



6th CSIR CONFERENCE

BUILDING A WORLD CLASS, GLOBALLY COMPETITIVE
PHARMACEUTICAL BUSINESS OUT OF SOUTH AFRICA

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5 October 2017



Humble beginnings - Greyville

Notre Dame de Bondeville



Oss - Netherlands



East London



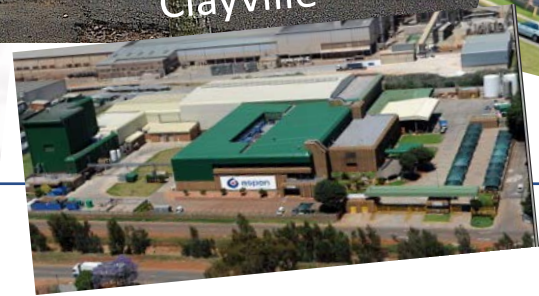
Port Elizabeth



Cape Town



Clayville



Evolution of Aspen's Manufacturing Base

- Aspen General Facility has been on the present site for approximately 70 years
- Acquired by Aspen from South African Druggists in March 1999, together with facilities in East London and Johannesburg
- Mainly supplied the South African market
- Within 15 years, Aspen has transformed from being a domestically accredited supplier to an international pharmaceutical manufacturer with the developed capability to supply various dosage forms to any pharmaceutical market in the world
- In the last 10 years, billions have been invested in the Group's South African facilities for infrastructural expansion and enhancements to improve compliance to the relevant regulatory standards, and in order to support Aspen's sustained supply to both its domestic and diverse international markets



Aerial view of Aspen's Global Manufacturing Base in Port Elizabeth



Regulatory Authorities Relevant to South African Operations



Regulatory Authority	PE Unit 1	PE Unit 2	PE Unit 3	SVP	International Distribution ADC	SA Distribution ACW
MCC	X	X	X	X	X	X
FDA	X	X		X	X	
MHRA	X	X		# planned on product submission	X	
WHO	X	X		X	X	
TGA	X	X		X	X	
Anvisa (Brazil)	X	X		X	X	
	High volume solid manufacturing for domestic and export markets	Small to medium volume solid manufacturing for domestic and export markets: fluid-bed dried products (2A) & oven dried products (2B)	End state solid packing for domestic market	Eye drops, lyophilized vials, ampoules and vials for domestic and export markets	Warehousing for domestic and export markets	Warehousing for domestic market

x = Approved

= Inspection planned

Strategic Manufacturing Partnerships

	Boehringer Ingelheim	Nevirapine	
	GSK	Lamivudine, Zidovudine, Combivir, Epivir & Others	
	BMS	Stavudine, Didanosine, Atazanavir	
	Gilead	Tenofovir & Emtricitabine	
	MSD	Efavirenz	
	Iroko	Aldomet and Indocid	
	Eli Lilly	Cycloserine and Capreomycin	
	Bayer	Nur- Isterate Injection	
	Prestige Brands	Murine & Murine Plus Range of Eye Drop Products	

Group revenue | by customer geography

Revenue by customer geography

R'million	FY 2017	FY 2016	% change	FY 2016 (CER)*	% change
Developed Europe	11 431	11 100	3%	10 161	13%
Asia Pacific	10 957	7 738	42%	7 490	46%
Sub-Saharan Africa	9 892	9 355	6%	9 185	8%
Latin America	4 184	3 481	20%	3 254	29%
Developing Europe and CIS	2 589	2 345	10%	2 223	16%
MENA	1 117	878	27%	820	36%
USA & Canada	1 043	662	58%	618	69%
Total	41 213	35 559	16%	33 751	22%

- Performance in ZAR is determined by
 - Fluctuations in exchange rate; and
 - Underlying operational performance
- Exchange rate effect
 - Variance between actual and constant exchange rate (CER)
- CER reflects the underlying operational performance

* FY 2016 restated at FY 2017 average exchange rates



The evolution of Aspen

Commercial Pharma

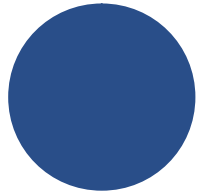
- Geographic diversity
- Product portfolio

Manufacturing Capacity and Capability

- Finished Dose Form
- API

FY 2000

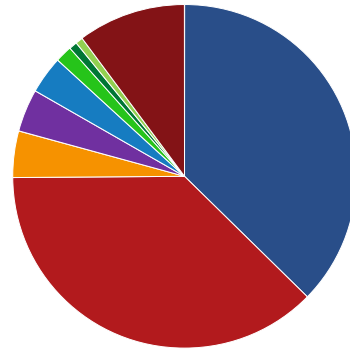
Sales R1.0 billion



South Africa only

FY 2013

Sales R18.6 billion

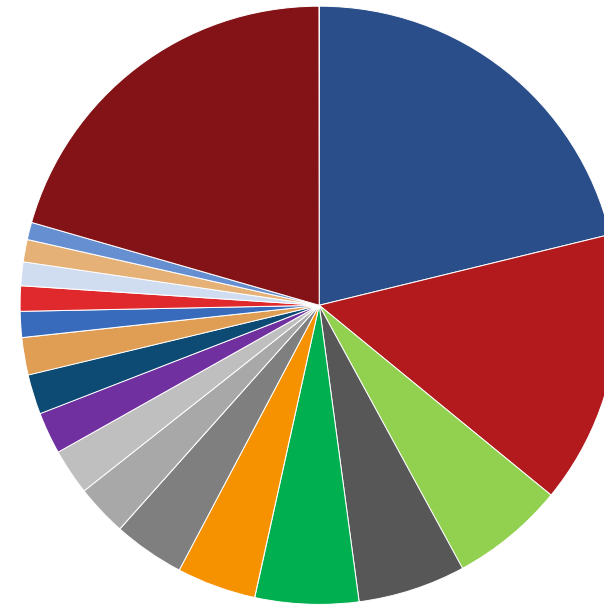


- South Africa
- Australasia
- Brazil
- Latin America
- SSA
- Rest of Asia
- Philippines
- Japan
- Rest of world

Predominantly SA and Australia

FY 2017

Sales R31.4 billion



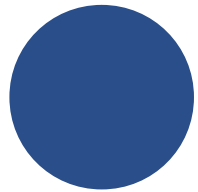
- South Africa
- Australia
- Japan
- Germany
- China
- Brazil
- France
- Italy
- United Kingdom
- Mexico
- Russian Federation
- United States
- Netherlands
- Poland
- Canada
- Belgium
- Tanzania
- Rest of World

Global Multinational

In FY2017, there was a further ±R10 billion of revenue from Nutritionals and Manufacturing

FY 2000

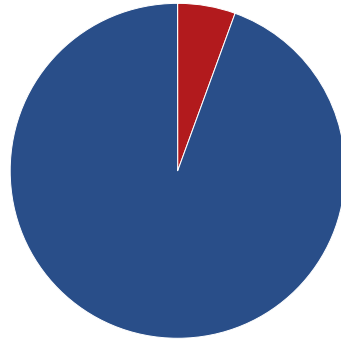
Sales R1.0 billion



**Other Commercial
Pharma Brands**

FY 2013

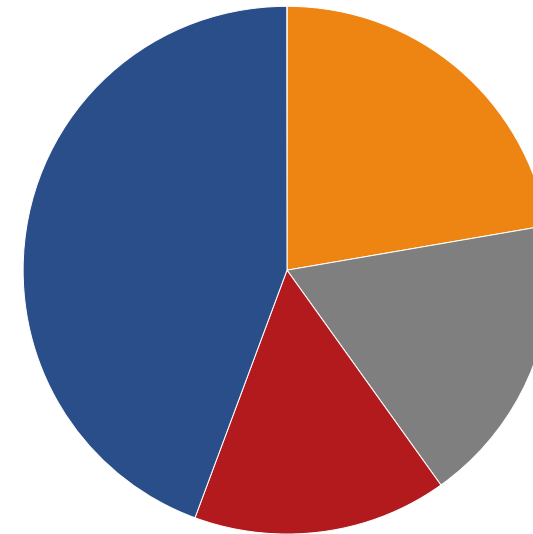
Sales R18.6 billion



**Predominantly Other Commercial
Pharma Brands with limited
therapeutic focused brands**

FY 2017

Sales R31.4 billion



- Anaesthetics
- Thrombosis
- High Potency & Cytotoxics
- Other Commercial Pharma Brands

**Global and diverse product range
with a focus on Speciality**

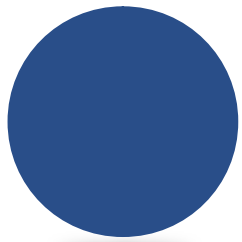
FY 2017:

- SA < 50% of Other Commercial Pharma brands
- Generics account for ±10% of sales

Manufacturing | FDF capacity & capability

FY 2000

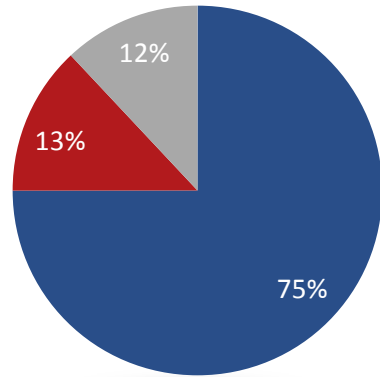
Tablets only



PE - Tablets

FY 2013

Predominantly solids with some Speciality

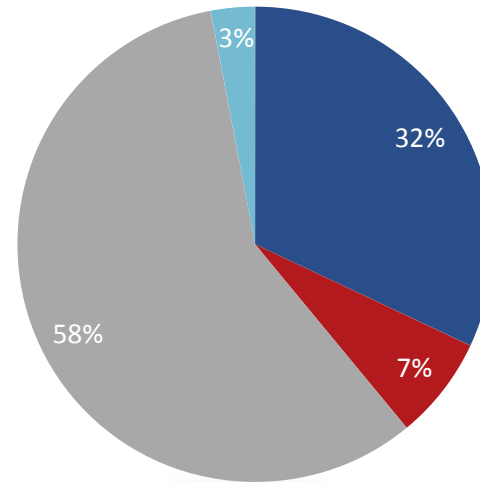


■ Solids ■ High Potency ■ Steriles

- **BO** - High Potency
- **PE** - Lyophilisation & Eye drops

FY 2017

Dominant sterile platform with Speciality & Solids



■ Solids ■ High Potency ■ Steriles ■ Semisolids/Liquids

- **PE** - High Potency & Cytotoxics Steriles (amps & vials)
- **BO** - Hormonal creams
- **NDB** - Prefilled syringes

FY2022

Further evolution to Sterile Manufacturing



Anaesthesia Products



FY 2013

FY 2017

Total Capacity 200 KvH

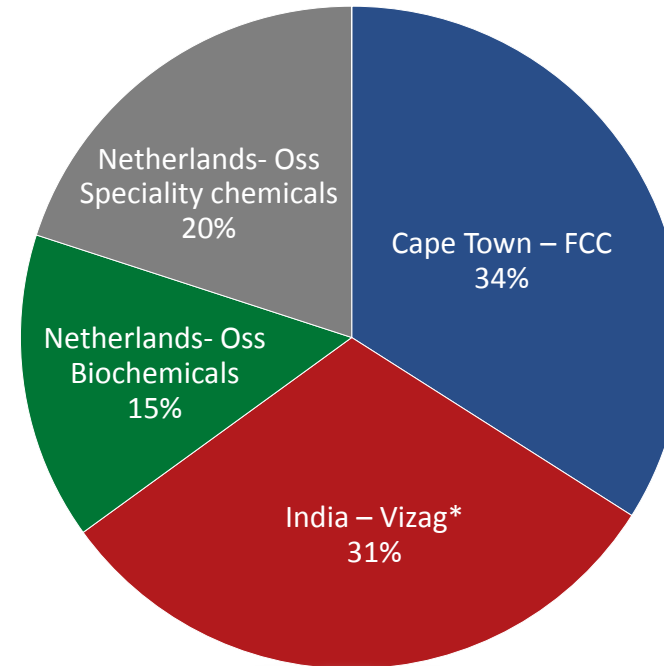
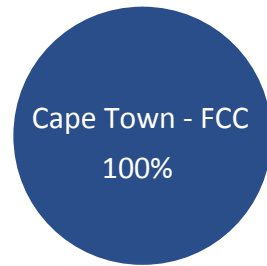
Total Capacity 980 KvH

Capabilities

Added Capabilities

- Anaesthetics
- Muscle relaxants
- Narcotics
- Analgesics
- Antipsychotics
- Antineoplastics
- Bronchodilators

- High Potency & Cytotoxics
- Steroids/Alkaloids/Heterocyclics
- Conjugated & Esterified estrogens
- Peptides
- Hormonal & General intermediates
- Biochemicals – Heparin & Danaparoid
Gonadotropins



- Five fold capacity increase
- Enhanced capabilities
- Broader geographic diversity

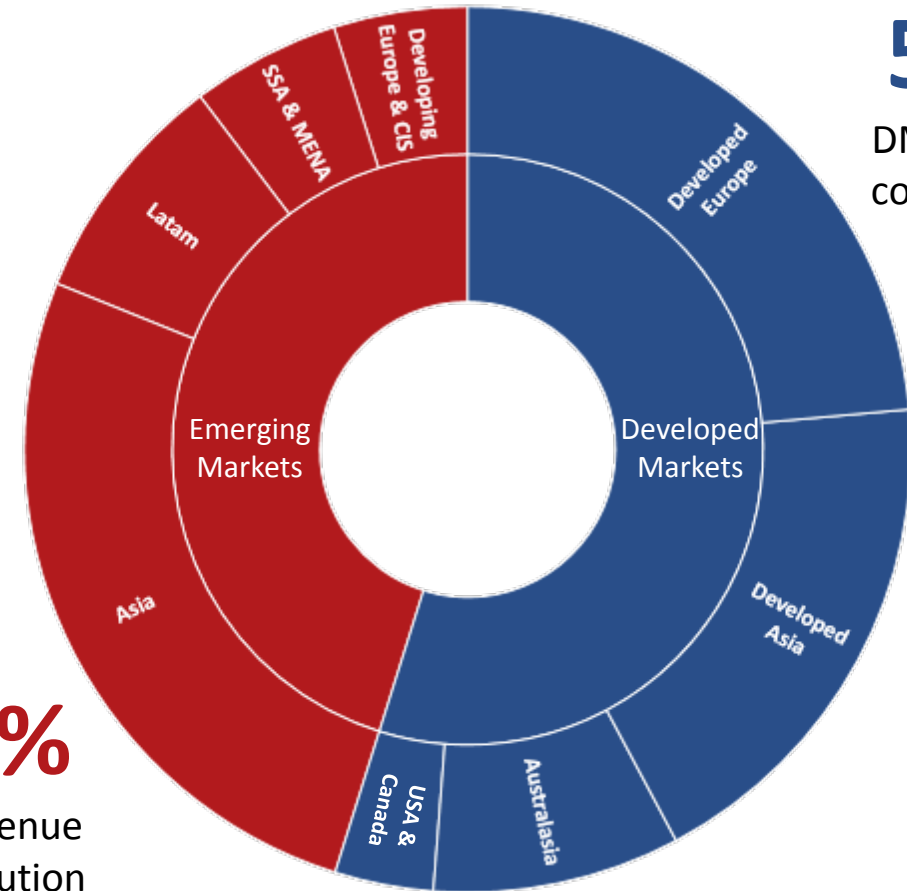
*Intermediate manufacturing

Anaesthetic Brands

R' million	FY 2017	FY 2016 (CER)	% change
Developed Markets	3 885	7	>100%
Emerging Markets	3 180	107	>100%
Total Revenue	7 065	114	>100%

- Largest sector of therapeutic focused brands
- Broad portfolio
 - No.1 globally (ex-USA)
 - Local, general and topical
 - AZ & GSK products included for ten and four months respectively

Regional representation



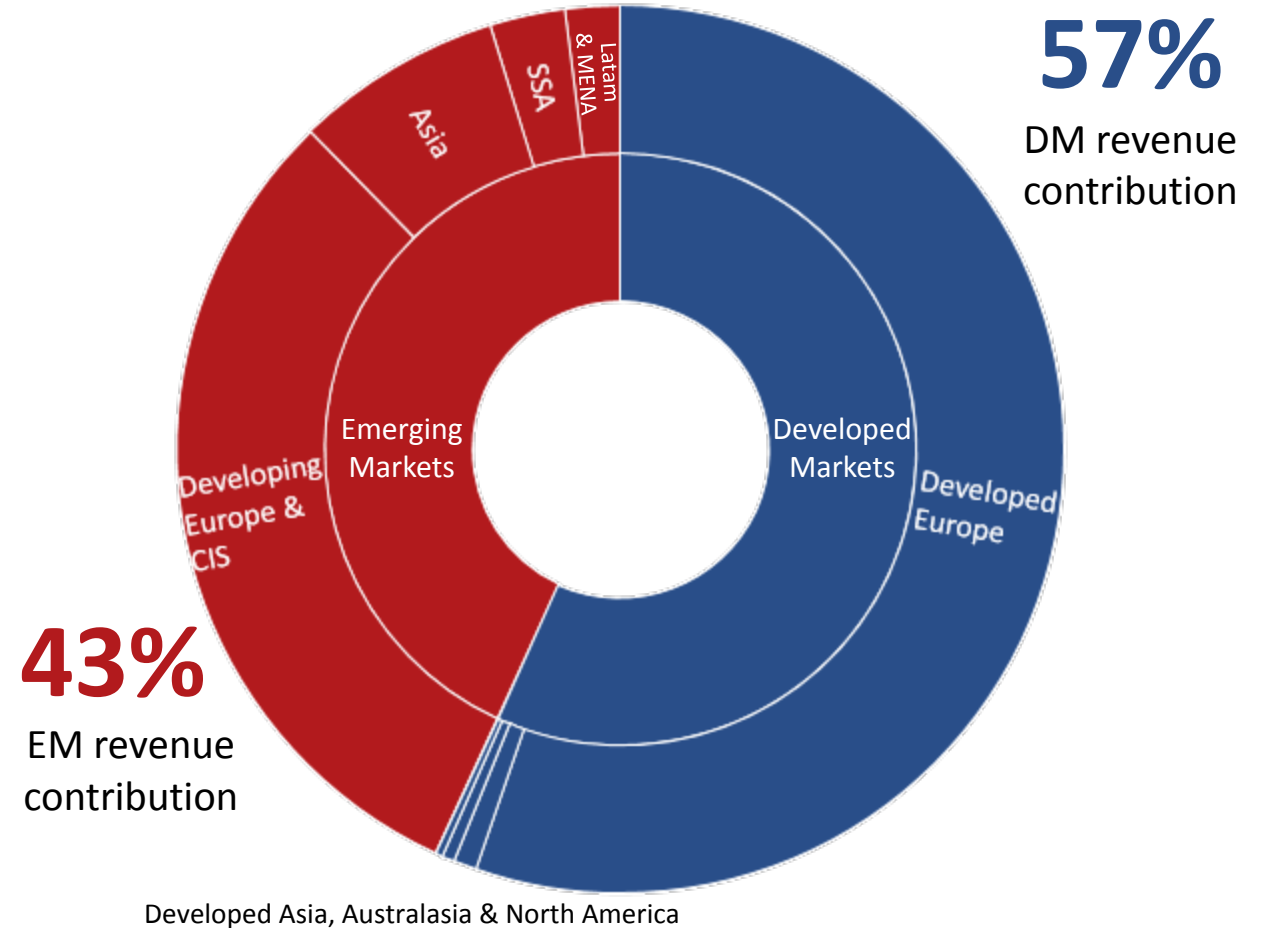
55%
DM revenue contribution

45%
EM revenue contribution

R 'million	FY 2017	FY 2016 (CER)	% change
Developed Markets	3 255	3 861	(16%)
Emerging Markets	2 410	2 128	13%
Total Revenue	5 665	5 989	(5%)

- Thrombosis sales down ↓ R324 million
 - Developed Europe down R605 million
- EMs providing positive offset

Regional representation





THANK YOU

