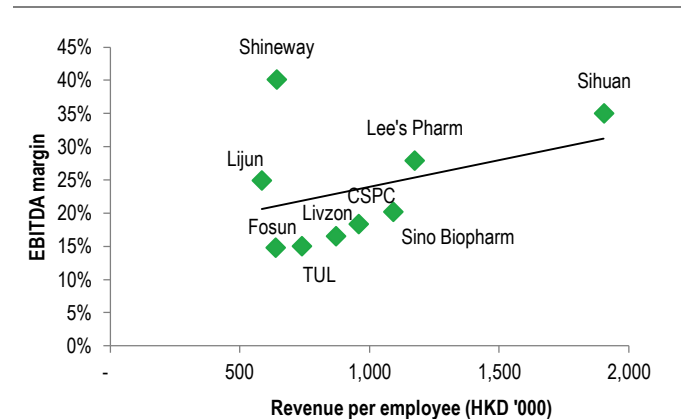
Sino Biopharm has highest assets turnover



Source: Bloomberg

Figure 82: EBITDA margin vs. sales per employee in 2013

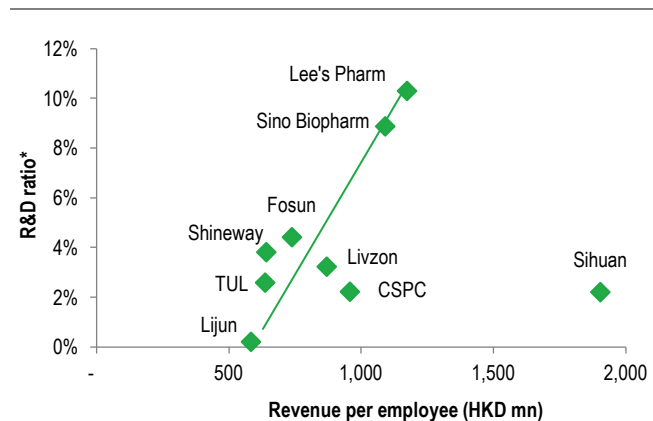
Sihuan has a mix of high margin and high staff productivity



Source: Bloomberg

Figure 83: R&D cost* ratio vs. revenue per employee in 2013

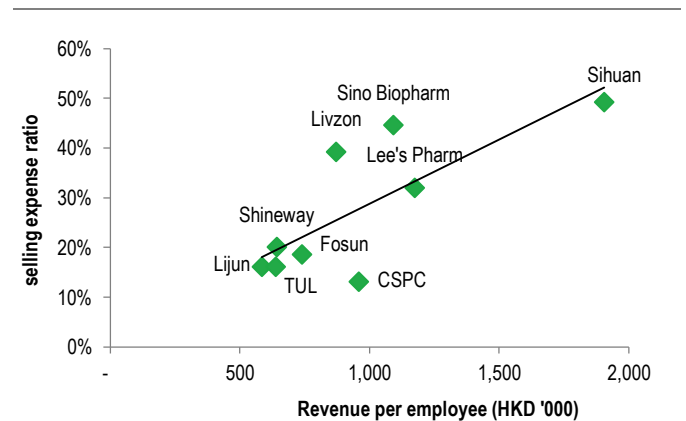
Sihuan's R&D cost makes it an outlier, but is explained by its acquisition strategy; upside risk for CSPC's R&D cost ratio?



*We added back capitalised R&D expenses in calculating the R&D cost ratio
Source: Companies, Standard Chartered Research

Figure 84: Selling expense ratio vs. sales per employee in 2013

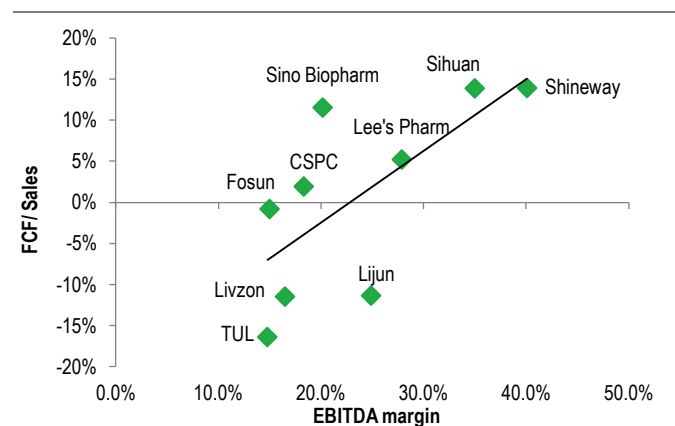
Selling expense ratio correlates with sales per head; Sihuan shows strength in its distribution platform



Source: Bloomberg

Figure 85: FCF margin vs. EBITDA margin in 2013

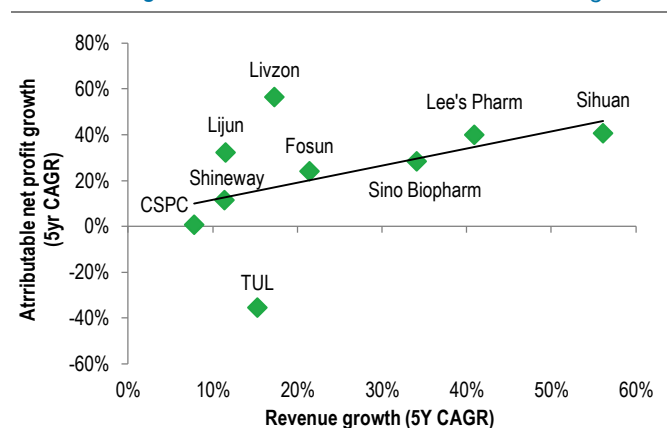
TUL is the outlier in terms of cashless growth



Source: Bloomberg

Figure 86: Revenue growth vs. attributable net profit growth (5Y CAGR)

TUL's sales growth has not translated into bottom-line growth



Source: Bloomberg



Appendix 5: Glossary

API: Active Pharmaceutical Ingredients are biologically active substances in a pharmaceutical product that are responsible for its therapeutic effect.

Alimentary tract: tubular passage extending from the mouth to the anus, through which food is passed and digested.

Antibiotics: chemical substance produced by a microorganism which has the capacity to inhibit the growth of or to kill other disease-causing organisms.

Bio-technology or bio-tech: the use of micro-organisms, such as bacteria or yeast, or biological substances, such as enzymes, to perform specific industrial processes or to be used as therapeutic or diagnostic products.

Bio-pharmaceutical products: pharmaceutical products applied for prevention, treatment or diagnosis of diseases which are produced from biotechnological processes such as genetic engineering, cell engineering or enzyme engineering.

CCV: cerebral-cardiovascular system, relating to or affecting the brain, heart, blood vessels, or circulatory systems.

CFDA: China Food and Drug Administration.

Chemical medicines or chemical drugs: medicines created by means of chemistry or obtained by chemical processes.

Clinical trial: a research study aimed at validating or finding the therapeutic effects and side-effects of test drugs in order to determine the therapeutic value and safety of the drugs.

CNS: the central nervous system is part of the nervous system consisting of the brain and spinal cord.

EDL: the Essential Drug List is issued by China's Ministry of Health, and is amended and supplemented from time to time.

FTM: first-to-market generic drug, the first to receive approval to be launched, following the expiry of the patent of an innovative drug.

Generic medicine or generic drugs: medicines which use the same active ingredients as the original products and are generally available in the same strengths and dosage forms as the original.

GMP: Good Manufacturing Practices, which are guidelines and regulations issued from time to time according to the Law on Administration of Pharmaceuticals. They provide assurance that pharmaceutical products are produced consistently and controlled to quality and standards appropriate for their intended use.

Health-care payers: entities other than the patient that finance or reimburse the cost of health services, including insurance carriers and health plan sponsors (state, employers or union).



Health-care providers, or health-care service providers: institutions that provide preventive, curative, promotional or rehabilitative health care in a systematic way to individuals, families or communities.

IND: the Investigative New Drug licence allows clinical trials to begin.

Innovative drugs: new chemical or biochemical drugs that are different from existing drugs or therapies to treat diseases.

mAb: monoclonal antibody, a highly specific antibody produced in large quantities by the clones of a single hybrid cell through the fusion of a B cell with a tumour cell.

NME: New Molecular Entity, a drug that contains an active moiety that has never been approved by the FDA or marketed in the US.

NDA, New Drug Application: the final licence required before production begins.

NRDL: National Reimbursement Drug List, issued by China's Ministry of Human Resources and Social Security in 2009, and amended and supplemented from time to time.

NDRC: National Development and Reform Commission.

OTC: medicines that are sold over the counter in China under CFDA approval, and which may be sold at dispensers, pharmacies or retail outlets without requiring a prescription by a practitioner.

TCM: traditional Chinese medicines have clinical functions expressed in terms of Chinese medicine theories, which originated from traditional medical practices in China. The medicines are applied in accordance with the Chinese medical theories.



China Shineway Pharmaceutical

To put growth back into the equation

- **Shineway has long been perceived an ex-growth stock, due to its mature portfolio. We regard it as a decent TCM play on China's lower-tier community hospitals sector.**
- **We project a 9% organic EPS CAGR over 2014-16 from -4% over 2010-13, supported by an improving OTC franchise. If it delivers on acquisitions, this could be an upside catalyst.**
- **We initiate coverage with an Outperform rating and a price target of HKD 18 on its good risk-reward balance.**

Favourable exposure to rural community market: The rural community segment accounts for 17% of China's pharmaceutical market, for which CFDA South projects a 15-20% CAGR in the next three years. It could surpass other segments with the state allocating more funding to community hospitals and clinics. Shineway is well represented in this market, as its major drugs are low-priced and sold in large volumes.

What could put growth back in the equation? China's rural market is enormous but Shineway's portfolio appears to have matured. We think Shineway's ongoing channel reorganisation could forge a new growth driver in OTC drugs. We also welcome management's renewed commitment to external growth and await its delivery. We understand that the company plans to spend RMB 500-600mn to acquire 2-3 companies with decent TCM and biological drug assets.

Initiating with Outperform on risk/reward. Factoring in its low valuation (10.7x 2015E PER), defensive growth features (7% FCF yield; net cash 55% of equity in 2013), and unbroken dividend payment record, we think Shineway represents a low-risk TCM play. We initiate coverage of the stock with an Outperform rating and set a price target of HKD 18, based on 14x 2015E PER.

OUTPERFORM (initiating coverage)

PRICE as of 26 Jun 2014

PRICE TARGET

HKD 13.20**HKD 18.00****Bloomberg code****Reuters code**

2877 HK

2877.HK

Market cap**12-month range**

HKD 10,916mn (USD 1,408mn)

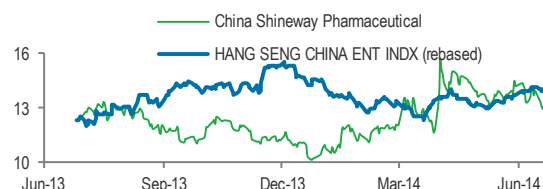
HKD 9.95 - 15.70

EPS adj est change NA

Year-end: December	2013	2014E	2015E	2016E
Sales (RMB mn)	2,187	2,442	2,729	3,046
EBITDA (RMB mn)	965	986	1,069	1,162
EBIT (RMB mn)	863	868	944	1,029
Pre-tax profit (RMB mn)	860	937	1,021	1,116
Net profit adj. (RMB mn)	696	759	828	905
FCF (RMB mn)	304	652	713	789
EPS adj. (RMB)	0.83	0.89	0.97	1.06
DPS (RMB)	0.33	0.36	0.40	0.43
Book value/share (RMB)	5.36	5.91	6.52	7.19
EPS growth adj. (%)	5.6	7.3	9.1	9.3
DPS growth (%)	3.1	9.8	9.0	9.3
EBITDA margin (%)	44.1	40.4	39.2	38.1
EBIT margin (%)	39.5	35.5	34.6	33.8
Net margin adj. (%)	31.8	31.1	30.3	29.7
Div. payout (%)	39.9	40.0	40.0	40.0
Net gearing (%)	-52.6	-54.9	-56.9	-58.9
ROE (%)	16.2	16.1	15.9	15.7
ROCE (%)	20.0	18.1	17.9	17.7
EV/sales (x)	2.8	2.4	1.9	1.5
EV/EBITDA (x)	6.4	6.0	4.8	4.0
PBR (x)	1.6	1.8	1.5	1.4
PER adj. (x)	12.3	11.8	10.3	9.3
Dividend yield (%)	3.2	3.5	4.0	4.4

Source: Company, Standard Chartered Research estimates

Share price performance



Share price (%)	-1 mth	-3 mth	-12 mth
Ordinary shares	-5	10	7
Relative to index	-7	5	-5
Relative to sector	-	-	-
Major shareholder	Forway (64.5%)		
Free float	36%		
Average turnover (USD)	1,846,510		

Source: Company, FactSet

Su Zhang

+852 3983 8526

Equity Research

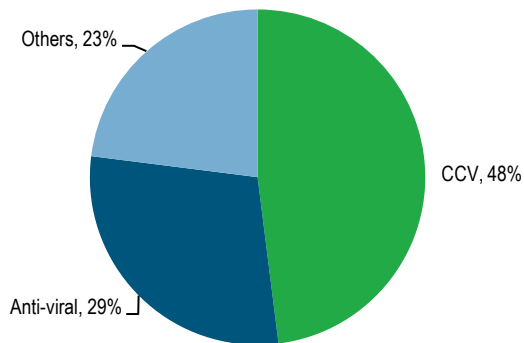
Standard Chartered Bank (HK) Limited



Investment case

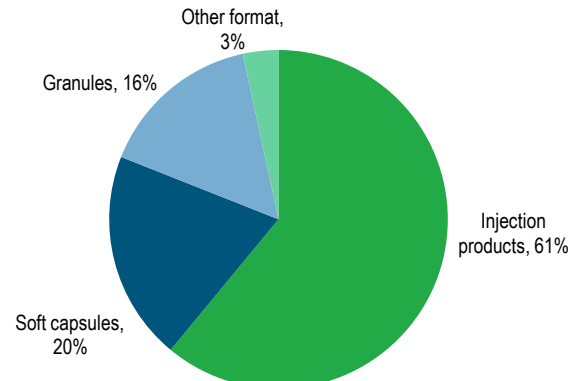
Shineway is one of the major companies in the traditional Chinese medicine sub-sector. It derived 48% of revenue from CCV drugs, 29% from anti-viral drugs and 23% from others in 2012. Its manufacturing base is in Hebei province.

Figure 87: Revenue breakdown by therapeutic area (2013)



Source: Company

Figure 88: Revenue breakdown by drug type (2013)



Source: Company, Standard Chartered Research

Management's plan to turn around an ex-growth TCM franchise...

Shineway has a decent TCM portfolio of 27 prescription drugs and 21 OTC drugs. Sales of its main product, Qingkailing, an anti-viral medicine available as injections or in capsules, exceeded RMB 900mn in invoice value in 2013 – impressive for a medium-sized company.

However, in 2011, Shineway appeared to have entered an ex-growth phase. Several of its drugs reached maturity in product life-cycles (e.g. Shenmai injections) and its pipeline was underwhelming. Sales CAGR was 26% in 2007-11, but slowed sharply to 2% in 2011-13.

Two years ago, the company embarked on a strategic transition. Management set two strategic initiatives to rekindle growth: (1) rebuild the OTC channel and improve hospital channels; and (2) make acquisitions to replenish its pipeline. It achieved some early milestones in channel reorganisation, and we think it has also become better positioned to make acquisitions.

...will depend on OTC growth

In OTC, Shineway built a 200-strong sales force from scratch, covering 160 chains and 9,000 pharmacies in China. It has an ambitious target to cover 400 chains and 20,000 pharmacies by end-2014. Capsule sales (which have 50% OTC exposure) rebounded to 26% YoY growth in 1Q, albeit against a weak base. Our integrated numbers indicate 20% growth in OTC sales in 2014E (note that as Shineway does not report individual sales channels, we have built our assumptions into capsule and granule growth).

...and acquisitions

In acquisitions, Shineway's target is to buy 2-3 companies with cash proceeds of RMB 500-600mn, and it hopes to do so in 2H14. According to management, its targeted companies have interesting assets with market potential in TCM injections, capsules and powder of RMB 300-500mn p.a. sales. Management is confident that Shineway has the right brand, channels and production capacity to guarantee success in acquisition. We estimate it has more than RMB 2bn net cash in 2014 and with its good reputation in the industry, we believe it will be able to deliver on some sizable deals.

*...to drive a re-rating*

Shineway currently trades at 12.3x/10.7x 2014E/15E PER. Considering its potential OTC recovery and planned acquisitions, we believe it deserves to trade at 14x PER on 2015E earnings, with a 10% premium to its five-year average PER (12.6x) due to its potential earnings reacceleration.

We believe a favourable risk-reward balance justifies our Outperform rating

We initiate coverage with an Outperform rating, based on a favourable risk-reward balance. We like Shineway's low valuation, defensive growth features (7% FCF yield; net cash over 50% of equity in 2013), and unbroken record of paying dividends.

Risks

One upside risk to our investment case could be that acquisitions exceed expectations. We do not know where consensus stands on this, but we believe Shineway will need to buy assets to help it penetrate the profitable mid-tier hospital market.

Downside risks relate mainly to intrinsic risks in the TCM injection business. In particular, if China were to cut the prices of TCM injections, Shineway could bear collateral damage. Its medicines, which are inexpensive and well represented in lower-tier cities' hospitals and clinics, should not be much affected. However, peers selling more expensive drugs could react to price cuts by encroaching on Shineway's core markets. Even so, this risk appears to have been priced in, judging from TCM stocks' significant underperformance in the past 12 months (please refer to the sector section of the report).



Valuation

Shineway trades at 10.7x 2015E PER, below its five-year average. Our 2014-15 EPS estimates are mainly in line with consensus.

Figure 89: Our estimates versus consensus

	Standard Chartered		Consensus		Ours vs. consensus	
	2014E	2015E	2014E	2015E	2014E	2014E
Turnover (RMB mn)	2,442	2,729	2,451	2,717	0%	0%
Gross profit (RMB mn)	1,633	1,798	1,635	1,800	0%	0%
EBIT (RMB mn)	868	944	805	894	8%	6%
Net profit (RMB mn)	749	817	745	812	1%	1%
EPS (RMB)	0.91	0.99	0.91	1.00	0%	-1%

Source: Bloomberg, Standard Chartered Research estimates

We provide a sensitivity test on our numbers below.

Figure 90: Sensitivity test

Input items	Change	Net profit growth	
		2014E	2015E
Qingkailing growth	-5%	-2%	-2%
Shenmai growth	-5%	-1%	-1%
EBIT margin	-100bps	-3%	-3%

Source: Standard Chartered Research

For a peer comparison, we focus on OTC-centric Chinese pharma companies, such as China Resources Sanjiu (NR), Guilin Sanjin (NR) and Kangenbei (NR). Those with similar projected growth profiles now trade at a mid-teen forward PER multiple on 2015E WIND consensus.

Figure 91: Peer comparison

Company	Bloomberg ticker	Mkt cap (USD mn)	EPS Y/Y growth (%) 2014E	PER		PBR 2014E	ROE (%) 2014E	PEG 2014E
				2014E	2015E			
China Shineway	2877 HK	1,472.0	10.2	12.3	10.7	1.8	15.9	1.2
China Resources Sanjiu*	000999 CH	2,874.6	14.6	12.8	10.9	2.4	19.3	0.8
Guilin Sanjin*	002275 CH	1,429.8	22.3	17.4	14.7	3.3	20.4	0.9
Kangenbei*	600572 CH	1,802.6	7.5	24.8	20.7	4.0	15.5	1.8

Price data as of 26 June 2014

Source: *WIND consensus for non-rated stocks, Standard Chartered Research estimates for Shineway

Our DCF valuation arrived at HKD 18.80 per share, representing 47% potential upside. We present our key assumptions below.



Figure 92: DCF valuation – Our main assumptions

ASSUMPTIONS	
Cost of equity (%)	
Risk free rate (%)	3.80
Beta	0.82
Equity risk premium (%)	8.3
CAPM unleveraged discount rate	10.6
Cost of debt (%)	
Average spread over risk-free rate (%)	3.0
Pre-tax cost of debt (%)	6.8
Average corporate tax rate for company (%)	20.0
Post-tax cost of debt (%)	5.4
Estimated target gearing (net debt/EV) (%)	(10.0)
WACC (%)	11.2
Number of years of explicit estimates	4.0
middle period duration (yrs)	3.0
No of years to start of terminal period	7.0
Middle period assumptions	
Growth rate (%)	7.0
Operating margin (%)	33.0
Capex/depreciation ratio (x)	130.0
Working capital/ turnover ratio (%)	20.0
Tax rate (%)	20.0
Terminal period assumptions	
Growth rate (%)	2.0
Operating margin (%)	30.0
Capex/depreciation ratio (x)	110.0
Working capital/ turnover ratio (x)	20.0
Tax rate (%)	20.0

Source: Standard Chartered Research estimates



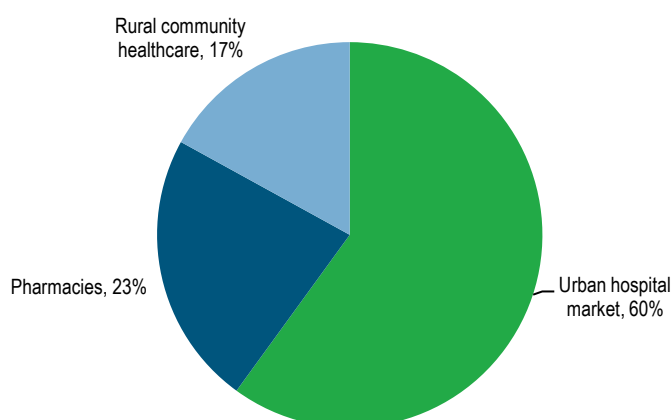
Shineway's TCM injection portfolio includes top-sellers targeted at a growing community healthcare market

A decent TCM franchise

Shineway's main TCM injection portfolio consists of **Qingkailing** (an anti-virus drug used to treat a range of implications from cold to hepatitis), **Shenmai** (CCV) and **Shuxuening** (CCV).

All three top sellers are included in the National Drug Reimbursement List (NDRL). Qingkailing and Shenmai are also in the 2012 EDL. They are well represented in China's community health-care market, which makes up 17% of the pharma market. Industrial consultant CFDA South estimates the community health-care segment will have a 15-20% CAGR in the next three years, surpassing hospital and OTC markets, with the state allocating more funding to community hospitals and clinics.

Figure 93: China pharma market – Breakdown by retail value per channel (2012)



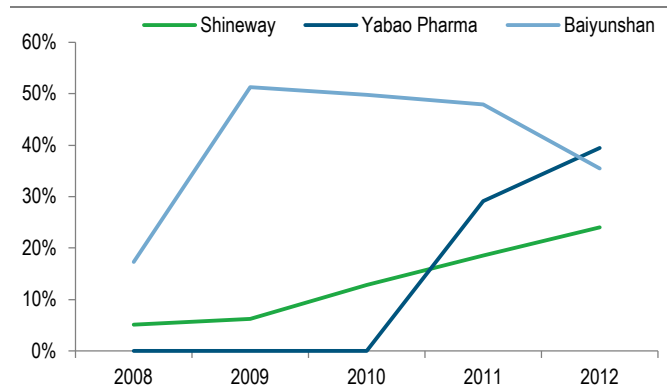
Source: CFDA South

Qingkailing is the best-selling medicine in Shineway's portfolio, with sales of over RMB 900mn by invoice value in 2013. Shineway's competitive advantage is that it offers both injections and capsules, which enables it to tap the OTC market. Shineway accounts for 25% of the Qingkailing market, according to MENET/SFDA South data. For another top-selling prescription drug, Shuxuening, Shineway has a market share of over 30%. For Shenmai, its market share is about 10%.

Note that CFDA South data were collated from sample hospitals and may under-represent Shineway's market share, since its exposure to community clinics is larger than its peers'. Shineway claims to be the largest supplier of Qingkailing and Shenmai with 70% and 35% market shares, respectively.

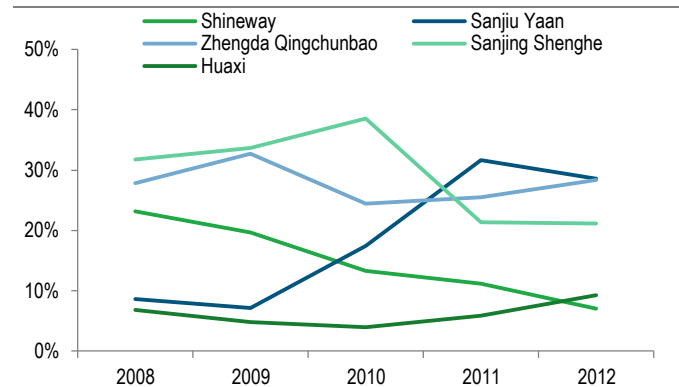


Figure 94: Qingkailing injections – Market share



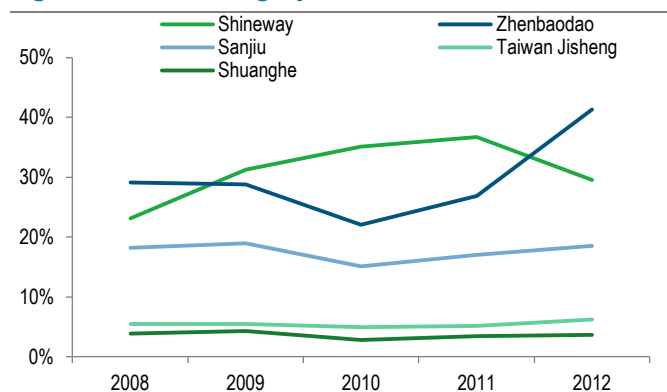
Source: MENET

Figure 95: Shenmai injections – Market share



Source: MENET

Figure 96: Shuxuening injections – Market share



Source: MENET

But they are structurally difficult to grow fast

Although we think Shineway has a decent offering in TCM injections, segmental growth has underperformed market growth (20%) since 2011. It plans to address this by attracting big promoters and organising academic promotion events. However, we think its organic growth options are limited for the following reasons:

- Unlike fast-growing TCM injection products by Tasly and Wuzhou Zhongheng, Shineway's portfolio is positioned towards the low end in price. It has little exposure to the profitable mid-tier hospital market, from which TCM injection products have extracted most of their growth in recent years.
- Since Shineway has historically been widely represented in low-tier clinics, it would be difficult for its 'grass-root' medicine to break into the upper-tier hospital market, even with the state's initiative to widen the use of EDL. In addition, it faces the threat of stronger competition if its peers should decide to diversify towards lower-tier hospitals and clinics to extract growth.
- Approvals of new TCM injection products have been few and far between since the mid-2000s, making it difficult for Shineway to refresh its portfolio through R&D.

Shineway has developed a decent low-price OTC portfolio...

Shineway has a strong portfolio of 21 OTC medicines. The most notable are **Pediatric Qingf Fei Hua Yu granule** (OTC children's respiratory drug), **Xin Nao Qing** (CCV), and **Huoxiang Zhengqi** (OTC drug for heart conditions, stroke, stomach ache, nausea and diarrhoea).



We note Huoxiang Zhengqi is among China's 10 top-selling OTC TCM drugs (see the table below) and Shineway is a major manufacturer, counting the well-established Tongrentang, Yunnan Baiyao and Tasly among its peers.

Figure 97: Top 10 OTC TCM medicines by sales (2012)

Ranking	Medicine name	Main application area	Companies
1	Chuanbei Pipa Gao	Respiratory system	Nianci'an (promoted by Kingworld), Guangzhou Baiyunshan
2	Fufang danshen	Cardiovascular	Tasly
3	Donge ejiao	Nutrition	Donge ejiao
4	Jinshuibao tablet	Kidney	Jimin Kexin
5	Angong Niu Huang tablet	Central nervous system	Tongrentang
6	Pianzaihuang	Dermatology	Pianzaihuang
7	Qizheng	Analgesic	Qizheng
8	Yunnan baiyao	Haemostatic	Yunnan Baiyao
9	Fufang ejiao	Nutrition	Donge ejiao
10	Huoxiang Zhengqi	Respiratory system	Tongrentang, Shineway

Source: IMS

We think the OTC market offers Shineway better opportunities than hospitals. Its good brand and quality manufacturing process helps gain the trust of distributors and patients. It grants competitive incentives to distributors and pharmacies, and supports pharmacies' promotion campaigns.

We think the introduction of a Low-Priced Drug Catalogue in China could be a catalyst. New Low-Priced Drugs certifications could provide Shineway with room to increase the prices of certain drugs.

Main assumptions in our models

We expect Shineway's portfolio to support 12% p.a. organic sales growth in the next three years. We list our growth assumptions for its main products below.

Figure 98: Main growth assumptions by product

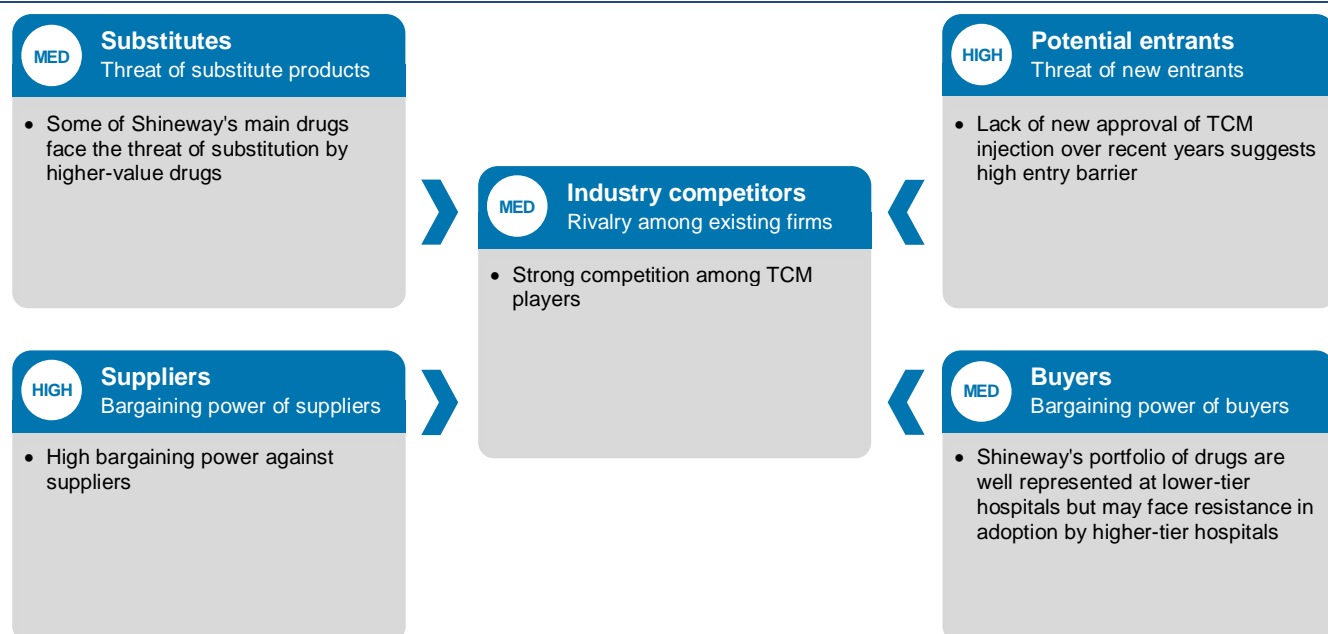
Growth by products	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
Injections	22%	29%	37%	-10%	8%	8%	9%	10%	10%
- Qingkailing injections							13%	13%	13%
- Shenmai injections							1%	0%	0%
- Shuxiening injections							6%	10%	10%
Soft capsules	27%	16%	-1%	13%	2%	-2%	18%	16%	16%
- Huoxiang Zhengqi soft capsules							18%	15%	15%
- Qingkailing soft capsules							20%	20%	20%
- Wufuxinnaoqing soft capsules							15%	10%	10%
Granules	42%	44%	17%	4%	8%	-7%	15%	15%	13%
- Paediatric Qingfei Huatan granules							6%	6%	6%
- Shujin Tongluo							10%	10%	10%
- Huamoyan granules							70%	50%	30%
Others							5%	5%	5%

Source: Company, Standard Chartered Research estimates



We expect a small contraction in gross margin from 66.8% in 2014E to 65.8% in 2016, mainly to reflect the negative effect of regional EDL bids in the injection category. With Shineway's stronger focus on OTC drugs, it would have to incur a higher selling expense ratio. However, the impact should be largely offset by higher interest income and a lower R&D ratio, as the company plans to replenish its product pipeline via acquisitions.

Figure 99: Shineway – Porter's five competitive forces model



Adapted from: Porter 1980 p.4
Source: Company, Standard Chartered Research

Figure 100: SWOT analysis

Strengths	Weaknesses
• Shineway's portfolio includes heavy hitters	• Shineway lacks a strong pipeline and may have to acquire growth
Opportunities	Threats
• OTC and low-priced drugs	• Competition among low-priced drugs is intense

Source: Standard Chartered Research

Income statement (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Sales	2,132	2,187	2,442	2,729	3,046
Gross profit	1,392	1,474	1,633	1,798	1,979
SG&A	(676)	(701)	(806)	(909)	(1,020)
Other income	152	173	122	136	152
Other expenses	(68)	(83)	(81)	(82)	(82)
EBIT	799	863	868	944	1,029
Net interest	0	(3)	68	77	87
Associates	0	1	0	0	0
Other non-operational	0	(1)	0	0	0
Exceptional items	0	0	0	0	0
Pre-tax profit	800	860	937	1,021	1,116
Taxation	(152)	(176)	(187)	(204)	(223)
Minority interests	0	0	0	0	0
Exceptional items after tax	0	0	0	0	0
Net profit	648	684	749	817	893
Net profit adj.	648	696	759	828	905
EBITDA	881	965	986	1,069	1,162
EPS (RMB)	0.78	0.83	0.91	0.99	1.08
EPS adj. (RMB)	0.78	0.83	0.89	0.97	1.06
DPS (RMB)	0.32	0.33	0.36	0.40	0.43
Avg fully diluted shares (mn)	827	841	856	856	856

Balance sheet (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Cash	2,232	2,831	3,183	3,570	4,001
Short-term investments	0	0	0	0	0
Accounts receivable	522	680	757	846	944
Inventory	204	244	275	316	363
Other current assets	104	122	122	122	122
Total current assets	3,061	3,877	4,338	4,854	5,430
PP&E	1,546	1,743	1,776	1,801	1,818
Intangible assets	92	92	92	92	92
Associates and JVs	17	0	0	0	0
Other long-term assets	26	25	25	25	25
Total long-term assets	1,682	1,861	1,894	1,919	1,936
Total assets	4,743	5,738	6,232	6,773	7,366
Short-term debt	0	500	500	500	500
Accounts payable	275	220	251	289	331
Other current liabilities	380	460	460	460	460
Total current liabilities	655	1,180	1,211	1,249	1,291
Long-term debt	0	0	0	0	0
Convertible bonds	0	0	0	0	0
Deferred tax	1	29	29	29	29
Other long-term liabilities	90	100	100	100	100
Total long-term liabilities	91	129	129	129	129
Total liabilities	746	1,309	1,340	1,378	1,420
Shareholders' funds	3,996	4,429	4,891	5,395	5,945
Minority interests	1	1	1	1	1
Total equity	3,997	4,430	4,891	5,395	5,946
Total liabilities and equity	4,743	5,739	6,232	6,773	7,366
Net debt (cash)	(2,232)	(2,331)	(2,683)	(3,070)	(3,501)
Year-end shares (mn)	827	827	827	827	827

Source: Company, Standard Chartered Research estimates

Cash flow statement (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
EBIT	799	863	868	944	1,029
Depreciation & amortisation	82	101	117	125	133
Net interest	18	46	68	77	87
Tax paid	(155)	(156)	(187)	(204)	(223)
Changes in working capital	(7)	(208)	(76)	(93)	(102)
Others	(84)	(81)	12	14	15
Cash flow from operations	653	566	802	863	939
Capex	(370)	(262)	(150)	(150)	(150)
Acquisitions & Investments	(17)	0	0	0	0
Disposals	48	45	0	0	0
Others	29	(507)	0	0	0
Cash flow from investing	(310)	(724)	(150)	(150)	(150)
Dividends	(306)	(265)	(300)	(327)	(357)
Issue of shares	0	0	0	0	0
Change in debt	0	500	0	0	0
Other financing cash flow	0	0	0	0	0
Cash flow from financing	(306)	235	(300)	(327)	(357)
Change in cash	37	77	353	386	432
Exchange rate effect	3	2	0	0	0
Free cash flow	283	304	652	713	789

Financial ratios and other

Year-end: Dec	2012	2013	2014E	2015E	2016E
Operating ratios					
Gross margin (%)	65.3	67.4	66.8	65.9	65.0
EBITDA margin (%)	41.3	44.1	40.4	39.2	38.1
EBIT margin (%)	37.5	39.5	35.5	34.6	33.8
Net margin adj. (%)	30.4	31.8	31.1	30.3	29.7
Effective tax rate (%)	19.0	20.5	20.0	20.0	20.0
Sales growth (%)	7.4	2.6	11.7	11.7	11.6
Net income growth (%)	-14.3	5.6	9.6	9.0	9.3
EPS growth (%)	-14.3	5.6	9.6	9.0	9.3
EPS growth adj. (%)	-14.3	5.6	7.3	9.1	9.3
DPS growth (%)	-20.0	3.1	9.8	9.0	9.3
Efficiency ratios					
ROE (%)	16.9	16.2	16.1	15.9	15.7
ROCE (%)	20.4	20.0	18.1	17.9	17.7
Asset turnover (x)	0.5	0.4	0.4	0.4	0.4
Op. cash/EBIT (x)	0.8	0.7	0.9	0.9	0.9
Depreciation/capex (x)	0.2	0.4	0.8	0.8	0.9
Inventory days	120.0	114.8	117.2	116.0	116.2
Accounts receivable days	80.4	100.3	107.4	107.2	107.3
Accounts payable days	139.2	126.6	106.1	105.8	105.9
Leverage ratios					
Net gearing (%)	-55.9	-52.6	-54.9	-56.9	-58.9
Debt/capital (%)	0.0	11.0	10.0	9.1	8.2
Interest cover (x)	nm	263.3	-12.7	-12.2	-11.9
Debt/EBITDA (x)	0.0	0.3	0.5	0.5	0.4
Current ratio (x)	4.7	3.3	3.6	3.9	4.2
Valuation					
EV/sales (x)	2.7	2.8	2.4	1.9	1.5
EV/EBITDA (x)	6.5	6.4	6.0	4.8	4.0
EV/EBIT (x)	7.2	7.1	6.8	5.4	4.5
PER (x)	12.3	12.3	11.5	10.0	9.1
PER adj. (x)	12.3	12.3	11.8	10.3	9.3
PBR (x)	2.2	1.6	1.8	1.5	1.4
Dividend yield (%)	3.3	3.2	3.5	4.0	4.4



CSPC Pharmaceutical

Good franchise but valuation is full

- We appreciate CSPC's R&D-driven mix improvement, quality management and supportive shareholder base.
- However, its full valuation presents a near-term earnings risk; our EPS are 8%/9% below consensus on 2014E/15E.
- We initiate coverage with an In-Line rating and a price target of HKD 6.60, valued at 25x 2015E EPS.

Significant mix improvement. CSPC has significantly upgraded its revenue mix. Its innovative drug portfolio (on a pro-forma basis) increased to 19% of sales in 2013 from 7% in 2011. We expect the proportion of innovative drugs to grow to 40% by 2017, supported by a strong R&D pipeline.

Quality management. We think highly of (1) management's R&D focus, (2) its initiative to promote butylphthalide (NBP) as China's first 'blockbuster' drug, (3) ambition to sell to overseas markets and (4) decision to exit API (Active Pharmaceutical Ingredients) segments where CSPC is not a leader.

Some margin concerns. We believe CSPC will need to invest more in R&D and increase selling expenses if it wants to maintain its sales level and expand into oncology, where it faces strong competition from multinationals as well as domestic companies.

Initiate with an In-Line rating. We agree that CSPC deserves a premium for its good management and product portfolio. However, its average valuation premium of 19% to HK-listed large-cap peers appears rich. We would wait for a better entry point to the stock.

IN-LINE (initiating coverage)

PRICE as of 26 Jun 2014

PRICE TARGET

HKD 6.05

HKD 6.60

Bloomberg code

1093 HK

Reuters code

1093.HK

Market cap

HKD 35,743mn (USD 4,611mn)

12-month range

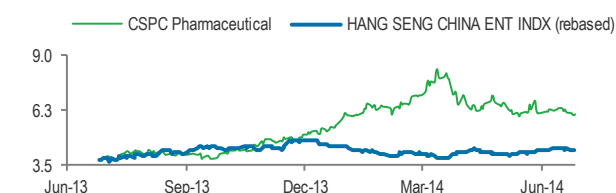
HKD 3.70 - 8.49

EPS adj est change NA

Year-end: December	2013	2014E	2015E	2016E
Sales (HKD mn)	9,949	10,913	12,330	14,017
EBITDA (HKD mn)	1,836	2,148	2,654	3,238
EBIT (HKD mn)	1,180	1,541	2,001	2,546
Pre-tax profit (HKD mn)	1,248	1,468	1,929	2,473
Net profit adj. (HKD mn)	952	1,212	1,564	2,003
FCF (HKD mn)	185	1,137	1,439	1,844
EPS adj. (HKD)	0.16	0.20	0.26	0.34
DPS (HKD)	0.08	0.06	0.08	0.10
Book value/share (HKD)	1.33	1.41	1.59	1.83
EPS growth adj. (%)	30.9	26.1	28.4	28.0
DPS growth (%)	15.6	-22.3	33.8	28.2
EBITDA margin (%)	18.5	19.7	21.5	23.1
EBIT margin (%)	11.9	14.1	16.2	18.2
Net margin adj. (%)	9.6	11.1	12.7	14.3
Div. payout (%)	43.3	28.9	29.7	29.7
Net gearing (%)	1.4	-7.9	-17.0	-25.9
ROE (%)	13.9	14.8	17.6	19.8
ROCE (%)	14.9	17.5	20.4	23.0
EV/sales (x)	2.3	3.1	2.8	2.3
EV/EBITDA (x)	12.3	15.9	12.9	10.2
PBR (x)	4.6	4.3	3.8	3.3
PER adj. (x)	24.5	29.6	23.1	18.0
Dividend yield (%)	1.9	1.0	1.3	1.7

Source: Company, Standard Chartered Research estimates

Share price performance



Share price (%)	-1 mth	-3 mth	-12 mth
Ordinary shares	-10	-16	59
Relative to index	-12	-20	41
Relative to sector	-	-	-
Major shareholder	Massive Top (72.7%)		
Free float	27%		
Average turnover (USD)	17,665,657		

Source: Company, FactSet

Su Zhang

+852 3983 8526

Equity Research

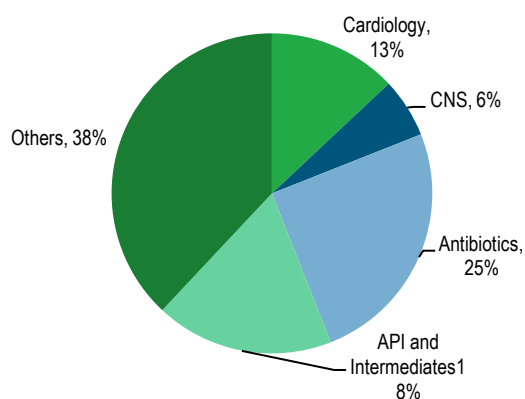
Standard Chartered Bank (HK) Limited



Investment case

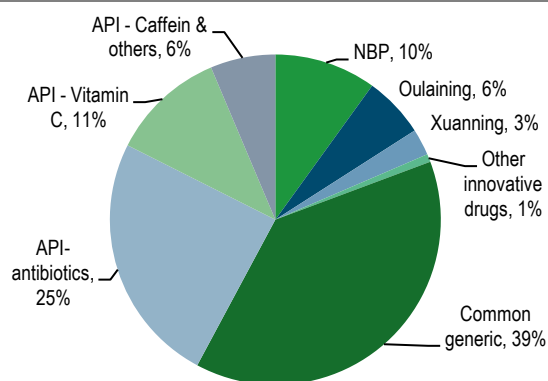
CSPC is one of the largest pharmaceutical groups in China. It is transforming itself from being an API and generic drug producer into an innovative drug company. Innovative drugs accounted for 19% of revenue in 2013, 39% from generics and 42% from API. Its manufacturing base is in Heibei province.

Figure 101: Revenue breakdown by therapeutic area (2013)



Source: Company

Figure 102: Revenue breakdown by drug type (2013)

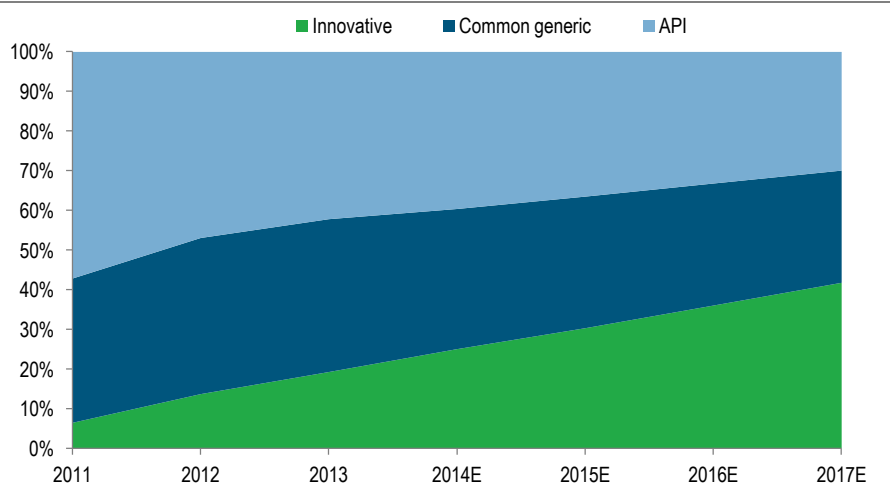


Source: Company, Standard Chartered Research

We appreciate its prospects of significant mix improvement supported by R&D

CSPC significantly upgraded its revenue mix by successfully commercialising new drugs from an in-house R&D pipeline. Its innovative drug portfolio (on a pro-forma basis) increased to 19% of sales in 2013 from 7% in 2011. We expect the proportion of innovative drugs to grow to 40% by 2017.

Figure 103: Revenue – Continuous improvement in product mix



Source: Company, Standard Chartered Research estimates

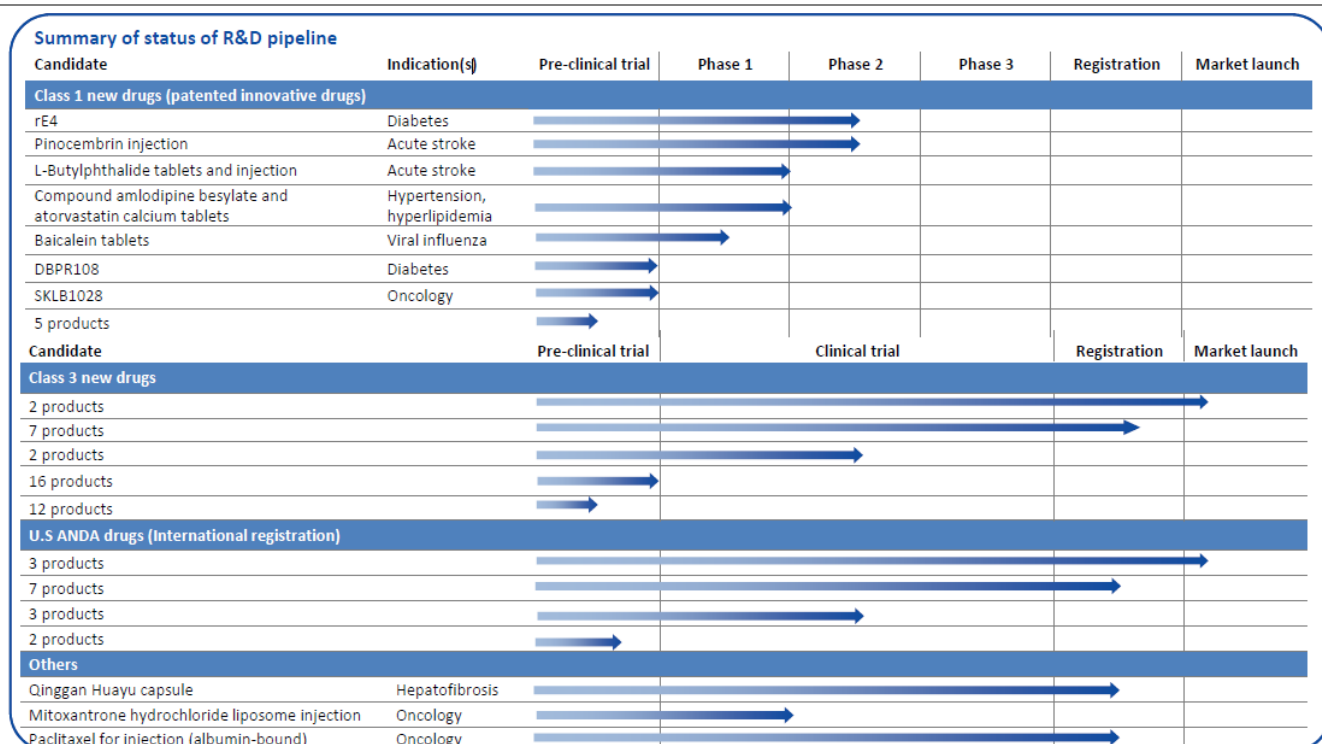
Management is confident its in-house developed NBP, an innovative drug to be used in the treatment of ischemic stroke, could become China's first innovative 'blockbuster' drug – achieving annual sales of USD 1bn – before its patent expires in 2023. It believes each of its main generic drugs, Oulaining (Alzheimer's disease) and Xuanning (hypertension), has the potential for annual sales of over RMB 1bn.



CSPC also expects its recently launched oncology drugs – Duomeisu (lymphoma cancer), Jinyouli (chemotherapy), and Ailineng (an elemene-based medicine for cancer) – to achieve strong sales in the next few years.

It has a strong pipeline of 12 new Class 1 drugs (five of these received approval under Investigative New Drug licences, which allow clinical trials to begin), 37 new Class 3 drugs, and 15 US ANDA drugs (see the table below). After 2015, management expects to obtain approval on 1-2 new Class 1 drugs and 3-5 new Class 3 drugs a year.

Figure 104: CSPC – Strong R&D pipeline



Source: Company

We like its quality management and active shareholders

CEO Cai Dongchen has about 30 years of experience in the pharmaceutical business. In the 2000s, he was one of the first few who understood the necessity of transforming from an API manufacturer into a full-range pharma group, a vision now widely shared by peers. He wants to make CSPC a forerunner in internationalisation – 13 of its drugs are under process for US ANDA approval. CSPC appears to be ahead of the industry curve.

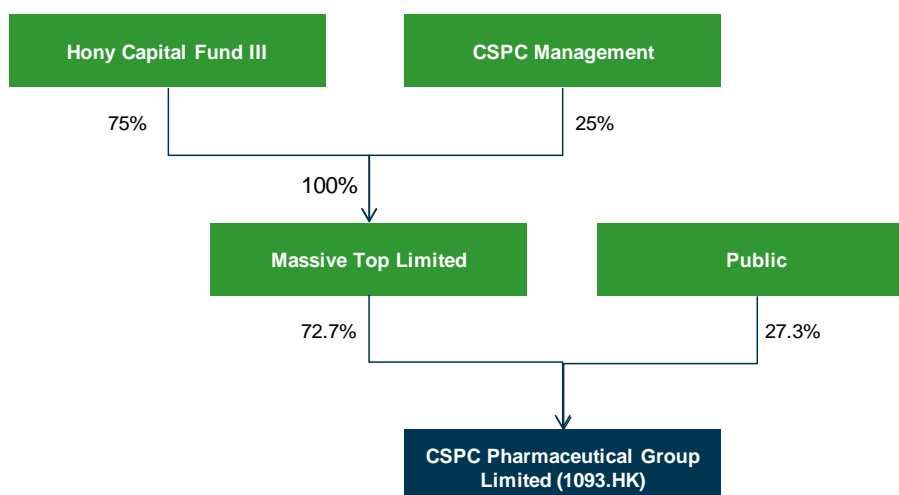
In addition, management has been pruning CSPC's portfolio under a strategy of cutting out a line of business if it falls out of the top two positions in the market. Accordingly, it sold CSPC Zhongrun, its antibiotics API business (mainly 6-APA, competing with The United Laboratories (OP), in 2013.

Its largest shareholder, Hony Capital, indirectly controls over 50% of CSPC. Overseen by the chairman of Legend Group, Hony has a strong track record in China, and counts China Glass and Zoomlion among its successful investments.



Unlike many other private equity companies, Hony regards itself as an active shareholder that is 'on the ground'. After acquiring CSPC from the Hebei government in 2007, it helped engineer the asset injection of innovative drugs (NBP, Oulaining and Xuanning) into the listed China Pharma Group in 2012. As part of the asset injection deal, it set a conversion clause on its convertible bonds that the acquired assets must double net profit to HKD 800mn in two years by 2013, a feat that management duly achieved.

Figure 105: CSPC – Shareholder structure



Source: Company

We are cautious about earnings risks and valuation

We expect a 27% CAGR in adjusted EPS over 2014-15. Our estimates are 8-9% lower than consensus mainly because we are more cautious on margins. We highlight that for its revenue mix and size, CSPC incurred relatively low R&D and selling expenses, which we do not think is sustainable. In addition, CSPC is penetrating the oncology market, where it would be competing with oncology majors in China. This would require more R&D investment and higher selling and distribution expenses in the next few years.

Figure 106: Standard Chartered vs. consensus

	Standard Chartered		Consensus		SCB vs. consensus	
	2014E	2015E	2014E	2015E	2014E	2015E
Turnover (HKD mn)	10,913	12,330	10,534	12,015	4%	3%
Gross profit (HKD mn)	3,960	4,849	3,943	4,703	0%	3%
EBIT (HKD mn)	1,541	2,001	1,701	2,179	-9%	-8%
Net profit (HKD mn)	1,212	1,564	1,338	1,692	-9%	-8%
EPS adjusted (HKD)	0.20	0.26	0.23	0.29	-10%	-9%

Source: Bloomberg, Standard Chartered Research estimates



Figure 107: Sensitivity test

Input items	Change	Net profit	
		2014E	2015E
NBP growth	-5%	-2%	-2%
Outaining growth	-5%	-1%	-1%
Xuanning growth	-5%	0%	0%
Common generic growth	-5%	-2%	-2%
EBIT margin	-100bps	-7%	-6%

Source: Standard Chartered Research estimates

We initiate coverage of CSPC with an In-Line rating and a price target of HKD 6.60, on 25x 2015E PER. We agree CSPC deserves a premium for its good management and portfolio. However, its valuation premium to peers is 19% to the mean multiple of Hong Kong listed large-cap names (Fosun, Sino Biopharm, Sihuan), which we believe justifies our In-Line rating.

Figure 108: Large-cap peers – Valuations

Company	Recommendation	Bloomberg Ticker	Mkt cap (USD mm)	EPS Y/Y Growth (%)		PER		PBR	ROE (%)		PEG
				2014E	2015E	2014E	2015E	2014E	2014E	2015E	2014e
*Sihuan	OP	460 HK Equity	6,350.8	22.8	28.5	23.9	17.8	5.5	17.8	19.7	0.9
Sino Biopharm	NR	1177 HK Equity	3,965.0	27.1	17.8	24.1	20.5	4.2	21.3	21.4	1.1
Shanghai Fosun	NR	2196 HK equity	7,402.4	10.5	16.4	22.7	19.3	2.7	14.1	14.4	1.7
*CSPC Pharmaceutical	IL	1093 HK equity	4,595.9	26.1	28.4	29.6	23.0	4.3	14.0	16.6	1.1

* Our coverage. Share prices as of 26 June 2014

Source: Non-rated stock data based on Bloomberg consensus, Standard Chartered Research estimates

Risks

Downside risks to our investment case relate to a failure by CSPC to execute its R&D pipeline or if its SG&A ratio goes up more rapidly than we expected. The upside risk is that its oncology franchise delivers results earlier than we assumed.



Valuation

Our price target is based on 25x 2015e PER, slightly above its average over the past three years. This valuation level implies a premium to its large-cap peers, due to its better earnings growth and good quality management.

Figure 109: PER band



Source: FactSet, Standard Chartered Research

Our DCF exercise leads to a valuation of HKD 8.90 per share, implying 41% potential upside. The following table summarises our key assumptions.

Figure 110: Our DCF assumptions

ASSUMPTIONS	
Cost of equity (%)	
Risk-free rate (%)	3.80
Beta	0.53
Equity risk premium (%)	8.3
CAPM unleveraged discount rate	8.2
Cost of debt (%)	
Average spread over risk-free rate (%)	4.0
Pre-tax cost of debt (%)	7.8
Average corporate tax rate for company (%)	15.0
Post-tax cost of debt (%)	6.6
Estimated target gearing (net debt/EV) (%)	(10.0)
WACC (%)	8.3
Number of years of explicit estimates	4.0
middle period duration (yrs)	3.0
No of years to start of terminal period	7.0
Middle period assumptions	
Growth rate (%)	10.0
Operating margin (%)	18.0
Capex/depreciation ratio (x)	200.0
Working capital/ turnover ratio (%)	10.0
Tax rate (%)	18.0
Terminal period assumptions	
Growth rate (%)	4.0
Operating margin (%)	18.0
Capex/depreciation ratio (x)	150.0
Working capital/ turnover ratio (x)	10.0
Tax rate (%)	18.0

Source: Standard Chartered Research estimates



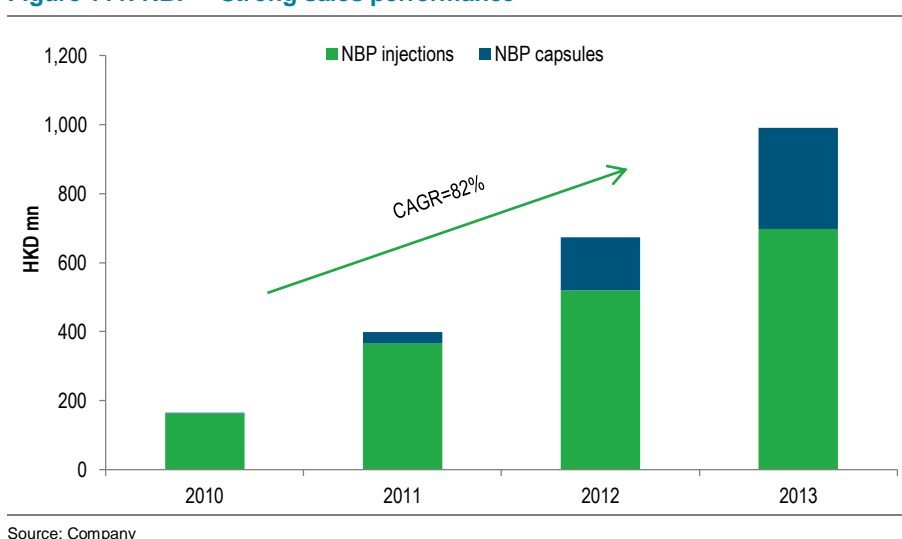
NBP should continue to enjoy strong growth in the next few years

Strong CCV/CNS franchise, adds oncology portfolio

NBP is a class I innovative drug that treats acute ischaemic stroke. CSPC estimates China's stroke market was RMB 17bn in 2012 and should grow to RMB 69bn by 2020, at its projected CAGR of 20%. As a patented drug, NBP has no direct competitor in its molecule market, but its applications overlap with Fosun's Audejin (deproteinised calf blood) and Sihuan's Oudimei (carnosine). Compared with those drugs, NBP has clearer pharmacologic evidence to support its prescription in higher-tier hospitals, in our view.

CSPC is confident that NBP will become the first 'blockbuster' drug (USD 1bn sales) under the innovative category by a China company before its patent expires in 2023. NBP current annual sales growth is 47% and we expect the pace to continue at 40-50% in the next few years. The growth trend should be supported by its own 650 NBP-dedicated staff which cover 1,200 hospitals, including over 1,000 top-tier ones. We think it will have little difficulty in penetrating the rest of the hospital market.

Figure 111: NBP – Strong sales performance



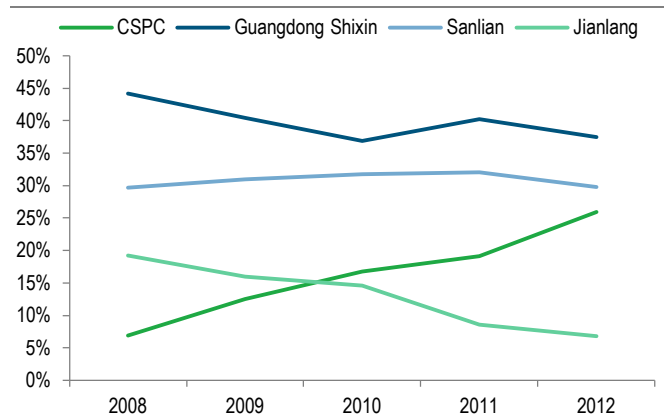
Xuanning and Oulaining should show strong growth despite the competition

Xuanning (maleate levamlodipine) is an improved generic drug to Pfizer's blockbuster Norvasc (amlodipine) that treats hypertension. Compared with Norvasc, levamlodipine has a better effect on smaller dosage. Compared to other levamlodipine drugs, Xuanning is the only maleate formula with a longer effective shelf life. Xuanning's sales grew 57% in 2013 and it increased market share in levamlodipine to 26%, second after Shihuida. We believe Xuanning will be able to maintain 30-40% annual growth in spite of the competition.

Oulaining (oxiracetam) is a generic FTM version of GSK's patent drug that is used to treat mild to moderate dementia. Sales grew 32% in 2013, and we expect growth to continue at 20-30% p.a. in the next few years. CSPC now accounts for about 26% of the market, and competes with Guangdong Shixin, Sanlian and Jianlang.

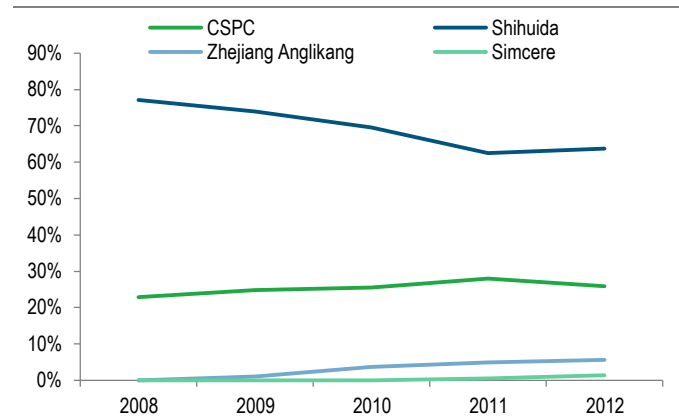


Figure 112: Outlaining's market share



Source: PICO

Figure 113: Xuanning's market share



Source: PICO

***CSPC is building
a good oncology franchise***

We understand that with the launch of Jinyouli in 2012, CSPC set its sights on the oncology market. **Jinyouli** is a PEGylated recombinant human granulocyte colony stimulating factor (PEG-rhG-CSF), used in chemotherapy to restore white blood cells and reduce chances of infection. It has a longer effect than the normal G-CSF injection, and is the only approved PEG-rhG-CSF injection in China. In the US it is a major blockbuster drug sold by Amgene under the brand of Neulasta, and recorded USD 4.6bn sales in 2013.

CSPC's other oncology offerings include **Duomeisu**, a doxorubicin hydrochloride liposome to treat lymphoma cancer, which it launched after Fudan-Zhangjiang's Libod, and **Ailineng**, an elemene injection for nerve glioma and brain metastases and the adjuvant treatment of malignant pleural and peritoneal effusion.

Management believes that once its oncology drugs have gone past the introductory phase, each has the potential to reach annual sales of over RMB 1bn. It enrolled them in provincial tenders recently. The drugs are supported by CSPC's own staff, which sells them to hospitals. CSPC has a dedicated oncology sales team of 170 personnel, and intends to expand its strength to 250 in the near future.

Within its R&D pipeline, CSPC is working on a generic drug for Takeda's Velcade (**Bortezomib**), which treats multiple myeloma and mantle cell lymphoma. Velcade sales came to USD 2.4bn in 2012. If CSPC obtains the FTM for Velcade, this should greatly complement its oncology offerings. However, the competition is intense in this drug and CSPC is up against China majors with a decent oncology franchise: Haoseng, Qilu, Simcere, Aokangsai and Sino Biopharm.



*We are in line with consensus
on sales growth*

We are more cautious about margin than consensus

We expect CSPC's portfolio to support 12% p.a. organic revenue growth in the next three years. We list below our assumptions for the main products. We assume 30-40% growth for innovative drugs, but low single-digit growth for the rest of the portfolio, reflecting tendering price pressure in generics and intense competition in APIs; these assumptions are in line with consensus.

Figure 114: Revenue growth by product

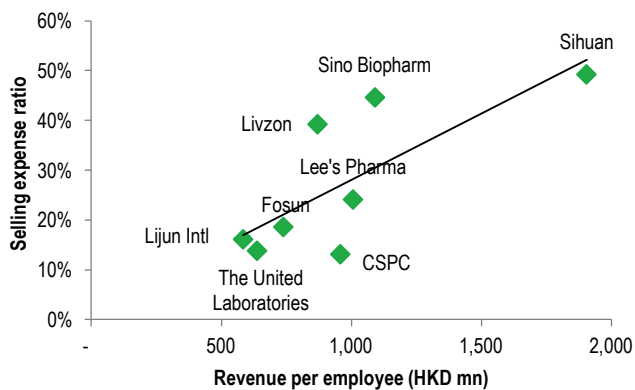
(%)	2011	2012	2013	2014E	2015E	2016E
Innovative - NBP	123%	94%	40%	50%	40%	40%
Innovative - Oulaining	82%	203%	32%	30%	20%	20%
Innovative - Xuanning	73%	34%	56%	40%	30%	30%
Innovative - Others	NA	NA	NA	100%	80%	50%
Generic	NA	7%	1%	2%	5%	5%
API - antibiotics	-5%	-10%	-12%	5%	3%	3%
API - Vitamin C	-16%	-40%	6%	3%	3%	3%
API - caffeine & others	NA	-8%	-9%	5%	3%	3%

Source: Company, Standard Chartered Research estimates

Where we differ from consensus is our greater concern over margin, which in our view could be weighed down by higher selling expenses and R&D cost. As we illustrate below, despite CSPC's better revenue mix – a proxy for this is sales per head – it has kept selling and R&D expenses low relative to sales, which is common for companies with an inferior product mix. With continuing mix improvement, CSPC's ratios could edge up faster than its peers – we expect a 3ppt rise in selling expense ratio and 2ppt rise in R&D ratio in the next three years.

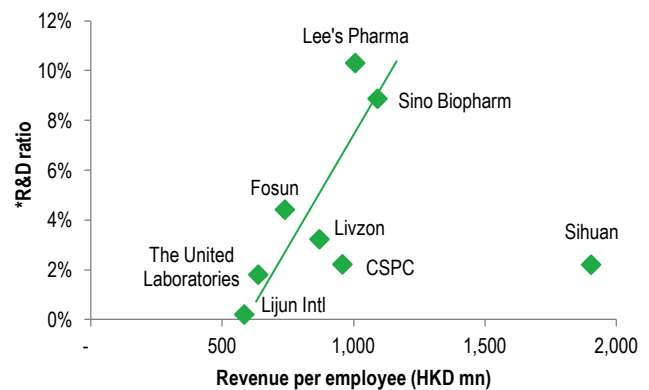
Sihuan's selling and R&D ratios may be an anomaly, but its higher selling expenses could be explained by its wholesale model, which relies on independent promoters to drive sales, translating into high revenue per staff member. In contrast, CSPC uses an internal sales staff. Sihuan's low R&D ratio could be due to its focus on the acquisition pipeline; in contrast, CSPC focuses on in-house development.

Figure 115: Revenue per employee vs. selling expense ratio in 2013



Source: Companies

Figure 116: Revenue per employee vs total R&D cost as % of sales in 2013



*R&D ratio refers to total R&D cost (including capitalised and expensed amounts) as a percentage of sales

Source: Companies



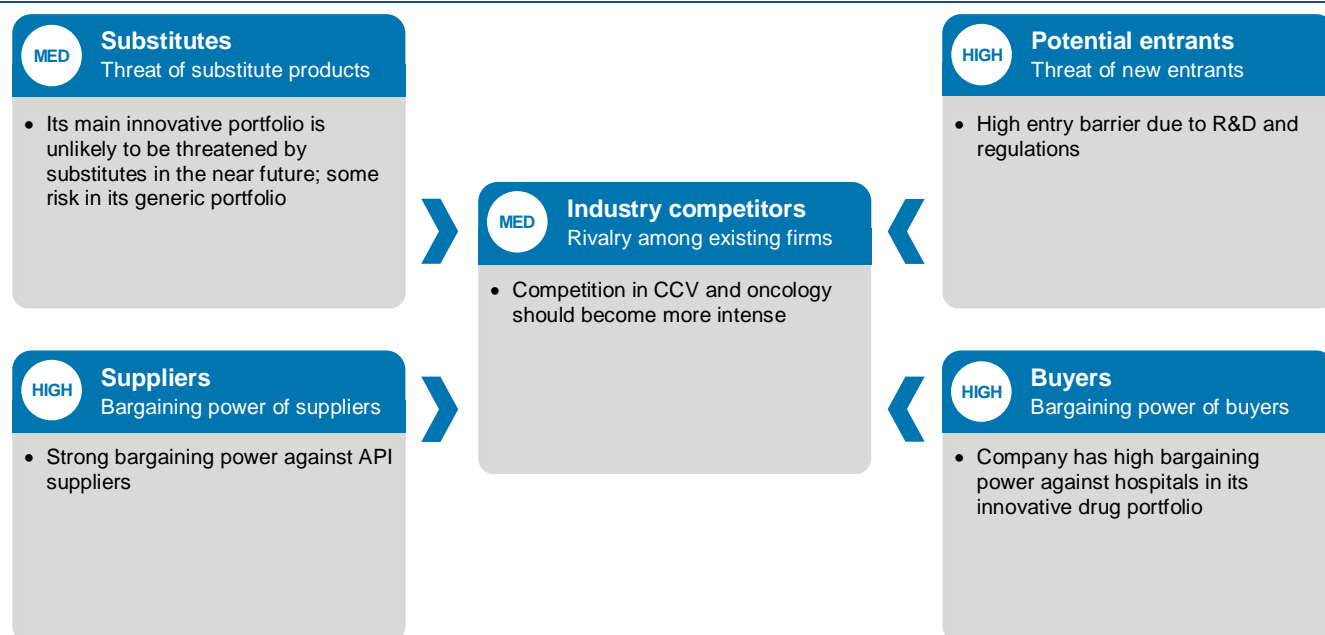
On gross margin, we are largely in line with consensus. We assume CSPC's innovative portfolio will retain a gross margin of 80% in the next three years. We think its API portfolio will see stable or slightly better margins as smaller companies exit the market. Its generics portfolio should see margin falling slightly to 30% in the next three years, in our view.

Figure 117: Gross margin assumptions

Gross margin	2011	2012	2013	2014E	2015E	2016E
Innovative	75%	80%	80%	80%	80%	80%
Generic	43%	40%	33%	32%	31%	30%
API - antibiotics	(4)%	0%	10%	11%	11%	11%
API - Vitamin C	(8)%	(2)%	(2)%	0%	0%	0%
API - caffeine & others	15%	18%	28%	24%	24%	24%

Source: Company, Standard Chartered Research estimates

Figure 118: CSPC – Porter's five competitive forces model



Adapted from: Porter 1980 p.4
Source: Company, Standard Chartered Research

Figure 119: SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> CSPC has a diversified portfolio with exposure to many main therapeutic areas. R&D should support continuous improvement of its product mix. Quality management and active shareholders. 	<ul style="list-style-type: none"> Generic drugs and API still account for over 80% of revenue.
Opportunities	Threats
<ul style="list-style-type: none"> A strong R&D pipeline. 	<ul style="list-style-type: none"> Competition in CCV and oncology may become more intense.

Source: Standard Chartered Research



Income statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Sales	4,146	9,949	10,913	12,330	14,017
Gross profit	1,805	3,133	3,960	4,849	5,941
SG&A	(993)	(1,921)	(2,313)	(2,651)	(3,084)
Other income	39	211	218	247	280
Other expenses	(88)	(243)	(324)	(444)	(592)
EBIT	764	1,180	1,541	2,001	2,546
Net interest	(60)	(73)	(73)	(73)	(73)
Associates	(4)	(14)	0	0	0
Other non-operational	0	0	0	0	0
Exceptional items	1,601	154	0	0	0
Pre-tax profit	2,301	1,248	1,468	1,929	2,473
Taxation	(132)	(258)	(279)	(366)	(470)
Minority interests	(7)	(17)	(20)	2	3
Exceptional items after tax	0	0	0	0	0
Net profit	2,162	973	1,169	1,564	2,006
Net profit adj.	567	952	1,212	1,564	2,003
EBITDA	955	1,836	2,148	2,654	3,238
EPS (HKD)	1.48	0.17	0.20	0.26	0.34
EPS adj. (HKD)	0.12	0.16	0.20	0.26	0.34
DPS (HKD)	0.07	0.08	0.06	0.08	0.10
Avg fully diluted shares (mn)	4,583	5,879	5,939	5,969	5,969

Balance sheet (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Cash	1,476	1,271	2,045	2,999	4,221
Short-term investments	2	2	2	2	2
Accounts receivable	3,112	3,012	3,304	3,733	4,244
Inventory	2,022	1,855	1,877	2,020	2,181
Other current assets	181	231	231	231	231
Total current assets	6,794	6,371	7,459	8,985	10,878
PP&E	6,671	5,509	5,378	5,151	4,885
Intangible assets	126	256	241	231	226
Associates and JVs	32	18	18	18	18
Other long-term assets	59	47	47	47	47
Total long-term assets	6,888	5,830	5,684	5,447	5,175
Total assets	13,682	12,201	13,143	14,432	16,054
Short-term debt	1,817	660	660	660	660
Accounts payable	3,448	2,531	2,581	2,777	2,998
Other current liabilities	975	648	648	648	648
Total current liabilities	6,240	3,838	3,889	4,085	4,305
Long-term debt	547	713	713	713	713
Convertible bonds	0	0	0	0	0
Deferred tax	0	0	0	0	0
Other long-term liabilities	148	52	52	52	52
Total long-term liabilities	695	765	765	765	765
Total liabilities	6,935	4,604	4,654	4,851	5,071
Shareholders' funds	6,587	7,453	8,324	9,419	10,824
Minority interests	177	144	164	162	159
Total equity	6,764	7,597	8,488	9,581	10,983
Total liabilities and equity	13,699	12,201	13,143	14,432	16,054
Net debt (cash)	887	103	(672)	(1,626)	(2,848)
Year-end shares (mn)	2,725	5,586	5,908	5,908	5,908

Source: Company, Standard Chartered Research estimates

Cash flow statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
EBIT	764	1,180	1,541	2,001	2,546
Depreciation & amortisation	191	656	607	652	692
Net interest	(56)	(66)	(67)	(63)	(58)
Tax paid	(106)	(223)	(279)	(366)	(470)
Changes in working capital	(280)	(742)	(263)	(376)	(452)
Others	(15)	9	47	(10)	(14)
Cash flow from operations	498	815	1,587	1,839	2,244
Capex	(194)	(630)	(450)	(400)	(400)
Acquisitions & Investments	(7)	(158)	(11)	(15)	(21)
Disposals	706	1,483	0	0	0
Others	(243)	(71)	0	0	0
Cash flow from investing	262	624	(461)	(415)	(421)
Dividends	(409)	(402)	(351)	(469)	(602)
Issue of shares	846	0	0	0	0
Change in debt	(60)	(1,328)	0	0	0
Other financing cash flow	0	0	0	0	0
Cash flow from financing	377	(1,729)	(351)	(469)	(602)
Change in cash	1,137	(291)	775	954	1,222
Exchange rate effect	3	28	0	0	0
Free cash flow	305	185	1,137	1,439	1,844

Financial ratios and other

Year-end: Dec	2012	2013	2014E	2015E	2016E
Operating ratios					
Gross margin (%)	43.5	31.5	36.3	39.3	42.4
EBITDA margin (%)	23.0	18.5	19.7	21.5	23.1
EBIT margin (%)	18.4	11.9	14.1	16.2	18.2
Net margin adj. (%)	13.7	9.6	11.1	12.7	14.3
Effective tax rate (%)	5.7	20.7	19.0	19.0	19.0
Sales growth (%)	72.2	139.9	9.7	13.0	13.7
Net income growth (%)	508.3	-55.0	20.2	33.8	28.2
EPS growth (%)	397.1	-88.2	16.3	30.1	28.2
EPS growth adj. (%)	49.0	30.9	26.1	28.4	28.0
DPS growth (%)	nm	15.6	-22.3	33.8	28.2
Efficiency ratios					
ROE (%)	57.4	13.9	14.8	17.6	19.8
ROCE (%)	18.0	14.9	17.5	20.4	23.0
Asset turnover (x)	0.5	0.8	0.9	0.9	0.9
Op. cash/EBIT (x)	0.7	0.7	1.0	0.9	0.9
Depreciation/capex (x)	1.0	1.0	1.3	1.6	1.7
Inventory days	181.4	103.8	98.0	95.1	94.9
Accounts receivable days	161.7	112.3	105.6	104.2	103.9
Accounts payable days	311.9	160.1	134.2	130.7	130.5
Leverage ratios					
Net gearing (%)	13.1	1.4	-7.9	-17.0	-25.9
Debt/capital (%)	31.8	16.4	14.8	13.3	11.7
Interest cover (x)	12.7	16.3	21.2	27.6	35.1
Debt/EBITDA (x)	1.4	1.0	0.6	0.5	0.4
Current ratio (x)	1.1	1.7	1.9	2.2	2.5
Valuation					
EV/sales (x)	0.8	2.3	3.1	2.8	2.3
EV/EBITDA (x)	3.5	12.3	15.9	12.9	10.2
EV/EBIT (x)	4.4	19.1	22.1	17.0	12.9
PER (x)	1.4	22.6	29.7	22.8	17.8
PER adj. (x)	16.1	24.5	29.6	23.1	18.0
PBR (x)	0.9	4.6	4.3	3.8	3.3
Dividend yield (%)	3.3	1.9	1.0	1.3	1.7



Lee's Pharmaceutical

High-quality growth

- Lee's Pharm stands out for the quality of its portfolio, pipeline, financials and management team, in our view.
- We forecast a 28% earnings CAGR in 2014-15, driven by strong underlying growth in the blood and blood-forming organ market.
- Our In-Line rating is mainly due to its full valuation; we have a price target of HKD 9.90.

China's blood market potential. We expect Lee's Pharma to register a strong revenue CAGR of 32% in 2014-15, supported by its strong franchise in blood and blood-forming organ drugs, which tap China's fast-growing dialysis market. We expect the dialysis market to grow over 25% p.a. in the next few years with enormous potential demand suggested by the gap between the number of patients with end-stage renal disease (1.5-2mn) and the number receiving dialysis treatments (260k). Higher coverage of dialysis in serious illness insurance (from the current 60% to 90% under a new national plan) should catalyse this demand in the next few years.

Strong research capability. Lee's Pharm is strong in securing in-licensed drugs, fostering collaborative R&D ties with international companies, and exploring niche markets such as orphan drugs. Its pipeline includes many new drugs in advanced stages of development (beyond phase II clinical trials). This should support its sustainable revenue growth, in our view.

Main rationale for an In-Line rating. Our target price is based on 23x 2015E PER. We think this is fair for a medium-sized pharmaceutical company that lacks diversification; it derives nearly 50% revenue from one in-licensed drug, Carnitene. The company could face moderate margin pressure, despite a strong R&D pipeline.

IN-LINE (initiating coverage)

PRICE as of 26 Jun 2014

PRICE TARGET

HKD 10.02**HKD 9.90****Bloomberg code**

950 HK

Reuters code

0950.HK

Market cap

HKD 5,393mn (USD 696mn)

12-month range

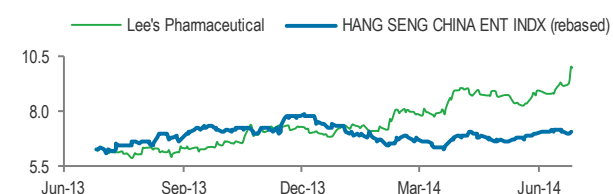
HKD 5.91 - 10.12

EPS adj est change NA

Year-end: December	2013	2014E	2015E	2016E
Sales (HKD mn)	697	926	1,212	1,571
EBITDA (HKD mn)	197	252	317	405
EBIT (HKD mn)	180	222	279	361
Pre-tax profit (HKD mn)	176	213	277	361
Net profit adj. (HKD mn)	153	185	240	312
FCF (HKD mn)	40	79	153	233
EPS adj. (HKD)	0.28	0.33	0.43	0.56
DPS (HKD)	0.07	0.09	0.12	0.15
Book value/share (HKD)	1.46	1.71	2.03	2.45
EPS growth adj. (%)	23.7	19.5	29.3	30.2
DPS growth (%)	30.7	23.0	29.7	30.5
EBITDA margin (%)	28.2	27.3	26.1	25.8
EBIT margin (%)	25.9	24.0	23.0	23.0
Net margin adj. (%)	21.9	20.0	19.8	19.9
Div. payout (%)	25.6	26.3	26.3	26.3
Net gearing (%)	-36.6	-30.4	-28.9	-29.9
ROE (%)	22.0	21.5	23.6	25.7
ROCE (%)	23.8	23.2	25.1	27.6
EV/sales (x)	4.3	5.5	4.2	3.2
EV/EBITDA (x)	15.2	20.2	16.0	12.3
PBR (x)	5.0	5.9	4.9	4.1
PER adj. (x)	22.2	30.0	23.2	17.8
Dividend yield (%)	1.2	0.9	1.2	1.5

Source: Company, Standard Chartered Research estimates

Share price performance



Share price (%)	-1 mth	-3 mth	-12 mth
Ordinary shares	15	14	60
Relative to index	13	9	42
Relative to sector	-	-	-
Major shareholder	Sigma Tau (25.6%)		
Free float	42%		
Average turnover (USD)	225,892		

Source: Company, FactSet

Su Zhang

+852 3983 8526

Equity Research

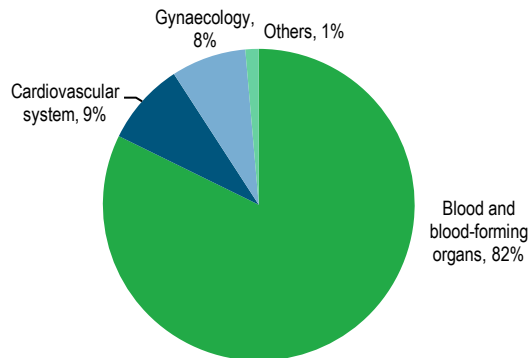
Standard Chartered Bank (HK) Limited



Investment case

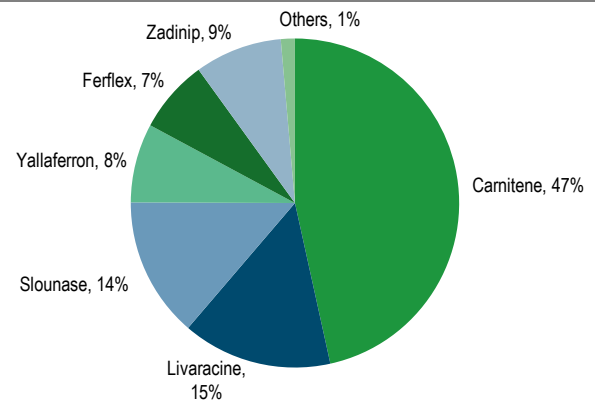
Lee's Pharmaceutical is a leading medium-sized pharmaceutical company in China engaged in the development and sales of blood and cardiovascular drugs. In 2012, 82% of revenue was derived from blood and blood-forming organ drugs, 9% from cardiovascular system drugs, and 8% from gynaecology drugs. Its manufacturing base is in Anhui, China.

Figure 120: 2013 revenue breakdown by therapeutic area



Source: Company

Figure 121: 2013 revenue breakdown by drugs



Source: Company, Standard Chartered Research

A play on China's dialysis market

We expect the dialysis market to grow over 25% p.a. in 2014-17. The nationwide **serious illness insurance** that China is rolling out this year will increase the reimbursement cap of dialysis to 90% of expenses (from the current 60%). This should catalyse the demand in this enormous market in the next few years.

We believe Lee's Pharm will benefit from this theme as it derives 62% of revenue directly from the treatment of multiple complications in dialysis patients. We expect a revenue CAGR of 32% over 2014-15, on the back of the fast growth in this market.

Collaborative research and in-licensed products are a key differentiator

In our view, Lee's Pharm has been punching above its weight in R&D thanks to its strong collaborative research capabilities and a strong in-licensed pipeline. As such Lee's Pharm now has many new drugs at more advanced stages of development than its competitors. This renders a more sustainable and visible growth outlook, in our view.

Margin pressure from R&D and depreciation

We understand from management that Lee's Pharm will continue to invest in growth through R&D and property, plant and equipment (PPE), and bolt-on acquisitions, which suggests near-term margin pressure on R&D expenses and depreciation. We model a modest 2ppt net margin decline over 2014-15.

Risks

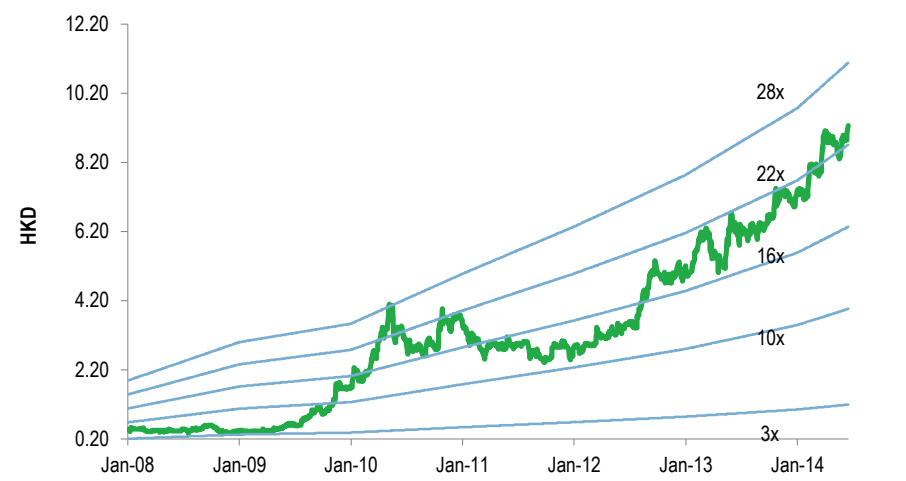
Risks to our investment view include product risk (a lack of diversification) and potential margin pressure.



Valuation

We value the stock at 23x 2015E earnings, reflecting a 10% premium to its five-year average PER of 21x. This is justified by an understanding of Lee Pharm's franchise and its potential growth catalyst in China's dialysis market.

Figure 122: Lee's Pharm – PER band



Source: FactSet, Standard Chartered Research

Our 2014-15 EPS estimates are mainly in line with consensus.

Figure 123: Our estimates versus consensus

	Standard Chartered		Consensus		Ours over consensus	
			2014E	2015E	2014E	2015E
Turnover (HKD mn)	926	1,212	955	1,243	-3%	-2%
EBITDA (HKD mn)	255	329	269	336	-5%	-2%
Net profit (HKD mn)	191	248	190	256	1%	-3%
EPS (adj.) (HKD)	0.35	0.45	0.35	0.46	1%	-2%

Source: Bloomberg, Standard Chartered Research estimates

We provide a sensitivity test on our numbers below.

Figure 124: Sensitivity test

Input items	Change	Net profit	
		2014E	2015E
Carnitene growth	-5%	-2%	-2%
EBIT margin	-100bps	-4%	-4%

Source: Standard Chartered Research estimates



Our DCF approach generates a value of HKD 13.4 per share, reflecting 33% potential upside. We present our assumptions below.

Figure 125: Main DCF assumptions

ASSUMPTIONS	
Cost of equity (%)	
Risk free rate (%)	3.80
Beta	0.56
Equity risk premium (%)	8.3
CAPM unleveraged discount rate	8.4
Cost of debt (%)	
Average spread over risk-free rate (%)	4.0
Pre-tax cost of debt (%)	7.8
Average corporate tax rate for company (%)	15.0
Post-tax cost of debt (%)	6.6
Estimated target gearing (net debt/EV) (%)	(30.0)
WACC (%)	9.0
Number of years of explicit estimates	4.0
Middle period duration (yrs)	3.0
No of years to start of terminal period	7.0
Middle period assumptions	
Growth rate (%)	10.0
Operating margin (%)	22.0
Capex/depreciation ratio (x)	200.0
Working capital/ turnover ratio (%)	10.0
Tax rate (%)	17.0
Terminal period assumptions	
Growth rate (%)	4.0
Operating margin (%)	20.0
Capex/depreciation ratio (x)	150.0
Working capital/ turnover ratio (%)	10.0
Tax rate (%)	20.0

Source: Standard Chartered Research estimates



A good franchise for China's blood market opportunity

We think Lee's Pharm has a good franchise in blood forming organs and CCV, which account for 91% of revenue.

Its main drug in blood-forming organs is Sigma-Tau's **Carnitene** (levocarnitine) which mainly treats the many complications of dialysis patients from muscle twitching to low blood pressure. Carnitene accounted for 47% of revenue in 2013.

Dialysis market in China has enormous potential

We highlight that dialysis is a growing market in China. The Lancet estimated that 10.8%, or 120mn Chinese adults, had chronic kidney disease in 2012. Among them, only 12.5% were aware of the disease in 2010, which means the majority of patients do not have the means or knowledge to control the situation. It estimated that 1.5-2mn patients with end-stage renal disease depend on either dialysis or (very expensive) kidney transplants to prolong life. This figure compares with the 260k patients currently receiving dialysis in China.

Figure 126: The five stages of chronic kidney disease

	Stage 1	Stage 2	Stage 3	Stage 4	Stage 5
Description of each stage	Early kidney damage with normal or even increased GFR	Worsening kidney damage with slightly reduced GFR	Moderately reduced GFR	Severely reduced GFR	Kidney failure
Treatment options	Identify cause and try to reverse it	Monitor creatinine level, blood pressure, and general health and well-being. Stop or slow worsening of kidney function	Stop or slow worsening of kidney function. Patients learn more about the disease and treatment options	Plan and create access site for dialysis. Receive assessment of possible kidney transplantation	Start renal replacement therapy; dialysis or kidney transplantation

GFR, the glomerular filtration rate, describes the flow of filtered fluid through kidney

Source: SMERI

The NDRC announced in February 2014 that China will roll out a serious illness insurance plan on a national scale to cover over 50% of medical expenses not covered by existing plans this year. In dialysis, the plan will increase reimbursement coverage to 90% of expenses (from the current 60%). This implies opportunities for dialysis device manufacturers, kidney drug manufacturers (e.g. Consun, NR), and blood and blood-forming organ drugs companies such as Lee's Pharma. We expect the related market to register over 25% p.a. growth in the next five years.

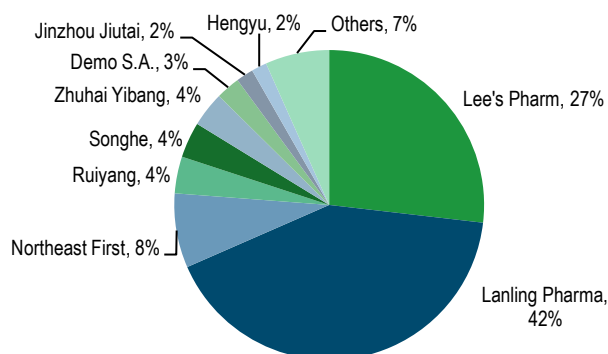
Bright future for Carnitene

Marketed as an 'innovative drug' and sold within an 'exclusive' price bracket in China, Carnitene has registered a 43% revenue CAGR in the past five years. It now occupies one-quarter of the market in Levocarnitine, second after a domestic drug from Lanling. We share management's view that Carnitene could continue to grow over 30% p.a. in the years to come for the following reasons:

- We believe the Levocarnitine oral solution, approved in 2013 as a new form of dosage, will be an important differentiator and a growth driver in 2014-15.
- The company completed clinical phase III tests and filed a New Indication Application for Carnitene to treat chronic heart failure in 2012; if approved, this could significantly boost sales.



Figure 127: Lee's Pharm – Market share in levocarnitine



Source: PICO, Standard Chartered Research

Livaracine may face competitive pressure, but should still grow well

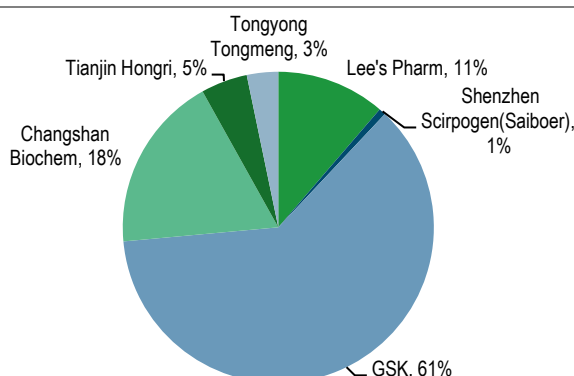
Livaracine (low molecular weight heparin calcium), a proprietary drug mainly used to prevent coagulation during dialysis, accounts for 15% of revenue. Similar to carnitine, it taps into China's dialysis market and has registered a CAGR of 32% in the past five years.

Livaracine occupies about 11% of the low molecular weight heparin market in China, third largest after GSK and Changshan Biotech. Both Lee's Pharma and Changshan have taken market share from GSK over the years. Management remains confident that Livaracine will continue its above-market growth trend. However, we note several downside risks to its target:

- Changshan Biochem has been aggressive in growing low molecular weight heparin calcium sales (up 40% in 2013) to digest its own massive upstream heparin capacity.
- Provincial tenders may not be much of a blessing for Lee's Pharm. Its Livaracine sales slowed significantly in 2011 when the company withdrew from some provincial tenders to maintain its prices; in the current round of provincial tenders, its competitors Changshan, Hongri and Saiboer have been aggressive in their bids in Guangdong and Shandong.

We thus expect 25% sales growth for Livaracine in 2014, slowing from 28% in 2013.

Figure 128: Lee's Pharm – Market share in low molecular weight heparin calcium



Source: PICO



*CCV franchise (9% of sales)
should be boosted by
Zanidip and Remodulin*

Among CCV drugs, management highlighted that **Zanidip** (lercanidipine, an in-licensed patent drug from Recordati) as an example of a drug that with a good sales team could deliver results in the competitive CCV market. Zanidip is a calcium channel blocker used to treat hypertension. It represented 9% of group sales after growing 124% in 2013. Management believes the company has captured less than 0.5% of the addressable market and it expects 60-80% growth in 2014.

The recently approved **Remodulin** (treprostinil sodium), on which Lee's Pharma obtained the sole distribution right in China from United Therapeutics, treats a rare disease called pulmonary arterial hypertension (PAH). It achieved USD 491mn sales in the US in 2013, up 7.2% from 2012, and is expected to continue to grow strongly by United Therapeutics. Lee's Pharm estimates more than 30k people a year suffer from this disease in China, and it could represent a RMB 300mn market.

Slounase may slow further

Growth in **Slounase** (haemocoagulase atrox), which accounts for about 14% of sales, slowed in 2013. Although PICO estimates over 10% p.a. growth in this market, we think the drug could present challenges for Lee's Pharm. First, domestic competition is already strong and has forced out the patent drug maker Valeant in 2012. Second, Slounase lacks an exclusive status in tenders – a privilege that belongs to Beijing Kangcheng's Suling. Slounase has to compete with Fosun (under its subsidiary Auhong) and Nuokang on prices. We expect flat growth for the drug in 2014, followed by a small decline in the next few years.

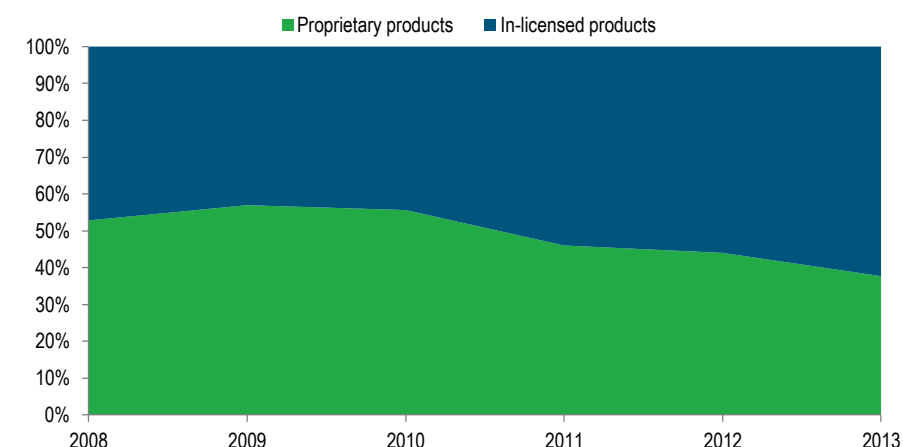


Smart positioning in collaborative R&D

Well positioned for collaborative R&D, in-licensed drugs

In our view, Lee's Pharm has been punching above its weight in R&D, due to its smart positioning and focus on collaborative research since 2007/08. It differs from most domestic companies, which tend to chase first-to-market (FTM) generics using in-house R&D. As a result, Lee's Pharm now has many new drugs at more advanced stages of development than its competitors (phase II clinical trials or beyond). The company expects three new drug approvals in 2014. For a company of its size, this would be a remarkable achievement.

Figure 129: In-licensed products – Rising proportion of Lee Pharma's revenue



Source: Company

Competitive edge in in-licensed drugs

Compared with promoters, we think Lee's Pharm's edge in in-licensed drugs lies in its capability in supporting CFDA registration with clinical trials. It also diligently follows up on existing drugs (via clinical phase IV study) by researching new indications. When the timing is right, it would build up its equity stake to facilitate further collaboration. Most promoters lack know-how and/or a balance sheet to be as deeply involved in the development process of new drugs.

To become an orphan drug leader

Compared with big pharma companies in China, Lee's Pharm smaller size makes it more flexible in exploring niches in orphan drugs and rare diseases. New drugs such as Remodulin or Zingo may not necessarily interest large pharma companies in China, but it could significantly support the growth in Lee's Pharm. The company has a relatively long history of involvement with overseas companies: Italian Sigma Tau built a significant stake in Lee's Pharm in 2004, which represents 25% of its current shares. We think it would be difficult for foreign companies to build up this large a stake in a large China pharma company.

Figure 130: Key proprietary and in-licensed R&D milestones

	2005	2006	2007	2008	2009	2010	2011	2012	2013
Proprietary R&D									
Declotana (Anfibatide)			Clinical phase I					Clinical phase II	
Eyprotor				NDA approval					
Livaracine for new indication		NDA approval							
Slounase	NDA approval								
Yallaferon for new indication		NDA approval							
ZK002						Preclinical			
ZK003									IND application
ZK006					IND application				
ZK007							IND application		
ZK008							IND application		
In-licensed/collaborative R&D									
Trittico						Preclinical	Clinical phase III (registration)	IDL application	
Acetyl-L-Carnitine				Clinical phase III			NDA application		
Dromodos (Pripiony-L-Carnitine)				Clinical phase III		NDA application			
JX-594					Clinical phase II			Clinical phase IIb (global)	
UT-15C							Clinical phase III		
Carnitene for new indication (chronic heart failure)						Clinical phase III		New indication application	
Prulifloxacin								Clinical phase III(registration)	
Rostafuroxin									IND application for clinical phase IIb
Istaroxim									IND application for clinical phase IIb
Gimatecan									IND application for clinical phase III registration
Hyalgan									IND application for clinical phase III registration
Betrixaban									IND application for clinical phase III registration

Source: Company, Standard Chartered Research

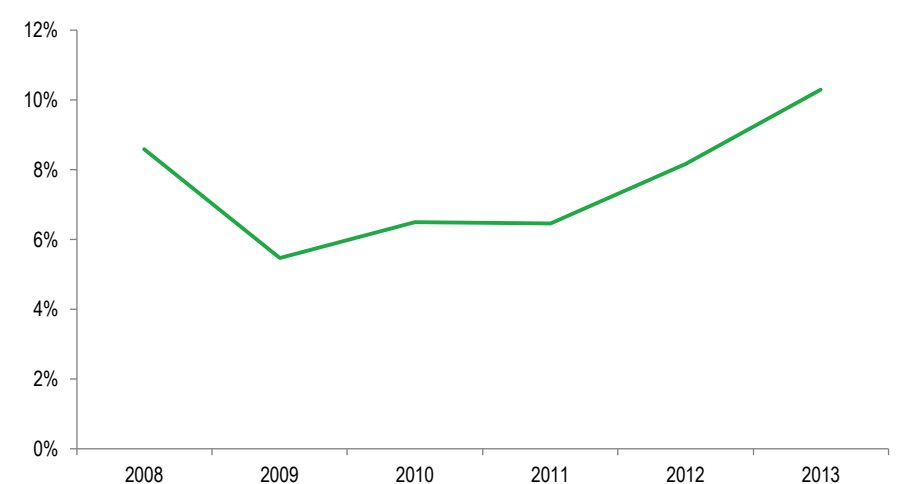


Investment for growth may imply margin pressure

We think Lee's Pharm will continue to invest for growth through R&D and PPE and bolt-on acquisitions. This strategy suggests near-term margin pressure, in our view. We thus model a 2ppt net margin slippage in 2014, which would slow net profit growth to 21% (from 31% in 2013).

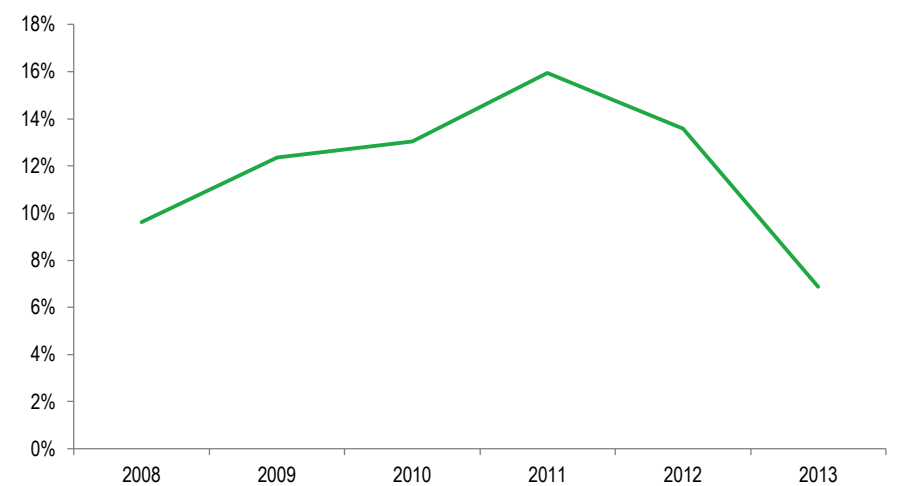
R&D ratio: The chart below shows its R&D ratio – combining expensed and capitalised amounts – on an upward trajectory. We note that its high R&D expenses in 2013 included some one-off write-offs; if new drug developments come to fruition, it should be able to capitalise a higher proportion of R&D in the next few years.

Figure 131: Total R&D as % of sales



Source: Company

Depreciation expense ratio: We believe its depreciation expense ratio will rise over the next two years. Lee's Pharm has significantly increased investment in PPE, mainly in the new GMP-compliant facilities in Anhui and the new R&D capacity in Guangzhou, over recent years. (GMP refers to Good Manufacturing Practices guidelines and regulations that are issued from time to time.) But the majority of these capacity additions are construction in-progress – now 61% of PPE – and have yet to start depreciation. This has resulted in a temporary fall in depreciation expense ratio (as a percentage of fixed assets cost) in 2012-13, which suggests higher depreciation charges in subsequent years.

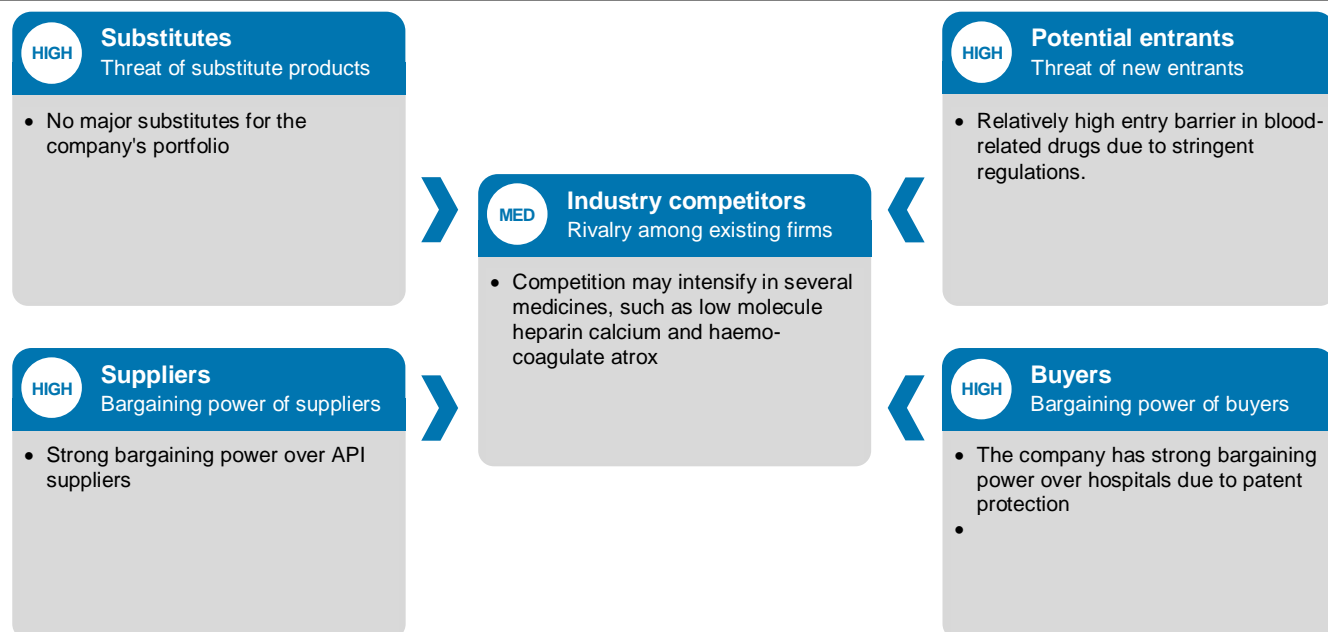
**Figure 132: Depreciation charges as a % of the prior year's fixed assets cost**

Source: Company, Standard Chartered Research

We note that Lee's Pharm is deriving an increasing proportion of sales from in-licensed revenue. Compared with the 70-80% gross margin in proprietary drugs, in-licensed revenue has 50-60% gross margin. Hence, a **change in mix** could result in gross margin pressure. However, management gave assurance that in-licensed products usually have a lower SG&A ratio as they are more established, so it believes the net margins would be comparable.



Figure 133: Porter's five competitive forces model



Adapted from: Porter 1980 p.4
Source: Company, Standard Chartered Research

Figure 134: SWOT analysis

Strengths	Weaknesses
<ul style="list-style-type: none"> Lee's Pharma is strong in conducting collaborative R&D with global partners Its pipeline includes many new drugs in advanced stages of development High-quality management 	<ul style="list-style-type: none"> Lacks diversification as 82% of revenue is from blood-related drugs; faces some margin pressure from R&D and depreciation A relatively small company
Opportunities	Threats
<ul style="list-style-type: none"> Positioned in China's fast-growing blood organ drug market 	<ul style="list-style-type: none"> Some of its competitors are more vertically integrated and could be a threat to Lee's market position; imported drugs may have less favour in regional tenders

Source: Standard Chartered Research



Income statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Sales	534	697	926	1,212	1,571
Gross profit	381	503	653	849	1,100
SG&A	(243)	(301)	(403)	(533)	(691)
Other income	12	11	19	24	31
Other expenses	(16)	(32)	(46)	(61)	(79)
EBIT	134	180	222	279	361
Net interest	(1)	(2)	(2)	(2)	(2)
Associates	0	(2)	(7)	0	2
Other non-operational	0	0	0	0	0
Exceptional items	0	0	0	0	0
Pre-tax profit	133	176	213	277	361
Taxation	(20)	(27)	(32)	(42)	(54)
Minority interests	1	1	2	2	3
Exceptional items after tax	0	0	0	0	0
Net profit	114	150	183	238	310
Net profit adj.	115	153	185	240	312
EBITDA	149	197	252	317	405
EPS (HKD)	0.23	0.28	0.34	0.44	0.58
EPS adj. (HKD)	0.23	0.28	0.33	0.43	0.56
DPS (HKD)	0.06	0.07	0.09	0.12	0.15
Avg fully diluted shares (mn)	508	546	555	555	555

Balance sheet (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Cash	336	381	369	403	482
Short-term investments	0	0	0	0	0
Accounts receivable	71	78	104	136	177
Inventory	64	118	167	222	287
Other current assets	40	65	65	65	65
Total current assets	512	642	704	826	1,010
PP&E	144	278	334	353	349
Intangible assets	131	198	234	281	342
Associates and JVs	0	35	28	28	30
Other long-term assets	10	13	13	13	13
Total long-term assets	285	524	608	675	734
Total assets	797	1,166	1,312	1,501	1,744
Short-term debt	31	69	69	69	69
Accounts payable	29	36	51	69	89
Other current liabilities	112	166	166	166	165
Total current liabilities	173	272	287	304	323
Long-term debt	0	0	0	0	0
Convertible bonds	0	0	0	0	0
Deferred tax	13	15	15	15	15
Other long-term liabilities	17	27	27	27	27
Total long-term liabilities	31	41	41	41	41
Total liabilities	203	314	328	345	364
Shareholders' funds	582	786	920	1,093	1,319
Minority interests	11	66	65	63	61
Total equity	593	852	984	1,156	1,380
Total liabilities and equity	797	1,166	1,312	1,501	1,744
Net debt (cash)	(304)	(312)	(299)	(334)	(412)
Year-end shares (mn)	521	538	538	538	538

Source: Company, Standard Chartered Research estimates

Cash flow statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
EBIT	134	180	222	279	361
Depreciation & amortisation	14	17	30	38	44
Net interest	1	1	(2)	(2)	(2)
Tax paid	(17)	(26)	(32)	(42)	(54)
Changes in working capital	25	(13)	(60)	(70)	(86)
Others	20	27	0	0	0
Cash flow from operations	178	185	159	203	263
Capex	(99)	(146)	(80)	(50)	(30)
Acquisitions & Investments	(48)	(89)	(42)	(55)	(71)
Disposals	28	100	0	0	0
Others	(6)	(13)	0	0	0
Cash flow from investing	(125)	(149)	(122)	(105)	(101)
Dividends	(23)	(33)	(50)	(64)	(84)
Issue of shares	157	5	0	0	0
Change in debt	14	38	0	0	0
Other financing cash flow	(1)	0	0	0	0
Cash flow from financing	147	9	(50)	(64)	(84)
Change in cash	200	46	(12)	34	79
Exchange rate effect	0	0	0	0	0
Free cash flow	79	40	79	153	233

Financial ratios and other

Year-end: Dec	2012	2013	2014E	2015E	2016E
Operating ratios					
Gross margin (%)	71.3	72.2	70.5	70.0	70.0
EBITDA margin (%)	27.8	28.2	27.3	26.1	25.8
EBIT margin (%)	25.1	25.9	24.0	23.0	23.0
Net margin adj. (%)	21.5	21.9	20.0	19.8	19.9
Effective tax rate (%)	15.1	15.4	15.0	15.0	15.0
Sales growth (%)	33.7	30.4	32.9	30.9	29.6
Net income growth (%)	35.6	32.2	21.8	29.7	30.5
EPS growth (%)	27.5	24.5	19.8	29.7	30.5
EPS growth adj. (%)	27.4	23.7	19.5	29.3	30.2
DPS growth (%)	35.2	30.7	23.0	29.7	30.5
Efficiency ratios					
ROE (%)	25.5	22.0	21.5	23.6	25.7
ROCE (%)	28.3	23.8	23.2	25.1	27.6
Asset turnover (x)	0.9	0.7	0.7	0.9	1.0
Op. cash/EBIT (x)	1.3	1.0	0.7	0.7	0.7
Depreciation/capex (x)	0.1	0.1	0.3	0.6	1.2
Inventory days	117.8	171.4	190.1	194.9	197.2
Accounts receivable days	44.3	39.2	35.9	36.2	36.3
Accounts payable days	45.4	61.8	58.8	60.2	60.9
Leverage ratios					
Net gearing (%)	-51.3	-36.6	-30.4	-28.9	-29.9
Debt/capital (%)	5.1	7.8	6.8	5.8	4.9
Interest cover (x)	112.7	97.4	120.0	150.6	195.1
Debt/EBITDA (x)	0.2	0.3	0.3	0.2	0.2
Current ratio (x)	3.0	2.4	2.5	2.7	3.1
Valuation					
EV/sales (x)	3.2	4.3	5.5	4.2	3.2
EV/EBITDA (x)	11.6	15.2	20.3	16.0	12.4
EV/EBIT (x)	12.8	16.6	23.0	18.2	13.8
PER (x)	17.0	21.9	29.6	22.8	17.5
PER adj. (x)	17.1	22.2	30.1	23.3	17.9
PBR (x)	4.7	5.0	5.9	5.0	4.1
Dividend yield (%)	1.4	1.2	0.9	1.2	1.5



Sihuan Pharmaceutical

Better understanding of its franchise

- Sihuan has pole position in CCV, a strong track record in acquisitions, and enhanced R&D capabilities.
- We initiate coverage with an Outperform rating and a price target of HKD 5.90.
- Potential share price catalysts are positive earnings updates and acquisitions.

Pole position in CCV. Sihuan holds the No. 1 position in CCV drugs in China with a 9% market share. Revenue has registered a 56% CAGR (38% organic) in the past five years. We believe the company will sustain 24% p.a. underlying organic revenue growth in 2014-15, supported by a strong portfolio (led by six exclusive drugs), a 'hybrid' sales model, and new wins in provincial tenders.

Acquisition track record. Sihuan has spent RMB 3bn on acquisitions since listing in 2010 and has a good track record in post-acquisition integration. Its acquired companies have more than doubled their sales in the past two years and contributed 57% of group revenue in 2013. Management has indicated that it is keen to add non-CCV, TCM and exclusive drugs to the portfolio.

Improving R&D. Sihuan has been upgrading its R&D pipeline through acquisitions, collaborative and in-house development. Following the recent addition of a diabetes drug and a cancer drug to its research pipeline, Sihuan showed improving R&D capability.

Initiating with an Outperform rating. The stock trades at 17.8x 2015E PER on our above consensus earnings, which is inexpensive, considering its strong CCV franchise, 26% net profit CAGR and 20% average ROE over 2014-15E.

OUTPERFORM (initiating coverage)

PRICE as of 26 Jun 2014

PRICE TARGET

HKD 4.75**HKD 5.90****Bloomberg code**

460 HK

Reuters code

0460.HK

Market cap

HKD 49,229mn (USD 6,351mn)

12-month range

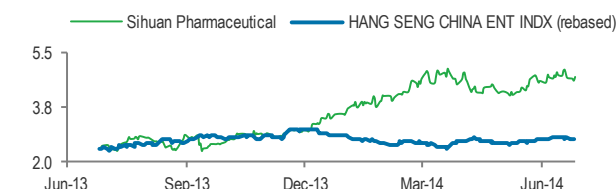
HKD 2.34 - 5.15

EPS adj est change NA

Year-end: December	2013	2014E	2015E	2016E
Sales (RMB mn)	4,733	5,287	6,412	7,931
EBITDA (RMB mn)	1,656	2,101	2,719	3,600
EBIT (RMB mn)	1,462	1,861	2,417	3,228
Pre-tax profit (RMB mn)	1,567	1,967	2,533	3,373
Net profit adj. (RMB mn)	1,316	1,618	2,080	2,764
FCF (RMB mn)	648	792	1,318	1,878
EPS adj. (RMB)	0.13	0.16	0.20	0.27
DPS (RMB)	0.03	0.05	0.06	0.08
Book value/share (RMB)	0.76	0.87	1.01	1.20
EPS growth adj. (%)	45.5	22.8	28.5	32.9
DPS growth (%)	-28.3	45.1	28.7	33.1
EBITDA margin (%)	35.0	39.7	42.4	45.4
EBIT margin (%)	30.9	35.2	37.7	40.7
Net margin adj. (%)	27.8	30.6	32.4	34.9
Div. payout (%)	25.4	29.9	29.9	29.9
Net gearing (%)	-19.4	-18.5	-20.1	-22.8
ROE (%)	17.4	19.0	21.2	24.0
ROCE (%)	18.5	21.2	24.0	27.3
EV/sales (x)	3.9	7.0	5.4	4.3
EV/EBITDA (x)	11.2	17.6	12.8	9.4
PBR (x)	3.7	4.3	3.5	3.0
PER adj. (x)	15.3	23.9	17.8	13.3
Dividend yield (%)	1.6	1.2	1.7	2.2

Source: Company, Standard Chartered Research estimates

Share price performance



Share price (%)	-1 mth	-3 mth	-12 mth
Ordinary shares	-1	1	95
Relative to index	-3	-3	73
Relative to sector	-	-	-
Major shareholder	Plenty Gold (45.9%)		
Free float	44%		
Average turnover (USD)	21,479,827		

Source: Company, FactSet

Su Zhang

+852 3983 8526

Equity Research

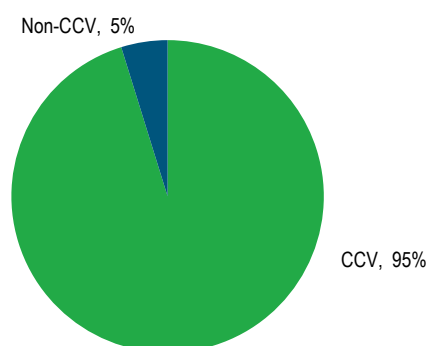
Standard Chartered Bank (HK) Limited



Investment case

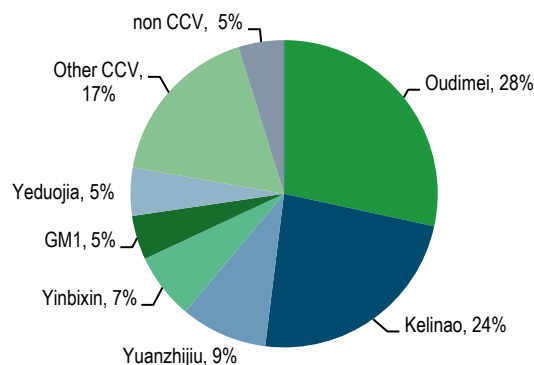
Sihuan Pharma is the largest cerebral-cardiovascular (CCV) drug maker in China. In 2013, it derived 95% of revenue from CCV drugs and 5% from other areas. Its manufacturing and research facilities are in Jilin, Beijing, Shandong and Hainan.

Figure 135: Revenue breakdown by therapeutic area (2013)



Source: Company

Figure 136: Revenue breakdown by drugs (2013)



Source: Company, Standard Chartered Research

A CCV leader and a tender play

Sihuan holds the No 1 position in CCV drugs with a 9.3% market share. The CCV market registered a 19% CAGR in 2009-12, and we expect high-teen growth in the next few years. Sihuan's leadership position is underpinned by a portfolio of six exclusive drugs, which together account for 73% of sales. It launched three of them in 2011-13, and we believe they are likely to be prime beneficiaries of a pick-up in provincial tenders in 2014-15.

After the company registered a 56% revenue CAGR (or 38% organic) in the past five years, we expect its strong portfolio and sales network to continue to support 26% p.a. organic growth in sales revenue in the next two years.

A champion of acquisitive growth

Sihuan has spent over RMB 3bn acquiring products and pipelines since listing in 2010. Acquired products contributed 57% of group revenue in 2013, and 68% of incremental revenue in 2010-13. We believe Sihuan has a good track record in acquisitions, and highlight that its acquired assets have more than doubled their sales in the past two years.

We estimate Sihuan will have over RMB 1.5bn net cash by end-2014 and would get a significant boost in financial firepower should it decide to leverage up its balance sheet. In our view, it has the capacity to make a large purchase or several bolt-on deals in non-CCV, TCM and/or exclusive drugs assets.

Improving R&D pipeline

We rank Sihuan's R&D franchise as second-tier among China pharma groups (see the sector section of this report). Its position pales beside CSPC and Sino Biopharm, but is on par with Fosun (NR) and Lee's Pharm (OP), in our view.

That said, we think its R&D franchise has improved after it added Imiglipitin Dihydrochloride, a DPP-4 inhibitor for type II diabetes, in 2011, and Pirotinib, a second generation pan-HER inhibitor for the treatment of lung cancer and breast cancer, in 2013.



Risks

It is worth noting that Sihuan's CCV portfolio is exposed mainly to supplementary treatment areas such as brain tissue protection and regeneration. Domestic competition is strong in these areas. In particular, CSPC's NBP (butylphthalide) and Fosun's Audejin (deproteinised calf blood) could represent competitive pressure for Sihuan.

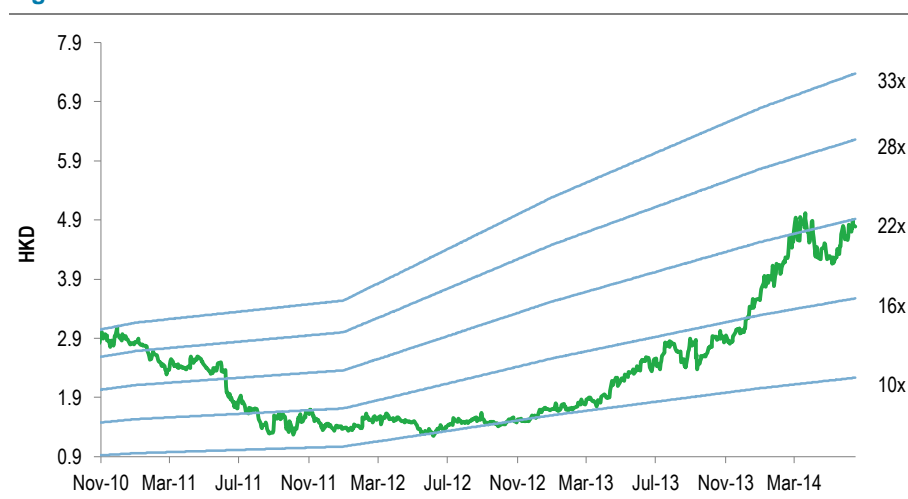
Sihuan has expanded its presence in the fast-growing TCM injection market, which currently accounts for c.12% of revenue, driven mainly by growth in its *Salviae Miltiorrhizae* and *Lingustrazine*. However, lingering concerns in the market relate to price cut risk and safety issues in TCM injections. Management's intention to diversify into TCM oral solutions could make a difference, in our view.



Valuation and risks

Our price target is based on 22x 2015E PER. We believe Sihuan deserves a premium to its mean PER of 19x since listing, as we expect better appreciation of its acquisition track record and R&D franchise. Note that Sihuan de-rated significantly in 2011 after its RMB 2.4bn Dupromise acquisition, and re-rated after benefits of the post-acquisition integration started to show. Sihuan's longer listing history and improving R&D pipeline should work in its favour and we expect this to partially drive re-rating.

Figure 137: PER band



Source: FactSet, Standard Chartered Research

The table below shows we are 5%/3% ahead of consensus on 2014E-15E earnings.

Figure 138: Our estimates versus consensus

	Standard Chartered		Consensus		Ours over consensus	
	2014E	2015E	2014E	2015E	2014E	2015E
Turnover (RMB mn)	5,287	6,412	6,120	7,614	-14%	-16%
EBITDA (RMB mn)	2,102	2,721	2,002	2,476	5%	10%
EBIT (RMB mn)	1,862	2,419	1,835	2,268	1%	7%
Net profit (RMB mn)	1,604	2,066	1,604	1,986	0%	4%
EPS (adj.) (RMB)	0.16	0.20	0.16	0.19	0%	5%

Source: Bloomberg, Standard Chartered Research estimates

We provide below a sensitivity analysis of our earnings estimates.

Figure 139: Sensitivity test

Input items	Change	Net profit	
		2014E	2015E
Oudimei growth	-5%	-1%	-1%
Kelinao growth	-5%	-1%	-1%
EBIT margin	-100bps	-3%	-3%

Source: Standard Chartered Research estimates



We highlight that our target valuation multiple is inexpensive relative to big-cap pharma companies trading in Hong Kong.

Figure 140: Large-cap peers – Valuations

Company	Recommendation	Bloomberg Ticker	Mkt cap (USD mn)	EPS Y/Y Growth (%)		PER		PBR	ROE (%)		PEG
				2014E	2015E	2014E	2015E	2014E	2014E	2015E	2014e
Sihuan	OP	460 HK	6,350.8	22.8	28.5	23.9	17.8	5.5	17.8	19.7	0.9
Sino Biopharm	NR	1177 HK	3,965.0	27.1	17.8	24.1	20.5	4.2	21.3	21.4	1.1
Shanghai Fosun	NR	2196 HK	7,402.4	10.5	16.4	22.7	19.3	2.7	14.1	14.4	1.7
CSPC Pharmaceutical	IL	1093 HK	4,595.9	26.1	28.4	29.6	23.0	4.3	14.0	16.6	1.1

Share prices as of 26 June

Source: Non-rated stock data based on Bloomberg consensus, Standard Chartered Research estimates

Our DCF approach generates a valuation of HKD 6.89 per share, reflecting 47% potential upside to the current share price. We present our key assumptions below.

Figure 141: Main assumptions for DCF

ASSUMPTIONS	
Cost of equity (%)	
Risk free rate (%)	3.80
Beta	0.64
Equity risk premium (%)	8.3
CAPM unleveraged discount rate	9.2
Cost of debt (%)	
Average spread over risk-free rate (%)	4.0
Pre-tax cost of debt (%)	7.8
Average corporate tax rate for company (%)	18.0
Post-tax cost of debt (%)	6.4
Estimated target gearing (net debt/EV) (%)	10.0
WACC (%)	8.9
Number of years of explicit estimates	4.0
middle period duration (yrs)	3.0
No of years to start of terminal period	7.0
Middle period assumptions	
Growth rate (%)	10.0
Operating margin (%)	35.0
Capex/depreciation ratio (x)	200.0
Working capital/ turnover ratio (%)	10.0
Tax rate (%)	18.0
Terminal period assumptions	
Growth rate (%)	4.0
Operating margin (%)	30.0
Capex/depreciation ratio (x)	150.0
Working capital/ turnover ratio (x)	10.0
Tax rate (%)	18.0

Source: Standard Chartered Research estimates



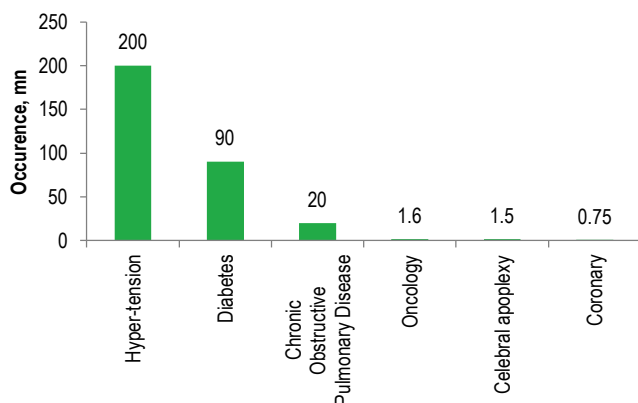
CCV is third-largest therapeutic area by value in China

A domestic leader in CCV

Among demography-driven diseases, cardio-cerebrovascular diseases occur most often in China and contribute significantly to the mortality rate. According to WHO, over 200mn people have hypertension and over 3mn die from CCV diseases in China every year. Unsurprisingly, CCV is now the third-largest therapeutic area in China, accounting for RMB 82bn in hospital purchase value in 2013 (IMS data), a CAGR of 28.6% over 2009-13.

Figure 142: Main demography-driven diseases: occurrence data in China (2010)

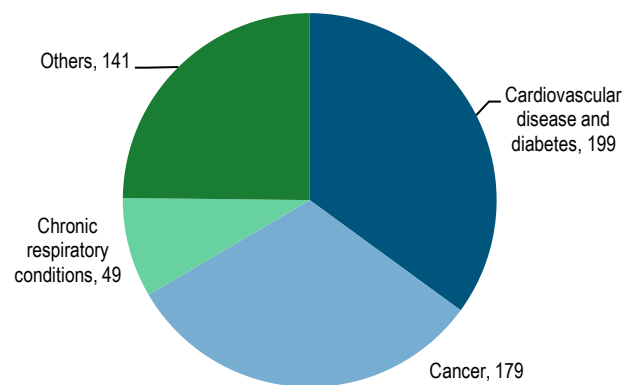
High occurrence in CCV diseases



Source: WHO

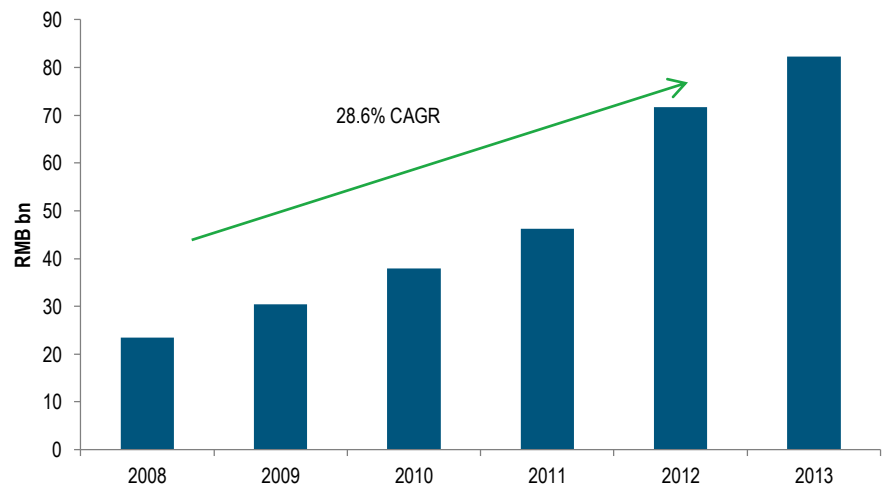
Figure 143: Age-standardised mortality rate by cause, per 100,000 people in China (2008)

CCV and diabetes account for 35% of mortality rate



Source: WHO

Figure 144: China's CCV market (by total hospital purchase value)

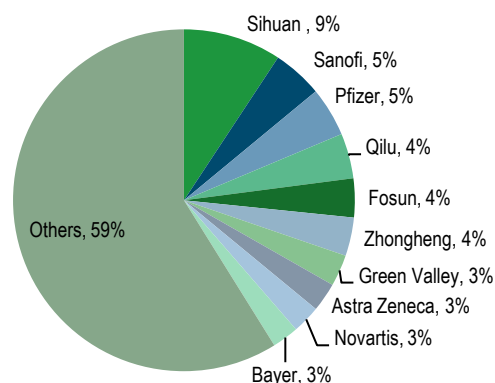


Source: PICO

Sihuan's leading market position in CCVs is underpinned by a portfolio of new, exclusive drugs

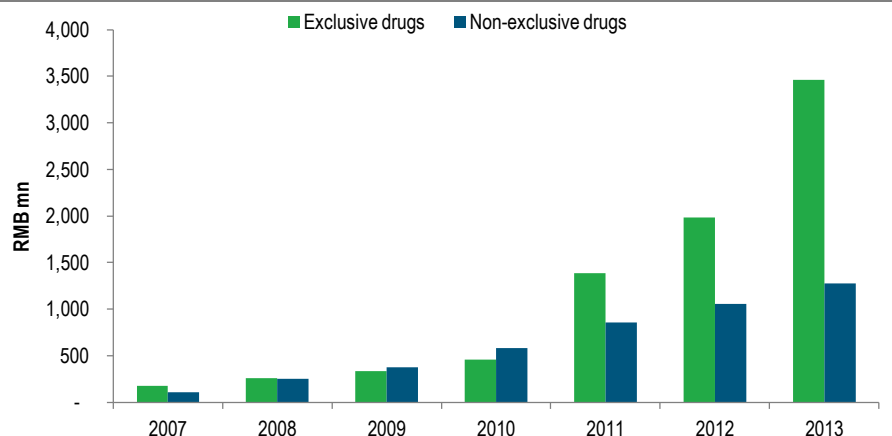
Sihuan holds the No 1 position in CCV drugs by value, and has a 9.3% market share. Its lead position is underpinned by a portfolio of six exclusive CCV drugs, which accounts for 73% of sales. As China's unique tender system favours drugs with 'exclusive' status, we expect Sihuan's portfolio to continue to drive a 25% CAGR in 2014-15 as provincial EDL tenders should step up their pace in these two years.

Figure 145: CCV market (2013)



Source: Sihuan, PICO

Figure 146: Exclusive drugs growth significantly outpace non-exclusive drugs



Source: Sihuan

Oudimei (Carnosine, 28% of sales) enhances the metabolism of heart and brain tissues, and promotes brain neurons regeneration. Sihuan launched the drug in 2011, and plans to enter many more EDL tenders after the ones in Hubei and Xinjiang. Sales of the drug had a 43% CAGR and came to RMB1.3bn in 2013. The company is confident of developing it into a RMB 3-4bn product over time. We expect 20-40% growth over 2014-15.

Kelinao (Cinepazide, 24% of sales) is an FTM drug that protects ischemic tissue. It was developed in a military hospital and acquired by Sihuan. Sihuan entered into tenders in Guangdong and Xinjiang EDL, and could enter Jiangsu, Shanghai, Guangxi and Sichuan EDL in the future. Despite competition from other drugs, Cinepazide is the eighth-largest molecule in China's CCV market in sales terms and we believe it will continue to grow 15-20% p.a. in 2014-15.

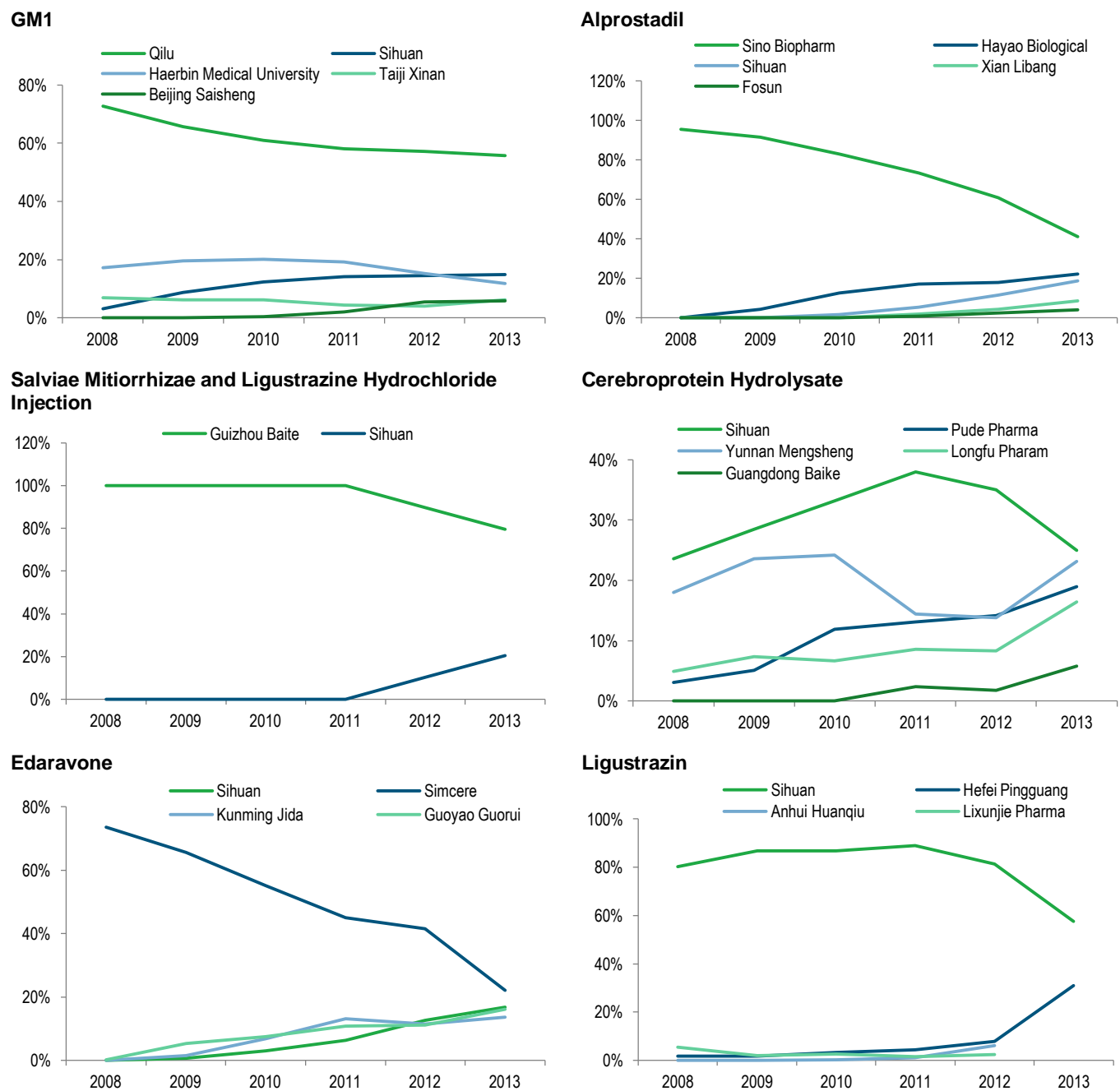
Yuanzhijiu (Troloxerutin and Cerebroprotein Hydrolysate, 9% of sales) treats a variety of CCV diseases. Sihuan launched the drug in 2010, and plans to enter many EDL tenders after the ones in Guangdong and Chongqing. We expect Yuanzhijiu's sales to grow 30% p.a. in 2014-15.

Roxatidine: Sihuan launched this FTM drug for digestive diseases in 2013. It now has won tenders in two provinces and sales are guided by management to grow to over RMB 1bn over time.

Market share gain in non-exclusive drugs

Sihuan has aggressively carved out a market share in most non-exclusive drugs in CCV, except Qu'ao (Cerebroprotein Hydrolysate) and Chuanqing (Ligustrazine).

Figure 147: Non-exclusive CCV drugs – Companies' market shares



Source: PICO



Unique sales model

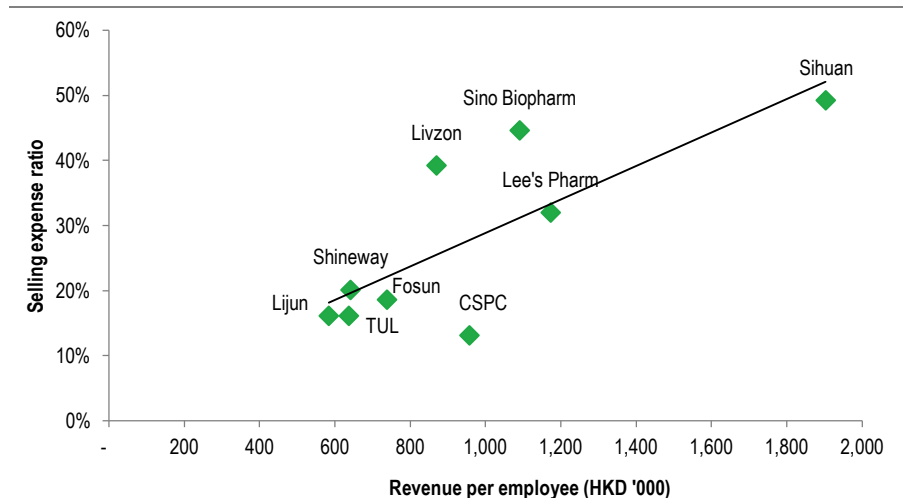
We believe Sihuan's unique hybrid sales network is a key differentiator against competitors. This has allowed the company to outsell competitors with comparable portfolios and stronger R&D capabilities.

Some key characteristics of Sihuan's sales and marketing model:

- Over 600-strong sales staff in charge of academic promotion, marketing and managing its 3,000 independent distributors, which in turn manage about 6,000 sales representatives.
- Unlike a completely outsourced model (Wuzhou Zhongheng, Sihuan's model allows better control of the main value-added parts in the sales channel, such as academic promotion and bidding activity.
- Compared to a direct distribution model such as those of Sino Biopharm and CSPC (IL), where pharma companies directly control 3,000-5,000 sales staff, Sihuan's model provides better incentives for distributors and staff, and leverages distributors' local resources and intelligence, and at the same time, buffers the company from the many regulatory risks to which a direct distribution model would be exposed.

Consequently, Sihuan has the highest sales per staff member among Hong Kong listed pharma names, and its selling expense ratio is comparable with peers such as Sino Biopharm (see below). This showcases the efficiency of Sihuan's sales network, in our view.

Figure 148: Peer comp – Revenue per employee vs. selling expense ratio



Source: Bloomberg

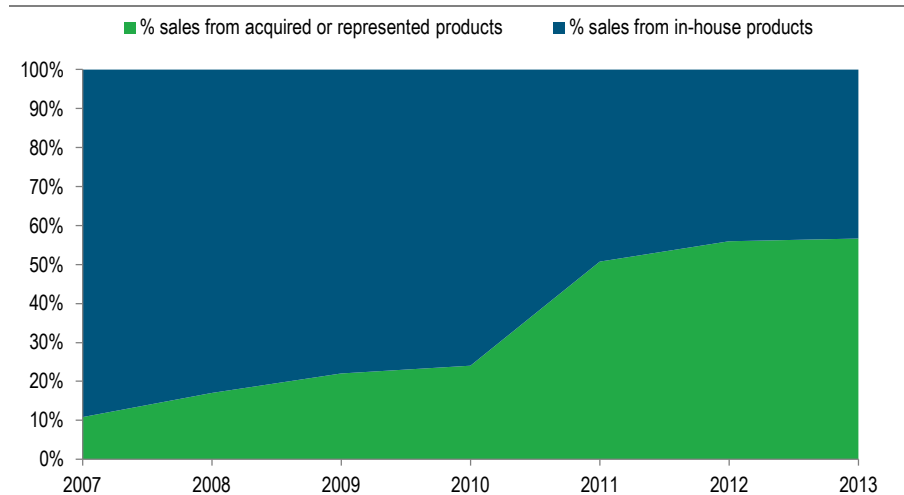


A champion of acquisitive growth

Sihuan rolled out a clear acquisitive strategy to improve its drugs portfolio and pipeline. We estimate it has spent over RMB 3bn on acquisition since listing in 2010. As a result, acquired products contributed 57% of revenue in 2013, and accounted for 68% of incremental revenue in 2011-13, by our estimates.

Figure 149: Acquired vs. in-house products – Revenue breakdown

Over 50% of revenue came from acquired or represented products



Source: Company

With hindsight, the Dupromise acquisition was a good move

The highlight of its acquisitive strategy was the RMB 2.4bn purchase of Dupromise in 2010, which brought in potential big hitters such as Oudimei, Yuanzhijiu and Yeduoqia. The deal had a multiple of 3x forward EV/sales, which looked hefty at the time. However, Oudimei, launched only in 2011, already doubled its sales over 2011-13 to become company's top-selling drug. It grossed RMB 1.3bn revenue in 2013, thanks to Sihuan's strong sales platform. In hindsight, we think this acquisition was fairly valued and well executed.

Figure 150: Sihuan – Acquisition record

Date	Company	Main products	Interest	Proceeds	EV/sales-trailing	EV/sales-forward	PER-trailing
2008/2012	Shandong Xuanzhu	R&D centre	60%, later 100%	144			
2010	Benxi Leilong	Yimaininig	100%	20-50?			
Nov-10	Dupromise Holding	Yuanzhijiu	100%	2,400	16.0	3.1	
		Odimei					
		Yeduoqia					
Jan-11	Changchun Xiangtong	Augan; Xiangtong	80%	141	2.7	1.2	14.6
Jun-11	Vinise Pharma, Hainan Litzman	Breviscapine and sodium chloride	100%	775	8.6	1.9	
		Freeze-dried powder					
		Salivae Miltiorrhizae					
Jul-11	Disposal of 50% stake in Vinise pharma to Shandong Buchang		(50%)	(638)			
Oct-12	KBP Biosensors	R&D centre	40%	47			

Source: Company, Standard Chartered Research

Changchun and Vinise add decent TCM exposure

The acquisition of Changchun Xiangtong and Vinise Pharma in 2011 helped the company gain exposure to the TCM market, which has grown quickly in recent years.

TCM is one of China's fastest-growing pharma segments, with a CAGR of 27% over 2008-12, surpassing the sector average by 4% p.a. Sihuan's TCM drugs (mainly *Salviae Miltiorrhizae* and *Ligustrazine*) more than doubled their sales since acquisition to 2013. We estimate that TCM accounted for over 12% of its CCV sales in 2013.

Future acquisitions to focus on non-CCV and TCM

We estimate Sihuan has over RMB 1.5bn net cash in 2014, which could boost its financial firepower significantly should it decide to leverage up its balance sheet. This capacity should allow one fairly large purchase (for instance, a big hitter with over RMB 1bn sales a year) or several bolt-on deals, in our view. Management plans to focus future acquisitions on (1) non-CCV drugs to increase product diversity; (2) TCM for oral solutions to diversify away from injections; and (c) exclusive drugs. We believe this set of criteria is sensible as they help address the company's growth headroom and its lack of diversification issue. With its positive track record, we believe the market will welcome acquisition news flow from Sihuan.

Improving R&D pipeline

Compared with peers, Sihuan has focused on acquiring drugs to save R&D time. We believe that it will continue to emphasise acquisitions, but will also rely on collaborative research to support its R&D pipeline. Among HK-listed pharma companies, Sihuan's pipeline of class 1 innovative drugs may pale in comparison with CSPC (OP) and Sino Biopharm, but is on par with players such as Fosun and Lee's Pharm (OP), in our view.

Figure 151: Sihuan – R&D pipeline

	TA	Characteristics	Clinical Trials					Registration pending	Expected time to market	
			Pre-clinical trials	Registration application	Phase I	Phase II	Phase III			
Innovative drugs										
CicloMulsion(collaboration with NeuroVive)	CCV	Class 1 New drug								2016
L - Phencynonate Hydrochloride 左旋盐酸苯环壬酯	CCV	Class 1.3 Innovative drug								2015
NeroStat (collaborating with NeuroVive)	CCV	Class 1 New drug								2017
Cinepazide Mesilate 甲磺酸桂哌齐特	CCV	Class 4 Innovative drug								2015
Imiglitin Dihydrochloride 盐酸依格列汀 (DPP4 inhibitor)	Metabolism	Class 1.1 Innovative drug								2018
Benapenem 百纳培南	Anti-infective	Class 1.1 Innovative drug								2017
Anaprazole Sodium 安纳拉唑钠	Digestive	Class 1.1 Innovative drug								2019
Pirotinib 哌罗替尼	Oncology	Class 1.1 Innovative drug								
Generic drugs										
Levetiracetam injection 左乙拉西坦注射液	CNS	Class 3.1 generic drug								2014-2015
Lacosamide 拉克酰胺	CNS	Class 3.1 generic drug								2015
Aprepitant 阿瑞皮坦	CNS	Class 3.1 generic drug								2015

Source: Company

Sihuan has eight innovative drugs (including six proprietary ones) and 17 generics under development. Among them, **Cinepazide Mesilate** is aimed at complementing Sihuan's current offering in Cinepazide Maleate, under Kelinao (FTM) and Anjieli (a different dosage form from Kelinao), and could reach over RMB 1bn sales, according to management. Cinepazide is Sihuan's second-largest selling molecule with RMB 1.3bn sales in 2013. It could face growing competition in generics, such as from Qilu, Shuanghe, and Northeast Pharma, which could be launched in the next few years. Sihuan is one of the two companies developing Cinepazide Mesilate, an improved form of Cinepazide Maleate. Management expects to launch the product in 2015, and anticipates this will help Sihuan maintain its leading position in the market.



A high-profile drug under development is **Imiglipitin Dihydrochloride**, a DPP-4 inhibitor (gliptin class) that treats type II diabetes. Gliptins are oral anti-diabetes drugs that enhance the natural body system (incretin system), and are more effective than existing drugs (Metaform, Pioglitazone) in lowering the blood sugar level. The FDA has approved a large number of gliptins since 2006. Among them, Merck's Januvia (Sitagliptin) grossed USD 4bn revenue in 2013 and is the 17th top-selling drug globally. Sihuan commenced the phase I trial in October 2013 and plans to launch the drug in 2018.

Another recent high-profile addition is **Pirotinib**, a second-generation pan-HER inhibitor for the treatment of lung cancer and breast cancer. The drug aims to be an improvement of AstraZeneca's Iressa (Gefitinib) and Astellas' Tarceva (Erlotinib), are the main new drugs treating lung cancers today. Iressa sold USD 647mn in 2013, showcasing the commercial potential of this category.

Within the generic pipeline, Sihuan expects **Levetiracetam** injections to be FTM in 2014-15. The drug treats epilepsy and could complement Sichuan's Ren'ao (Oxabazepine) in Central Nervous System (CNS) drugs. Levetiracetam achieved its peak sales of USD 1.2bn globally in 2009.

In collaborative research, Sihuan developed two drugs with NeuroVive, a Sweden-listed R&D house. NeuroVive is conducting a multinational phase III trial on **CicloMulsion**, a cyclophilin inhibitor to treat reperfusion injury coincident with myocardial infarction. Depending on the outcome of the study, CicloMulsion could be launched in 2016. **NeuroSTAT** is another cyclophilin inhibitor to treat traumatic brain damage. It is undergoing a phase IIa trial in Denmark and is slated for launch in 2017, pending favourable test results. Both drugs are aimed at markets which have little competition from domestic players, according to management.

Main assumptions in our models

Sihuan has had a 56% revenue CAGR (or 38% organic) in the past five years. We expect this strong portfolio to drive 24% p.a. underlying organic growth in sales revenue in the next two years.

We list our assumptions for the main products below.

Figure 152: Products – Main growth assumptions*

	2008	2009	2010	2011	2012	2013	2014E	2015E	2016E
CCV									
Odimei					6%	93%	20%	5%	20%
Kelinao	46%	28%	38%	16%	23%	72%	2%	30%	20%
GM1			189%	118%	51%	1%	5%	5%	5%
Yimaininig				1460%	102%	55%	10%	20%	20%
Yuanzhiju					334%	20%	5%	30%	30%
Danshen chuanxiongqin					775%	84%	10%	30%	20%
Yinbixin					119%	60%	30%	30%	20%
Yeduojia					188%	226%	30%	50%	30%
non-CCV									
Luoanming					65%	25%	20%	20%	20%
Roxatidine								500%	400%

*Growth has taken into account the change of invoicing methods in 2014/15e

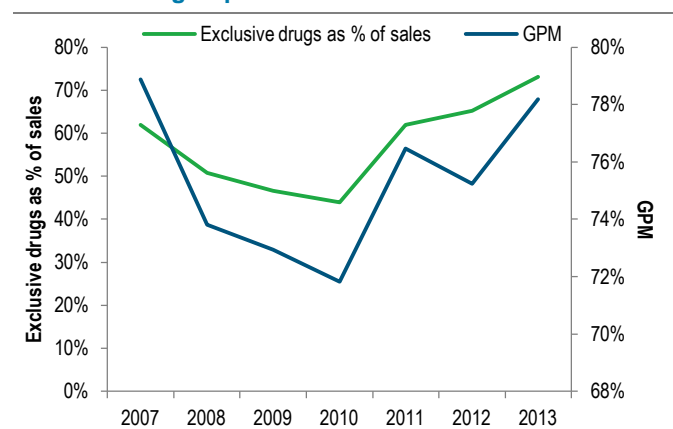
Source: Company, Standard Chartered Research estimates



We note that Sihuan's margins are difficult to model for the following reasons:

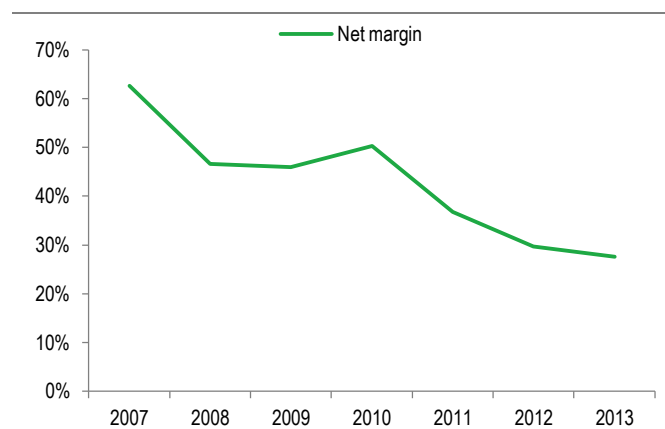
- The acquisition in 2010-11 resulted in higher gross margin (with the addition of exclusive products) but lower net margin (due to a need to invest in sales and marketing).
- A change in invoicing method for certain products has made the selling expense ratio volatile; this involved a move from a 'low invoice value, low distributor rebate' model to 'high invoice value, high distributor rebate' in 2011, and a return to the former model in 2014-15. Such changes boosted invoiced sales growth in 2011 but should lower invoiced sales growth below the underlying sales level in 2014E-15E.
- After the 2010 acquisition, Sihuan started to book a Jilin government subsidy, which is essentially a VAT and income tax rebate for its local operation, under 'other income'. We assume a chunk of such income will be sustainable, according to company guidance.

Figure 153: Sihuan – Gross margin vs. exclusive drug sales as % of group revenue



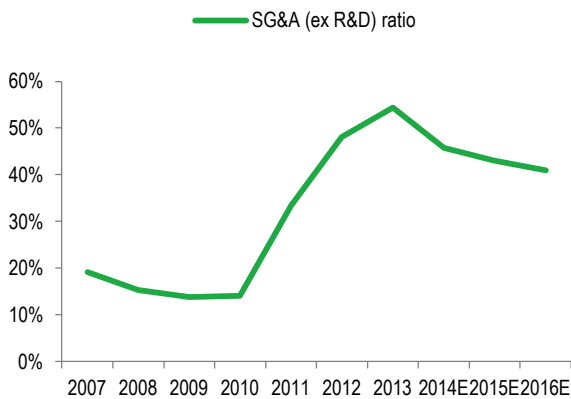
Source: Company

Figure 154: Sihuan – Group net margin trend

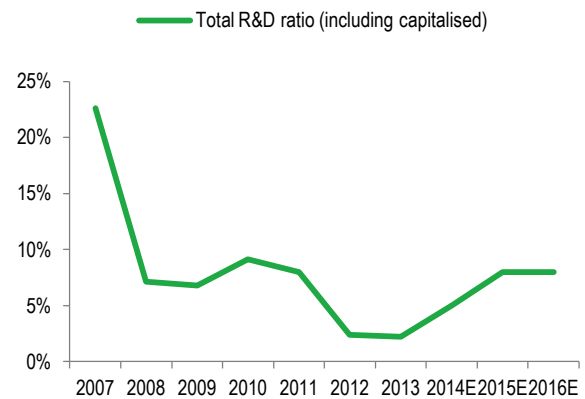


Source: Company

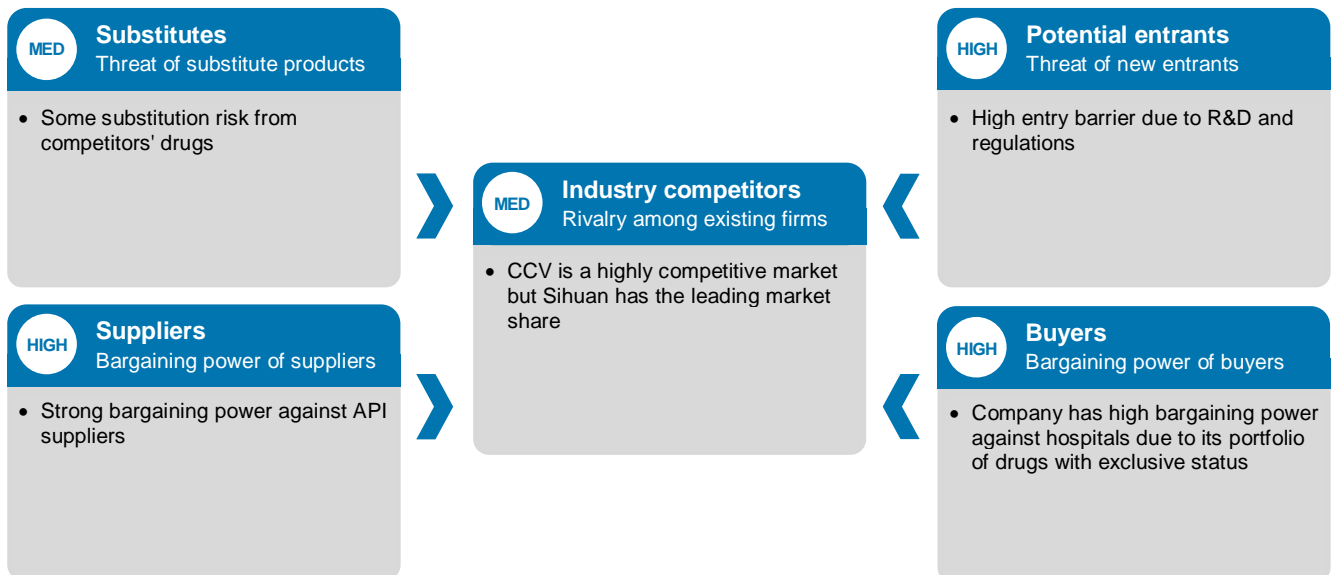
We model a higher net margin of 30%/32% in 2014/15 (versus 28% in 2013). We believe Sihuan will be able to regain its low selling expense ratio of 2011 after changing its invoicing method. However, this could be partially neutralised by lower 'other income' after removing one-off items, a mean reversion in the R&D ratio and higher depreciation expenses. That said, we take a view that Sihuan's underlying profitability will improve in 2014-15, reflecting economies of scale as its existing portfolio continues to deliver strong growth.

**Figure 155: Sihuan – SG&A (ex R&D) ratio***Change of invoicing methods should lower SG&A ratio*

Source: Company, Standard Chartered Research estimates

Figure 156: Sihuan – R&D ratio*R&D ratio should rise as its pipeline strengthens*

Source: Company, Standard Chartered Research estimates

Figure 157: Porter's five competitive forces modelAdapted from: Porter 1980 p.4
Source: Company, Standard Chartered Research**Figure 158: SWOT analysis**

Strengths	Weaknesses
<ul style="list-style-type: none"> Sihuan is strong in promoting its portfolio in the hospital channel and making acquisitions 	<ul style="list-style-type: none"> It lacks diversity outside of CCV
Opportunities	Threats
<ul style="list-style-type: none"> New acquisitions in TCM may enrich Sihuan's offerings 	<ul style="list-style-type: none"> CCV segment has many strong competitors

Source: Standard Chartered Research

Income statement (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Sales	3,043	4,733	5,287	6,412	7,931
Gross profit	2,289	3,700	4,150	5,065	6,345
SG&A	(1,519)	(2,656)	(2,590)	(3,013)	(3,569)
Other income	277	419	302	366	452
Other expenses	0	0	0	0	0
EBIT	1,048	1,462	1,861	2,417	3,228
Net interest	124	112	105	114	142
Associates	(6)	(7)	1	2	2
Other non-operational	0	0	0	0	0
Exceptional items	0	0	0	0	0
Pre-tax profit	1,166	1,567	1,967	2,533	3,373
Taxation	(244)	(257)	(354)	(456)	(607)
Minority interests	(17)	(7)	(9)	(11)	(15)
Exceptional items after tax	0	0	0	0	0
Net profit	904	1,303	1,604	2,066	2,751
Net profit adj.	902	1,316	1,618	2,080	2,764
EBITDA	1,179	1,656	2,101	2,719	3,600
EPS (RMB)	0.09	0.13	0.15	0.20	0.27
EPS adj. (RMB)	0.09	0.13	0.16	0.20	0.27
DPS (RMB)	0.04	0.03	0.05	0.06	0.08
Avg fully diluted shares (mn)	10,350	10,378	10,385	10,392	10,392

Balance sheet (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Cash	2,442	1,742	1,878	2,320	3,056
Short-term investments	718	776	776	776	776
Accounts receivable	769	1,398	1,480	1,667	2,062
Inventory	91	101	114	135	159
Other current assets	0	0	0	0	0
Total current assets	4,021	4,017	4,248	4,898	6,052
PP&E	1,090	1,780	2,510	3,196	3,838
Intangible assets	3,735	2,881	2,986	3,155	3,358
Associates and JVs	41	34	35	37	39
Other long-term assets	573	1,300	1,300	1,300	1,300
Total long-term assets	5,438	5,995	6,831	7,688	8,536
Total assets	9,459	10,012	11,079	12,586	14,588
Short-term debt	767	181	181	181	181
Accounts payable	214	479	398	431	476
Other current liabilities	869	1,145	1,145	1,145	1,145
Total current liabilities	1,850	1,804	1,723	1,756	1,801
Long-term debt	6	6	6	6	6
Convertible bonds	0	0	0	0	0
Deferred tax	209	141	141	141	141
Other long-term liabilities	207	63	63	63	63
Total long-term liabilities	422	210	210	210	210
Total liabilities	2,272	2,014	1,933	1,966	2,011
Shareholders' funds	7,084	7,882	9,022	10,484	12,426
Minority interests	103	115	124	135	150
Total equity	7,187	7,998	9,146	10,620	12,577
Total liabilities and equity	9,459	10,012	11,079	12,586	14,588
Net debt (cash)	(1,669)	(1,555)	(1,692)	(2,134)	(2,869)
Year-end shares (mn)	10,350	10,350	10,364	10,364	10,364

Source: Company, Standard Chartered Research estimates

Cash flow statement (RMB mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
EBIT	1,048	1,462	1,861	2,417	3,228
Depreciation & amortisation	131	194	239	301	371
Net interest	124	87	105	114	142
Tax paid	(238)	(290)	(354)	(456)	(607)
Changes in working capital	98	98	(176)	(175)	(374)
Others	1	29	17	17	17
Cash flow from operations	1,165	1,581	1,692	2,218	2,778
Capex	(612)	(933)	(900)	(900)	(900)
Acquisitions & Investments	(2,207)	(1,028)	(174)	(256)	(317)
Disposals	4	1	0	0	0
Others	(73)	1,382	0	0	0
Cash flow from investing	(2,888)	(578)	(1,074)	(1,156)	(1,217)
Dividends	(662)	(523)	(481)	(620)	(825)
Issue of shares	0	0	0	0	0
Change in debt	767	(523)	0	0	0
Other financing cash flow	4	(3)	0	0	0
Cash flow from financing	109	(1,049)	(481)	(620)	(825)
Change in cash	(1,614)	(46)	137	442	735
Exchange rate effect	0	(7)	0	0	0
Free cash flow	553	648	792	1,318	1,878

Financial ratios and other

Year-end: Dec	2012	2013	2014E	2015E	2016E
Operating ratios					
Gross margin (%)	75.2	78.2	78.5	79.0	80.0
EBITDA margin (%)	38.8	35.0	39.7	42.4	45.4
EBIT margin (%)	34.4	30.9	35.2	37.7	40.7
Net margin adj. (%)	29.7	27.8	30.6	32.4	34.9
Effective tax rate (%)	20.9	16.4	18.0	18.0	18.0
Sales growth (%)	35.7	55.6	11.7	21.3	23.7
Net income growth (%)	9.8	44.1	23.1	28.8	33.1
EPS growth (%)	10.0	44.1	23.0	28.7	33.1
EPS growth adj. (%)	9.5	45.5	22.8	28.5	32.9
DPS growth (%)	102.5	-28.3	45.1	28.7	33.1
Efficiency ratios					
ROE (%)	12.9	17.4	19.0	21.2	24.0
ROCE (%)	14.2	18.5	21.2	24.0	27.3
Asset turnover (x)	0.3	0.5	0.5	0.5	0.6
Op. cash/EBIT (x)	1.1	1.1	0.9	0.9	0.9
Depreciation/capex (x)	0.1	0.0	0.2	0.2	0.3
Inventory days	36.1	34.1	34.5	33.7	33.7
Accounts receivable days	89.2	83.6	99.4	89.6	85.8
Accounts payable days	82.5	122.5	140.8	112.3	104.3
Leverage ratios					
Net gearing (%)	-23.2	-19.4	-18.5	-20.1	-22.8
Debt/capital (%)	10.2	2.3	2.0	1.7	1.5
Interest cover (x)	390.5	169.5	221.5	287.8	384.3
Debt/EBITDA (x)	0.3	0.3	0.1	0.1	0.1
Current ratio (x)	2.2	2.2	2.5	2.8	3.4
Valuation					
EV/sales (x)	3.2	3.9	7.0	5.4	4.3
EV/EBITDA (x)	8.2	11.2	17.6	12.8	9.4
EV/EBIT (x)	9.2	12.7	19.8	14.4	10.5
PER (x)	13.3	15.5	24.0	17.9	13.3
PER adj. (x)	13.4	15.3	23.9	17.8	13.3
PBR (x)	1.9	3.7	4.3	3.5	3.0
Dividend yield (%)	3.8	1.6	1.2	1.7	2.2



The United Laboratories International

Recovering from cashless growth

- China's antibiotics curbs have hurt The United Laboratories (TUL), as has its own cash-consuming expansion; however, we expect a recovery in FCF and lower gearing in 2014-16.
- We see improving visibility in antibiotics and expect a tailwind for provincial tenders of its diabetes drugs. We take comfort in management's assurance that it will protect margins with greater vertical integration.
- We forecast a 25% CAGR in adjusted net profit over 2014-15 as TUL deleverages its balance sheet. We initiate coverage with an Outperform rating.

Greater visibility in antibiotics. TUL derives three-fourths of its operating profit from antibiotics. We expect stabilising end demand and normalising utilisation to help TUL to regain growth in this segment. Vertical integration should also protect margins in end products (Amoxicillin and Ampicillins).

Appreciation of diabetes franchise. We believe provincial tenders in 2014 will lead China hospitals to recognise TUL's new diabetes franchise in recombinant human insulin. First marketed in 2011, its diabetes drugs account for only 3% of profit but we expect this to reach 16% by 2017, supported by a strong pipeline.

Potential removal of debt overhang. We expect the company to lower its gearing level in 2014 and FCF to trend upwards in 2015. Our numbers do not integrate the potential disposal of a piece of land in Chengdu, recently valued at HKD 2.3bn; its disposal could greatly reduce the company's leverage.

Initiating with OP and PT of HKD 6.70. We value the stock at 18x 2015E PER, on our above-consensus earnings estimate. Potential share price catalysts: (1) It obtains a production licence for third-generation human insulin; (2) news flow on the disposal plan for its land in Chengdu; and (3) updates of its insulin development pipeline.

OUTPERFORM (initiating coverage)

PRICE as of 26 Jun 2014

PRICE TARGET

HKD 5.07**HKD 6.70****Bloomberg code**

3933 HK

Reuters code

3933.HK

Market cap

HKD 8,248mn (USD 1,064mn)

12-month range

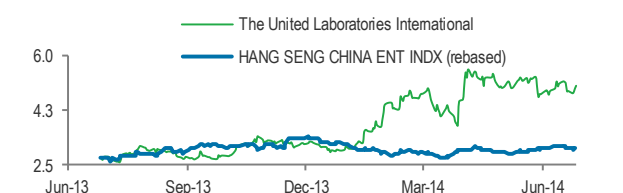
HKD 2.55 - 5.85

EPS adj est change NA

Year-end: December	2013	2014E	2015E	2016E
Sales (HKD mn)	7,648	8,581	9,382	10,446
EBITDA (HKD mn)	1,318	1,616	1,939	2,317
EBIT (HKD mn)	743	873	1,068	1,309
Pre-tax profit (HKD mn)	901	1,035	800	1,028
Net profit adj. (HKD mn)	392	495	614	784
FCF (HKD mn)	(982)	(609)	42	900
EPS adj. (HKD)	0.24	0.30	0.37	0.48
DPS (HKD)	0.00	0.00	0.00	0.14
Book value/share (HKD)	3.98	4.46	4.83	5.16
EPS growth adj. (%)	100.4	26.1	24.2	27.7
DPS growth (%)	-	-	-	nm
EBITDA margin (%)	17.2	18.8	20.7	22.2
EBIT margin (%)	9.7	10.2	11.4	12.5
Net margin adj. (%)	5.1	5.8	6.5	7.5
Div. payout (%)	0.0	0.0	0.0	30.0
Net gearing (%)	88.8	82.2	75.4	62.6
ROE (%)	0.8	11.3	7.9	9.5
ROCE (%)	8.7	8.6	9.9	11.5
EV/sales (x)	1.4	1.7	1.5	1.3
EV/EBITDA (x)	7.9	8.8	7.3	5.8
PBR (x)	0.8	1.1	1.0	1.0
PER adj. (x)	13.3	16.9	13.6	10.6
Dividend yield (%)	0.0	0.0	0.0	2.8

Source: Company, Standard Chartered Research estimates

Share price performance



Share price (%)	-1 mth	-3 mth	-12 mth
Ordinary shares	-5	32	87
Relative to index	-7	26	66
Relative to sector	-	-	-
Major shareholder	The Choy Family (73.3%)		
Free float	27%		
Average turnover (USD)	3,154,313		

Source: Company, FactSet

Su Zhang

+852 3983 8526

Equity Research

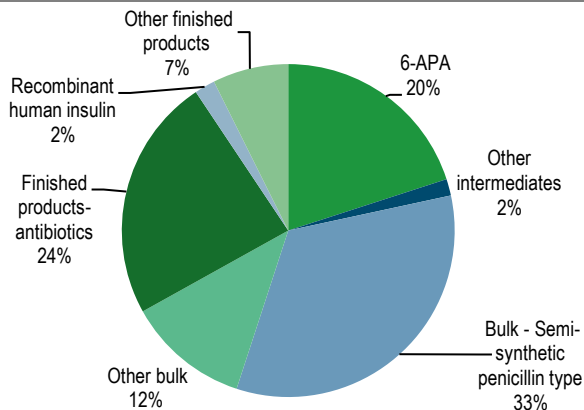
Standard Chartered Bank (HK) Limited



Investment case

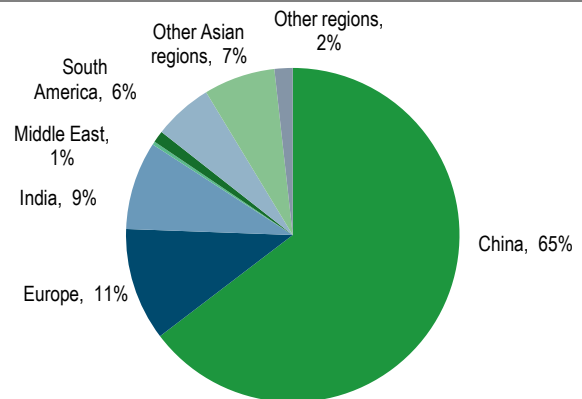
TUL is one of China's largest manufacturers of antibiotic drugs and it recently built a franchise in diabetes drugs. Its manufacturing bases are in Guangdong, Sichuan and Inner Mongolia, all of which have GMP certification. TUL derived 33% of revenue from finished products, 45% from bulk, and 22% from intermediates in 2013. The China market accounts for 65% of sales, and 35% came from overseas last year.

Figure 159: Revenue breakdown by product (2013)



Source: Company

Figure 160: Revenue breakdown by region (2013)

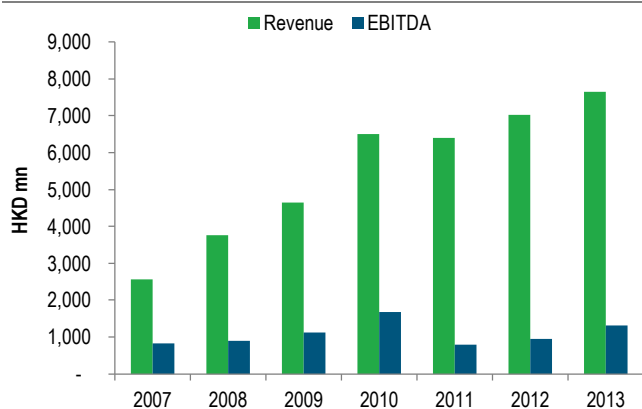


Source: Company

Main reason for past weak performance

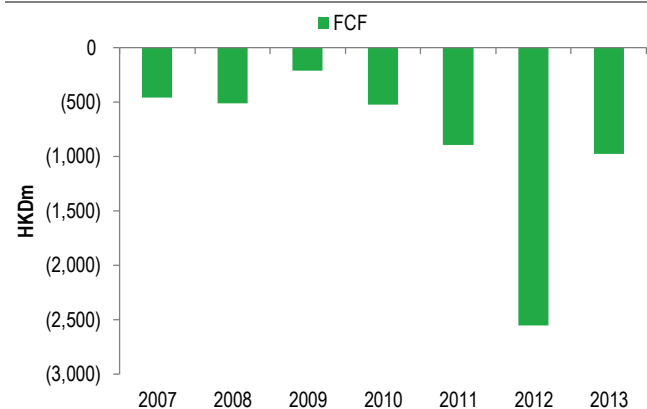
Before building our investment case, we discuss what has held back TUL's performance: we cite its record of cashless growth. While TUL focused on building the top line rapidly, free cash flow stayed negative (see the charts below). Unsurprisingly, this led to a continual rise in gearing. Since listing, it has tapped the market to raise HKD 2.7bn of capital, compared with the HKD 1bn in dividends that it returned to investors.

Figure 161: Revenue and EBITDA



Source: Company, Standard Chartered Research

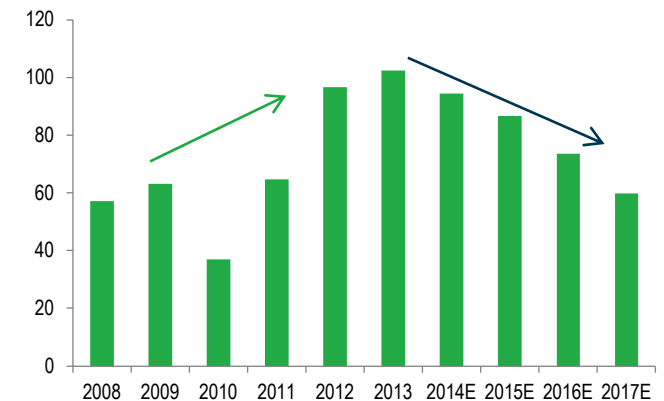
Figure 162: FCF



Source: Company, Standard Chartered Research

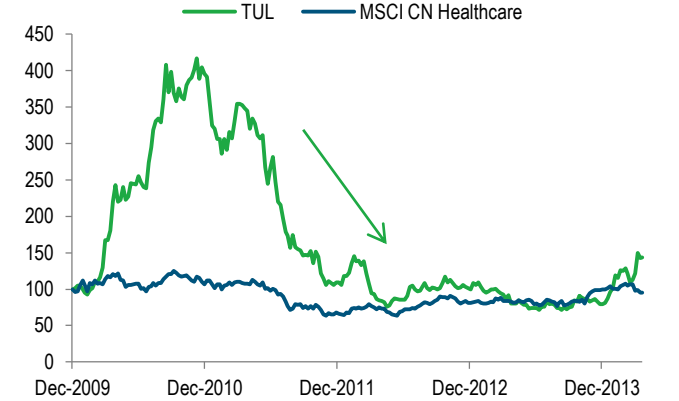


Figure 163: TUL – Net gearing ratio (ex-pledged cash)



Source: Company, Standard Chartered Research estimates

Figure 164: TUL vs. the index



Source: Bloomberg

The following are main reasons why we think it could rerate in the next few years:

Recovering from cashless growth

(1) Nearing the end of investment cycle

In its antibiotics business (75% of operating profit), we believe TUL is nearing the end of its investment cycle, and should start to extract better returns from this investment.

- As the world's largest manufacturer of 6-APA (an intermediate for making penicillin type antibiotics), it controls over 50% of global capacity, hence it should have no need for further investment.
- We share management's view that TUL's large scale and strong vertical integration help protect margins in end products (Amoxicillin and Ampicillins).
- Since late 2013, end demand in antibiotics appears to have stabilised, with stable prices and single-digit volume growth, reflecting the fading effect of the curbs on antibiotics and tight supply on stricter environmental regulations.

(2) New provincial tender cycle

We believe the new provincial tender cycle will provide a tailwind for TUL's new diabetes franchise.

- TUL has not fully benefited from the last provincial tender cycle (2009-12) – it launched its first human recombinant insulin only in 2011
- It is on track to lead China companies with the launch of a third-generation insulin (insulin glargine) product in 2015, secured by a healthy pipeline of new drugs.
- We expect TUL to obtain a 7% share of China's human insulin market by 2017 – currently worth RMB 10bn – underpinned by a favourable momentum in tenders.

(3) Should be able to address debt overhang

We believe TUL will be able to address its debt overhang in the next few years.

- We calculate that its debt level will remain flattish in 2014E. Operating cash flow and a government subsidy should offset a chunk of capex. With a rising equity balance, we expect net gearing to fall for the first time since 2010.
- We estimate 2015 will be the first year that the company registers positive FCF since its listing; this should further lower its gearing.



- Our numbers do not factor in its potential disposal of a piece of land in Chengdu, recently valued at HKD 2.3bn; the disposal could lower its net gearing to 60% in 2014 (from 75%).

Based on these arguments, we forecast a 25% CAGR in net profit in 2014-15, as it steadily lowers gearing to 63% and improves ROE to 9% by 2016E. We recommend that investors buy this stock to fully participate in its recovery potential.

Valuation

Our price target is based on 18x forward earnings versus its historical 16.5x average of the past five years, according to Bloomberg. The premium can be justified by improving earnings visibility and a deleveraging balance sheet, as explained in our investment case.

The company trades at 14x 2015E earnings. Our 2014/15 EPS estimates are 15%/6% ahead of consensus.

Figure 165: Our estimates versus consensus

	Standard Chartered		Consensus		Ours over consensus	
	2014E	2015E	2014E	2015E	2014E	2015E
Turnover (HKD mn)	8,581	9,382	8,415	9,186	2%	2%
Gross profit (HKD mn)	3,118	3,627	2,935	3,367	6%	8%
EBIT (HKD mn)	873	1,068	809	1,014	8%	5%
Net profit (HKD mn)	494	612	428	578	16%	6%
EPS adjusted (HKD)	0.30	0.37	0.26	0.35	15%	6%

Source: Bloomberg, Standard Chartered Research estimates

We provide a sensitivity test on our numbers below.

Figure 166: Sensitivity test

Input items	Change	Net profit	
		2014E	2015E
Finished products	-5%	-8%	-8%
EBIT margin	-100bps	-17%	-20%
Net gearing	-10ppt	7%	6%

Source: Standard Chartered Research estimates

Upside risk to our investment case is a sustained price recovery in antibiotics and TUL claiming a larger market share in insulin than we expected. We assume no price gain in 6-APA in 2014-15, expecting that TUL's recent price hikes will not stick for the remainder of the year. Our 7% market share assumption in 2017 is conservative relative to the company's 10% mid-term target.

Downside risk relates to slow growth in its bulk and intermediate segments, or its insulin business may struggle to take market share from competitors. In addition, its antibiotics capacity – while 100% compliant with local standards – may also be subjected to more scrutiny under tighter environmental regulations.

We estimate a DCF value of HKD 8.20 per share, reflecting 62% potential upside. Our key assumptions are detailed below:



Figure 167: Key assumptions for DCF

ASSUMPTIONS	
Cost of equity (%)	
Risk free rate (%)	3.00
Beta	0.89
Equity risk premium (%)	8.0
CAPM unleveraged discount rate	10.1
Cost of debt (%)	
Average spread over risk-free rate (%)	6.0
Pre-tax cost of debt (%)	9.0
Average corporate tax rate for company (%)	25.0
Post-tax cost of debt (%)	7.2
Estimated target gearing (net debt/EV) (%)	30.0
WACC (%)	9.2
Number of years of explicit estimates	4.0
middle period duration (yrs)	3.0
No of years to start of terminal period	7.0
Middle period assumptions	
Growth rate (%)	10.0
Operating margin (%)	14.0
Capex/depreciation ratio (x)	150.0
Working capital/ turnover ratio (%)	20.0
Tax rate (%)	25.0
Terminal period assumptions	
Growth rate (%)	4.0
Operating margin (%)	15.0
Capex/depreciation ratio (x)	120.0
Working capital/ turnover ratio (x)	20.0
Tax rate (%)	25.0

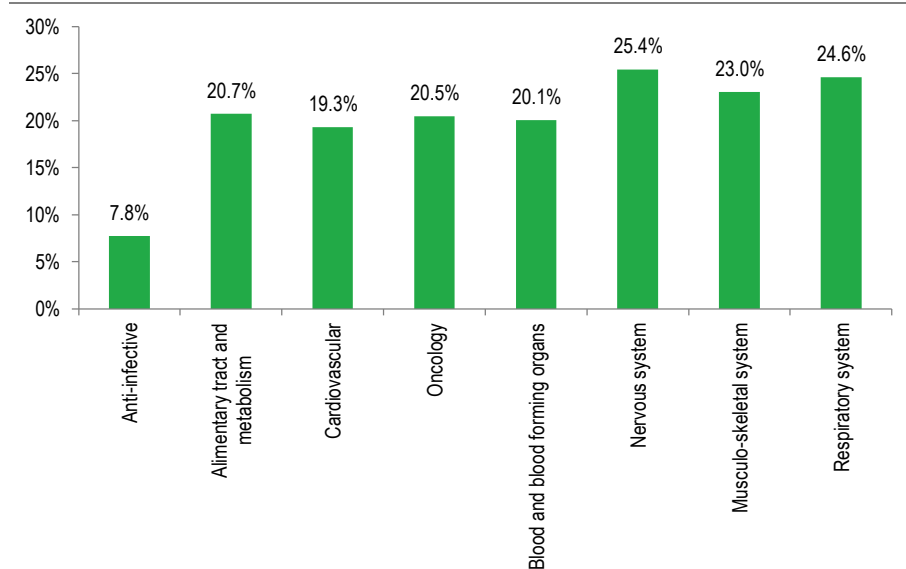
Source: Standard Chartered Research estimates



Scale and vertical integration should continue to protect antibiotics profitability

Antibiotics contributed over 90% of revenue and 75% of operating profit in 2013. The majority of TUL's revenue stems from penicillin-type antibiotics, such as Amoxycilin and Ampicillin. We think antibiotics are a challenging segment, with recent curbs on its use in China. According to MENET, their in-patient use fell to 54% from 68% and outpatient use fell to 15% from 22% in 2010-13. That said, the penicillin type is more resilient as it has wider applicable areas and is more cost effective than other types.

Figure 168: Chemical drugs CAGR by therapeutic area, 2009-12



Source: CFDA South

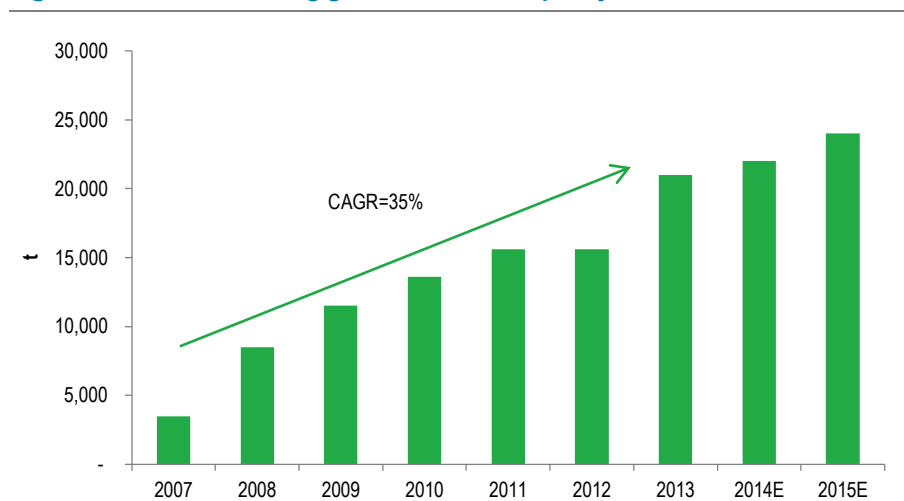
Adapting to a low-growth antibiotics market

The industry expects low-single digit demand growth in the next few years. This should be partly driven by mild domestic demand recovery, partly driven by exports growth, where it counts Indian generic pharma companies such as Ranbaxy among its main end customers. To adapt to a low-growth environment in antibiotics, TUL's strategy is to focus on increasing its economies of scale and vertical integration.

6-APA, an important intermediate in antibiotics, represents 20% of total revenue. It is the parent nucleus for the semi-synthetic penicillin type of antibiotics. After adding capacity at a 35% CAGR since 2013, TUL now effectively controls over 50% of global production capacity for 6-APA.



Figure 169: 6-APA – Strong growth in TUL's capacity



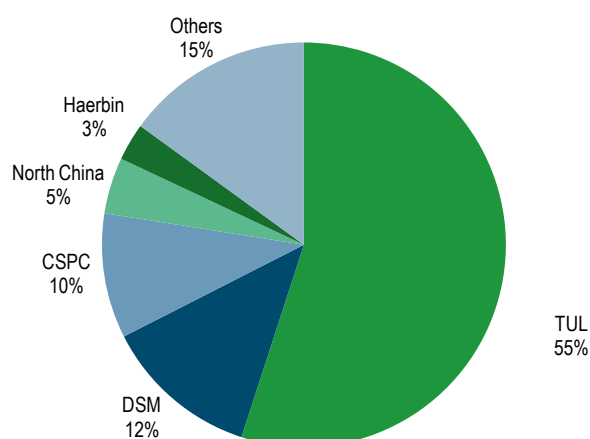
Source: Company, Standard Chartered Research estimates

Some price discipline is returning to the market

We do not share the company's case in taking a pre-emptive stance in 2009-11 to win capacity against the competition. That said, we think the battle for capacity is drawing to an end and better price discipline in the sector has ensued.

- TUL now has the most competitive cost curve for 6-APA at RMB 120 per kg, according to the company. With its large capacity, TUL should be in a good position to retaliate against any price aggression from competitors.
- Other manufacturers, DSM, CSPC and North China, represent a mix of SOE, foreign and domestic listed companies. We understand some have started diverting their resources elsewhere to gain better shareholder returns.
- Stricter environmental regulations have forced the hand of new entrants. China media reported in 4Q13 that some market entrants underwent significant delays in building new capacity due to environmental concerns.

Figure 170: 6-APA global capacity share – well consolidated

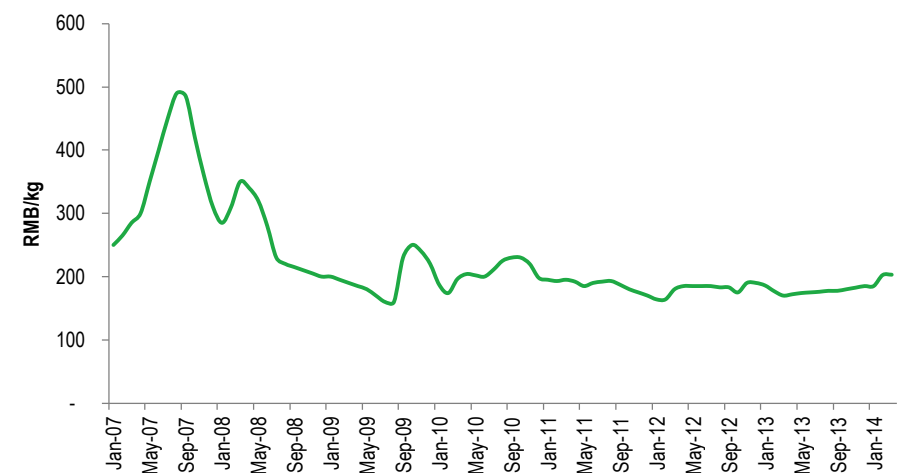


Source: MENET, Standard Chartered Research



Consequently, the 6-APA price has stabilised at RMB 150-200 since late 2009, a narrow range, in our view.

Figure 171: 6-APA price



Source: Healthoo

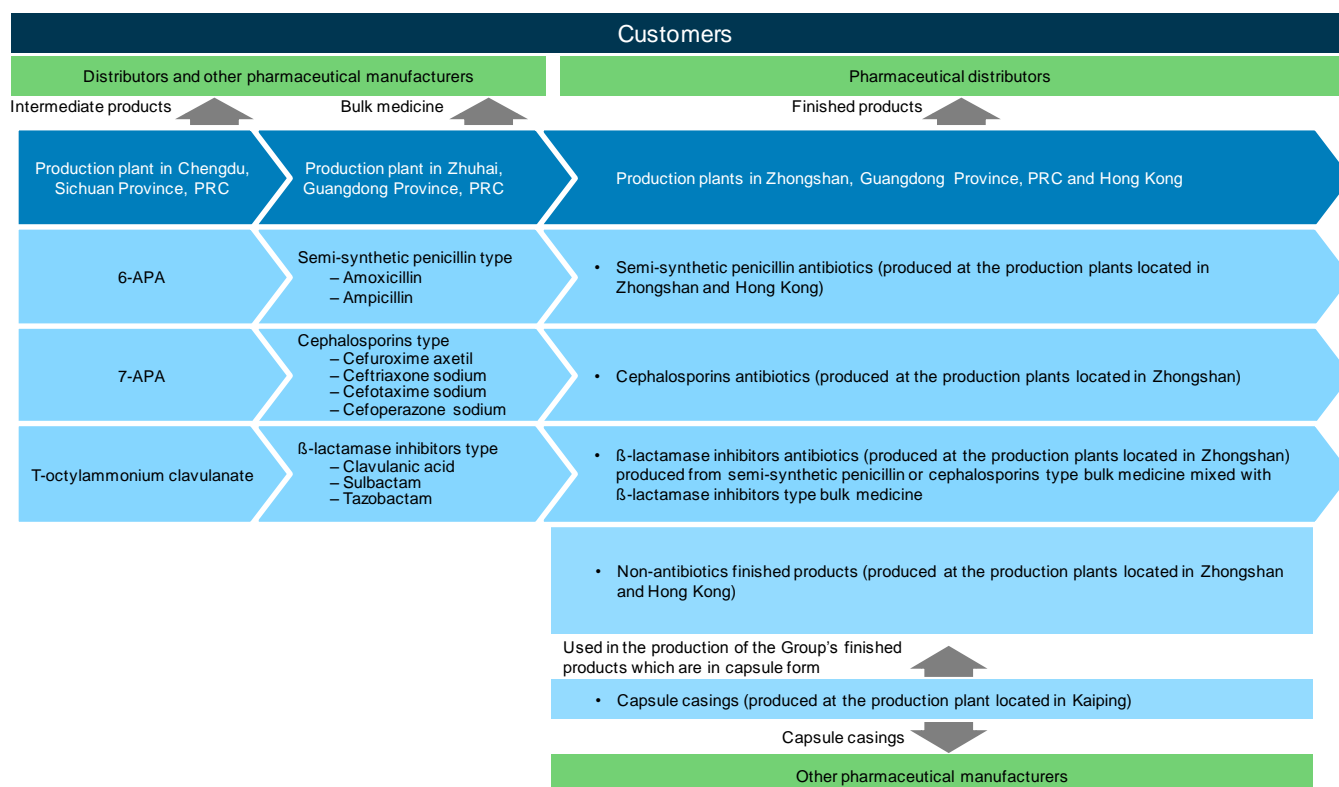
Going forward, we believe TUL will be able to outgrow the market by reaccelerating growth to a low-teen rate in 2014-15E:

- We assume incremental growth will come completely from better capacity utilisation and volume growth, as 2013 was affected by plant relocation, and 2014-15 should start to see contributions from phases IV and V in Inner Mongolia.
- We assume no benefit from an antibiotics price increase, mindful that the increase may not stick in this competitive industry.
- The CFDA plans to roll out a quality-consistency evaluation to determine if generic drugs in China are consistent in quality, compared to patented drugs. The initiative may help weed out inferior competitors, in our view. TUL claims all its lines meet European GMP standards and should benefit from tougher quality regulations in China.

TUL is focusing on vertical integration to derisk margins

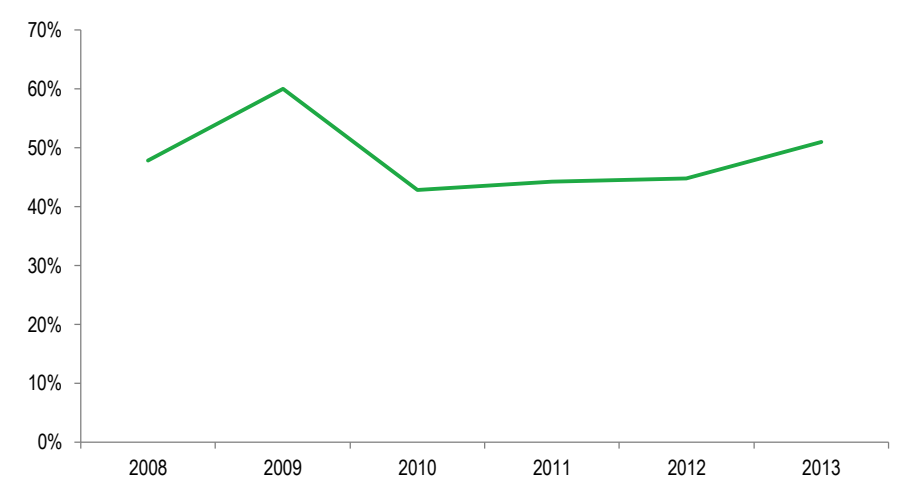
TUL has a vertically integrated model that enables it to undertake upstream production of intermediate products, mid-stream processing of bulk medicine, and downstream production of antibiotics. With continuing pricing volatility in the intermediate and bulk segments, management stated its intention to reduce exposure to these segments and increase exposure to finished products.

Figure 172: Fully integrated antibiotics production



Source: Company

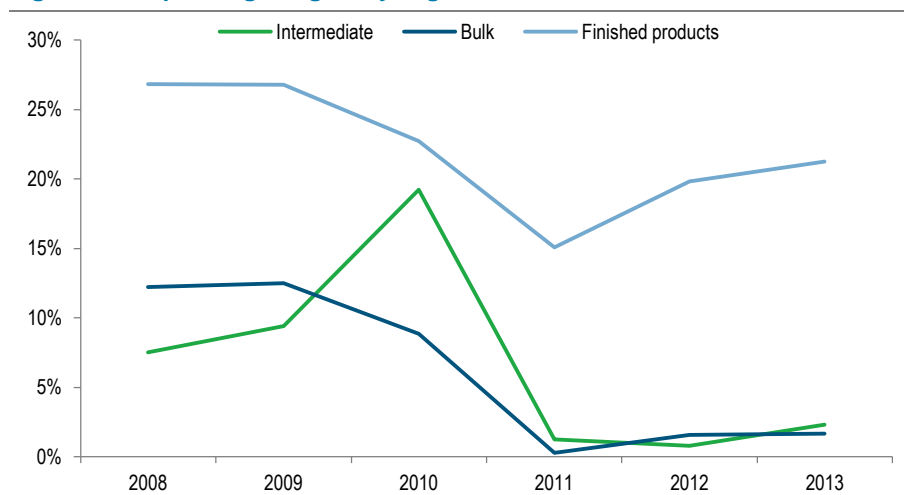
Figure 173: Percentage of internal sales in intermediates by value



Source: Company

The rationale of this strategy can be illustrated in the charts below. Finished products have much higher margins than bulk and intermediates. Hence, by generating more sales in finished products and less in bulk, TUL should be able to expand margin.

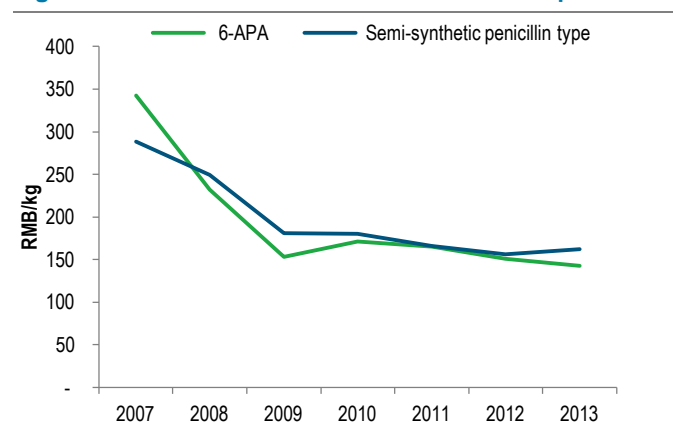
Figure 174: Operating margins by segment



Source: Company, Standard Chartered Research

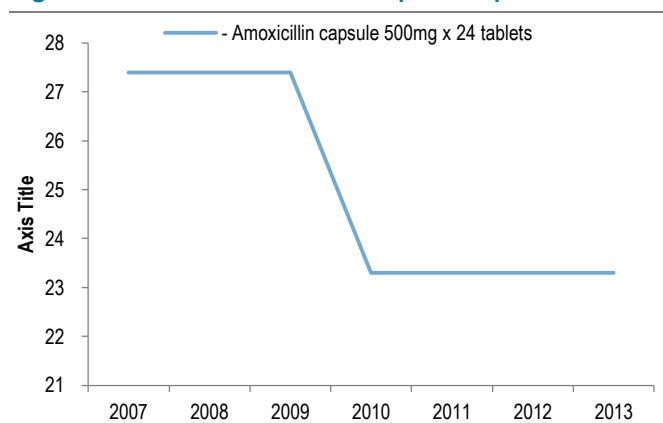
Moreover, finished products not only have higher margins, but could also have less volatile margins. This is because compared with more volatile intermediate and bulk prices, finished products' prices in antibiotics are stable. The Amoxicillin price has stayed at RMB 23 per 500mg (24 tablets) since 2010.

Figure 175: Amoxicillin's bulk and intermediate prices



Source: Company, Standard Chartered Research

Figure 176: Amoxicillin's finished product price



Source: Company, Standard Chartered Research

Management said a price cut in 2009 was an NDRC-mandated one-off (see Appendix 4), and not linked to provincial tenders, which tend to recur. Management does not foresee further price cuts by the NDRC in the near term, as it believes the price in the segment has already been "cut to the bone".



Human insulin a major earnings driver in 2014-17E

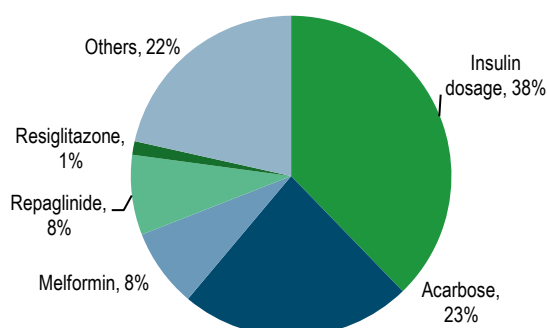
TUL derived 2% of revenue and 3% of operating profit from human insulin in 2013. We believe this business has the potential to reach an 80% CAGR in sales and contribute to 16% of operating profit by 2017E.

Fundamentals and competitive landscape in China's insulin market

Human insulin is a RMB 10bn market in China and grew 17% per year over 2006-11. This laboratory-grown synthetic insulin was first approved for pharmaceutical use in 1982. It is now the main medicine for diabetes, accounting for 38% of value share in the therapeutic area in China. Its growth is supported by demographic changes. According to a survey published in *New England Medicals* in 2010, China's diabetes population reached 92mn at that time, and is expected to grow fast, owing to lifestyle changes (higher fat intake, growing obesity rate, and so on).

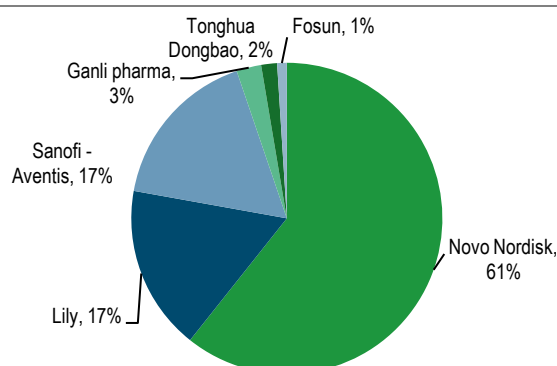
Novo Nordisk is the largest diabetes drug company in China, with a 30% share of the diabetes market and over-60% in insulin. Tonghua Dongbao and Ganli are the largest China companies and each has a 2-3% share of the insulin market.

Figure 177: Diabetes drugs: Market share (2011)



Source: CFDA South, Standard Chartered Research

Figure 178: Insulin: Market share of main companies (2011)



Source: CFDA South

Why we think TUL insulin will have a 7% share of the market by 2017

As its insulin product arrived in the market only in 2011, TUL's insulin sales were only one-tenth of Tonghua Dongbao's in 2013. However, it has set an ambitious target to take a 10% share of the market in the medium term. We assume TUL will take 7% of the insulin market by 2017. Our rationale follows:

- TUL's human insulin product won the national EDL tender in 2012 and won 10 provincial tenders since without much price competition (it is selling at RMB 43-47 per unit). This should pave the way for strong insulin revenue growth in this tender cycle (2012-17), in our view. Indeed, TUL's insulin sales have grown eight-fold in the past two years and the company targeted over 66% sales growth in 2014.
- We expect TUL to be the first company in China to obtain a production licence (NDA) for third-generation insulin (insulin glargine) this year. Its other third-generation insulin products, insulin aspart and insulin deter, are ahead of domestic competitors in terms of development stages.
- Its prices are 10% lower than those of foreign competitors. It also uses the same 'academic promotion' strategy as big pharma companies to tap higher-tier local hospitals. Its leading position in researching third-generation insulin could improve its positioning in higher-tier hospitals (class 2-3), which currently account for only 10% of sales.



Net gearing inflection in 2014

Gearing inflection in 2014, FCF turning point in 2015

On its leverage situation, we believe TUL has come a long way from the trough and believe an inflection point in net gearing is in sight in 2014.

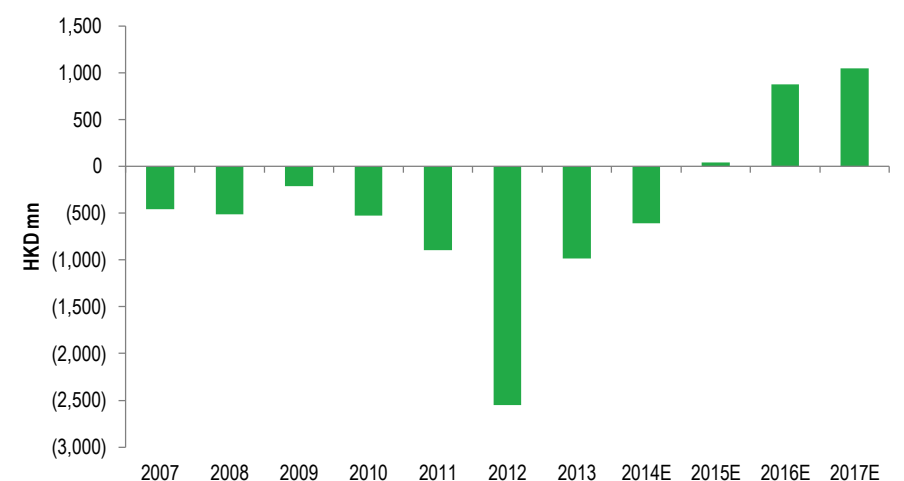
We believe TUL will generate HKD 890mn net operating cash flow in 2014 (2013E: HKD 1.1bn), reflecting recovering profitability in antibiotics and strong growth in finished products. It announced that it should receive a HKD 394mn subsidy from the Pengzhou government for a plant relocation in 2014. These sums should help to cover a chunk of its guided HKD 1.5bn capex in 2014, in our view. Net net, its debt level should remain similar to 2013's. As equity should increase from the current level, net gearing should register its first decline in 2014 since 2010, according to our estimates.

Note that our calculation does not build in TUL's disposal of its (now commercial) land in Chengdu, valued at HKD 2.3bn by an independent appraiser in March 2014. Management has confirmed that it has plans for its disposal yet. However, it gave assurance that commercial property development is not its core business. If the company manages to dispose of the land in 2014, net gearing would fall from to 60% (from 82%) in 2014.

FCF turns around in 2015E

With the company guiding lower capex to HKD 1bn, and our estimated HKD 1.04bn operating cash flow in 2015, we expect TUL to generate positive free cash flow for the first time since 2007.

Figure 179: FCF trend could turn around



Source: Company, Standard Chartered Research estimates

Income statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Sales	7,022	7,648	8,581	9,382	10,446
Gross profit	2,117	2,638	3,118	3,627	4,274
SG&A	(1,672)	(1,787)	(2,171)	(2,467)	(2,852)
Other income	73	93	103	113	125
Other expenses	(111)	(200)	(178)	(204)	(239)
EBIT	407	743	873	1,068	1,309
Net interest	(215)	(201)	(232)	(269)	(281)
Associates	0	0	0	0	0
Other non-operational	0	0	0	0	0
Exceptional items	56	359	394	0	0
Pre-tax profit	248	901	1,035	800	1,028
Taxation	(86)	(853)	(259)	(200)	(257)
Minority interests	0	0	0	0	0
Exceptional items after tax	0	0	0	0	0
Net profit	162	48	776	600	771
Net profit adj.	198	392	495	614	784
EBITDA	947	1,318	1,616	1,939	2,317
EPS (HKD)	0.11	0.03	0.48	0.37	0.47
EPS adj. (HKD)	0.12	0.24	0.30	0.37	0.48
DPS (HKD)	0.00	0.00	0.00	0.00	0.14
Avg fully diluted shares (mn)	1,665	1,646	1,646	1,646	1,646

Balance sheet (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
Cash	1,893	1,968	1,753	1,755	1,763
Short-term investments	4	8	8	8	8
Accounts receivable	2,477	3,017	3,347	3,753	4,178
Inventory	1,814	1,272	1,366	1,496	1,605
Other current assets	424	277	277	277	277
Total current assets	6,611	6,542	6,750	7,289	7,832
PP&E	8,524	9,921	10,685	10,823	10,323
Intangible assets	7	65	58	50	41
Associates and JVs	0	0	0	0	0
Other long-term assets	1,001	3,073	3,073	3,073	3,073
Total long-term assets	9,531	13,059	13,816	13,945	13,436
Total assets	16,142	19,600	20,566	21,234	21,268
Short-term debt	5,510	5,555	5,555	5,515	4,855
Accounts payable	1,705	1,832	2,021	2,129	2,284
Other current liabilities	1,641	2,476	2,476	2,476	2,476
Total current liabilities	8,855	9,863	10,052	10,120	9,615
Long-term debt	1,023	2,050	2,050	2,050	2,050
Convertible bonds	0	115	115	115	115
Deferred tax	65	983	983	983	983
Other long-term liabilities	104	107	107	107	107
Total long-term liabilities	1,192	3,256	3,256	3,256	3,256
Total liabilities	10,047	13,118	13,308	13,376	12,870
Shareholders' funds	6,094	6,482	7,258	7,858	8,398
Minority interests	0	0	0	0	0
Total equity	6,094	6,482	7,258	7,858	8,398
Total liabilities and equity	16,141	19,600	20,566	21,234	21,268
Net debt (cash)	4,640	5,753	5,968	5,926	5,257
Year-end shares (mn)	1,627	1,627	1,627	1,627	1,627

Cash flow statement (HKD mn)

Year-end: Dec	2012	2013	2014E	2015E	2016E
EBIT	407	743	873	1,068	1,309
Depreciation & amortisation	540	575	743	871	1,009
Net interest	(292)	(415)	(232)	(269)	(281)
Tax paid	(106)	(117)	(259)	(200)	(257)
Changes in working capital	(226)	443	(234)	(429)	(380)
Others	(24)	(165)	0	0	0
Cash flow from operations	299	1,065	891	1,042	1,400
Capex	(2,851)	(2,046)	(1,500)	(1,000)	(500)
Acquisitions & Investments	(2)	0	0	0	0
Disposals	27	50	394	0	0
Others	(684)	393	0	0	0
Cash flow from investing	(3,510)	(1,604)	(1,106)	(1,000)	(500)
Dividends	0	0	0	0	(231)
Issue of shares	700	0	0	0	0
Change in debt	2,208	953	0	(40)	(660)
Other financing cash flow	0	0	0	0	0
Cash flow from financing	2,908	953	0	(40)	(891)
Change in cash	(303)	413	(215)	2	9
Exchange rate effect	0	21	0	0	0
Free cash flow	(2,553)	(982)	(609)	42	900

Financial ratios and other

Year-end: Dec	2012	2013	2014E	2015E	2016E
Operating ratios					
Gross margin (%)	30.2	34.5	36.3	38.7	40.9
EBITDA margin (%)	13.5	17.2	18.8	20.7	22.2
EBIT margin (%)	5.8	9.7	10.2	11.4	12.5
Net margin adj. (%)	2.8	5.1	5.8	6.5	7.5
Effective tax rate (%)	34.8	94.7	25.0	25.0	25.0
Sales growth (%)	9.6	8.9	12.2	9.3	11.3
Net income growth (%)	55.3	-70.4	1,516.9	-22.7	28.5
EPS growth (%)	33.6	-72.4	1,516.9	-22.7	28.5
EPS growth adj. (%)	56.6	100.4	26.1	24.2	27.7
DPS growth (%)	-	-	-	-	nm
Efficiency ratios					
ROE (%)	2.9	0.8	11.3	7.9	9.5
ROCE (%)	5.9	8.7	8.6	9.9	11.5
Asset turnover (x)	0.5	0.4	0.4	0.4	0.5
Op. cash/EBIT (x)	0.7	1.4	1.0	1.0	1.1
Depreciation/capex (x)	0.2	0.3	0.5	0.9	2.0
Inventory days	124.7	112.4	88.1	90.8	91.7
Accounts receivable days	117.2	131.1	135.3	138.1	138.6
Accounts payable days	137.5	128.8	128.7	131.6	130.5
Leverage ratios					
Net gearing (%)	76.1	88.8	82.2	75.4	62.6
Debt/capital (%)	89.7	79.3	73.4	69.1	60.2
Interest cover (x)	1.9	3.7	3.8	4.0	4.7
Debt/EBITDA (x)	5.7	5.4	4.8	4.0	3.2
Current ratio (x)	0.7	0.7	0.7	0.7	0.8
Valuation					
EV/sales (x)	1.4	1.4	1.7	1.5	1.3
EV/EBITDA (x)	10.1	7.9	8.8	7.3	5.8
EV/EBIT (x)	23.5	14.0	16.3	13.3	10.3
PER (x)	36.2	107.7	10.6	13.8	10.7
PER adj. (x)	32.6	13.3	16.9	13.6	10.6
PBR (x)	1.0	0.8	1.1	1.0	1.0
Dividend yield (%)	0.0	0.0	0.0	0.0	2.8

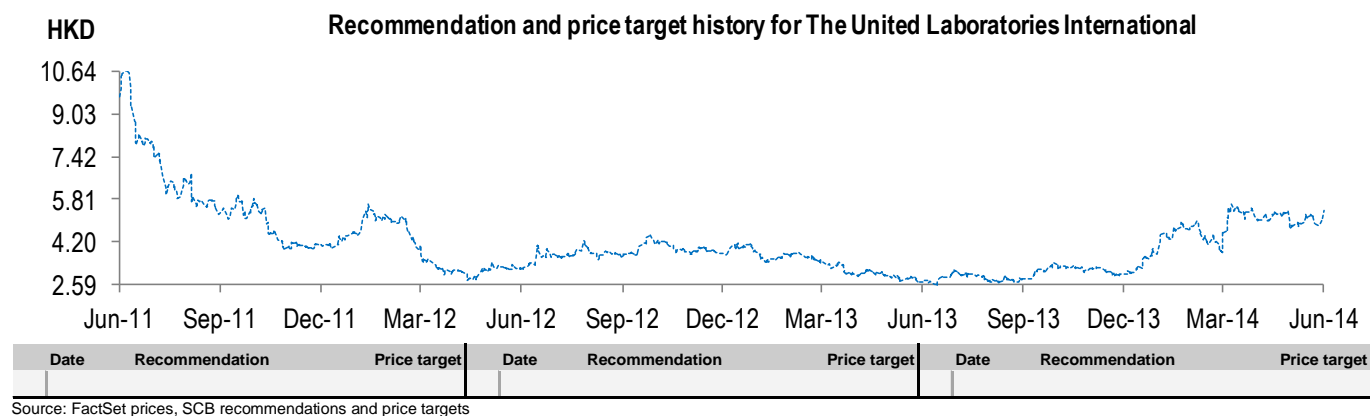
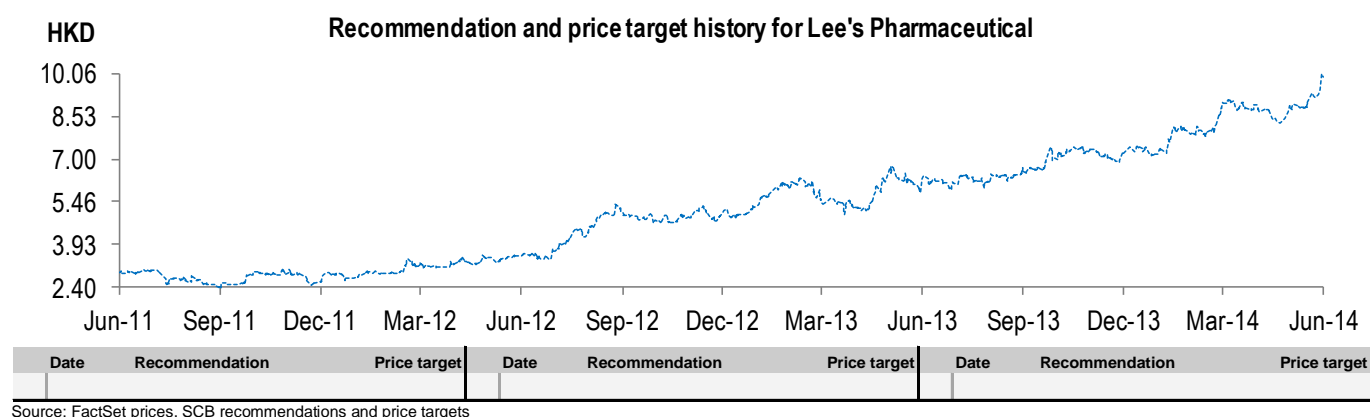


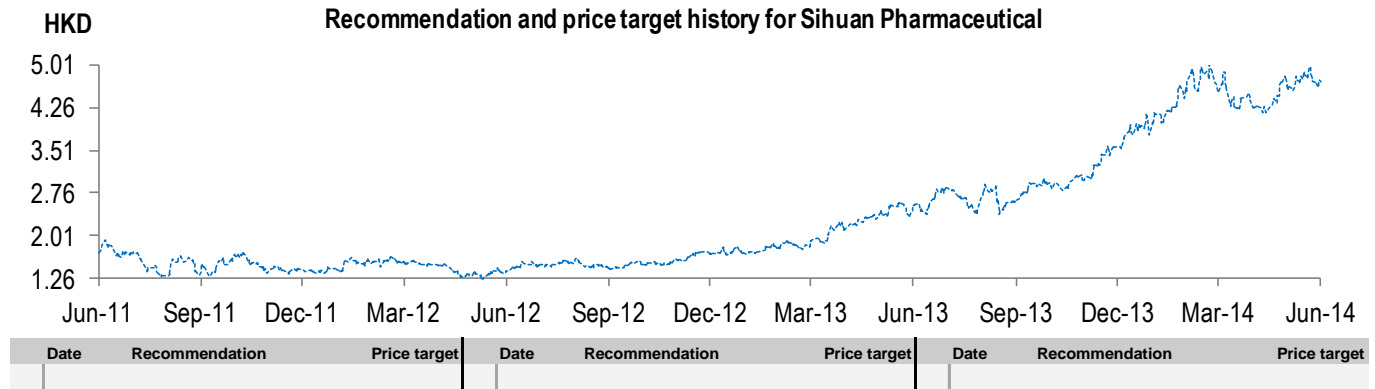
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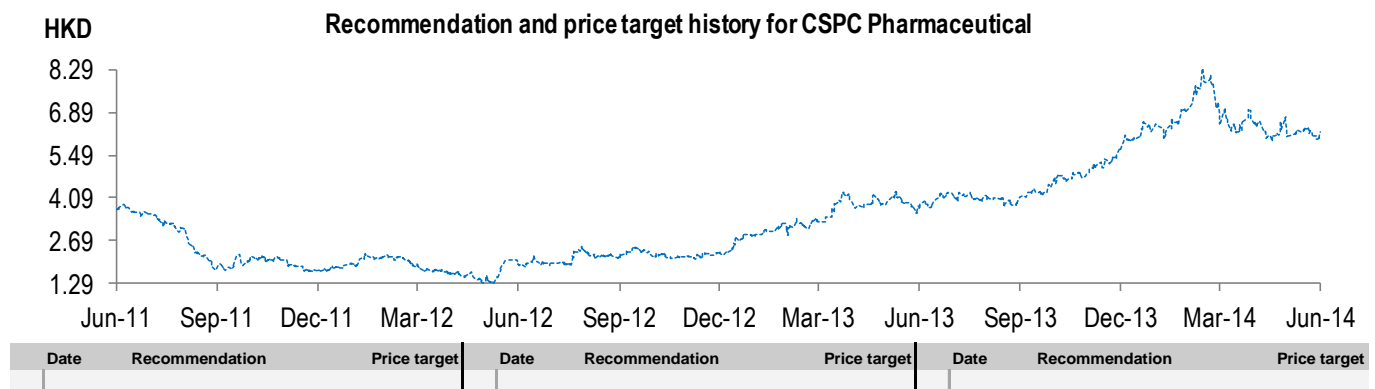
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As of 31 March 2014

Research Recommendation

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