

The US, Canadian & Global Pharmaceutical Market: What's In?, What's Out? and What's Ahead?

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2011 Strategic management presentation

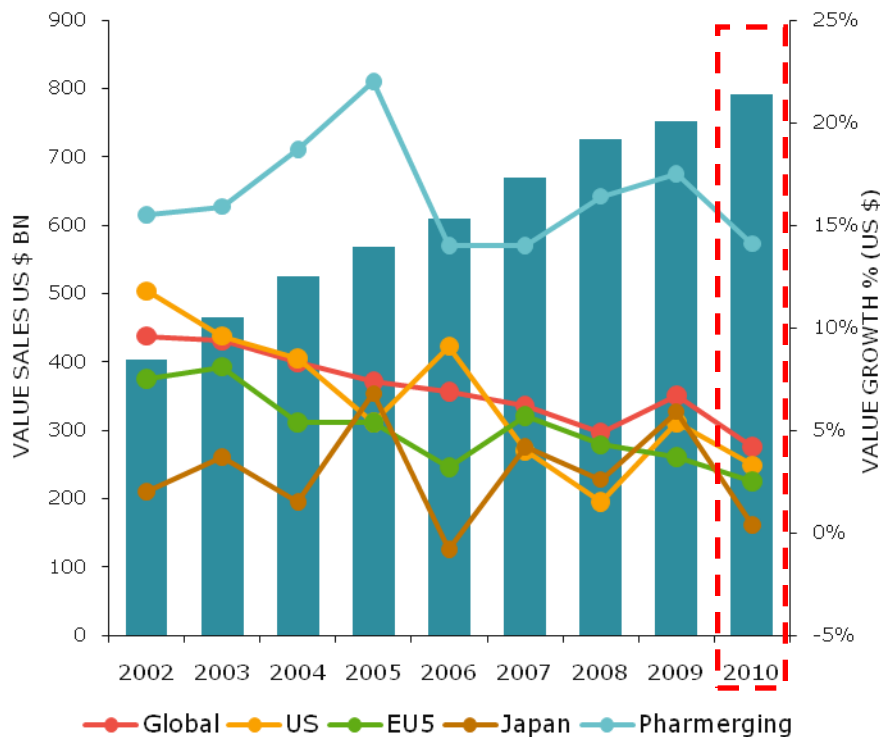
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The global pharmaceutical market performance declined in 2010

Global Pharma Historical Market Dynamics & Current Environment

Global Sales and Market Growth



Pharma market challenges











- The US/top 5 Europe/Japan no longer the main growth drivers
- The economic crisis impact has been different across pharmaceutical markets
- New product launches are not replacing revenues lost to generic competition, especially in primary care
- The most attractive areas for growth are in emerging, generics and specialty markets

Source: IMS Health, MIDAS, Dec 2010



Top 10 markets sales and growth

Audited markets in 2010

Country	2010		% Growth, Constant US \$	CAGR 2006-2010
	Sales, US \$ Billions	% Market Share		
10 Key Markets	614.9	100	3.9	5.0
United States 	310.7	50.5	3.3	4.6
Japan 	85.8	13.9	0.4	2.4
Germany 	40.0	6.5	3.0	3.6
France 	38.9	6.3	0.9	2.7
China 	32.8	5.3	21.9	23.9
Italy 	25.2	4.1	2.2	3.7
Spain 	22.0	3.6	2.6	6.6
Canada 	21.6	3.5	2.6	6.4
United Kingdom 	20.3	3.3	3.8	4.2
Brazil 	17.5	2.9	20.1	13.5

Source: IMS Health, MIDAS, Dec 2010



China is becoming the 3rd largest market, Brazil the 6th

FIGURE 2: THE PHARMERGING MARKETS ARE REDEFINING THE ESTABLISHED WORLD ORDER

2004 Rank		2009 Rank		2014(f) Rank	
1	United States	1	United States	1	United States
2	Japan	2	Japan	2	Japan
3	France	3	Germany	3	China
4	Germany	4	France	4	Germany
5	United Kingdom	5	China	5	France
6	Italy	6	Italy	6	Brazil
7	Spain	7	Spain	7	Italy
8	Canada	8	United Kingdom	8	Spain
9	China	9	Canada	9	United Kingdom
10	Mexico	10	Brazil	10	Canada
11	Brazil	11	Russia	11	India
12	Australia	12	Mexico	12	Venezuela
13	South Korea	13	India	13	Russia
14	India	14	Turkey	14	South Korea
15	Netherlands	15	South Korea	15	Turkey
16	Turkey	16	Australia	16	Greece
17	Belgium	17	Greece	17	Australia
18	Greece	18	Venezuela	18	Poland
19	Russia	19	Poland	19	Mexico
20	Poland	20	Belgium	20	Netherlands

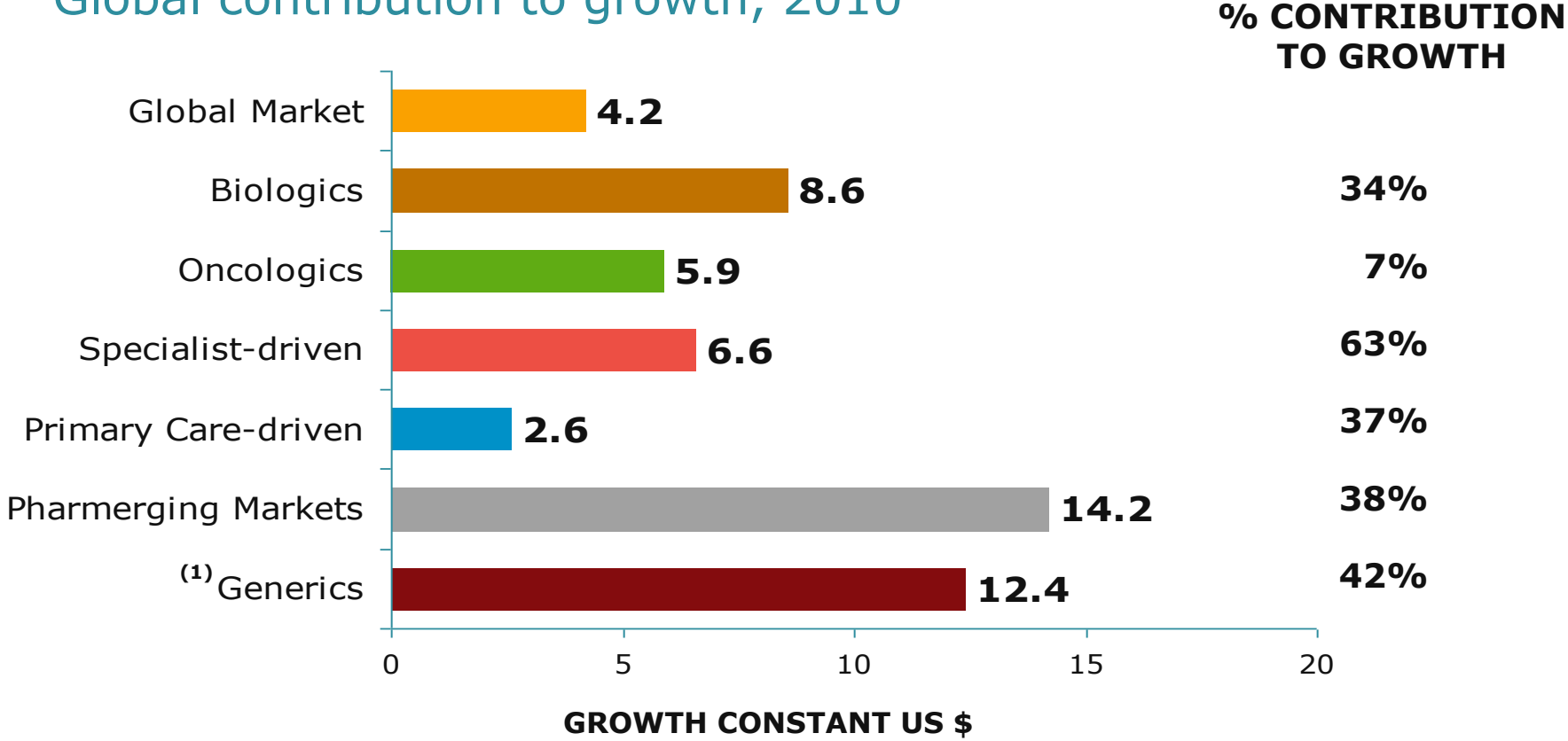
■ Tier 1 Pharmedging
 ■ Tier 2 Pharmedging
 ■ Tier 3 Pharmedging

Source: IMS Health MIDAS, Market Prognosis March 2010; Market size ranking in constant US\$.



Most Global market segments record healthy growth, except primary care

Global contribution to growth, 2010



(1) Market segmentation, Rx only (excludes OTC).
(2) Numbers are not mutually exclusive and will not add to 100%.
Source: IMS Health. MIDAS. MAT December 2010



In both specialist and primary care we have winners and losers

Primary care driven				Specialist driven			
Global Rank	Sales US\$bn	% Market Share	% Growth	Global Rank	Sales US\$bn	% Market Share	% Growth
Top 10	208.2	45.6%	4.2%	Top 10	185.4	56.8%	7.7%
Lipid regulators	36.4	8.0%	3.7%	Oncologics	55.3	16.9%	7.4%
Respiratory agents	28.9	6.3%	7.8%	Antipsychotics	24.9	7.6%	9.2%
Anti-ulcerants	28.4	6.2%	-5.6%	Autoimmune agents	20.1	6.1%	15.3%
Angiotensin II antag.	26.6	5.8%	7.6%	Antidiabetics	15.8	4.8%	12.7%
Antidepressants	20.0	4.4%	2.5%	HIV antivirals	15.1	4.6%	14.4%
Antidiabetics, oral	17.5	3.8%	11.9%	Anti-epileptics	12.4	3.8%	-11.2%
Platelet aggr. inhib.	15.2	3.3%	3.8%	Narcotic analgesics	11.9	3.7%	7.8%
Vitamins & minerals	12.7	2.8%	6.8%	Erythropoietins	10.7	3.3%	-1.2%
Cephalosporins & combs.	11.3	2.5%	7.3%	Hospital solutions	9.5	2.9%	7.9%
Non-narcotic analgesics	11.1	2.4%	2.5%	MS therapies	9.5	2.9%	12.6%

Source: IMS Health, MIDAS, MAT Sep 2010

Top 10 Drugs 2014 - World-Wide



1. Avastin (cancer)	Roche	\$8.9 billion
2. Humira (arthritis)	Abbott	\$8.5 billion
3. Enbrel (arthritis)	Pfizer & Amgen	\$8.0 billion
4. Crestor (cholesterol)	AstraZeneca	\$7.7 billion
5. Remicade (arthritis)	Merck & J&J	\$7.6 billion
6. Rituxan (cancer)	Roche	\$7.4 billion
7. Lantus (diabetes)	sanofi-aventis	\$7.1 billion
8. Advair (asthma/COPD)	GlaxoSmithKline	\$6.8 billion
9. Herceptin (cancer)	Roche	\$6.4 billion
10. NovoRapid (diabetes)	Novo Nordisk	\$5.7 billion

1/10 is an oral solid
 2/10 treat diabetes
 3/10 treat cancer or RA
 6/10 are biologics
 8/10 are injected
 10/10 treat chronic
 diseases
 2/10 are Primary Care

Source: Reuters



Top 10 corporations lag market growth – significantly

Global pharmaceutical sales and growth, 2010

Rank	MAT December 2010		Constant US \$	
	US \$ Billion	% Market Share	% Growth	CAGR 05-09
Worldwide	791.4	100.0	4.2	6.1
1 Pfizer	55.5	7.0	-3.5	-1.4
2 Novartis	46.8	5.9	10.7	6.6
3 Merck & Co.	38.4	4.9	-1.3	3.0
4 sanofi-aventis	35.8	4.5	-1.4	2.6
5 AstraZeneca	35.5	4.5	2.5	8.1
6 GlaxoSmithKline	33.6	4.3	-4.3	0.3
7 Roche	32.7	4.1	-0.4	12.1
8 Johnson & Johnson	26.8	3.4	-0.4	-0.4
9 Abbott	23.8	3.0	3.5	7.1
10 Lilly	22.1	2.8	8.1	9.3
Top 10	351.0	44.4	0.9	3.7

Source: IMS Health. MIDAS. Worldwide. MAT December 2010



Big Pharma faces major challenges...

Canadian market's top 10 corporations (purchases), MAT Dec 2010

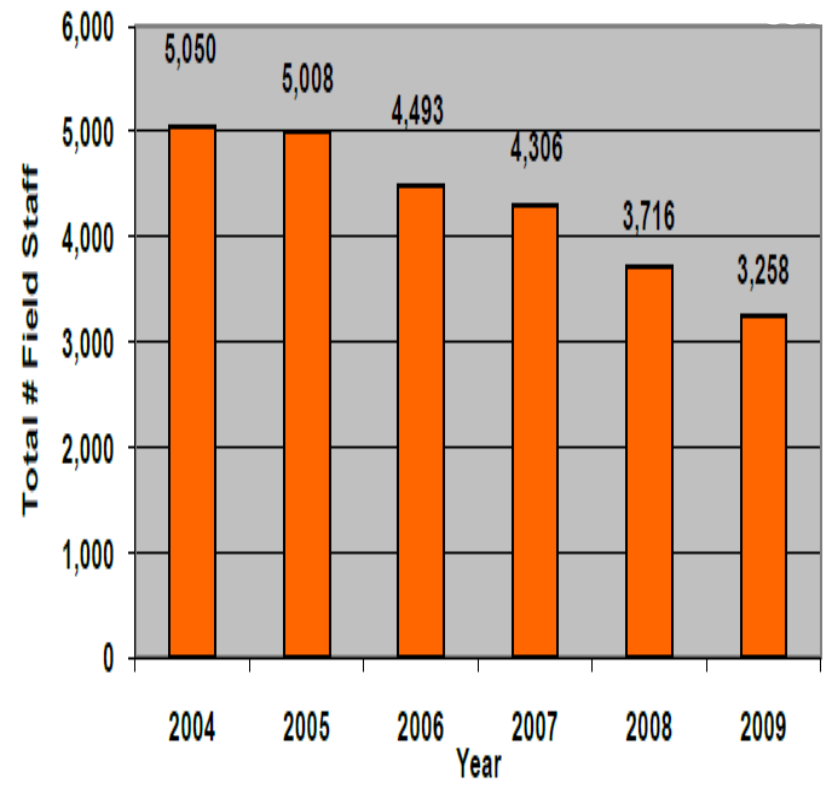
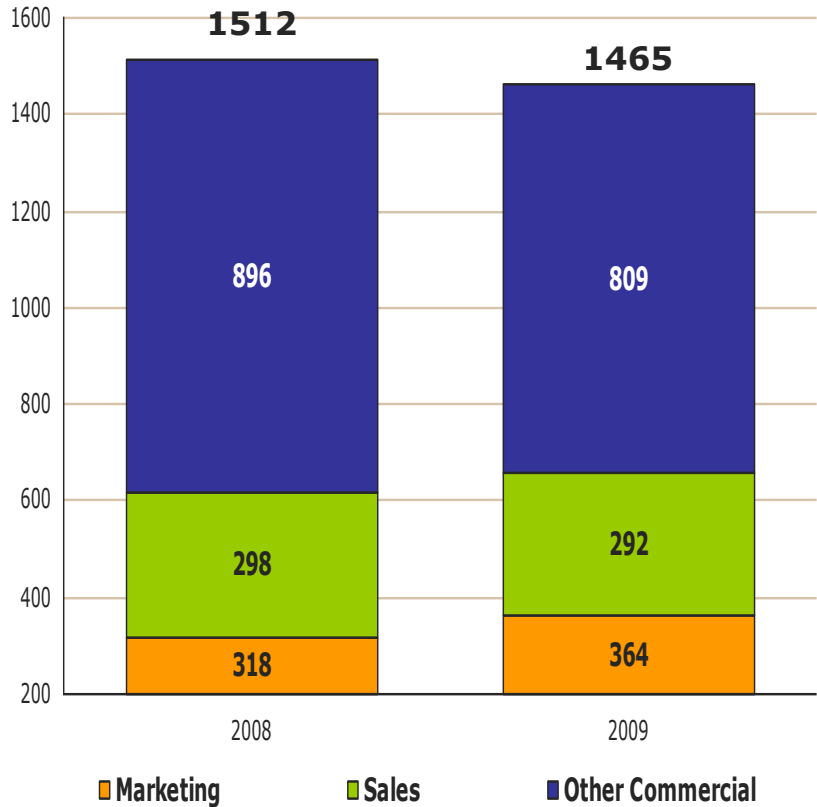
Rank		\$ Billions MAT December 2010	% Market Share MAT December 2010	% Growth MAT December 2010	CAGR 2005-2009
1	Pfizer/Wyeth	2.06	9.2	-30.1	+2.8
2	AstraZeneca	1.63	7.3	+12.6	+6.6
3	Merck/Schering-Plough	1.41	6.3	+5.7	+5.2
4	Apotex	1.35	6.1	-12.6	+13.1
5	Johnson & Johnson	1.16	5.2	+0.9	-2.0
6	Teva	1.06	4.7	+14.7	+19.7
7	Novartis	0.99	4.5	+11.5	+9.2
8	GlaxoSmithKline	0.98	4.4	+5.9	+0.7
9	Abbott	0.79	3.5	-7.6	+14.0
10	Bristol-Myers Squibb	0.74	3.3	+10.4	+5.6

Bolded corporations exceeded the overall industry's +1.4% growth in MAT December 2010.

Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. MAT December 2010.



Head Office and Field Force head count trends



* Based on 8 companies providing Head Office data for the last 4 consecutive years.

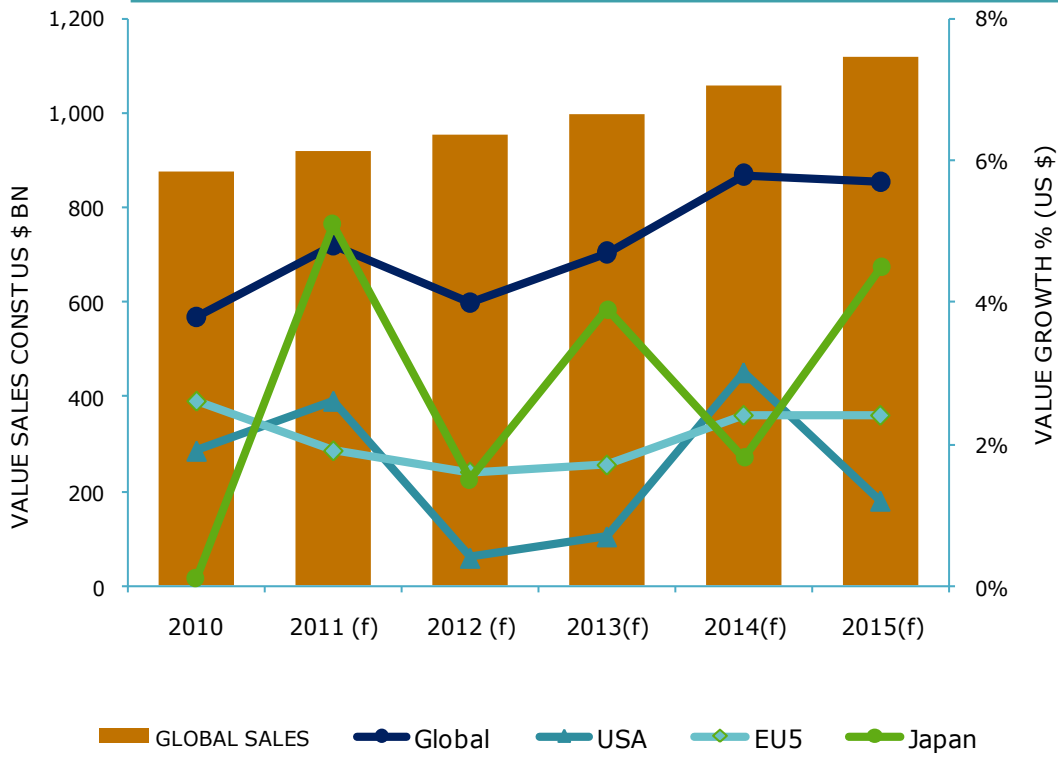
** Based on 12 companies providing field force data for all years between 2004 and 2009 consecutively.

Source: IMS Brogan. IMS Detailing Survey. 2009.



Global Forecast: 3-6% CAGR to 2015 Volume Over \$ 1 trillion^(*)

Global Sales and Growth (constant US\$)



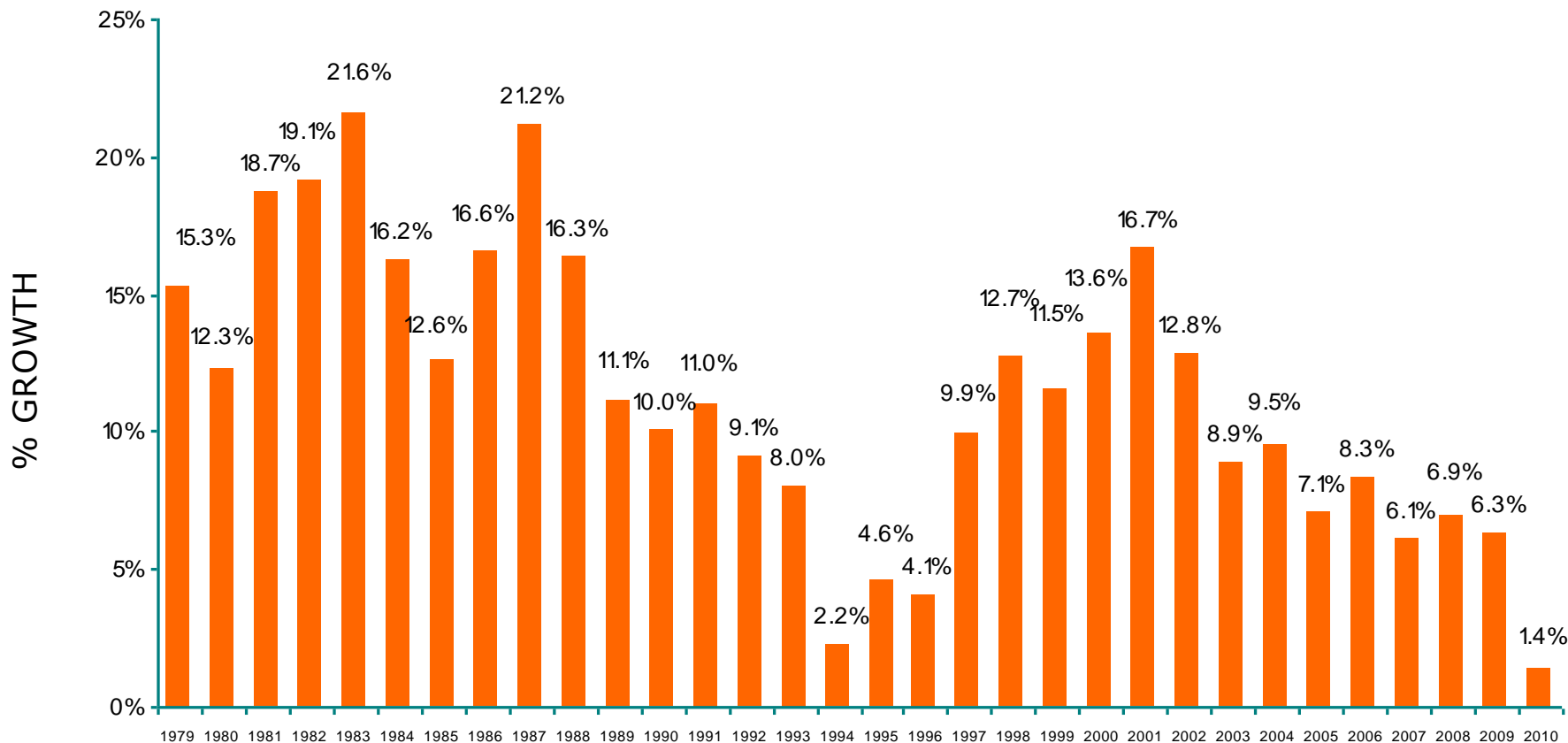
	Mature Markets CAGR 2010-2015	Pharmerging Markets CAGR 2010-15
US	0-3%	Tier 1 19-22%
Japan	2-5%	China 19-22%
Germany	1-4%	Tier 2 12-15%
France	0-3%	Brazil 10-13%
Italy	1-4%	Russia 11-14%
Spain	1-4%	India 14-17%
UK	-1-2%	Tier 3 10-13%
Mature	1-4%	Pharmerging 13-16%

Source: IMS Health Market Prognosis, March 2011 Provisional forecast. For ROW, Egypt and Ukraine, 2015 sales estimated using 2011-2014 CAGR as per Sept. 2010 forecasts. ^(*) at ex-manufacturer price levels, not including rebates and discounts



Canada's 2010 growth (+1.4%) marks the lowest growth rate recorded in over 30 years

Total Canadian Drug Store and Hospital \$ Purchases, 2010



Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. MAT December 2010.



Canada: Major Market Drivers

- Health care consuming greater share of overall provincial expenditures (Ontario 45.7% in 2009*)
- Spending restraint in provincial budgets
- Provinces continue to restrict access to newer drugs
- Provincial governments target generic prices
- Loss of Exclusivity



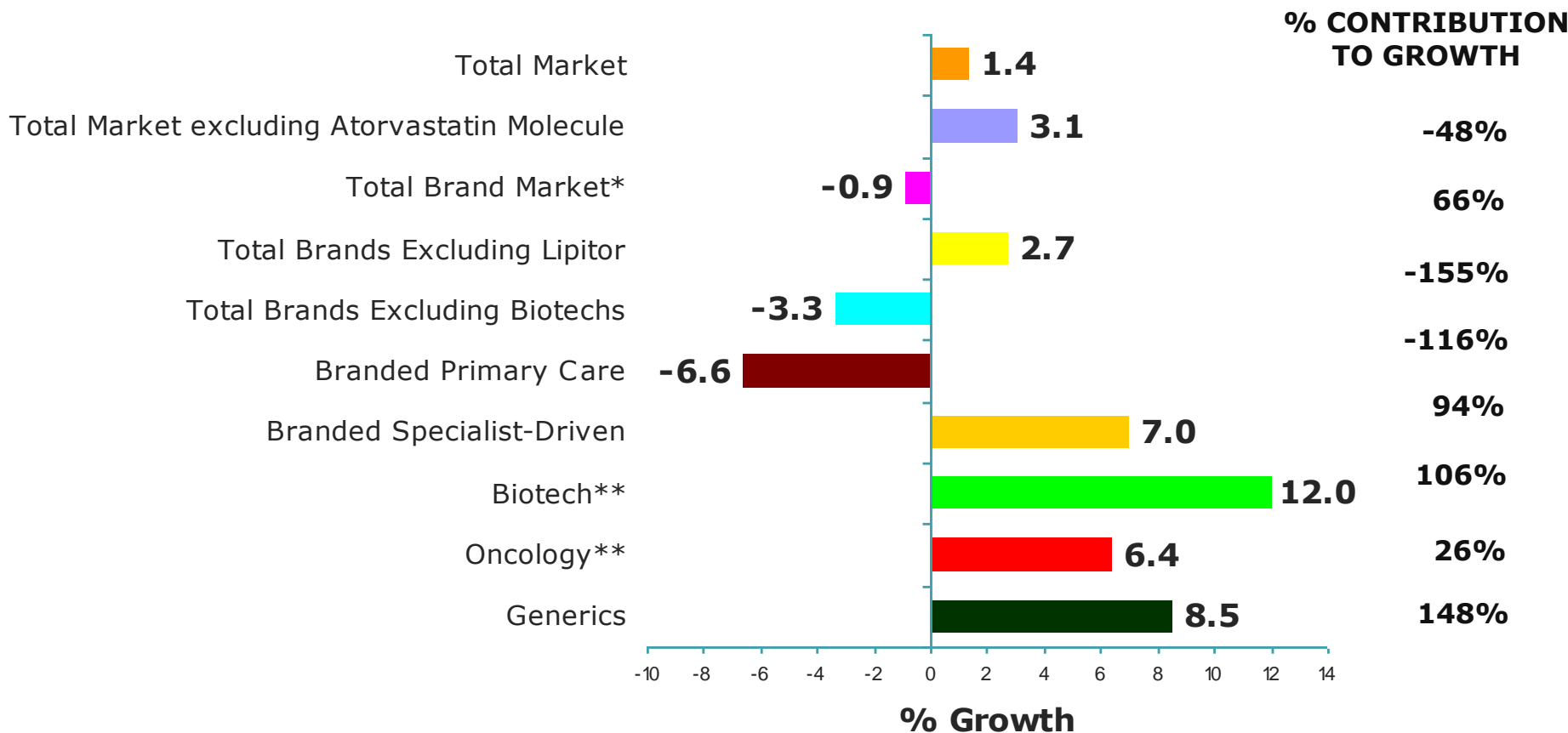
*Source: CIHI Report. October 2010.



Market performance varies considerably by segment

Brands contribute negatively (-48%) to absolute market growth;

Generics contribute most (148%), MAT December 2010



*Brand market segment definition includes biotech and oncology segments

**Biotechnology market segment includes some oncology products. MIDAS. Biotech products launched to June 2010.

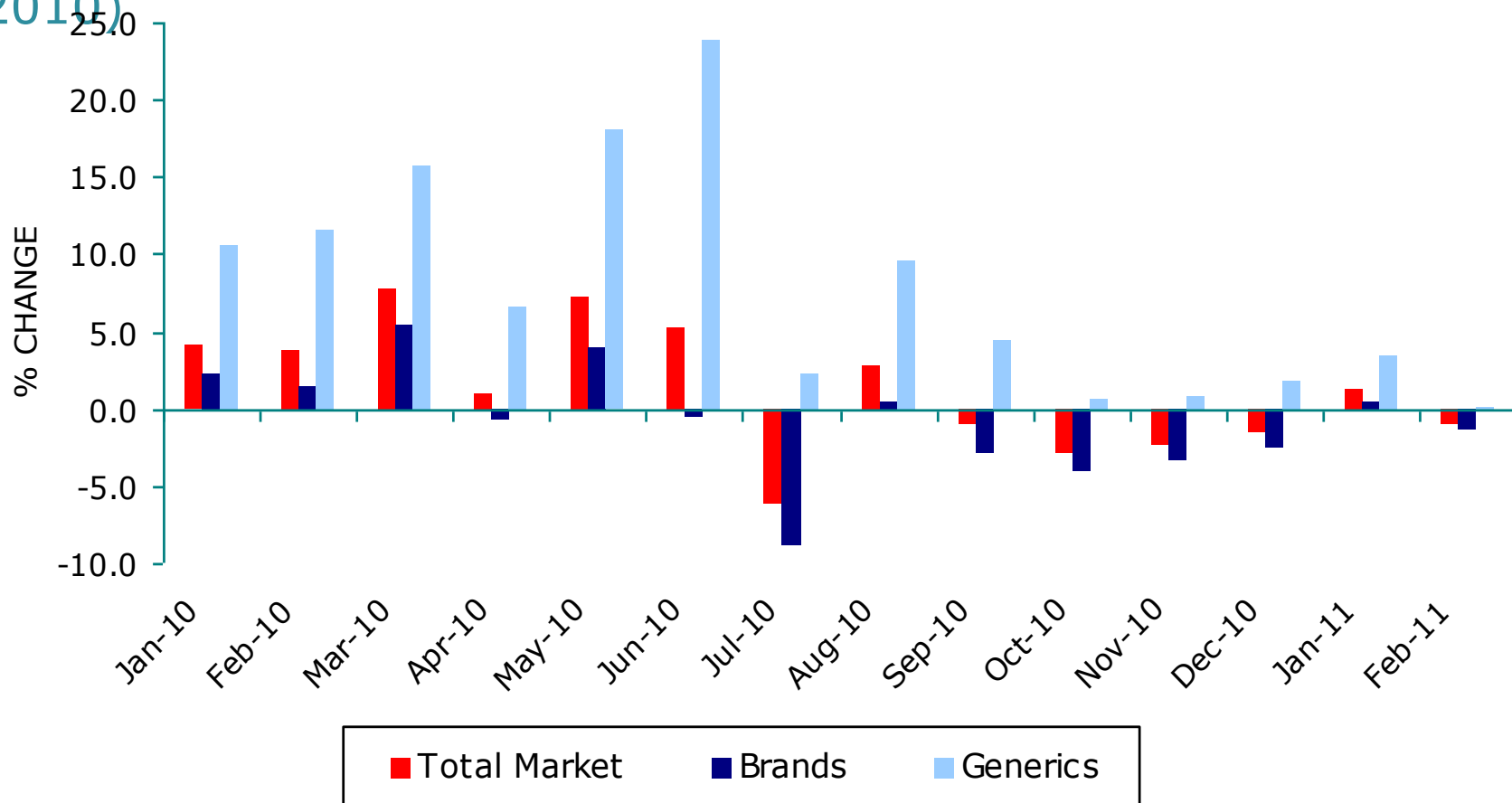
Branded Primary Care and Specialist-driven segments are sourced from MIDAS. YTD September 2010.

Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. MAT December



Impact of provincial drug reforms and Lipitor LoE hit hard mid-year

(Purchases Growth, Months January 2010 to December 2010)

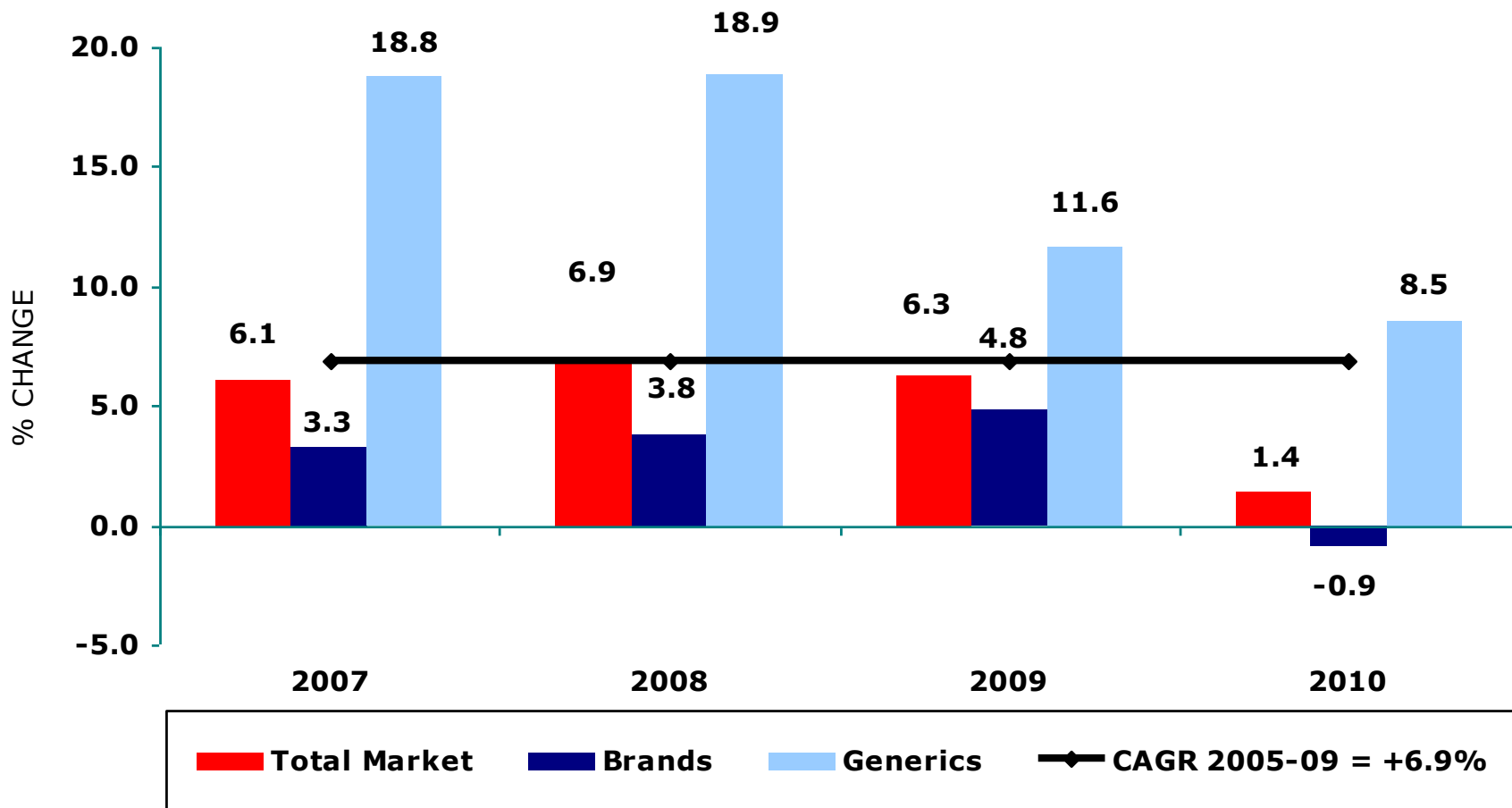


Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. December 2010.



Price Regulation & major LoEs hamper market growth

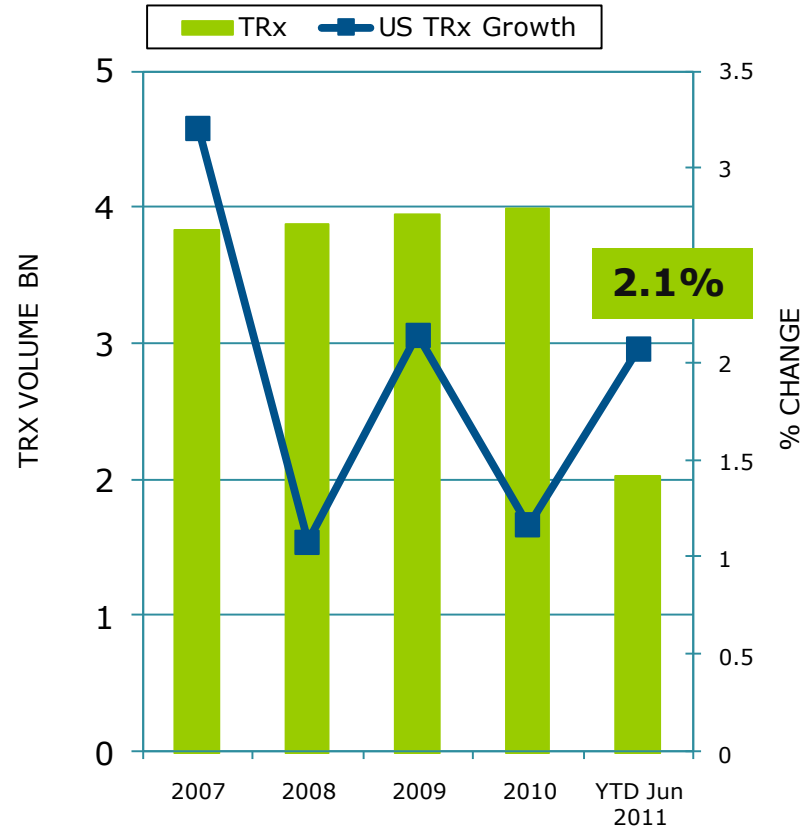
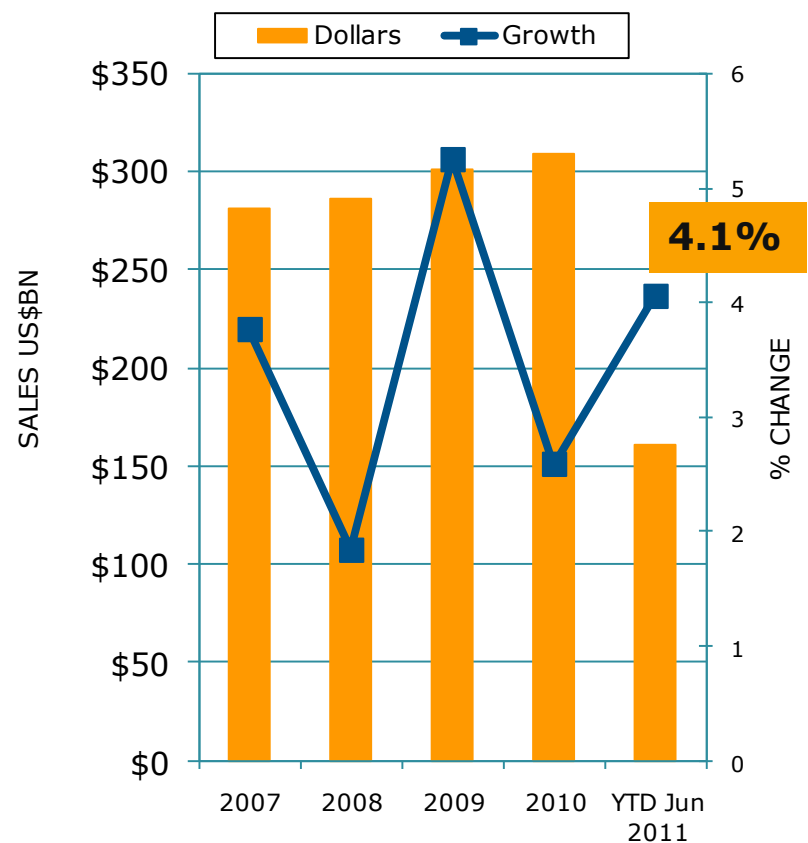
\$ Purchases Growth, Full-year 2007 to 2010



Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. December 2010.



2011 is off to a good start in the US

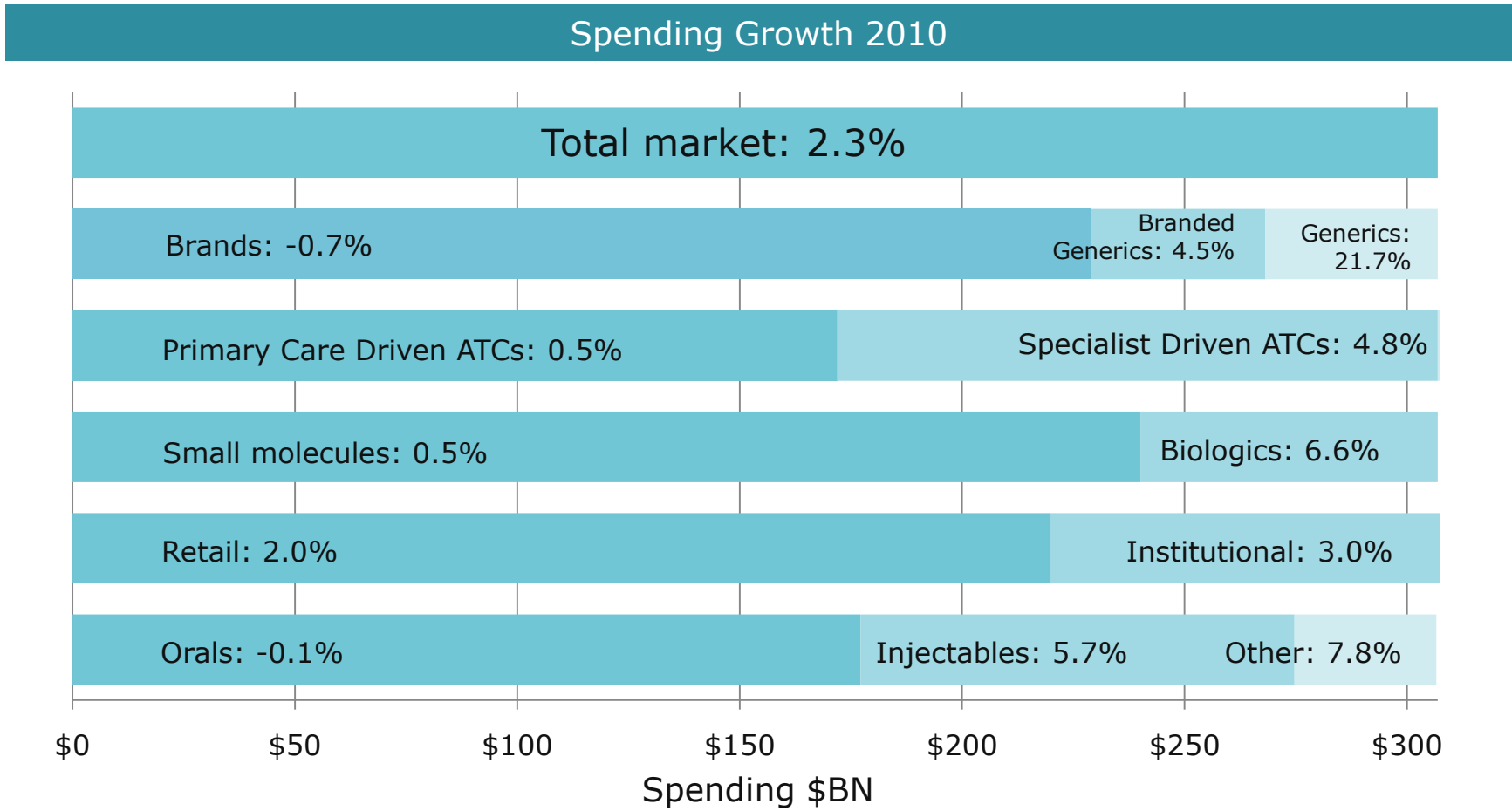


Source: IMS Health, National Sales Perspectives, Jun 2011

Source: IMS Health, National Prescription Audit, Jun 2011



Spend grew 2.3% but largest segments grew slower or declined in the US

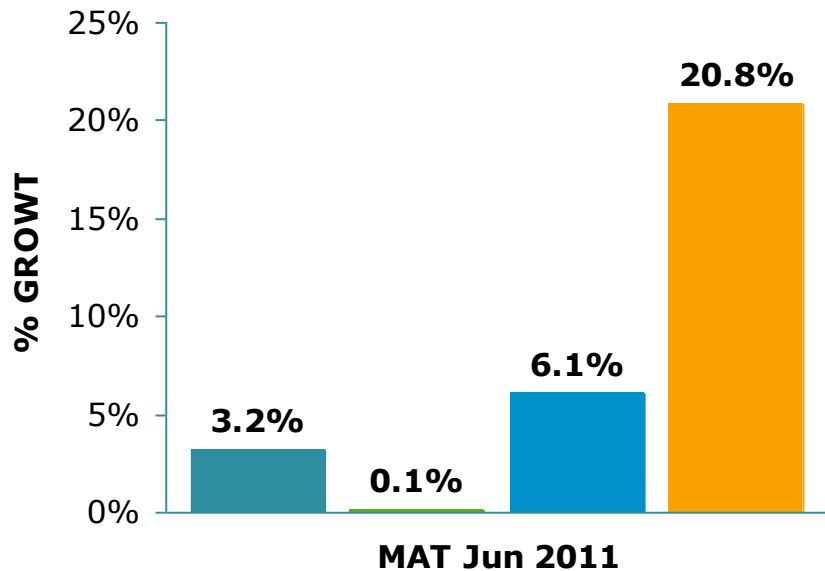


Source: IMS Health, National Sales Perspectives, Dec 2010

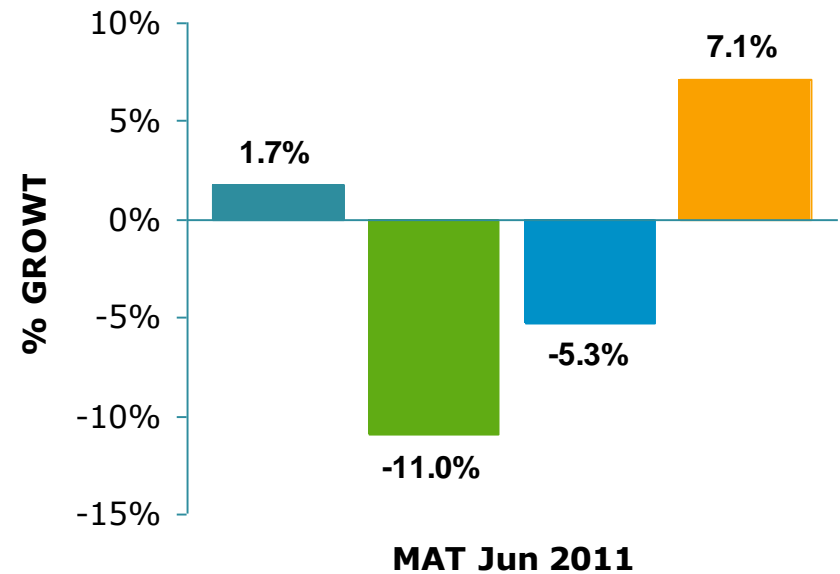


Branded sales growth barely positive in MAT June 2011

% Growth US\$



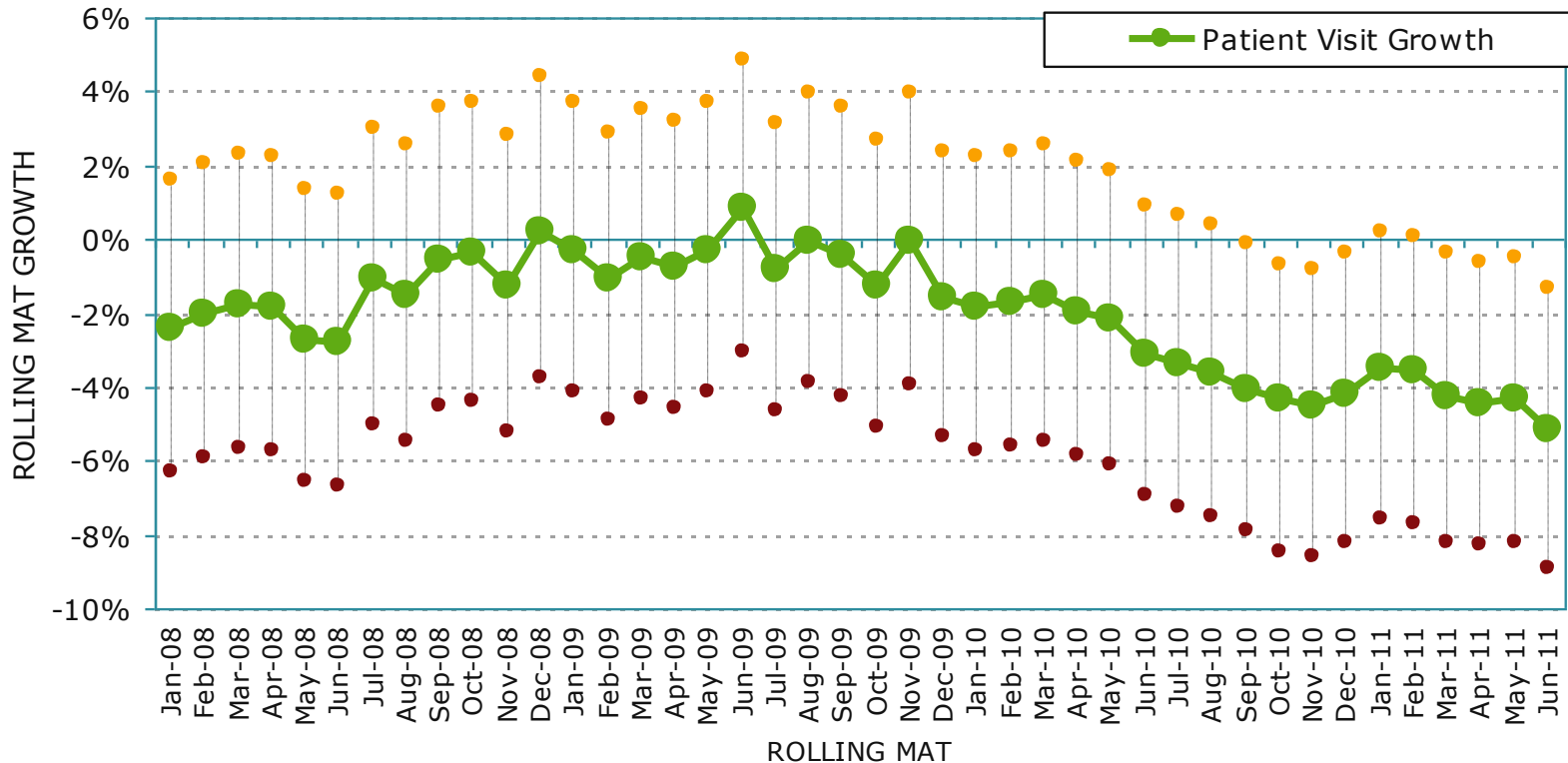
% Growth TRx



■ Total market ■ Brands ■ Branded generics ■ Unbranded generics



Patient visit trends remain negative with -5.2% growth in MAT June 2011; Long term headwinds for demand will follow



Source: IMS Health, National Disease and Therapeutic Index, June 2011, Confidence Interval shown (+/-3.9%)



Trade channel performance- YTD

Channels	YTD Jun 2011		
	US\$bn	% Market Share	% Growth
Retail	114.2	71.3	4.0
Chain/Mass	56.7	35.4	4.7
Mail service	27.6	17.2	6.7
Independents	19.1	11.9	-0.3
Food stores	10.8	6.8	1.2
Institutional	46.0	28.7	4.3
Clinics	18.8	11.8	4.8
Hospitals	16.1	10.1	1.4
Long-term care	7.7	4.8	4.2
Home health care	1.3	0.8	4.6
HMO	1.3	0.9	44.1
Others	0.5	0.3	0.2
Total	160.2	100.0	4.1

Source: IMS Health, National Sales Perspectives, Jun 2011



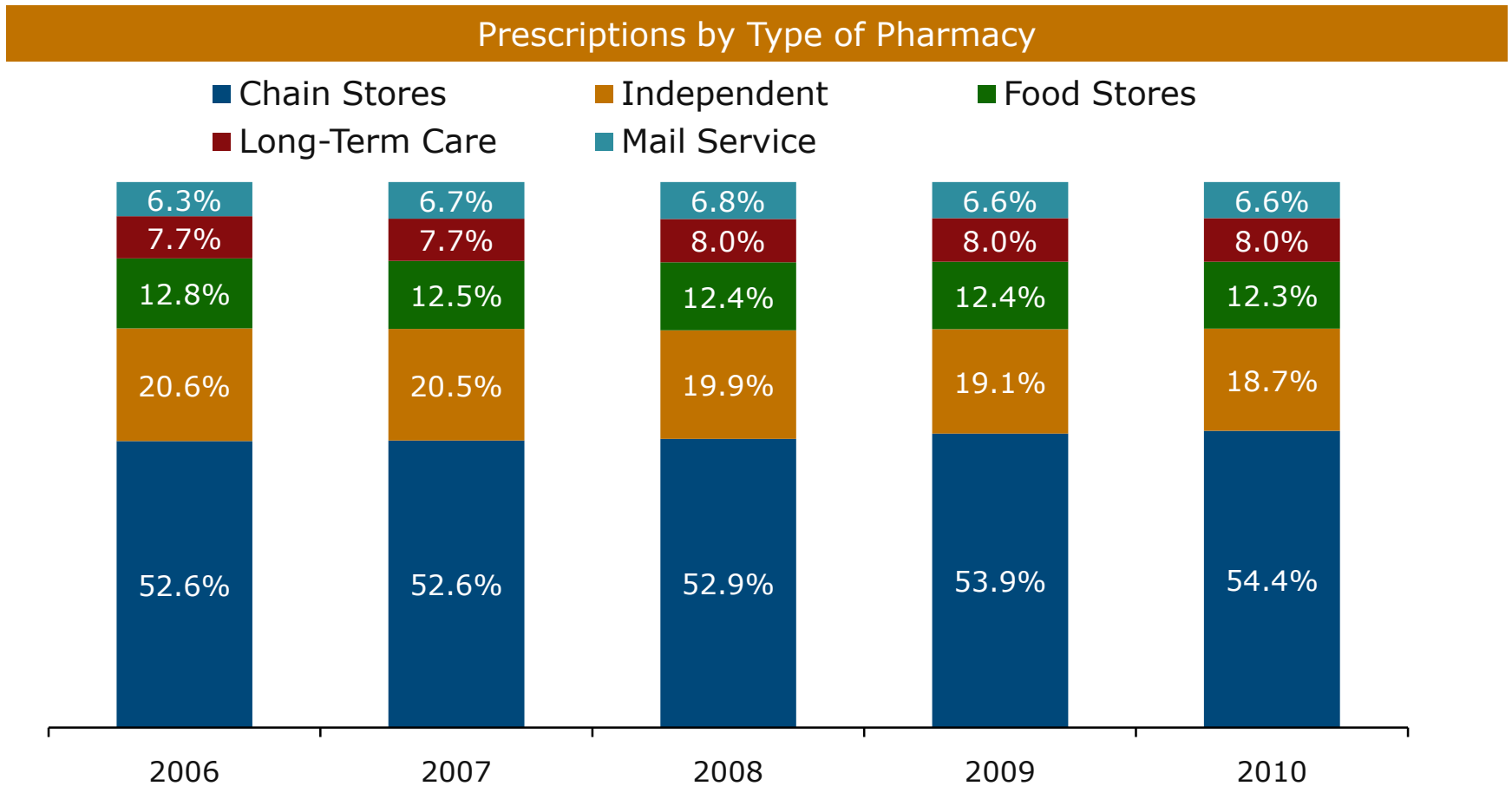
Trade channel performance- YTD

	YTD Jun 2011		
Channels	TRxs mn	% Market Share	% Growth
Retail	<u>1,859</u>	<u>91.8%</u>	<u>1.8%</u>
Chain/Mass	1,114	55.0%	3.0%
Independents	373	18.4%	0.0%
Mail service	241	11.9%	-0.3%
Food stores	131	6.5%	0.6%
Non retail channels	<u>167</u>	<u>8.2%</u>	<u>5.5%</u>
LTC	167	8.2%	5.5%
Total	2,025	100.0%	2.1%

Source: IMS Health, National Prescription Audit, Jun 2011



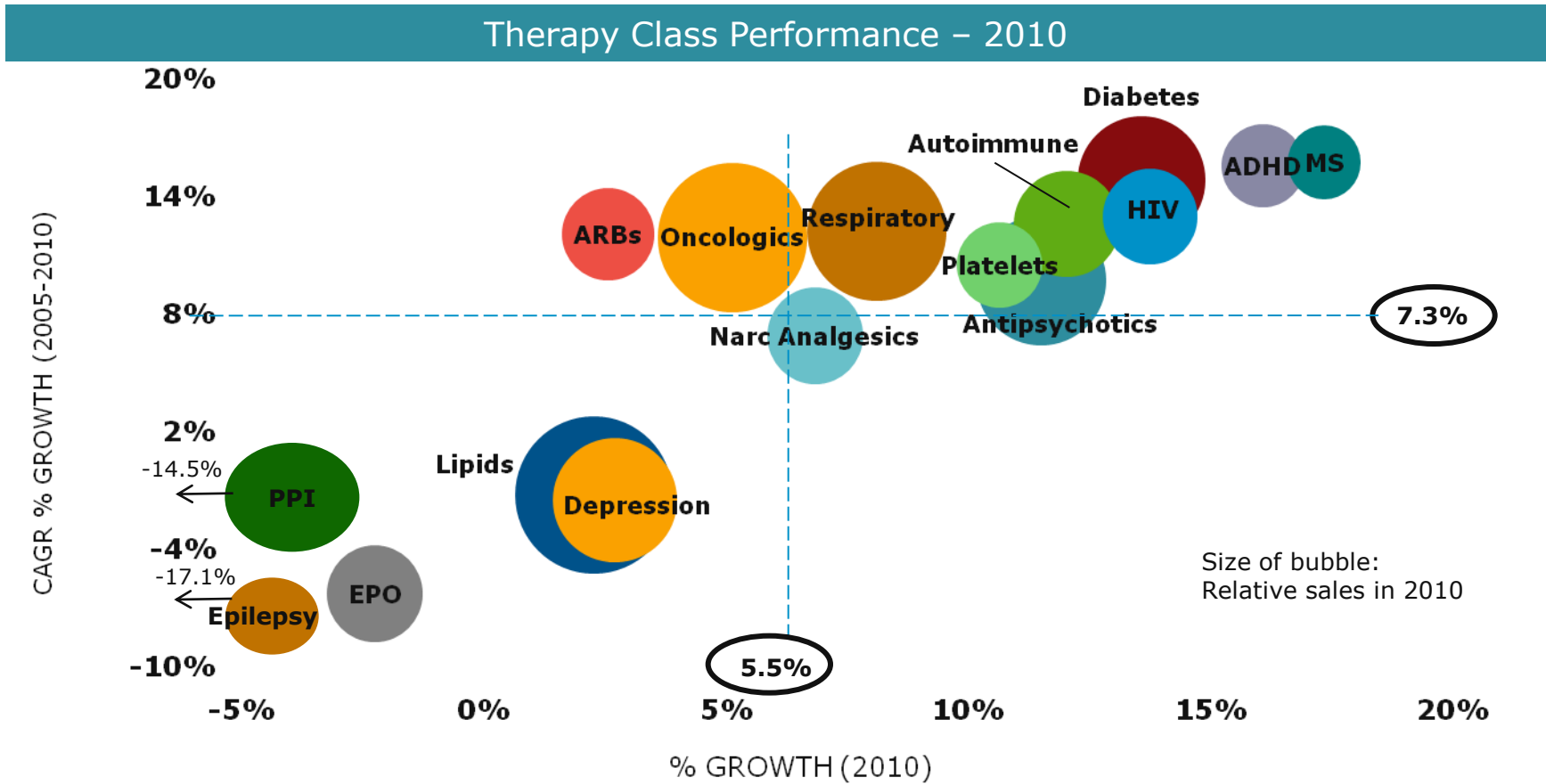
Patients chose to fill more prescriptions at chain drugstores



Source: IMS Health, National Prescription Audit, Dec 2010



Therapy Class performance – Top 20 Therapy Areas

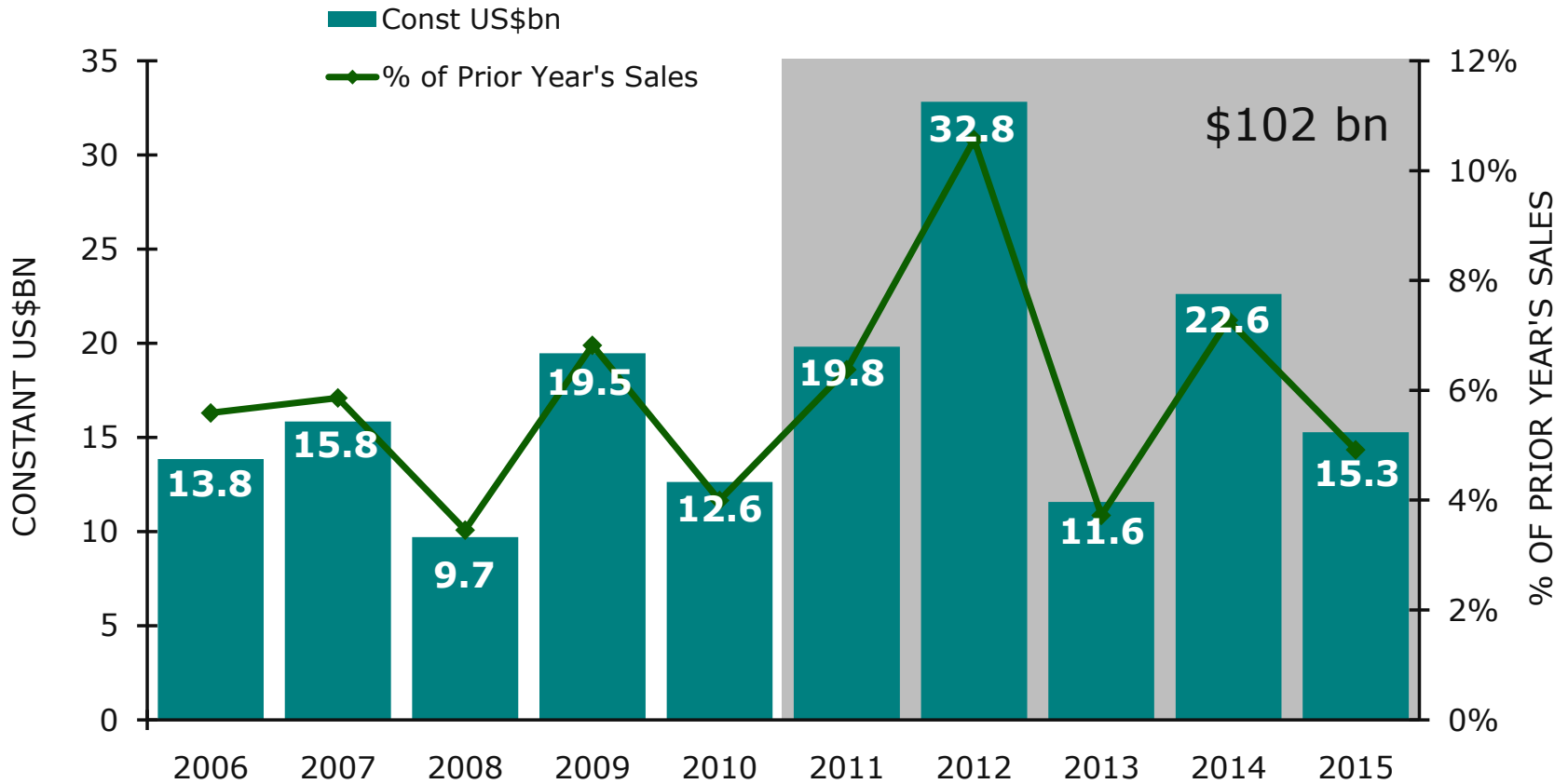


Source: IMS Health, National Sales Perspectives, Dec 2010



\$102 bn at risk to generic competition in the US by 2015

Value of products at risk 2005-2015

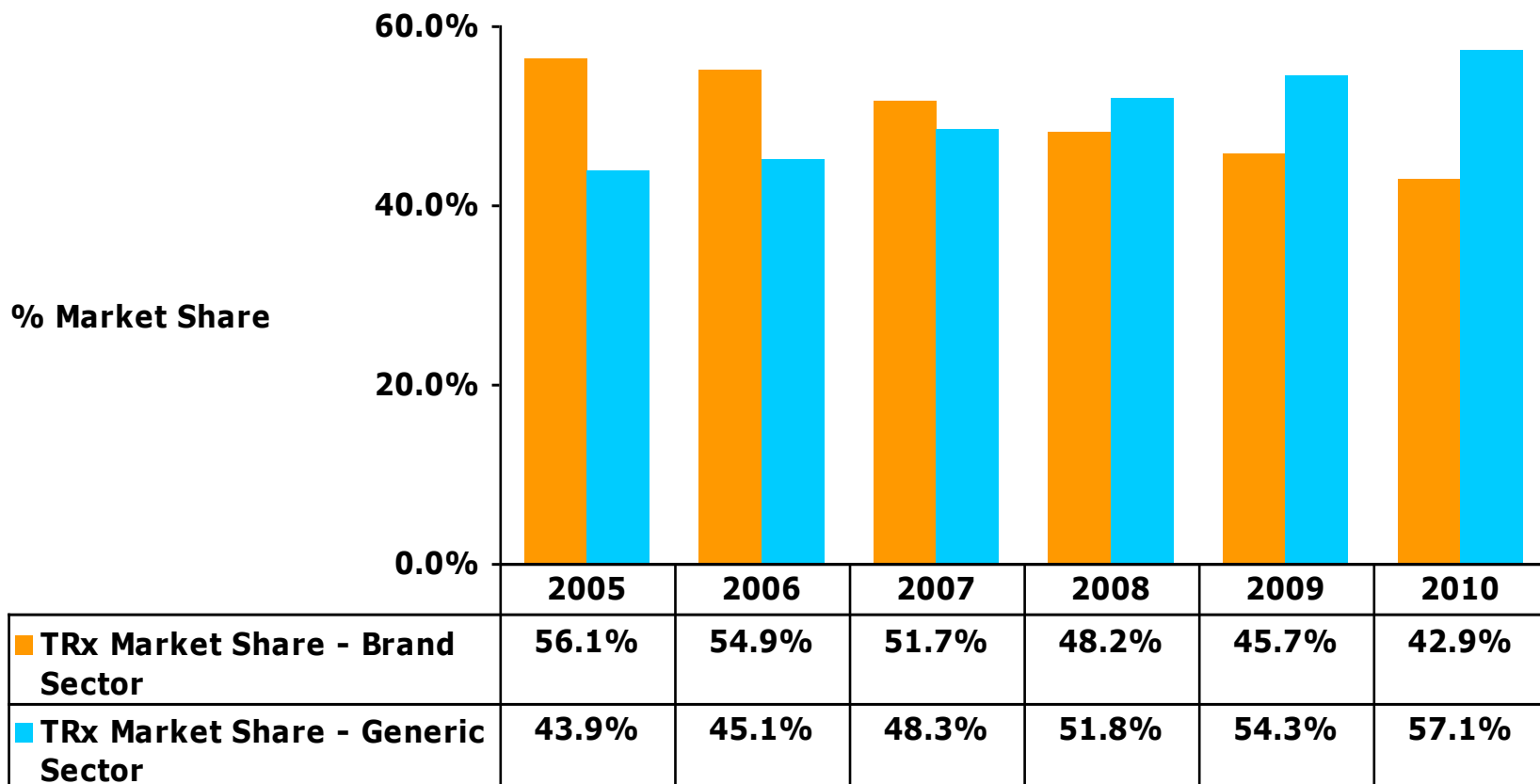


Source: IMS Health, MIDAS, Market Segmentation, Dec 2010



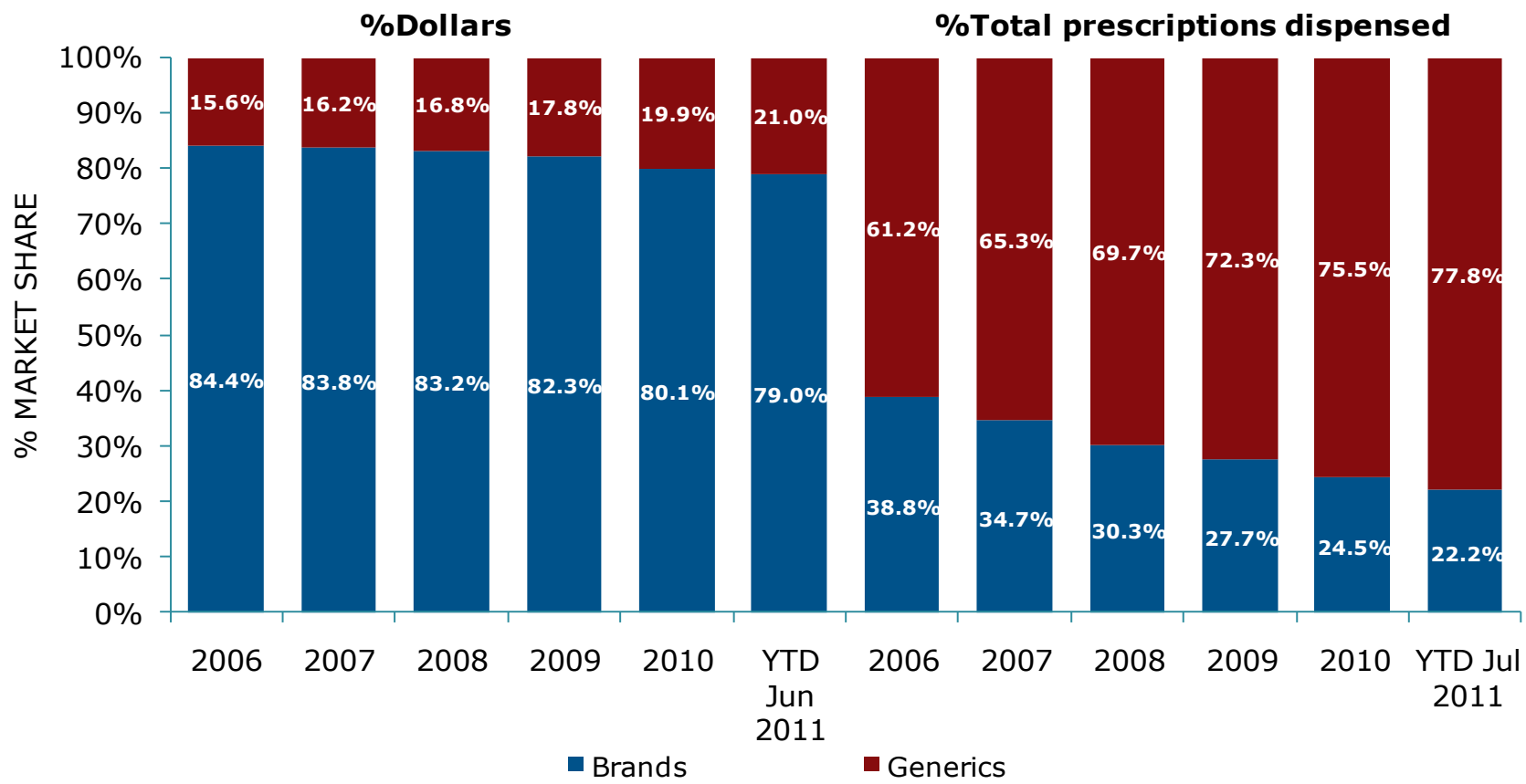
Generics claim the majority of TRx volume due to major patent losses

Canadian market, Prescription Market Share – Brand versus Generic





Generics have reached an all-time high share

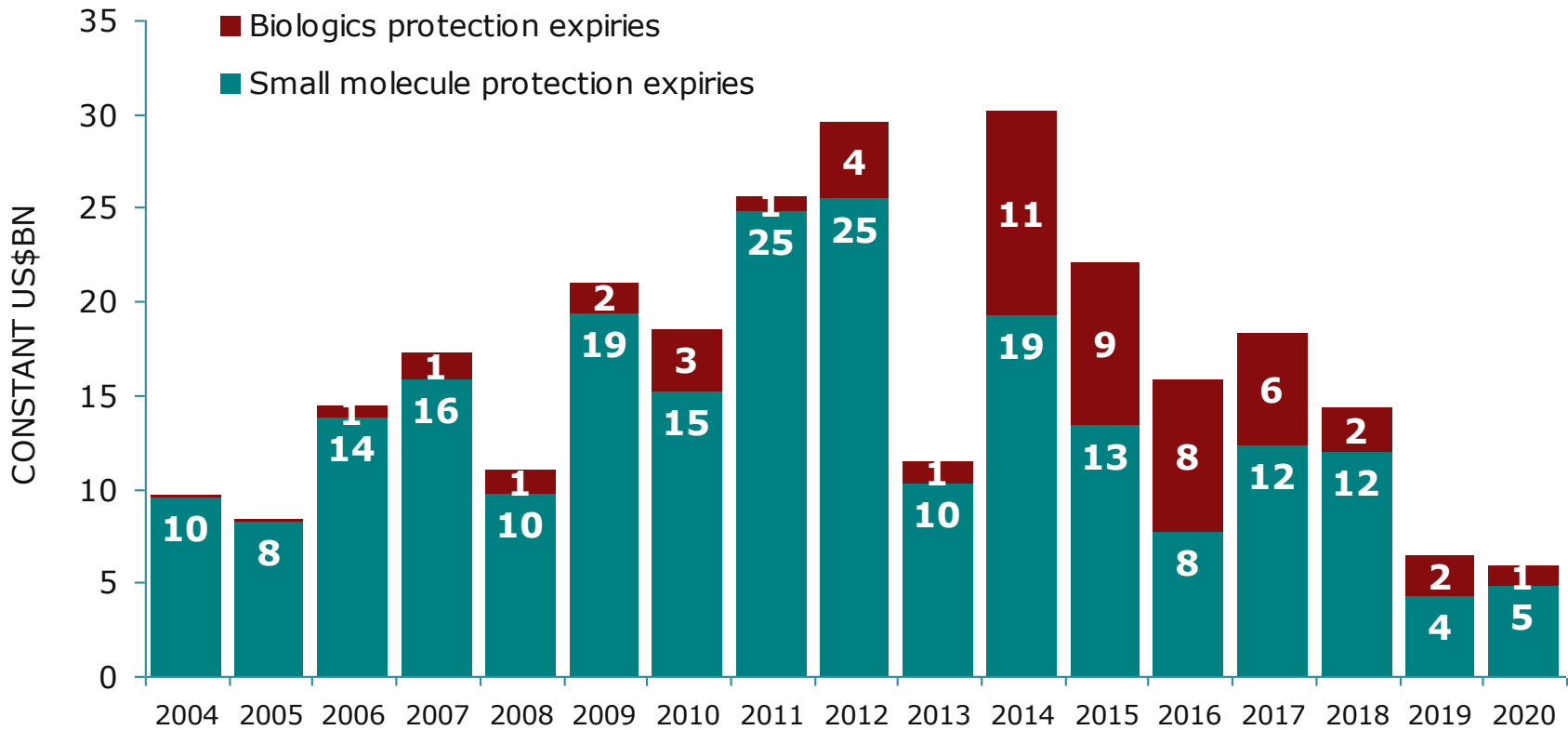


Source: IMS Health, National Sales Perspectives, Jun 2011, Branded generics disaggregated, Source: IMS Health, National Prescription Audit, Branded generics disaggregated, Jul 2011



Long term LOE exposure

Value of products at risk 2004-2020



Source: IMS Health, MIDAS, Market Segmentation, Jun 2010

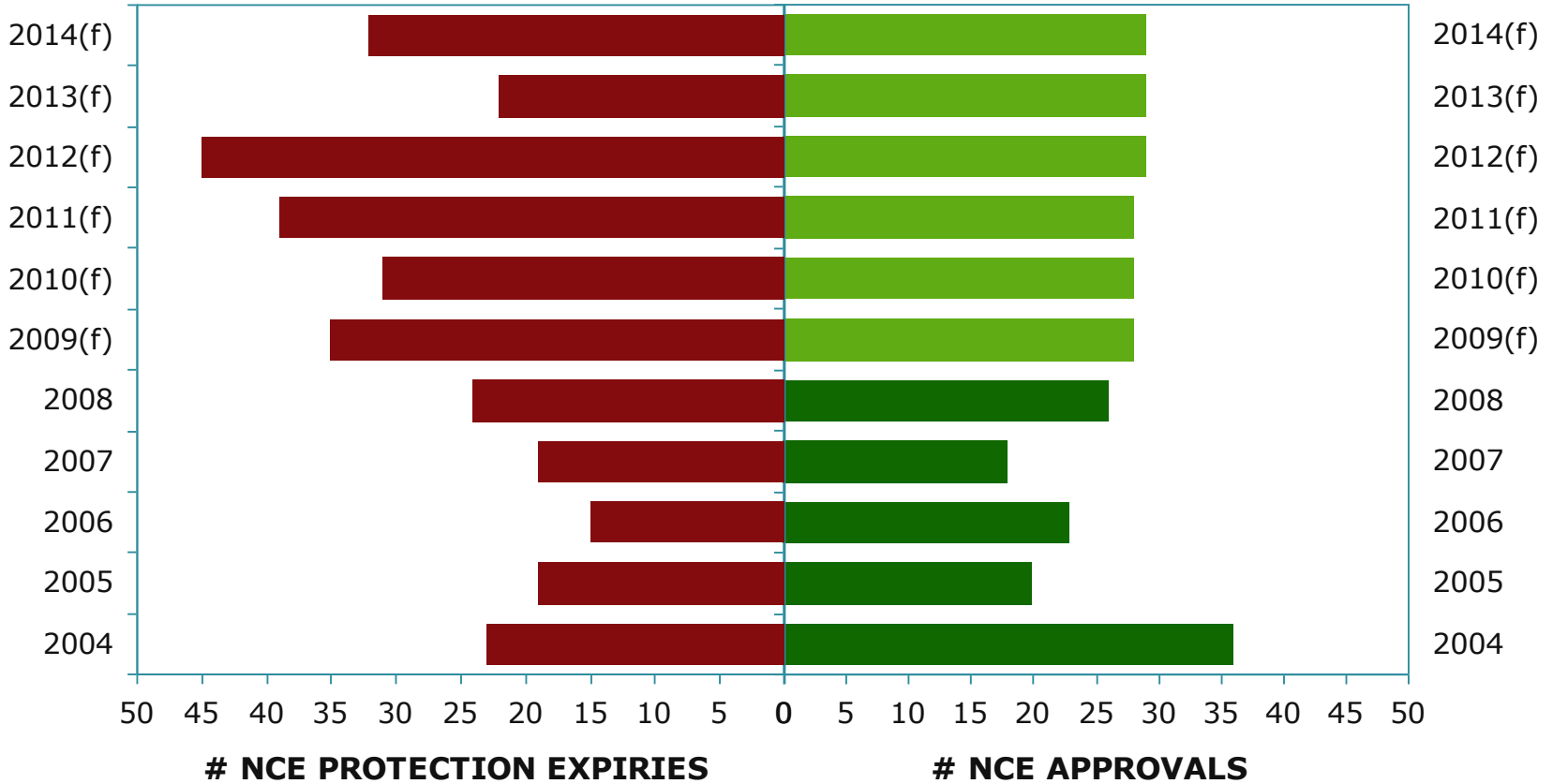


Average cost of treatment for major therapy areas has declined significantly in recent years

- Across 28 therapy areas (including all major chronic therapies) an average 3% reduction in the daily cost of therapy has occurred since 2006; this is 0.8% annual percent lower than CPI rates
- The impact of loss of exclusivity of a major product affects the average cost for the total therapy area
- Price competition within the generic market is intense and contributing to the decline in average therapy costs



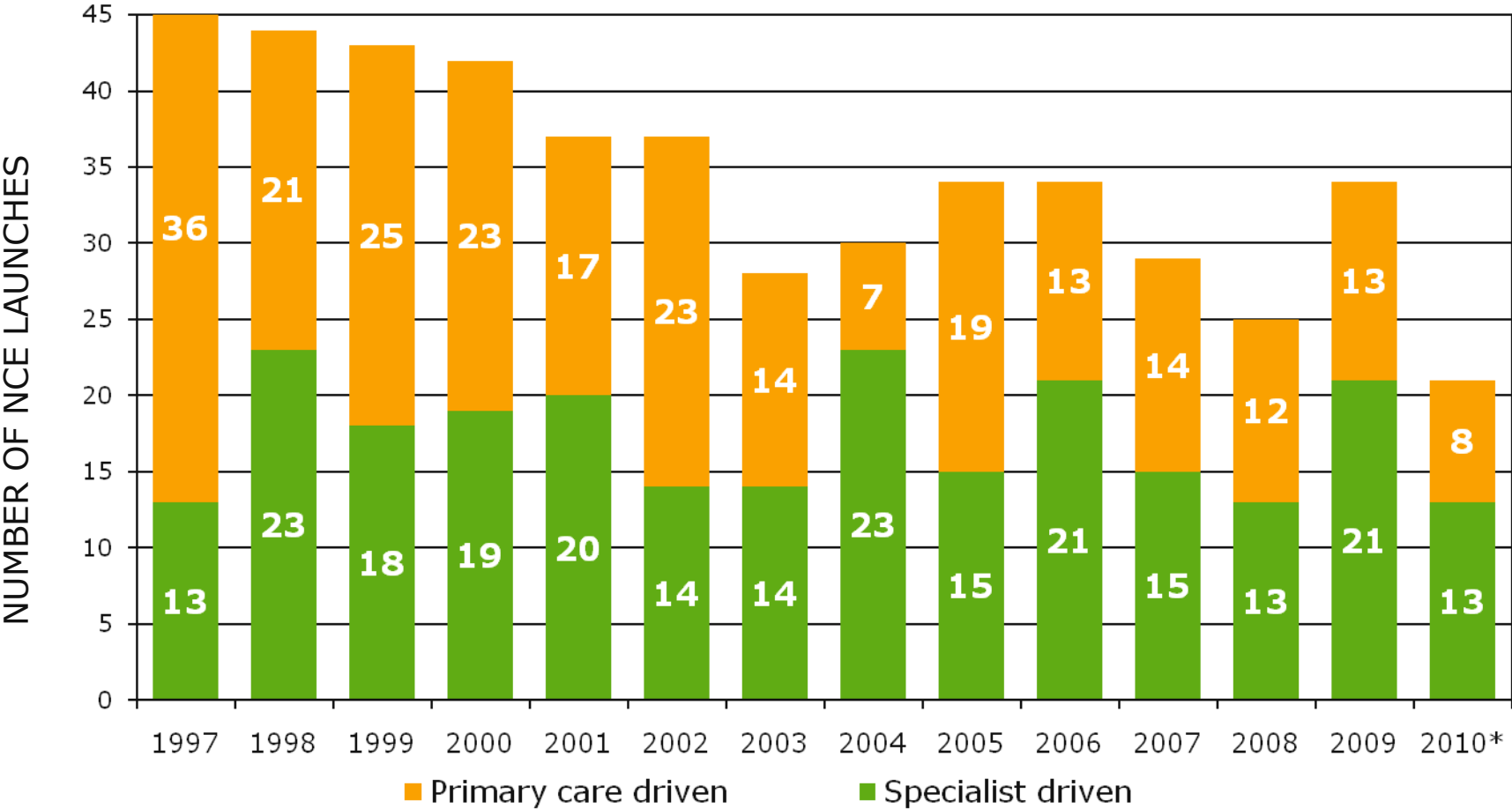
More innovative products will be lost than gained in the next few years if FDA approvals remain at the current level



Source: FDA, IMS Health, Market Insights Team Analysis, Oct 2009



Global launches of innovative products declining, driven by fewer primary care products



Source: IMS Health, New Product Focus, Jan 2011. *Preliminary estimate



10 fastest-growing products by incremental TRx growth

Ventolin and Crestor are the only brands

2010 Rank		Total Rxs (000s)	Total Rx Growth (000s)	Total Rx Growth (%)
1	Apo-atorvastatin	3,013	3,013	N/A
2	Ventolin HFA	2,208	1,965	810.0%
3	Crestor	9,620	1,912	24.8%
4	Apo-salvent CFC Free	2,576	1,545	149.9%
5	Teva-amoxicillin	4,191	1,491	55.3%
6	Teva-risedronate	1,252	1,252	N/A
7	Teva-amlodipine	1,496	1,033	223.1%
8	Ran-ramipril	1,567	1,000	176.2%
9	Apo-lansoprazole	1,628	994	157.0%
10	Apo-hydro	3,664	988	36.9%

Source: IMS Brogan. Canadian CompuScript. MAT December 2010



Recent and future novel therapies do address unmet patient needs

Selected Product Launches 2009-2013

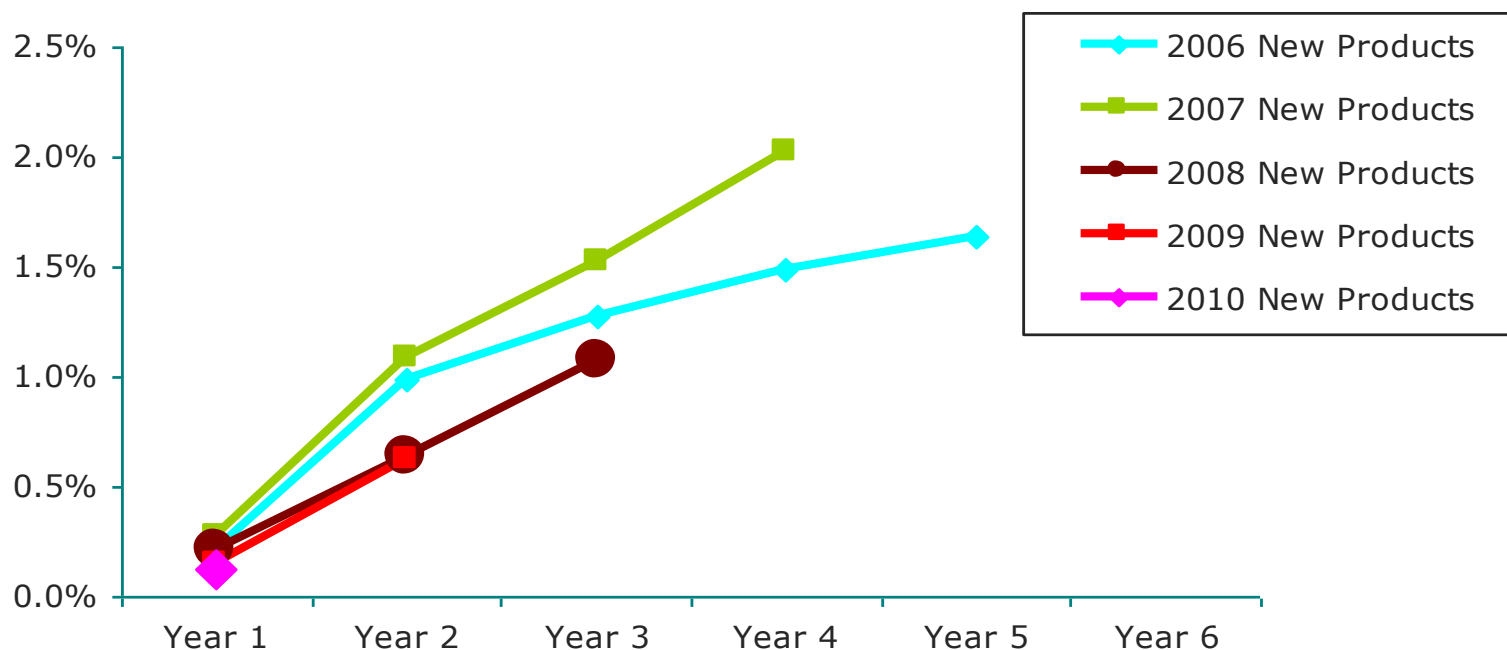
Disease area	Launched	Upcoming
Arrhythmia	Brinavess™ (vernakalant) Multaq® (dronedarone)	
Autoimmune	Simponi® (golimumab) Stelara™ (ustekinumab)	tofacitinib (JAK inhibitor)
Diabetes	Nesina® (alogliptin, DPPIV) Onglyza™ (saxagliptin, DPPIV) Victoza® (liraglutide, GLP-1)	Bydureon™ (exenatide, GLP-1) canagliflozin (SGLT2) dapagliflozin (SGLT2) lixisenatide (GLP-1) Tadjenta™ (linagliptin, DPPIV)
Hepatitis C	Victrelis™ (boceprevir, NS3-4A PI) Incivek® (telaprevir, NS3-4A PI)	
Lupus	Benlysta® (belimumab)	
Melanoma	Yervoy™ (ipilimumab)	vemurafenib
Multiple sclerosis	Ampyra® (fampiridine, oral) Gilenya® (fingolimod, oral)	laquinimod (oral) ocrelizumab teriflunomide (oral)
Osteoporosis	Prolia® (denosumab)	
Thrombosis/ Acute coronary syndrome	Brilique™ (ticagrelor, P2T), Effient® (prasugrel,) Pradaxa® (dabigatran etexilate, Xa)	Eliquis® (apixaban, Xa)
Prostate cancer	Firmagon® (degarelix) Jevtana® (cabazitaxel) Provenge® (sipuleucel-T)	Zytiga™ (abiraterone acetate)

Source: IMS Institute for Healthcare Informatics, Apr 2011



Slower uptake from new product launches in '09 & '10

Market share of new NASs (and LEs) over five years, 2010



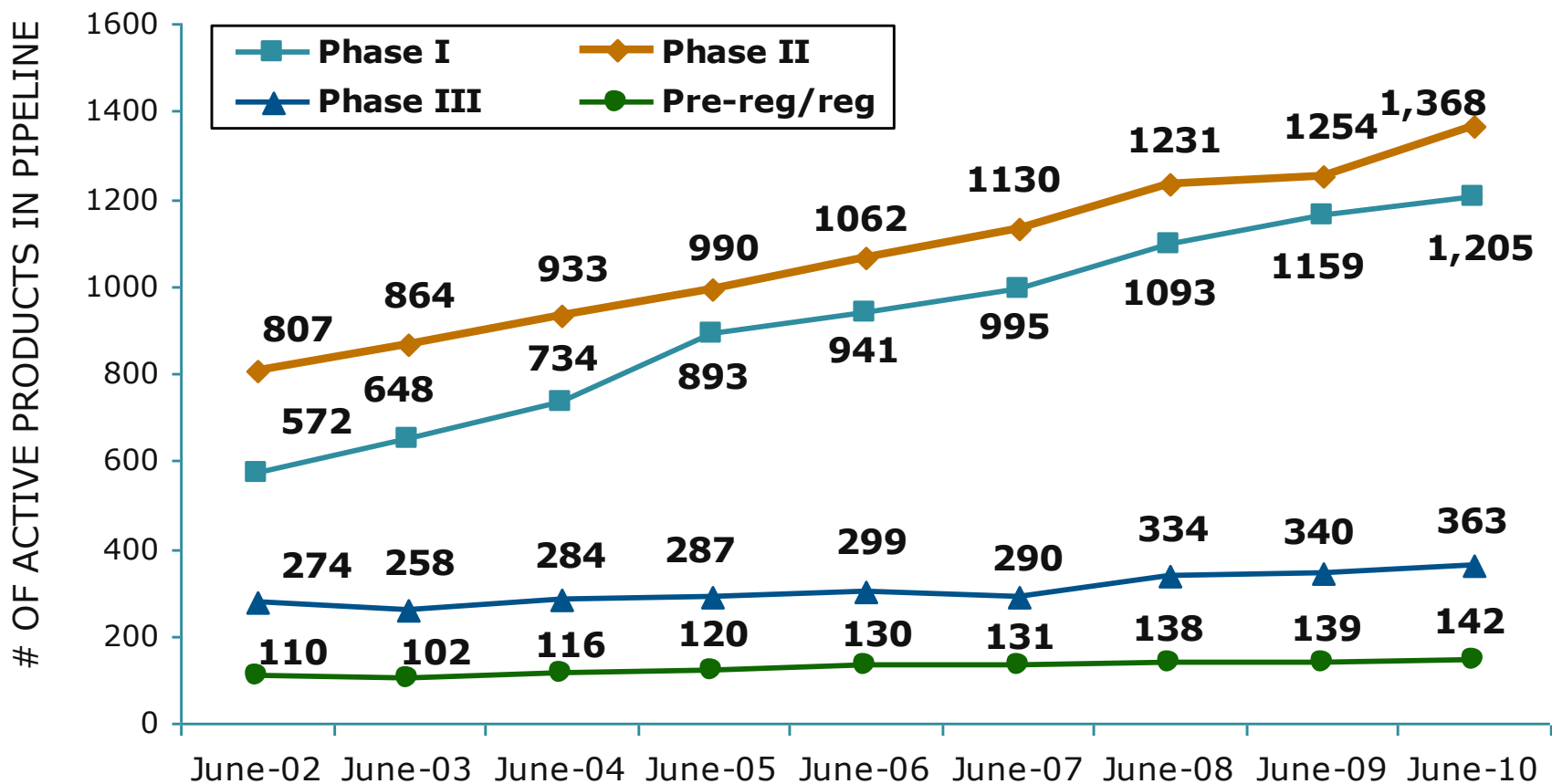
Market Share of Products in Year of Launch

	2006	2007	2008	2009	2010
New Product Market Share	0.21%	0.28%	0.21%	0.15%	0.12%

Source: IMS Brogan. Canadian Drug Stores and Hospital Purchases. MAT December 2010

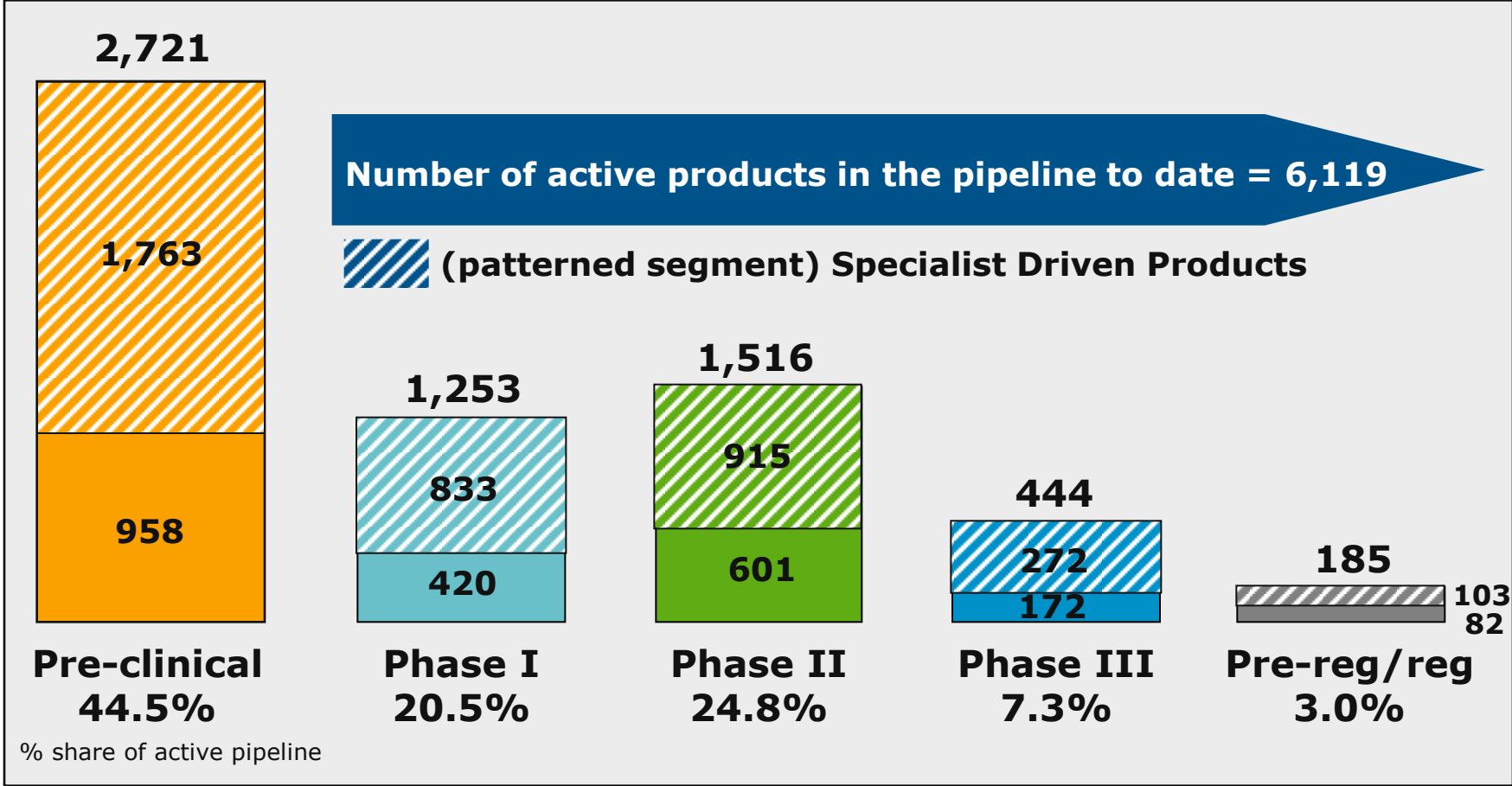


Active pipeline continues to grow in each stage of clinical development except Phase I



Source: IMS Health, R&D Focus, Jun 2010 and previous year slides

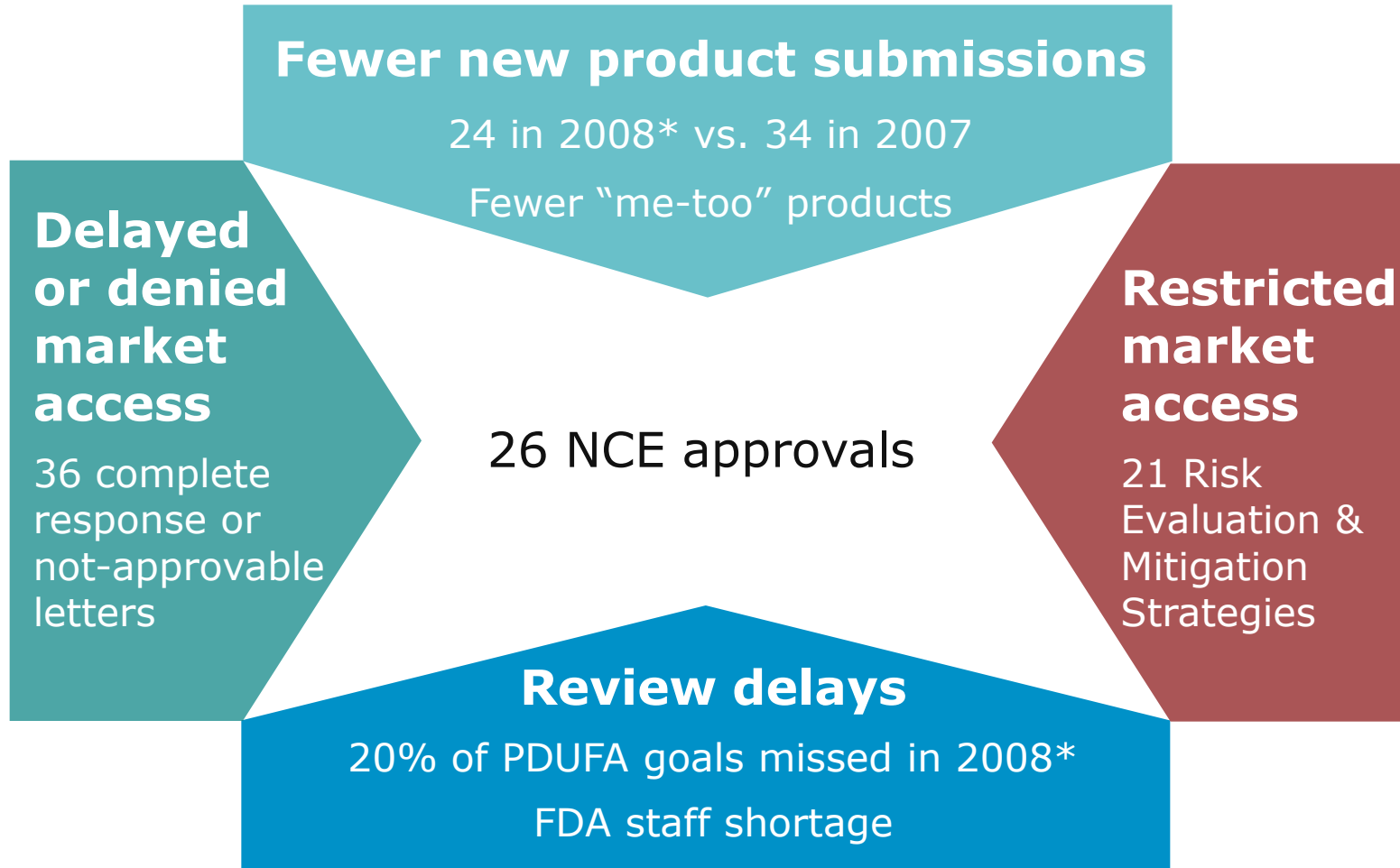
Global R&D pipeline compared against previous year



Source: IMS Health, R&D Focus, Jun 2010

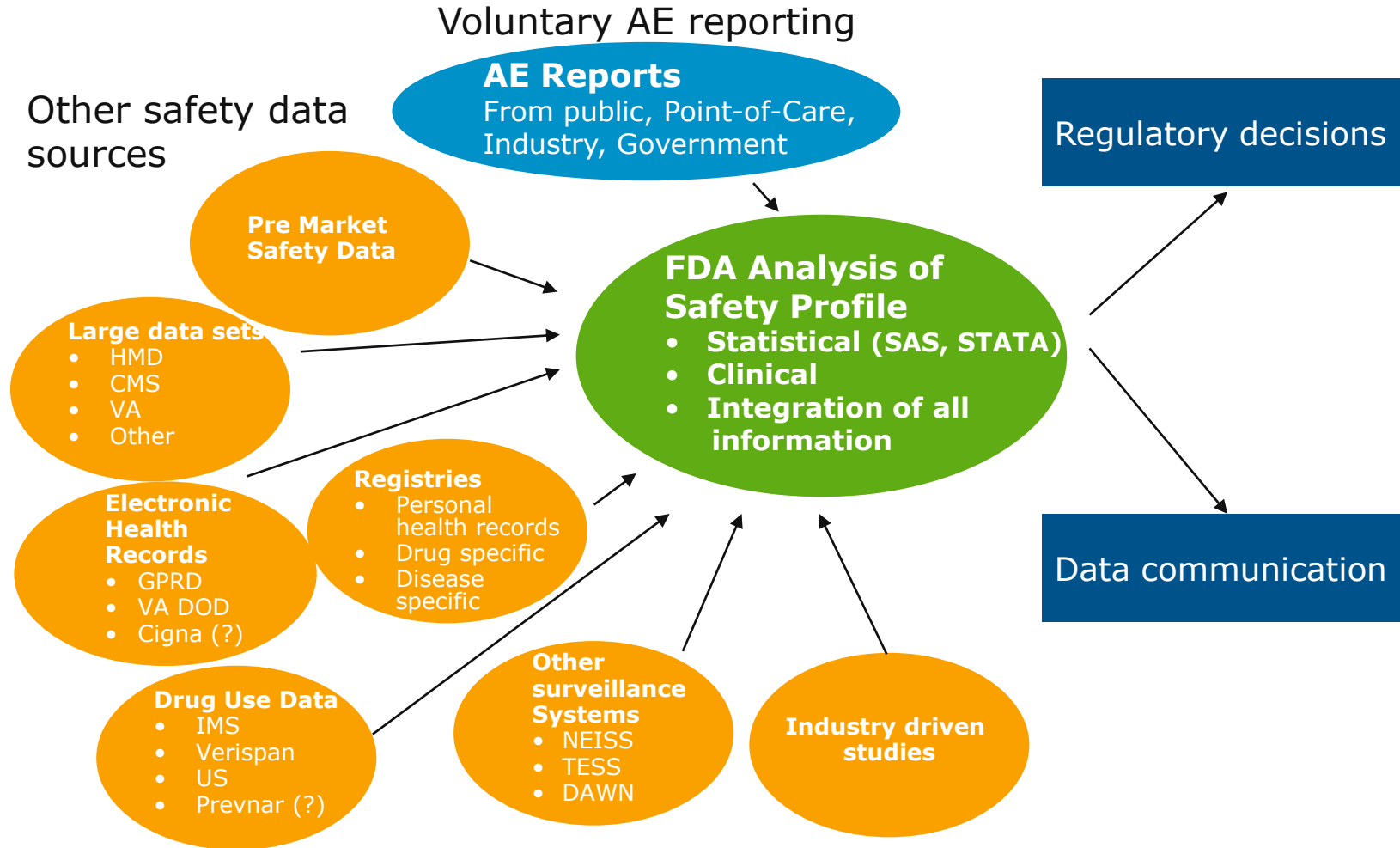


2008 FDA approvals of NCEs took place in a challenging environment



Source: IMS, Market Insights Research. *Jan-Oct 2008.

REMS programs and a more active FDA safety program will bring new risk/benefit dynamic



Source: FDA PDUFA IV Information Technology Plan, DRAFT, Dec 2007



Health care industry stakeholders have data needs to inform decision-making; needs that are not being met by pharma

Medical profession

- Improve patient management
- Mitigate against medical error
- Conduct research

Providers

- Develop and enforce guidelines
- Review efficiency & gain competitive advantage

Regulators

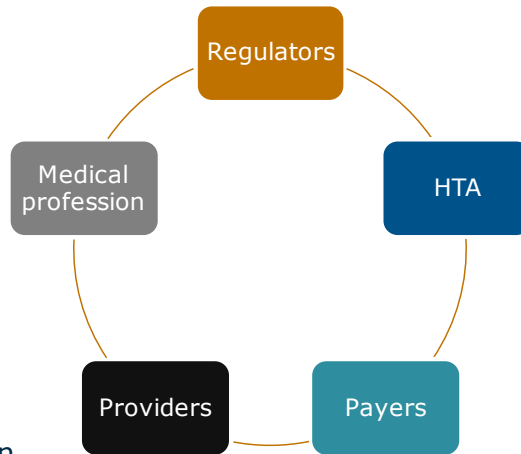
- Minimize/understand safety risk
- Measure associations between mid & long-term outcomes

HTA

- Evaluate relative clinical effectiveness
- Evaluate relative cost effectiveness
- Provide guidelines

Payers

- Evaluate effectiveness
- Manage and reward providers
- Specify or restrict services &/or payment



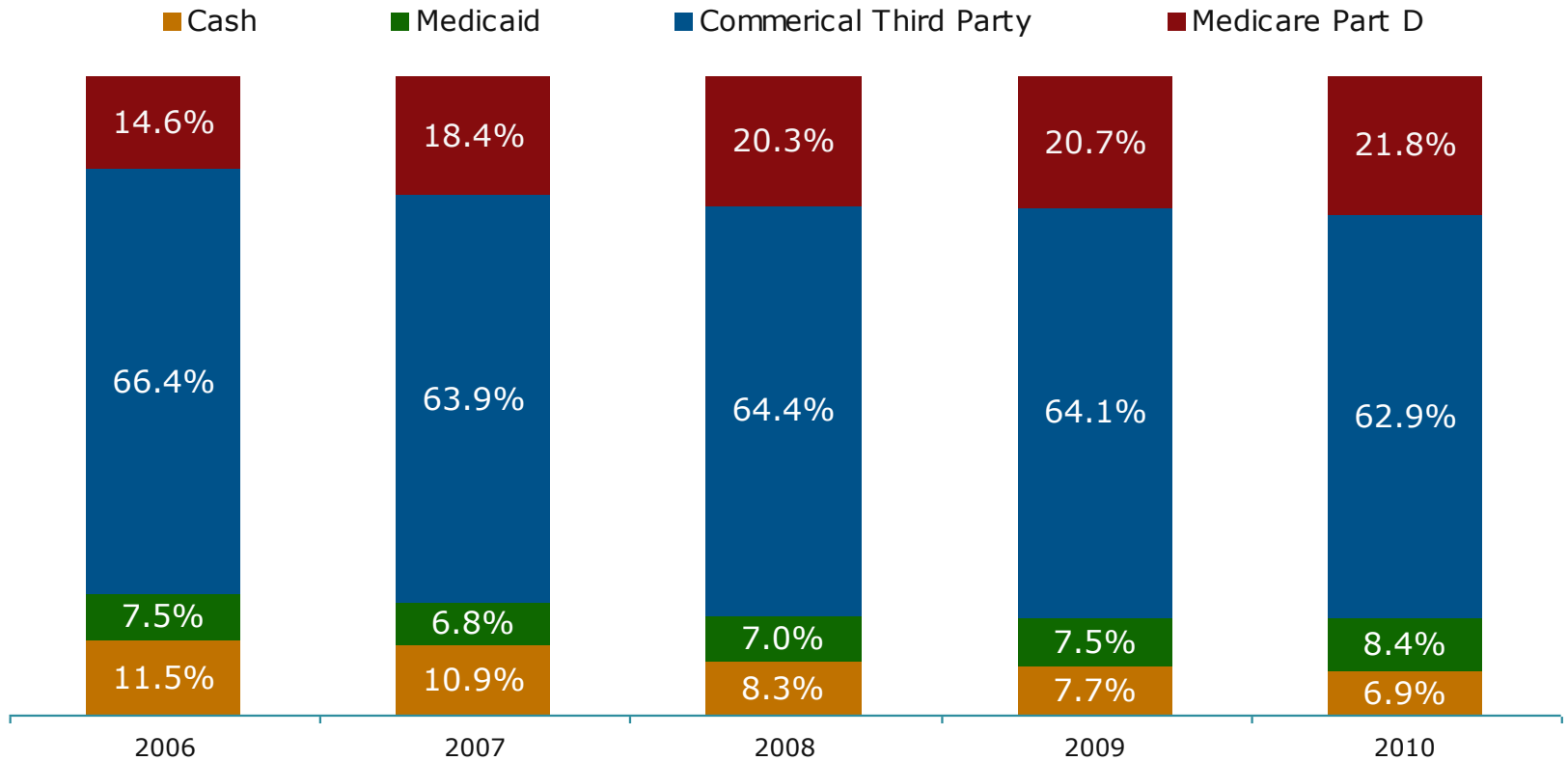
Data from pharma is based on studies designed by themselves in order to optimize their commercial opportunity while incurring the least risk.

These data do not tell stakeholders what they want to know, historically there were few other options available



Payment type continued shift toward Medicare Part D and Medicaid

Dispensed Prescriptions by Payment Type

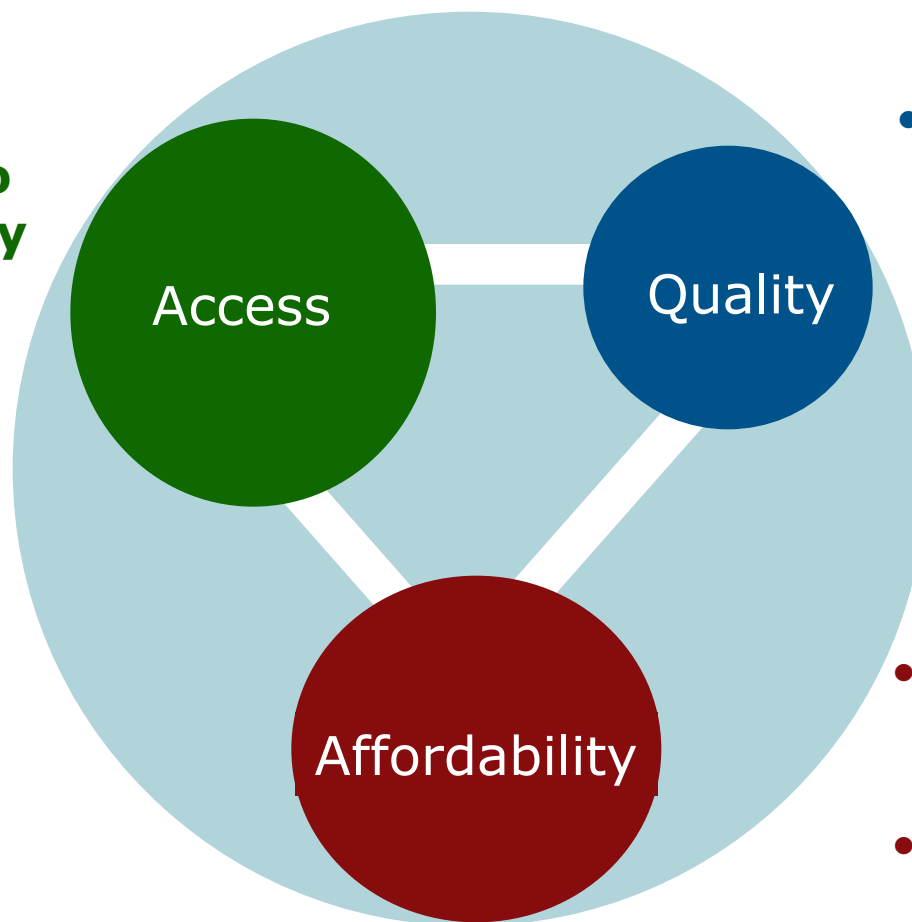


Source: IMS Health, National Prescription Audit, Dec 2010



Debate in the US on healthcare reform was broadly centered on core issues of access, affordability and quality

- **Providing insurance to the currently uninsured**

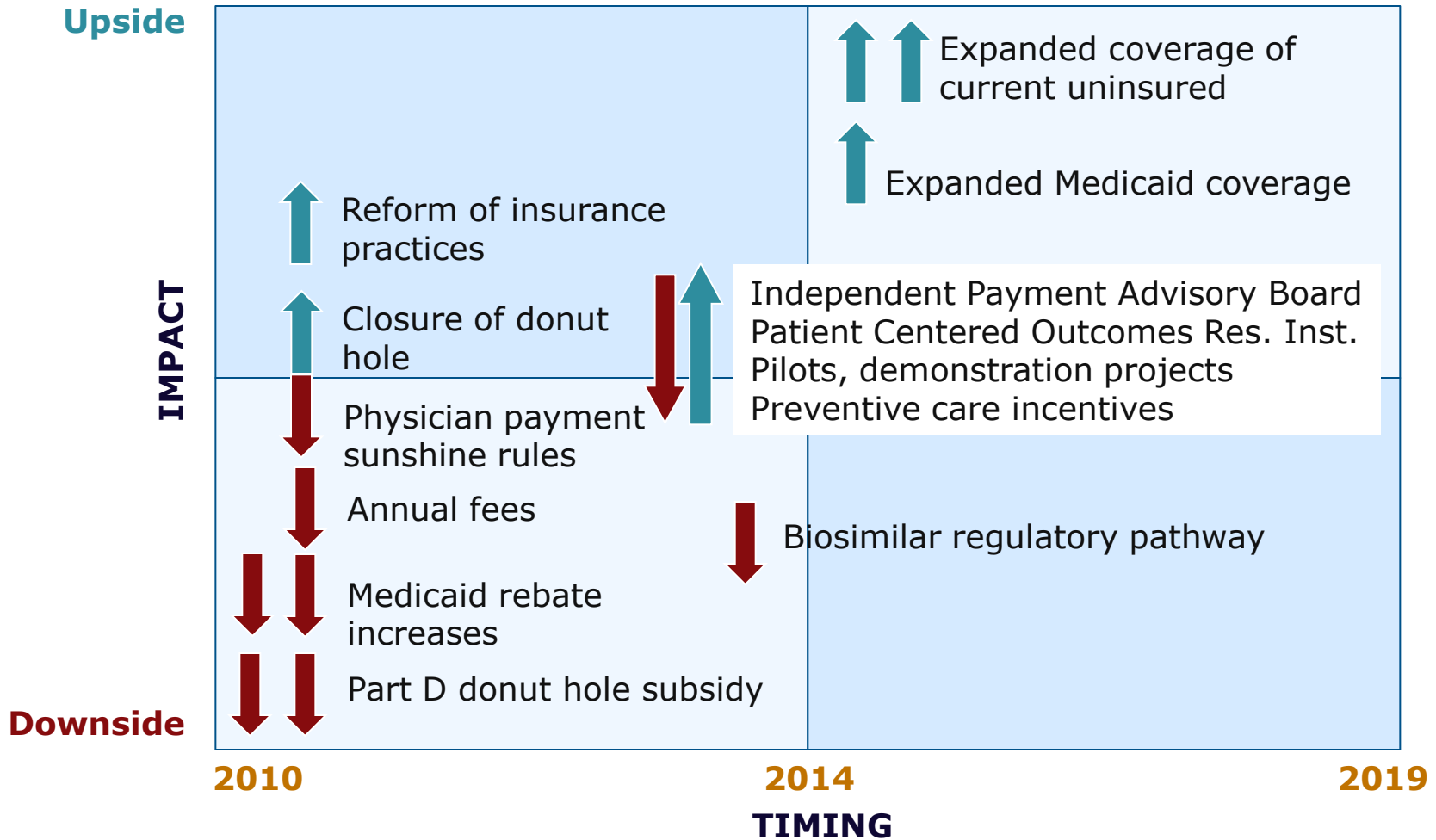


- **Improving the quality of care that is delivered**

- **Lowering costs of existing activities**
- **New sources of funding**



The most certain impacts are negative in the short term but more positive or uncertain longer term





What's In?

- Slower market growth
- Generics & Patent Cliff
- Specialty is growing but at a slower pace
- RX to OTC
- Private label OTC
- Chain & Mass, Mail service, Clinics, & LTC
- Medicaid & Medicare Part D
- Cough, Cold and Flu
- Price Increases
- REMS
- Drug Shortages
- S&D



What's out and what's ahead???

What's Out?

- Brand growth
- Innovation
- R&D
- Office visits
- Elective surgery
- Adherence

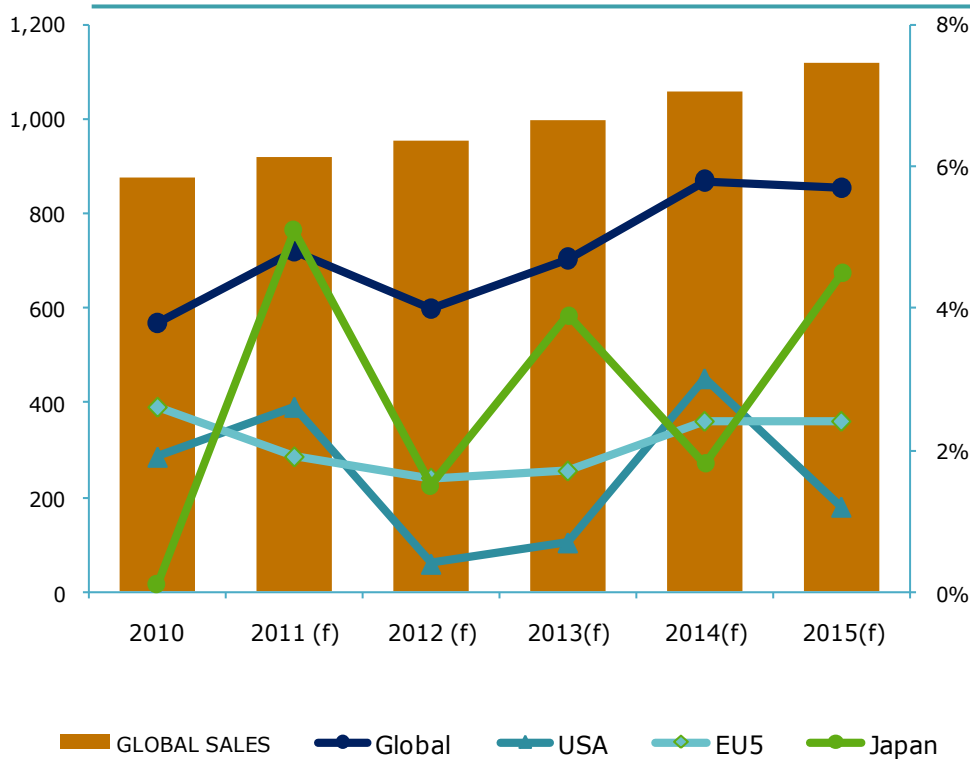
What's Ahead?

- Government
 - Medicaid
 - Medicare Part D
 - Health Care reform
 - Generic User fees
 - Generic approval backlogs
 - More FDA inspections
 - AMP
 - Biosimilar Pathway
 - REMS
 - Patent Settlements



Global Forecast: 3-6% CAGR to 2015 Volume Over \$ 1 trillion(*)

Global Sales and Growth (constant US\$)



Mature Markets CAGR 2010-2015		Pharmerging Markets CAGR 2010-15	
US	0-3%	Tier 1	19-22%
Japan	2-5%	China	19-22%
Germany	1-4%	Tier 2	12-15%
France	0-3%	Brazil	10-13%
Italy	1-4%	Russia	11-14%
Spain	1-4%	India	14-17%
UK	-1-2%	Tier 3	10-13%
Mature	1-4%	Pharmerging	13-16%

Source: IMS Health Market Prognosis, March 2011 Provisional forecast. For ROW, Egypt and Ukraine, 2015 sales estimated using 2011-2014 CAGR as per Sept. 2010 forecasts. (*) at ex-manufacturer price levels, not including rebates and discounts



Longer-term upsides to pharma growth are possible

Growing share of healthcare budget for pharmacotherapy

Expanded patient access to healthcare

Accelerated uptake of healthcare information technology

Greater clinical evidence of drug efficacy

Increased diagnosis of asymptomatic conditions

Emergence of new therapeutic platforms

Improved compliance and persistency rates

Aging population and economic development

Thank you
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