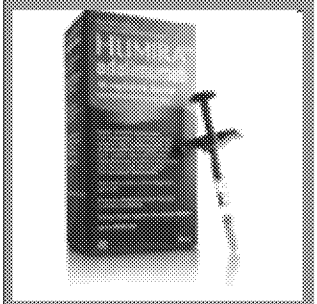

PRELIMINARY

CONFIDENTIAL

Assessing the Risk to Humira from Biosimilars and JAK-3

Abbott
A Promise for Life

Proposed Project Approach

August 24, 2010

McKinsey&Company

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CONTENTS FOR TODAY'S DISCUSSION

- **Our understanding of project context and objectives**
- Proposed approach / deliverables and working model
- Why McKinsey?
- Summary of McKinsey perspectives on biosimilars

1

CONTEXT FOR THIS EFFORT

PRELIMINARY

- Humira continues to be the major revenue driver for Abbott with expected 2010 revenues of ~$6.5B (~25% of total revenues)
- However, the potential entry of both biosimilars and oral DMARDs (in particular Pfizer's JAK-3 inhibitor) puts Humira at risk across its key markets
- Abbott has established a working team that has been assessing the nature and timing of the threat to Humira and modeling the impact on the LRP of both biosimilars and the JAK-3 compound. This internal team has identified a projected decline in revenue of ~$8.5B in 2019 off baseline projected LRP revenues of ~$12B
- Given the extent of the projected decline, it raises a number of tough decisions that you will face for the brand and company. As a result, you have asked us to work with your team to reassess the threat and timing of both biosimilars and JAK-3 on the Humira LRP (US and ex-US) and what could be done to minimize that risk
- In addition, based on our assessment of the biosimilars markets in the US and other key markets, you are seeking a perspective on whether biosimilars could be an attractive market for Abbott to enter and, if yes, the best approach to do so

PROJECT OBJECTIVES

PRELIMINARY

1. Develop country-by-country assessment of the likely **impact of biosimilars on Humira in key markets** based on detailed evaluation of key factors, including
   - Regulatory environment / IP landscape (e.g., assess level of regulatory risk, current / projected pathway and how it might change, likely development requirements, implications on innovators and entrants, etc.)
   - Market access issues (including listing / reimbursement, likely payor reactions, etc.)
   - Evolution of MD treatment patterns (including conversion drivers by segment, impact of persistency)
   - Pricing
   - Competitive landscape, including likely number of entrants, impact of other biosimilar products and implications on pricing
2. Identify **potential actions** that could be taken by Abbott **to sustain Humira usage** post- biosimilar entry, including policy / government affairs, development (e.g., new formulation), commercial levers (e.g., pricing / contracting, counter-detailing, switching, etc.)
3. Determine **likely impact of Pfizer's JAK-3 compound**, including assessment of likelihood of approval in US and key EMEA markets, likely positioning and strategy and projected impact on Humira in key markets
4. Develop **integrated financial model** quantifying risk to Humira from biosimilars and JAK-3 compound through 2019 (and relative to current LRP), as well as potential impact of Abbott "defense" strategies (where possible)
5. Conduct **assessment of attractiveness to Abbott of entering the biosimilars** market as well as potential entry options

OVERVIEW OF KEY MARKETS FOR HUMIRA

PRELIMINARY

	Market	FY10 Update $M
Markets included in ABT initial deep-dive assessment	US	2,742
	Germany	497
	UK	341
	Spain	293
	France	289
	Canada	242
	Netherlands	232
	Italy	221
	Japan	104
	Sweden	94
	Rest of WE*	688
	Lat AM**	444
	AAAME***	223
	CEE****	102
	RIC	10
	Total	**6,520**

* Biggest remaining market Belgium at $109M
** Biggest market Brazil at $213M
***Biggest market Australia at $118M
**** Biggest market Czech Republic at $29M

- Ten markets covered by ABT working team represent 77% of Humira revenue
- Recommend our assessment covers US, EU5 and other select important markets in Scandinavia and Benelux that are aggressively pushing biosimilars (e.g., Sweden or Norway, Netherlands)
- Also recommend including one "low cost" biosimilar market to serve as "testing grounds" for whether biosimilars at a lower price point could drive volume uptake, assuming market access could be improved, e.g.,
  - Brazil (top 10 market)
  - China or Columbia (biosimilar TNFs on market today)
- Recommend not including
  - Japan—tough biosimilars market due to very strict regulatory pathway and negative MD perceptions
  - Canada—recently finalized biosimilars guidance; similar dynamics expected as other developed markets

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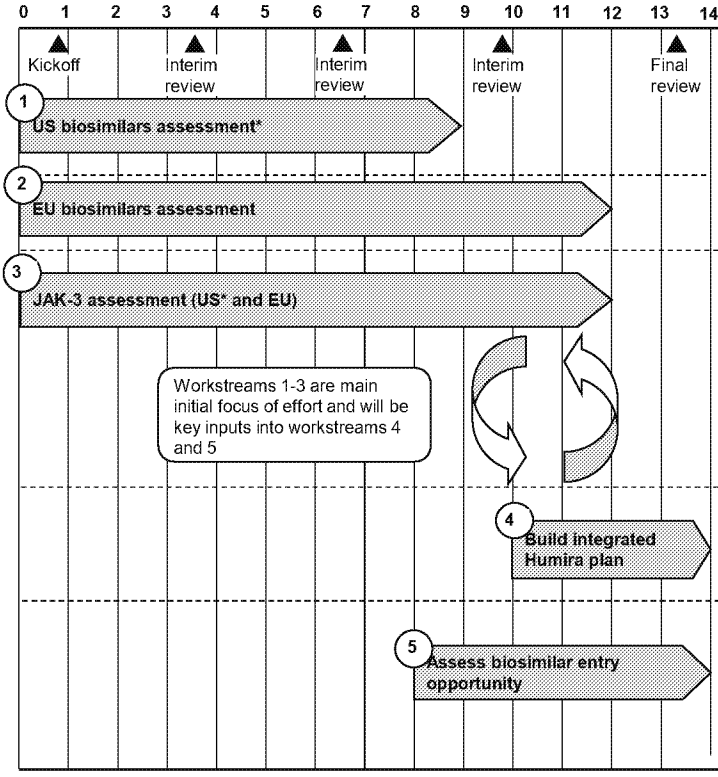
OVERALL PROJECT APPROACH AND DELIVERABLES

PRELIMINARY



Detailed deliverables

- Detailed assessment of impact of biosimilars on Humira (both penetration and pace) based on assessment of
  - Regulatory environment
  - Market access—payor receptivity, reimbursement / listing, etc.
  - Physician treatment patterns
  - Patient perceptions
  - Competitive environment
- Country-specific modeling of volume and price impact
- Country –specific ideas to sustain Humira usage

- Detailed assessment of impact of Pfizer's JAK-3 compound on Humira (both penetration and pace) by market based on assessment of
  - Scenarios on likelihood and timing of regulatory approval
  - Likely clinical profile and positioning
  - Market access—payor receptivity, reimbursement / listing
  - Physician treatment patterns
  - Patient perceptions
  - Competitive environment for RA therapies
- Country-specific modeling of volume and price impact
- Country –specific ideas to blunt impact of JAK-3 entry

- Develop integrated financial model across all markets to assess impact on Humira and define key swing factors
- Develop integrated plan to sustain Humira usage following biosimilar and JAK-3 entry, including potential impact on Humira volume / price (where possible)

- Detailed assessment of biosimilar entry opportunity, including business case covering
  - Potential markets / molecules to pursue
  - Projected revenue for targeted molecules based on expected competitive landscape
  - Costs / capabilities required to enter
  - Market entry options and feasibility / risks based on current position relative to others

*US team also to address Brazil

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PROPOSED DETAILED PROJECT APPROACH AND ACTIVITIES (1/3)

PRELIMINARY

	Timing*	Key activities
1/2 **Biosimilars assessments – US and ex-US**	9-12 weeks total	• Define current status of regulatory pathway, potential evolution and implications for biosimilar development requirements, substitutability / interchangeability, market entry, penetration and pricing through assessment of existing and pending legislation, guidance, etc., interviews with country-specific market experts and, for US, interviews with McKinsey and external regulatory experts • Define projected market scenarios for timing of product entry, potential number of competitive entrants and model likely impact on pricing for key markets (based on market scenarios, case studies, expert interviews) • Conduct interviews with relevant payor(s) and / or payor experts in each market to determine stance on biosimilars (in general and for RA) and likely impact on listing, pricing, reimbursement, etc. • Conduct interviews with physicians in each market to determine likely impact of biosimilars on treatment approach—develop preliminary physician segmentation and patient flow, including assessment of persistency risk • Conduct quantitative survey of physicians across key markets to determine impact of biosimilars on treatment patterns in RA (depending on different profiles for potential biosimilar entrants—e.g., data, etc.) • Model degree of impact by market on Humira volume and price, including pace of change based on market specific incidence / prevalence (assuming MDs unlikely to switch existing patients)

* Overall project 14 weeks; workstreams 1-3 overlap with workstreams 4 and 5

PROPOSED DETAILED PROJECT APPROACH/ACTIVITIES (2/3)

PRELIMINARY

	Timing*	Key activities
3 JAK-3 assessment – US and EU	12 weeks	• Develop scenarios on likelihood and timing of approval for Pfizer's JAK-3 compound based on expert interviews • Conduct interviews with physicians in each market to determine views on existing and future treatment patterns for RA and expected clinical profile and positioning of key products (with particular focus on perceptions and impact of Pfizer's JAK 3 compound) and assess likely impact on Humira—develop preliminary physician segmentation and patient flow • Conduct interviews with payor(s) and / or payor experts to determine perspectives and likely management related to current and future RA treatments (with particular focus on perceptions and impact of Pfizer's JAK 3 compound) and assess likely impact on Humira • Review analyst expectations of Pfizer's JAK-3 (as well as other potential JAK-3 entrants) where available • Develop perspective on expected strategy / positioning for Pfizer's JAK-3 based on likely clinical data in light of other likely RA products on market and key stakeholder perceptions • Conduct quantitative survey of physicians across key markets to determine impact of Pfizer's JAK-3 on treatment patterns in RA (depending on different profiles for potential biosimilar entrants—e.g., data, etc.) • Model degree of impact by market of Pfizer's JAK-3 on Humira volume and price based on projected market-specific adoption curves

* Overall project 14 weeks; workstreams 1-3 overlap with workstreams 4 and 5

PROPOSED DETAILED PROJECT APPROACH AND ACTIVITIES (3/3)

PRELIMINARY

	Timing*	Key activities
4 **Build integrated Humira plan**	4 weeks	• Build integrated financial model across all markets to assess impact on Humira of both biosimilars and JAK-3 and determine key swing factors in model—identify key assumptions / swing factors / scenarios for forecast (both globally and for specific markets) • Synthesize and assess market specific ideas to sustain Humira usage following biosimilars and JAK-3 entry • Determine applicability of global programs, actions against either threat • Where possible, model impact of potential actions to blunt impact of biosimilar and JAK-3 entry • Develop integrated plan to sustain Humira usage
5 **Assess biosimilar entry opportunity**	6 weeks	• Conduct detailed assessment of biosimilar market entry opportunity, including – Project size of overall biologics opportunity by market and molecule – Determine likely market share based on likely timing of entry and number of competitors – Determine likely pricing / margin based on industry / expert interviews – Develop full P&L, including estimates for development costs, COGS, SG&A, partnership terms, any depreciation / amortization on capital outlays, etc. – Assess key risks, including • Market / competitive risk • Patent / regulatory risk • Execution risk • Partnership risk • Assess potential market entry options, including potential partners as appropriate

* Overall project 14 weeks; workstreams 1-3 overlap with workstreams 4 and 5

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KEY QUESTIONS TO ADDRESS AS WE GET STARTED

FOR DISCUSSION

Project sponsorship and governance

- Interactions with Rick / [redacted]—weekly / bi-weekly updates?
- Who should be on Steering Committee? How often should it meet?
- Should we involve any other key PPG functional leaders or business heads and if so when / how (e.g., ~2 individual discussions with key other senior staff to get input and discuss findings)?
- Who should be on working team? Should we involve key individuals from countries?

Project timeline and working model

- When should we get started? 14 week project will be completed on either 12/10 or 12/17 based on early to mid Sept. start date (e.g., 9/7 or 9/13)?
- Where should we locate our 2 project teams in US (assumption onsite at Abbott Park) and EU?
- How should we interact with ABT working team?
- Should we have a project kick-off? Who would we involved and what would goal of meeting be?

SUGGESTED ROLES AND RESPONSIBILITIES

McKinsey working model

- 2 project teams—one in US and one in EU
- [redacted] and [redacted] will be deeply involved with both teams [redacted] 50% of time) and will also work with [redacted] (50%) and [redacted] (50%) to integrate learnings / findings across teams
- US team focused on US and Brazil biosimilar and JAK-3 assessments as well as integrated model and biosimilar entry
- EU team focused on biosimilar and JAK-2 assessments in key EU markets

Steering committee

- Rick Gonzalez
- [redacted]
- Others?

- Set project objectives
- Guide overall effort
- Review and refine findings
- When necessary provide access to appropriate contacts

Working teams – US

McKinsey	Abbott
• [redacted] (Engagement manager) • 2 associates	• TBD

Working teams – EU

McKinsey	Abbott
• [redacted] • Engagement manager • 2 associates	• TBD

- Drive the problem solving
- Conduct analyses and interviews
- Provide access to key ABT personnel / external contacts
- Gather and synthesize facts
- Develop preliminary findings
- Prepare communication materials

- Additional McKinsey experts will provide topical expertise as needed (e.g., additional biosimliars, RA, country-specific knowledge, etc.) as well as support to integrate across teams

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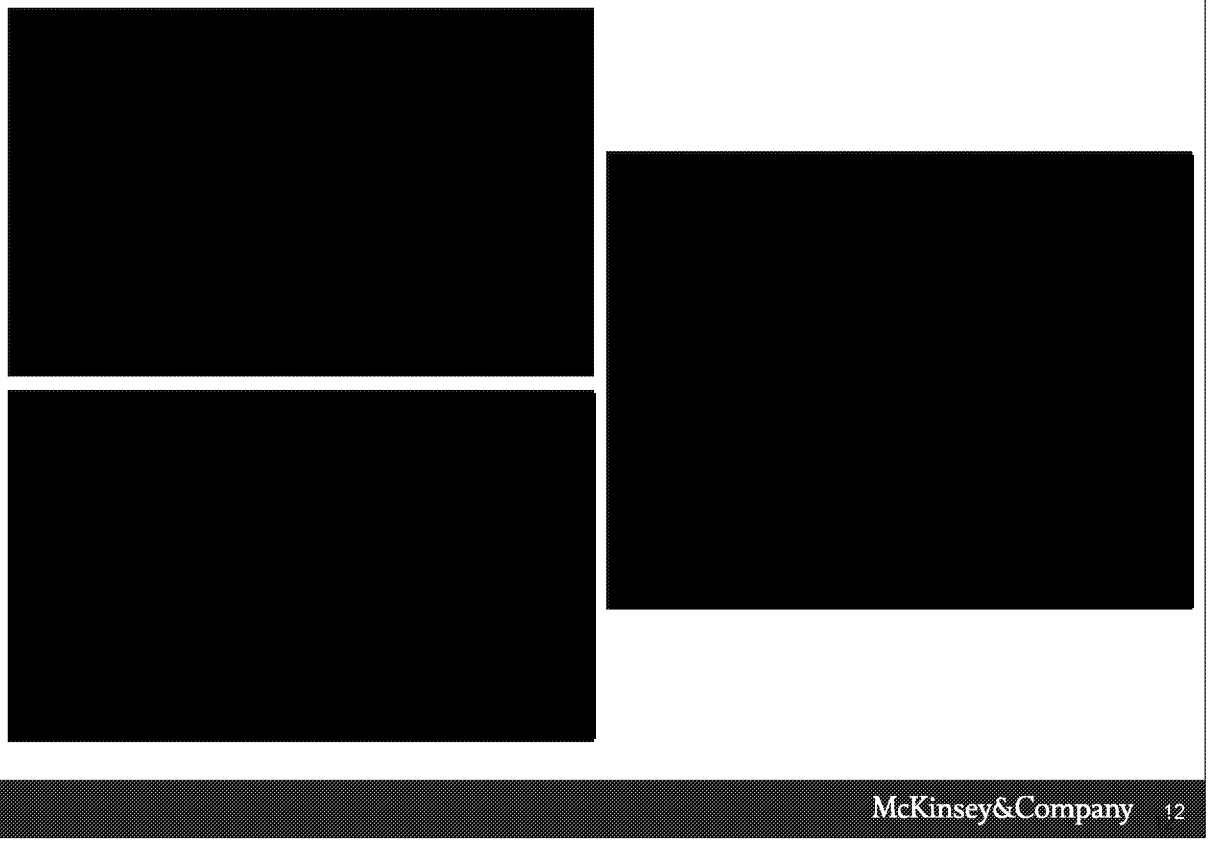
WHO WE ARE – MCKINSEY PROJECT LEADERSHIP (1/2)



WHO WE ARE – MCKINSEY PROJECT LEADERSHIP (2/2)

[redacted]

In addition to experts on project team, we will also leverage other key McKinsey experts on bioeimilars and RA across markets

[redacted]

CONTENTS FOR TODAY'S DISCUSSION

- Our understanding of project context and objectives
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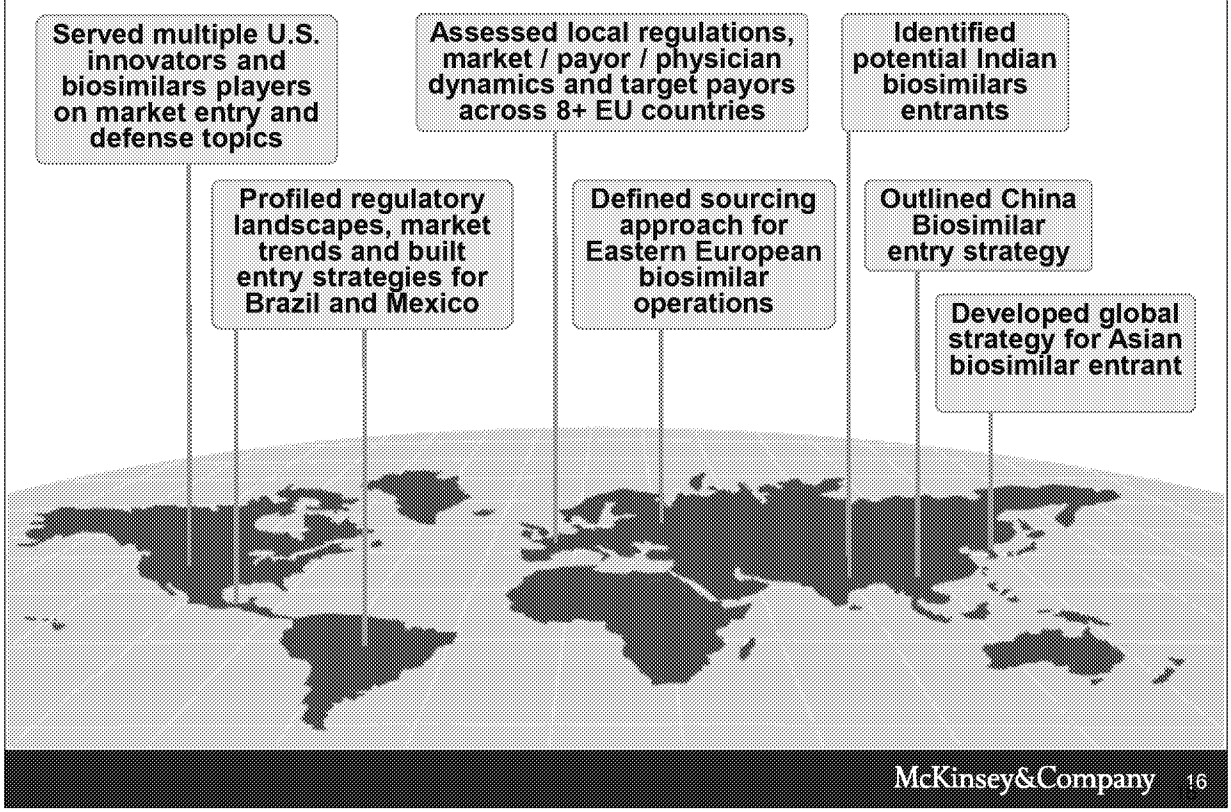
- **Why McKinsey?**
- Summary of McKinsey perspectives on biosimilars

WHY MCKINSEY?

Deep expertise in biosimilars across markets	• McKinsey has been at the forefront of developing industry-leading perspectives on biosimilars, publishing several topical white-papers on key issues • We have deep expertise working across all major biosimilars markets on both innovator and market entry strategies • We have extensive biologics expertise in each key functional area, e.g., clinical, operations, commercial, regulatory, etc. • We have proprietary methodologies for evaluating biosimilars market opportunities as well as existing knowledge on regulatory landscapes, market sizing, etc. that we can leverage to jump-start effort
Broad expertise across healthcare spectrum	• We have deep expertise working with leading payors, national health systems and key regulatory agencies across global markets • McKinsey has established a Center for US Healthcare Reform in Washington, D.C. as well as a Health Systems Institute in London to ensure that we are at the forefront of understanding health care reform and impact on our clients • We also supplement our own knowledge and experts with panels of relevant leading outside experts that are aligned with McKinsey only, e.g., regulatory, health policy, etc.
Deep knowledge of Abbott	• History of service to Abbott corporate leadership and key businesses • Client service team leadership brings expertise in managing complex cross-country international growth strategies for Abbott

WHY MCKINSEY? – DEEP EXPERTISE IN GLOBAL BIOSIMILARS MARKETS

Example engagement topics



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SUMMARY OF CURRENT MCKINSEY PERSPECTIVES ON BIOSIMILARS

- Biosimilars market is growing rapidly and is expected to reach ~$30B in size by 2020. As a result, it is drawing attention from a large number of players and that is reflected in level of deal activity
- Recent US healthcare legislation opens pathway for biosimilars in U.S. but U.S. environment likely to be innovator friendly, and details still to be worked out. From biosimilar entrant perspective, EU regulatory landscape is most attractive, followed by US regulatory landscape while Japan regulations are least attractive
- However, several business and execution risks are inherent in the biosimilar market. In addition, high investment levels are required for clinical trials and manufacturing to target major markets
- Biosimilars space is likely to be very competitive with only 4-6 players being profitable (compared to 10-15 players attacking innovator products)
  - High investment level in trials (irrespective of product sales potential). As a result most players will need to focus on major products with branded sales of >$2-3B to be profitable
  - Small number of products with branded sales >$2-3B will result in high competition
- Significant competition expected for biosimilars for major products and innovators should have diligent competitive intelligence efforts to understand development stage and efforts of various competitors pursuing key products
- Innovators should consider a range of defense strategies including but not limited to legal challenge, formulation/delivery change, pricing action etc.
  - Formulation changes is one potential defense strategy.
  - Further, several new entrants – especially smaller players - will lack IP capabilities, and thus adopting and aggressive IP/legal stance can benefit innovators

GLOBAL BIOSIMILAR MARKET EXPECTED TO GROW RAPIDLY TO REACH ~$30 BILLION BY 2020…

ROUGH ESTIMATE

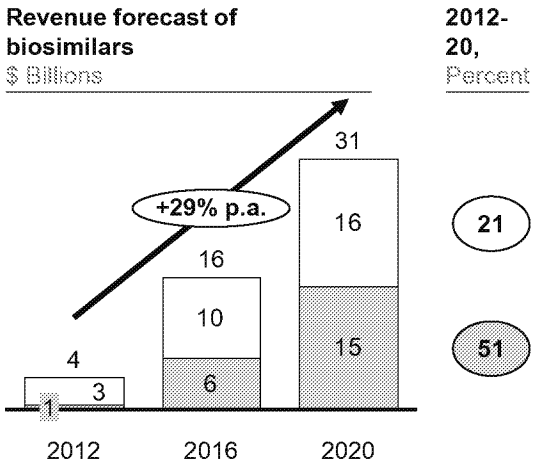
Other biologics | Monoclonal antibodies

Key driving forces for growth

- Multiple blockbuster biologics with combined annual revenues over $75 billion will go off patent during 2010-20
- Opening of biosimilar regulatory pathway in US
- Significant payor pressure to control healthcare expenditure in US & EU
- Relatively lower price erosion of biosimilars expected compared to small molecule generics

However, there are high entry barriers due to clinical trial costs for U.S./E.U. trials and manufacturing requirements

Global biosimilar market is expected to reach ~$30 billion by 2020, driven by growth of monoclonal antibodies



Source: VisionGain (2009); Nature biotechnology; industry interviews; Team analysis

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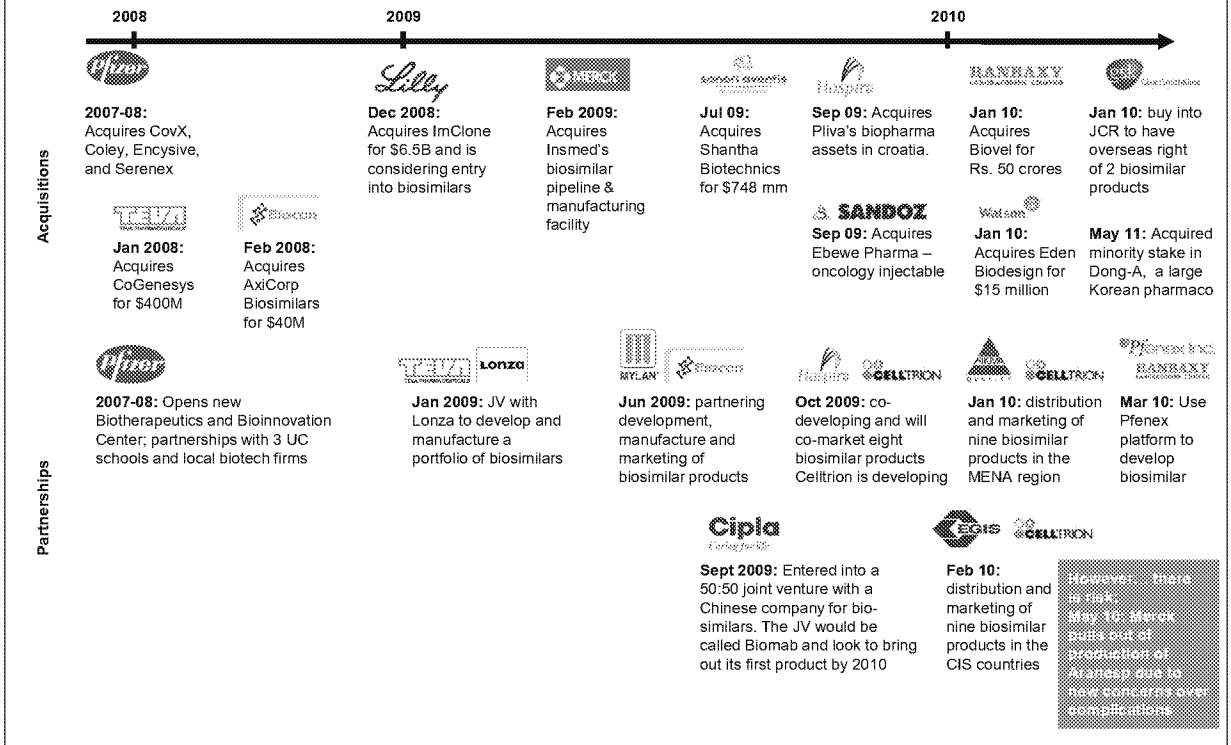
… AND IS DRAWING ATTENTION FROM A LARGE NUMBER OF PLAYERS AS IS EVIDENT IN RECENT DEAL ACTIVITY

NOT EXHAUSTIVE



Source: Literature search; company press releases; annual reports; team analysis

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RECENT US LEGISLATION OPENS PATHWAY FOR BIOSIMILARS BUT REGULATORY SITUATION REMAINS INNOVATOR FRIENDLY

Low
High

Current status

- No FDA pathway currently established for biosimilars
- Biosimilar bill approved by House and Senate in Mar 2010
- Biotechnology lobby (BIO) continuing to influence policy in favor of innovators

Key uncertainties/risks:

- Lack of a dedicated FDA Biogenerics office will likely favor innovators
- FDA expected to create a clear pathway for biosimilars by Oct 2010

	Description of guidelines	Biosimilar "friendliness"
Interchange-ability	• FDA likely to require rigorous switching studies to show same expected clinical effect as reference drug	
Nomenclature	• Unique nomenclature required for biosimilars	
Exclusivity	• 12 years of data exclusivity for innovators after mkt authorization, plus 6 mo. pediatric extension • 1-year market exclusivity for first biosimilar, but may require comparable immunogenicity	
Clinical data requirements	• Immunogenicity, PK/PD trials for safety, purity and efficacy likely required for all indications • US may be open to EU-based clinical trials • Reference product must be authorized in US	
Post-market surveillance	• Risk management plan likely required, though FDA has not determined detailed clinical requirements	
Manufacturing requirements	• US cGMP certification required • Comparability study likely required after mfg site transfer, though exact requirements not defined	
Pricing and reimbursement	• Interchangeable FOBs receive same Medicare part B billing code as reference drug • Pricing for non-interchangeable FOBs set at ASP+6%	

Source: Regulatory expert interviews; UBS Biogenerics report; US House and Senate bills

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HIGHLIGHTS OF NEW US BIOSIMILAR LEGISLATION

Regulatory pathway	• FDA authorized to develop detailed regulatory guidelines for biosimilars • Both analytical testing and clinical studies required for approval • Biosimilars need to pay user fee similar to NDAs and are subject to same REMS requirements as innovators
Interchange-ability	• Allowance for interchangeability with reference product if biosimilar demonstrates comparable safety, efficacy and immunogenicity to reference product with switching with biosimilar during clinical trials • 1 year marketing exclusivity permitted for first interchangeable biosimilar
Innovator exclusivity period	• Innovators receive 12 year data exclusivity (i.e.. biosimilar companies cannot leverage safety and efficacy data for their application) • Biosimilar applications not permitted within 4 years of licensure of reference product • Clauses in place such that innovators cannot make incremental/non-clinically significant changes to extend exclusivity
Patent litigation	• Outlined patent certification process by which key patents for dispute are identified in advance to biosimilar companies
Medicare Part B reimburse-ment	• Reimbursement policy in place to remove financial incentives for physicians to prescribe more expensive innovator products • Biosimilar products reimbursed at ASP (of biosimilar product) + 6% of reference product

Source: Biologics Price Competition and Innovation Act (2009) enacted in March 2010

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IMPLICATIONS OF NEW US BIOSIMILARS LEGISLATION FOR KEY STAKEHOLDERS

Biosimilar companies

- Clinical and cost burden to market entry can be quite significant (upto 6 years and $100+ Million per indication, based on TA)
- Interchangeability and 1-yr market exclusivity provision can significantly drive adoption for first interchangeable biosimilar entrant
- Regulatory strategy should consider clinical risk vs. commercial upside tradeoffs for achieving interchangeability
- For non-interchangeable biosimilars, a hybrid (i.e., generic/innovator) commercial model is likely required

Innovator companies

- 12-yr data exclusivity period provision enables innovators to generate returns from their R&D investments and allows time to convert patients to their next generation therapies
- The interchangeability provision has potential to rapidly drive down revenues of their reference product; however the likelihood of a biosimilar entrant gaining interchangeability status is unknown

Payers

- Biosimilars offers significant opportunity to control cost for high growth/high cost biologics
- Payors are likely to manage utilization of biosimilars e.g., through step edits, prior authorizations, formulary tiers

EU REGULATORY LANDSCAPE IS MOST ATTRACTIVE FOR BIOSIMILARS FOLLOWED BY REGULATORY LANDSCAPE WHILE JAPAN REGULATIONS ARE LEAST ATTRACTIVE

Relative attractiveness for biosimilars

	Current status	Expected progress	Implications for Player
EU	• EMEA established biosimilars pathway in 2003	• EMEA expected to issue MAb specific guidance by 2013	• **6 biosimilar drugs have already been approved under current guidelines** • **Key hurdles for biosimilars:** – Interchangeability decision at country level – Reference product must be EU authorized – Immunogenicity studies required
US	• Biosimilar bill approved in March 2010	• More detailed FDA guidance timing expected by October 2010	• **New regulations/guidelines still being defined** • **Key hurdles for biosimilars:** – FDA guidelines still not finalized – Interchangeability has strict clinical trial requirements – 1-year exclusivity difficult to achieve – Separate nomenclature for biosimilars likely
Japan	• MHLW[1] issued biosimilar guidance in May 2009 • Pricing guidance announced in early 2010	• New manufacturing/ production guidelines expected by 2014	• **Biosimilars will be priced at 70% of original drug price; and likely to be tough market for generics** • **Lengthy clinical trials requirement** • **Key hurdles for biosimilars:** – In-market preclinical and clinical trials required – No exclusivity or interchangeability allowed – Widespread perception among physicians that biosimilars have lower quality/safety/efficacy

1 Japan's Ministry of Health, Labor, and Welfare

Source: EMEA Mab concept paper; US Library of Congress, Japan biologics paper; Press search; Regulatory expert interviews; team analysis

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HOWEVER, SEVERAL BUSINESS AND EXECUTION RISKS EXIST IN THE BIOSIMILAR BUSINESS FOR NEW ENTRANTS

NOT EXHAUSTIVE

	Description of potential risks	Actions entrants are likely to take mitigate the risk
Market risk	• Overall market is unfavorable to biosimilars, affecting adoption rate and pricing • Competition overly intensifies, diminishing likely market share, affecting order of entry, or price	• **Monitor market evolution** around biosimilars to respond in a timely manner (market intelligence) • **Develop competitive intelligence** capability and make investments in a stage-gate manner • **Form alliance with partners** with strong sales and marketing capabilities
Patent/ regulatory risk	• Key patents and regulation prevent/ slow biosimilars to gain market access • Originator challenges	• **Run IP assessment early** and leverage experienced IP/legal resources to develop effective IP strategy • **Develop working relationships** and open dialogs with local regulatory bodies early on
Execution risk	• Clinical trials execution is delayed, affecting order of entry	• **Hire key capabilities** experience with clinical trials and regulatory affairs in EU and US • **Support necessary resources** to accelerate research & development (e.g. incentive system tied to milestones) • Have **investment review process** that accommodates market challenges
Partnership risk	• Inability of smaller entrants to find strong partner to enter major markets (US/EU)	• **Improve value proposition** to potential partners (e.g. expand portfolio, accelerate clinical trials) • **Hire key BD talents** with strong existing BD network • **Approach** broad set of potential partnership candidates **aggressively and early**

In addition, investment requirements are high with clinical trial costs for U.S./E.U. trials (in many cases ~$150M per molecule, not correlated with product sales potential) and manufacturing requirements (potential upfront CAPEX or lower margins)

MOST ENTRANTS HAVE HIGHER CHANCE OF ACHIEVING PROFITABILITY ONLY IF THEY FOCUS ON BIOLOGICS WITH PEAK SALES >$2-3B

Risk unadjusted NPV > 0

Step 1 : NPV analysis based on peak sales

Step 2 : Attractive peak sales analysis to identify screening criteria for portfolio candidates based on market size

Overview

- Analyzed NPV of a target biologic based on peak year sales (i.e. sales after partnership fee)
- Based on the NPV analysis, **peak year sales of $40M - $60M were required for positive NPV**

Assumption

- 30-40% biosimilar adoption
- 30% price discount
- 40% revenue sharing with partner

Biosimilar player sales in peak year
in million USD

Target branded biologics peak year sales	*Biosimilar player market share*[1] 5%	10%	15% (*Base case M/S*)	20%	25%
500	<5	<10	10 - 15	15 - 20	15 - 25
1,000	<10	15 - 20	15 - 25	25 - 35	30 - 40
1,500	10-15	15 - 25	30 - 40	**40 - 50**	**45 - 65**
2,000	10-20	25 - 35	**40 - 50**	**50 - 65**	**65 - 85**
2,500	15-25	30 - 40	**45 - 65**	**65 - 85**	**80 - 105**
3,000	20-25	**40 - 50**	**55 - 75**	**75 - 100**	**95 - 125**

1 Assuming simultaneous entry along with other competitors, market share scenarios translates into # of competitors in the market – 1 competitor (50% market share), 2 competitors (30-40%), 3 competitors (20-30%), 4 competitors (~20%), 5 competitors (10-20%), etc

2 Biologics with 2014 branded sales > $1B are also considered in the selection process to be more comprehensive
Note: For NPV analysis, terminal value is not considered for NPV analysis, but sales are extrapolated till 2025

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LIMITED NUMBER OF BIOLOGICS WITH SALES >$2-3 BILLION LIKELY TO CREATE AN INTENSELY COMPETITIVE SPACE

BIOLOGICS WITH LOE BEFORE 2020 WITH SALES > $1 BILLION

Revenue size

$ Billions

		2014 branded sales[1]	CAGR 2012-14 Percent
>5 billion	Avastin	8.8-9.7	4-10
	Enbrel	7.3-8.0	
	Humira	7.9-8.7	0-1
	Rituxan	7.4	6
	Herceptin	6.2-7.0	1
	Lantus	6.5	3-5
>3 billion	Remicade	4.5-5.4	5
	Prevnar	3.9	-10
	Neulasta	3.8	4
	NovoRapid/Log	3.2	2
>1.5 billion	Lucentis	2.9-3.3	11
	Erbitux	2.5-2.8	2-4
	Levemir	2.6	5-7
	Humalog	2.4	13
	Avonex	2.4	1
	Rebif	2.1	-2
	Botox	2.0	-2
>1.5 billion (continued)	Epogen	2.0	-6
	NovoMix	1.9	8
	Tysabri	1.2-1.8	-1-6
	NovoSeven	1.6	4
	Pegasys	1.6	-3
	Kogenate	1.6	4
>1B	Xolair	1.4	4-7
	Orencia	1.4	11
	Procrit/Eprex	1.4	-12
	Neupogen	1.2	-3
	Gardasil	1.1	0
	Actemra[2]	1.1-1.9	29
	Cervarix	1.1	6
	Norditropin	1.1	5
	Cerezyme	1.1	1

1 Forecasted sales can differ by research firms; 2014 branded sales are ranged if there are notable discrepancies between different sources

2 Actemra launched in early 2010; and will have data exclusivity in US that will be until 2021; and also given early stage of launch sales estimates uncertain

Source: Datamonitor; Evaluate; press search; company websites; analyst reports; team analysis

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SIGNIFICANT COMPETITION EXPECTED FOR BIOSIMILARS OF MAJOR BIOLOGICS AND DILIGENT COMPETITIVE INTELLIGENCE NECESSARY ON POTENTIAL ATTACKERS (1/2)

HERCEPTIN EXAMPLE

Current progress of competitors in Herceptin

Company	Country of origin	Current progress: Research (Varies)	Phase I (6-9 months)	Phase III (1.5-2 years)
CELLTRION[1]	Korea	———	———	———
Hanwha	Korea	———		
YESBIOXIS	Korea	———		
SCI-CELL	Korea	———		
JCR	Japan	———		
zenotech	India	———		
Glycenax Biotech Inc.	Taiwan	———		
biogen idec	USA	———		
DONG-A PHARMACEUTICAL	Korea	———		
Shenzen Wanle pharma[2]	China	———		
TEVA / Lonza	Israel/ Swiss	———		
CURAXIS	Spain	———		
GTC Biotherapeutics[3]	USA	———		

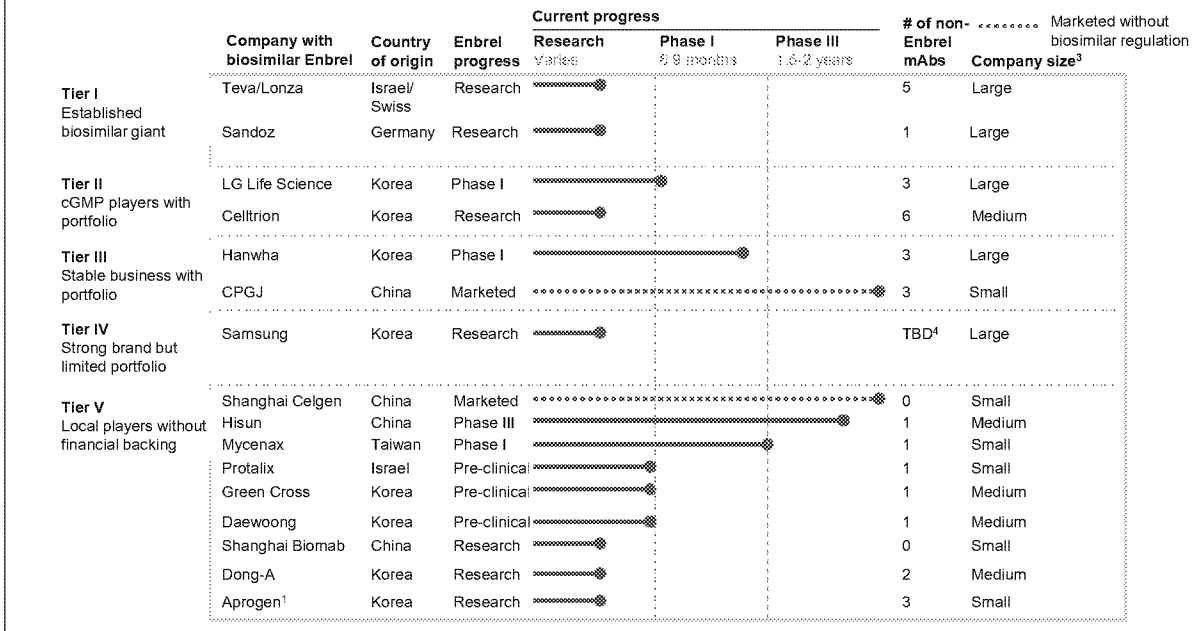
- ~13 known players competing for Herceptin biosimilar market, with likely more competitors researching or developing Herceptin due to its attractiveness
- Competitors likely to start accelerating the process in coming years given the patent expiry date of 2014 – 2015 in US/EU

1 Celltrion announced that it completed non-clinical research on Herceptin in 2Q 2009; so we assume it has completed Ph 1 already in last 12 months
2 Shenzen Wanle pharma submitted pre-IND application in Dec.3, 2009, currently under SFDA review; expect 3-4 years until market entry
3 GTC Biotherapeutics announced its plan to file IND for Herceptin in 2012

Source: Press search; Analyst reports; Industry insiders; Company websites; IMS patent focus; Team analysis

SIGNIFICANT COMPETITION EXPECTED FOR BIOSIMILARS OF MAJOR BIOLOGICS AND DILIGENT COMPETITIVE INTELLIGENCE NECESSARY ON POTENTIAL ATTACKERS (2/2)

ENBREL EXAMPLE



	Company with biosimilar Enbrel	Country of origin	Enbrel progress	# of non-Enbrel mAbs	Company size[3]
Tier I Established biosimilar giant	Teva/Lonza	Israel/ Swiss	Research	5	Large
	Sandoz	Germany	Research	1	Large
Tier II cGMP players with portfolio	LG Life Science	Korea	Phase I	3	Large
	Celltrion	Korea	Research	6	Medium
Tier III Stable business with portfolio	Hanwha	Korea	Phase I	3	Large
	CPGJ	China	Marketed	3	Small
Tier IV Strong brand but limited portfolio	Samsung	Korea	Research	TBD[4]	Large
Tier V Local players without financial backing	Shanghai Celgen	China	Marketed	0	Small
	Hisun	China	Phase III	1	Medium
	Mycenax	Taiwan	Phase I	1	Small
	Protalix	Israel	Pre-clinical	1	Small
	Green Cross	Korea	Pre-clinical	1	Medium
	Daewoong	Korea	Pre-clinical	1	Medium
	Shanghai Biomab	China	Research	0	Small
	Dong-A	Korea	Research	2	Medium
	Aprogen[1]	Korea	Research	3	Small

1 Bought by Schnell Biopharmaceuticals in 2009 2 R=Research, P=Pre-clinical, I=Phase I, III=Phase III; Based on press search
3 Revenue >$1B = large, Revenue > $100M = medium, Revenue < $100M = small 4 Announced they will add ~7 molecules mostly inorganically

Source: literature search; company websites; team analysis

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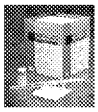
FORMULATION CHANGE IS ONE TACTIC INNOVATORS SUCCESSFULLY EMPLOY TO DIFFERENTIATE PRODUCTS

ENBREL EXAMPLE

	Freeze-dried (vial)	Pre-filled syringe	Injection pen (SureClick)
			
Year of launch	1999	2003	2006
Description	Solid powder	Stable liquid formulation	Stable liquid formulation
Patent expiry	2009-15	2023-27	2023-20
Administration	Administered by HCP	Self-administered by patient	Self-administered by patient
Cost	Low cost	Same cost as vial	~2x cost of vial/syringe
Convenience	Difficult to mix/use; Requires costly physician visit	Easy to use; Needle-associated anxiety/pain	Very easy to use; Lower anxiety

Increasing ease of use

Source: USPTO, JPO, and EPO websites; IMS Patent Focus; EvaluatePharma; team analysis

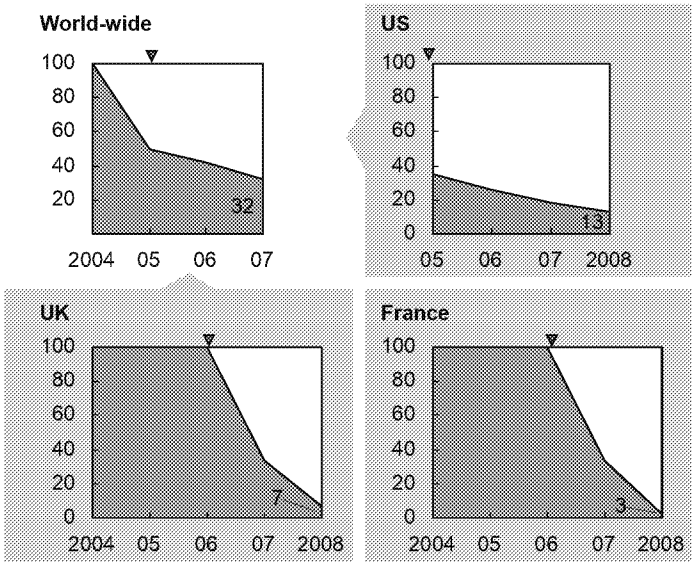
TRANSITION TO NEW FORMULATION IS RAPID GIVEN THE CONVENIENCE AND SIMILAR PRICE POINTS

ENBREL EXAMPLE

Pre-filled + pen
Freeze-dried
Pre-filled introduced

Pre-filled Enbrel formulation comprises more than 75% of global sales, and likely ~90% in developed markets (e.g. US, UK, FR)

Percent of total Enbrel sales (except world wide, which is in units)



Pre-filled's cost competitiveness likely to accelerate adoption in RoW as well

Country / formulation	Price
Korea	
• 25 mg, vial	KRW 134,316
• 25mg, syringe	KRW 134,316
Russia	
• 25mg, vial	EUR 1,130
• syringe	N/A
Turkey	
• 25 mg, vial	TL 1,002
• 50mg, sureclick	TL 1,002
India	
• 25mg, vial	INR 9,065
• 25mg, syringe	INR 7,983

Transition to syringe likely to happen even in RoW given the pricing policy (e.g. same price for freeze dried and syringe)

1 Pre-filled syringe patented in US (2027), EU (2023), Japan (2023), Turkey (2023). Patents not found in Brazil, India, Mexico, Russia

Source: US Drug Delivery (Frost & Sullivan 2008); USPTO, JPO, and EPO websites; IMS patent focus; company website

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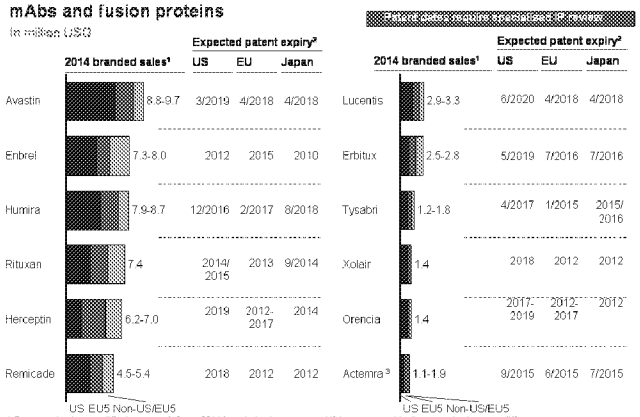
SEVERAL NEW ENTRANTS – ESPECIALLY SMALLER PLAYERS – WILL LACK IP CAPABILITIES, AND THUS ADOPTING AGGRESSIVE IP/LEGAL STANCE CAN BENEFIT INNOVATORS

Challenges in understanding IP rights

- Unclear what patents define possible entry date for biosimilars as multiple patents exist per product
- Different data sources (e.g. Vision gain, IMS) publish different IP expiry dates
- IP rights are often extended by new filings or litigation by the originator

Estimated patent expiry dates in major markets for top 12 mAbs and fusion proteins

In million USD



1 Forecasted sales can differ by research firms; 2014 branded sales are ranged if there are notable discrepancies between different sources
2 Patent expiry based on analyst view and need to be validated through IP/legal assessment 3 Longer timeframe due to 12-year data exclusivity
SOURCE: Datamonitor; IMS patent focus; press search; team analysis

Humira IP Discussion

25 January 2011

Goals and Objectives/Agenda - [redacted]

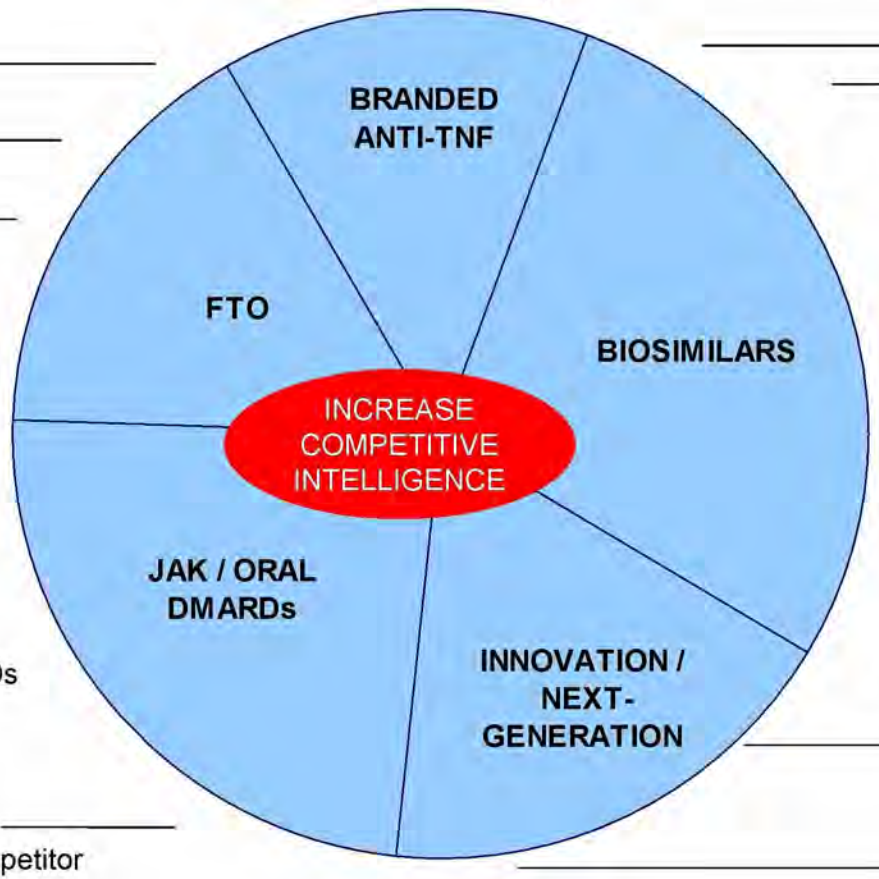
Humira Strategy Overview/ Mckinsey Conclusions- [redacted]

Humira IP Development: Technical Plans/ Current Status – [redacted]

Next Steps - [redacted]

Abbott
A Promise for Life

IP Strategy Development Activity
At A Glance



Review current Humira disclosures for patent claims that cover third-party branded anti-TNF products

Litigation enforcement

Review current patent portfolio disclosures for additional patent claims

Brainstorming and new filings for alternative, innovative processes, formulations, devices, etc. for Humira

Brainstorming for alternative, innovative processes, formulations devices, etc. for Enbrel and Remicade

Influence biosimilar legislation worldwide:

- U.S.: FDA regulation input
- E.U.: MAB guidelines input
- Study U.S. vs. E.U. laws to identify commercial strategies

Prepare for litigation

Brainstorming to identify innovative next-generation Humira products

Analyze biosimilar legislation to identify innovations that qualify for 12-year regulatory exclusivity

Monitoring for FTO

Identify patents for acquisition/ license to strengthen portfolio

Evaluate patents and license agreements for possible royalty reductions

Litigation defense

Patent landscaping

- Identify patents for possible acquisition/license to strengthen portfolio leverage

Animal and/or clinical studies to identify anti-TNF advantages (e.g., efficacy or side effects) vs. oral DMARDs

- JAK
- JAK vs. Enbrel/Remicade
- JAK vs. Humira

Review Abbott's patent disclosures for potential inventions that may cover competitor oral DMARDs

Executive Summary

- According to McKinsey, the two biggest threats to HUMIRA are:
  - Biosimilar HUMIRA
  - Tasocitinib (Pfizer's JAK3)

- Focus of GPO-led initiative is mitigation of biosimilar HUMIRA threat

- Identify commercially significant opportunities and innovate solutions
  a. Improved methods for manufacture of the current HUMIRA API
  b. Improvements to the HUMIRA API itself
  c. Improvements to the HUMIRA drug product
     - Enhancements

- Patenting the innovations
  - provides Abbott with business opportunities
  - gives Abbott a competitive advantage

Redacted

Progress to Date

- Multiple patent applications have been submitted since 2003
  - API: 1 granted (2011) and 2 pending
  - Drug Product: 2 granted (2004, 2010) and 11 pending
- Kick-off efforts for New IPs
  - Generated over 200 ideas at the brainstorm meeting (Oct 2010)
  - Developed top proposals (Dec 2010), ready for Sr management review
  - Launched Humira Idea Submission Incentive Program to encourage patent ideas from scientists (Dec 2010)

Brainstorm Meeting
Worcester Oct 4-5 2010

Sponsored by [redacted] and [redacted]

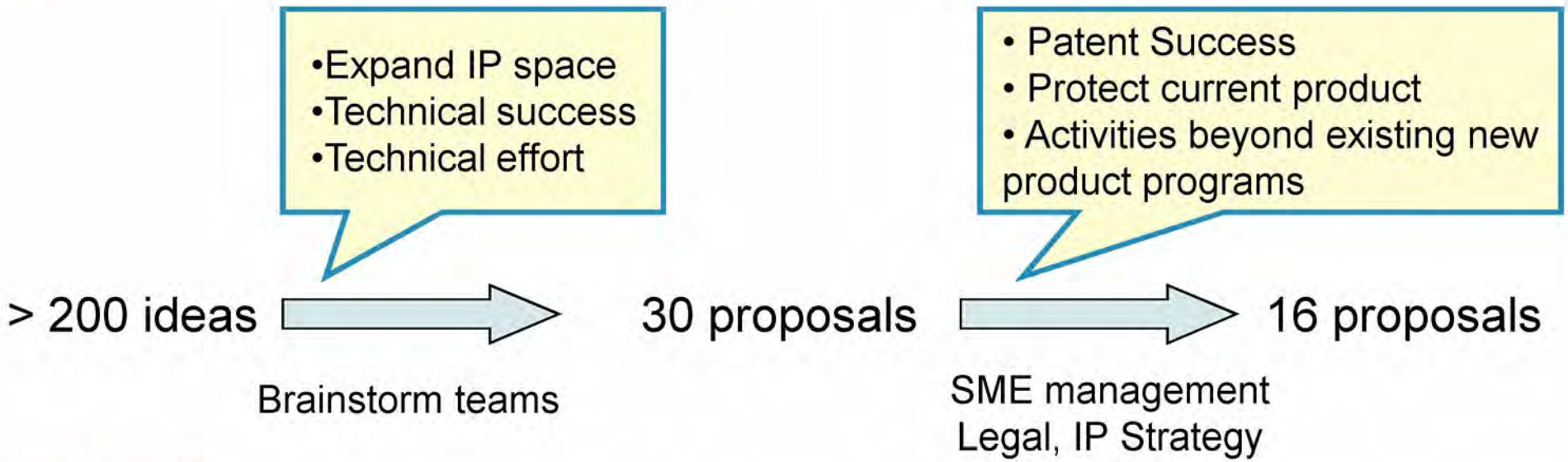
- Objective: Generate ideas to broaden our Humira patent estate in response to Biosimilars
- Brainstorm Approach:
  - In the eye of biosimilar makers….

    How would they manufacture HUMIRA?
  - In the eye of innovator …
    - What are our know-how's and our improvements

42 participants from five locations: Lake County, Worcester, Puerto Rico, Redwood City, Ludwigshafen

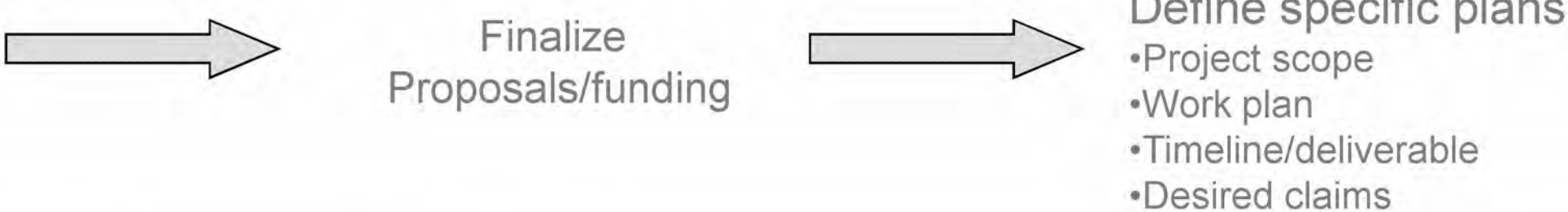
GPRD / GPRA	GPO	Corporate Legal	ADD
➢ Devices	➢ Process Sciences	➢ Patents	➢ R&D
➢ Formulations	➢ Mfg Sciences	➢ IP Strategy	
➢ Biologics, CMC	➢ MS&T	➢ Outside Counsel	

Development of Technical Proposals



Completed

TBD



Proposals

Category	Function	Project Name	Objectives	Technical Success Score (5 High)	Patentability Success Score (5 High)	Total Score
	Purification					
New Process	[redacted]	Existing Humira Process	Broaden the current IP to include the widest possible operating ranges to control product quality and removing Humira specific impurities	[redacted]	Redacted	
	[redacted]	Protein A Purification Platform	[redacted]	[redacted]		
	[redacted]	Non-Protein A Purification Platform	[redacted]	[redacted]		
	[redacted]	Non-Process Conditions	Enable IP to create non-process conditions to control product quality	[redacted]		
	Cell Culture					
	[redacted]	Existing Humira Process	Broaden the current IP to include the widest possible operating ranges to control product quality (oligo or charge variants)	[redacted]		
	[redacted]	Cell Culture Media components	[redacted]	[redacted]		
	[redacted]	Commercial Cell Culture Media	[redacted]	[redacted]		

Proposals

Category	Function	Project Name	Objectives	Technical Success Score (5 High)	Patentability Success Score (5 High)	Total Score
	Protein Characterization					
Improved API	[redacted]	Lysine Variant	[redacted]	[redacted]	Redacted	
	[redacted]	Profiling TNF:Humira Complex	[redacted]	[redacted]		
	[redacted]	Detection assay for Anti-drug antibodies	Enable IP or publication on the detection method to measure Humira and antibodies to Humira. This enables further development of a potential detection kit that can help physicians to monitor patients	[redacted]		
	[redacted]	Method to detect impurities by cytokine release	[redacted]	[redacted]		
	Biologics					
Improved API	[redacted]	Lysine Variant	[redacted]	[redacted]		
	Formulation					
Product Improvement	[redacted]	High Concentration formulation	Enabling IP generation on new dosing regimen with less pain (excluding preclinical and clinical studies)	[redacted]		
	[redacted]	High Concentration formulation	Enable IP on monthly dosing based on high concentration formulation (excluding preclinical and clinical studies)	[redacted]		
	Device					
Product Improvement	[redacted]	Plastic Pre-filled syringes	Plastic prefilled syringes with Humira formulations	[redacted]		
	[redacted]	Improved Glass Primary Package(including glass cartridge)	Identify accessories/improvements for existing glass syringe and vials: identify possible partners	[redacted]		

Summary of Cost and FTE Proposed

Function	Incremental FTE (2 years)	Total Costs
GPO API	6	$ 2,979,000.00
GPRD Formulation	6	$ 2,844,000.00
GPRD Device	1	$ 537,000.00
Grand Total	13	$ 6,360,000.00

- Biologics and Legal not included
- Dedicated Legal Support Required

Humira Idea Submission Program Established

Objective	• Provide a significant incentive program to target audience in order to increase the patent coverage for Humira
Target Audience	• 70-75 technical employees from GPO, GPRD and ADD
Key milestones	• Three levels of awards established (drawings from all participants) –i-phone or i-Touch - Idea Generation –i-pad - Patent Submission –Apple computer - Patent Award
Approvals	• Technical Advisory Board to approve Ideas [redacted] • Senior Review Board to determine Patent Award based on impact [redacted]

Projects Fall into 3 Categories with Distinct Value Propositions

New Process(es) (same API)

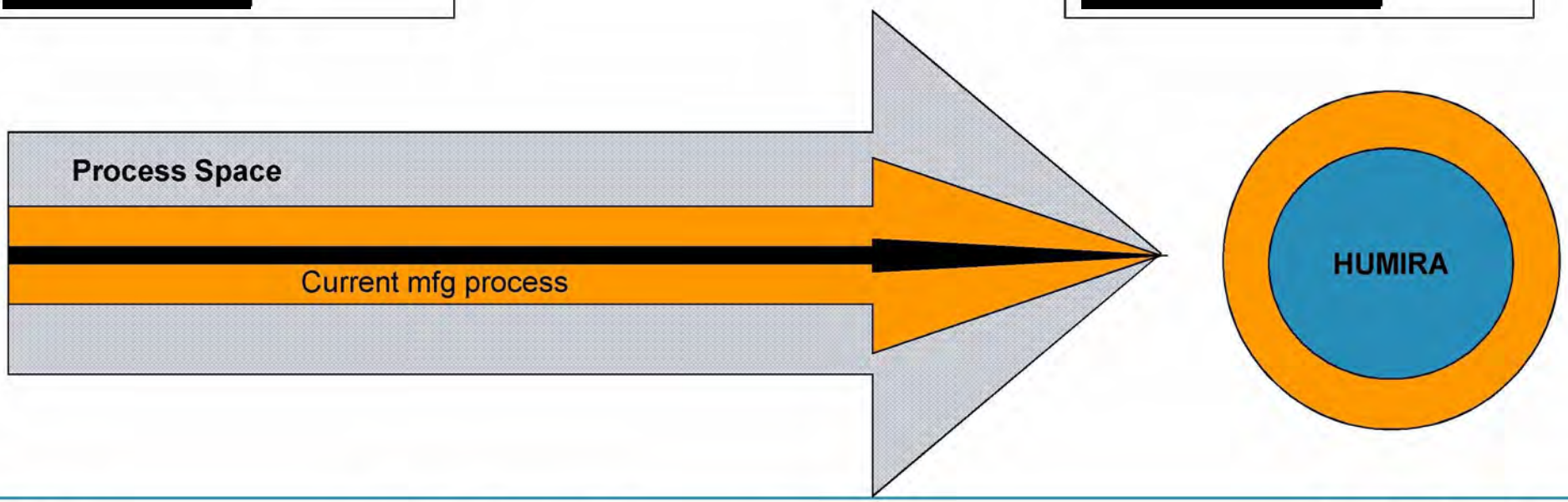
[redacted]

Improved API (same primary aa seq)

[redacted]

New Drug Product

[redacted]



One of 3 Herceptin patents listed in Genentech's last 10K

(12) **United States Patent**
Basey et al.

(10) **Patent No.: US 6,339,142 B1**
(45) **Date of Patent: Jan. 15, 2002**

(54) **PROTEIN PURIFICATION**

(75) Inventors: **Carol D. Basey**, Winters; **Greg S. Blank**, Menlo Park, both of CA (US)

(73) Assignee: **Genentech, Inc.**, South San Francisco, CA (US)

WO	WO 89/05157	6/1989
WO	WO 96/33208	10/1996

OTHER PUBLICATIONS

Carter et al., "Humanization of an anti-p185^{HER2} antibody for human cancer therapy" *Proc. Natl. Acad. Sci.* 89:4285–4289 (May 1992).

What is claimed is:

1. A composition comprising a mixture of anti-HER2 antibody and one or more acidic variants thereof, wherein the amount of the acidic variant(s) is less than about 25%.

2. The composition of claim **1** further comprising a pharmaceutically acceptable carrier.

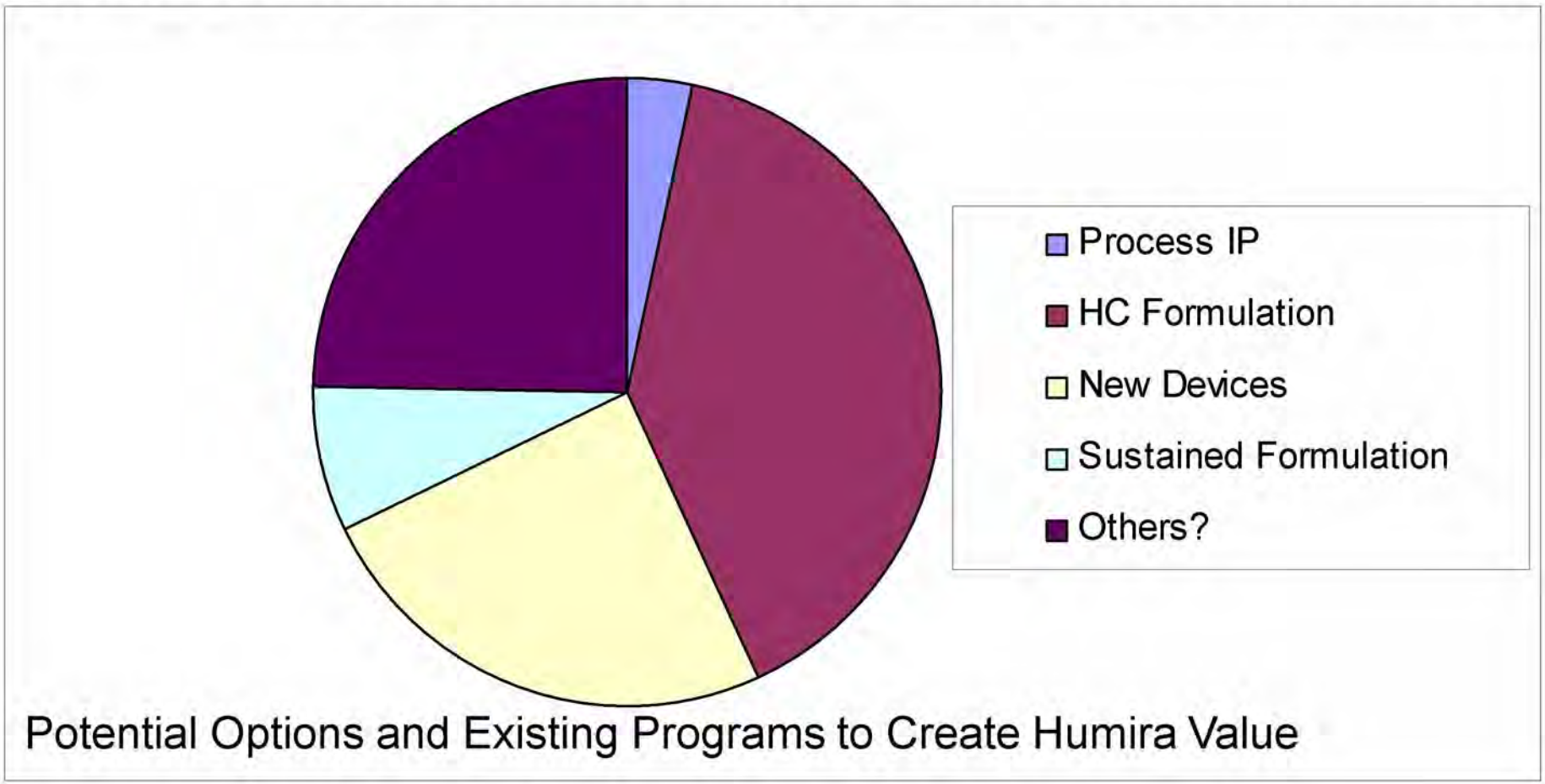
3. The composition of claim **1** wherein the anti-HER2 antibody is humMAb4D5-8.

* * * * *

Redacted

Process IP is one of many value creating options

- Need to review and assess all programs, total spend and prioritize value



Agenda – Day 1 (Bldg 71, Room 308)

• Welcome & Introductions	9:00 – 9:15
• Review commercial strategic priorities for Enhancements	9:15 – 9:45
• Provide an "early directional read" on ongoing market research	9:45 – 10:00 BREAK
• High Concentration Formulation	10:15 – 11:45
• Review formulation development of HC program , including activities/plans to	
– Strengthen IP	
– Understand the causality of pain reduction	
– Potential strategy/options for monthly dosing	
• Sustained Release	11:45 – 12:30
• Discuss objectives and plans for developing a sustained release formulation	LUNCH BREAK
• Formulation(s) in development and potential other formulation approaches	**1:00 – 2:15** BREAK
• Dosing frequency options (1 month & 2 month efforts, discuss 3 mos dosing)	
• Room Temperature	2:30 – 4:00
• Ongoing and planned CMC activities/timing	
• Commercial considerations for dual chamber syringe/pen	
• Agree on strategic path forward	
• Wrap-up	4:00 – 4:30
• Define Agenda for next day	
Group Dinner ([redacted])	start 6:30 PM

Agenda – Day 2 (Bldg 71, Room 304)

- Welcome & Recap from Day 1 — 8:30 – 8:45
- Agenda will be driven by outcome from Day 1
  - High Concentration project — 8:45 – 9:35
    - Monthly dosing
    - Pain topic / IP protection — 10 min BREAK
  - Sustained Release — 9:45 – 10:35
    - Timeline review up to Phase 1
    - Clinical development program plans — 10 min BREAK
  - Room Temperature (Lyo project) — 10:45 – 11:35
    - Combination of Stability/Storage options
    - Limited room temperature for HC — 10 min BREAK
- Wrap-up — 11:45 – 12:00
  - Decisions and next steps

DRAFT VERSION AS OF 6-10-13

Perspectives on the Pharmaceutical Industry

abbvie

AbbVie Board Meeting

June 19th, 2013

McKinsey&Company

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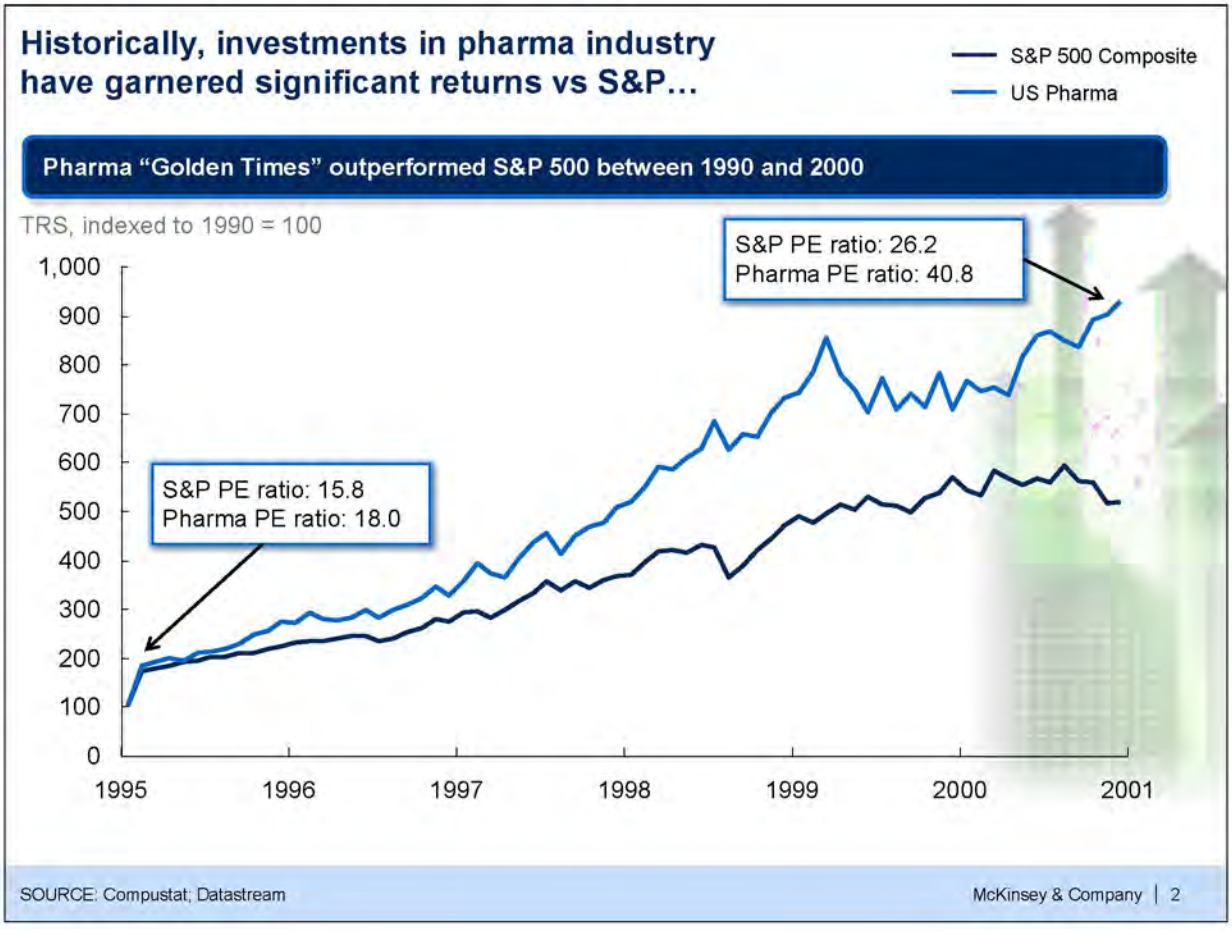
Context for discussion

- The pharma industry has faced unprecedented change in the last ten years as many competitors faced both steep LOE declines and fundamental changes to their core markets through health reform, macro-economic slowdowns and changes in the regulatory and payor landscape
- However, the industry now appears to be rebounding, as most players are changing their approach to compete in this new reality
- AbbVie is uniquely positioned to succeed in this era of transition. With the separation, AbbVie has the reason and momentum to re-examine everything that it does and make those changes that will be required to succeed. In addition, AbbVie can do this from a position of strength given the continued success of Humira, the world's leading therapy

1

Historically, investments in pharma industry have garnered significant returns vs S&P…



SOURCE: Compustat; Datastream

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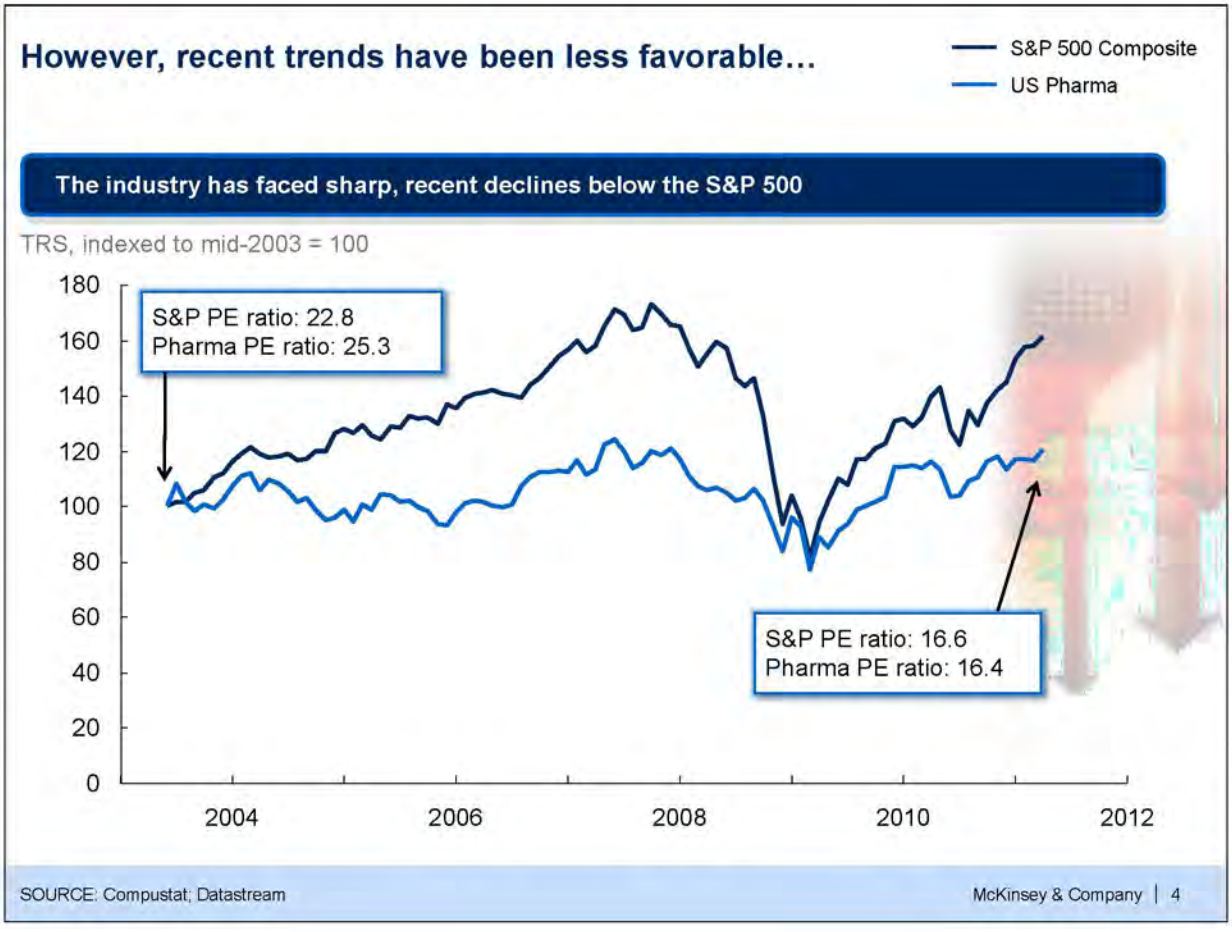
2

...driven by multiple factors

Drivers of "Golden Times" pharma growth between 1990 and 2000...

- Highly successful R&D model targeting "known biology & chemistry"
- Primary care "blockbusters"
- Successful "me too" products with limited differentiation
- Larger and larger salesforces to access physicians and drive high levels of therapy adoption
- Little resistance to growth from payors
- Aging and increasingly wealthy population
- Strong underlying growth in GDP and healthcare spending
- Overall globalization of the Pharma industry into new markets

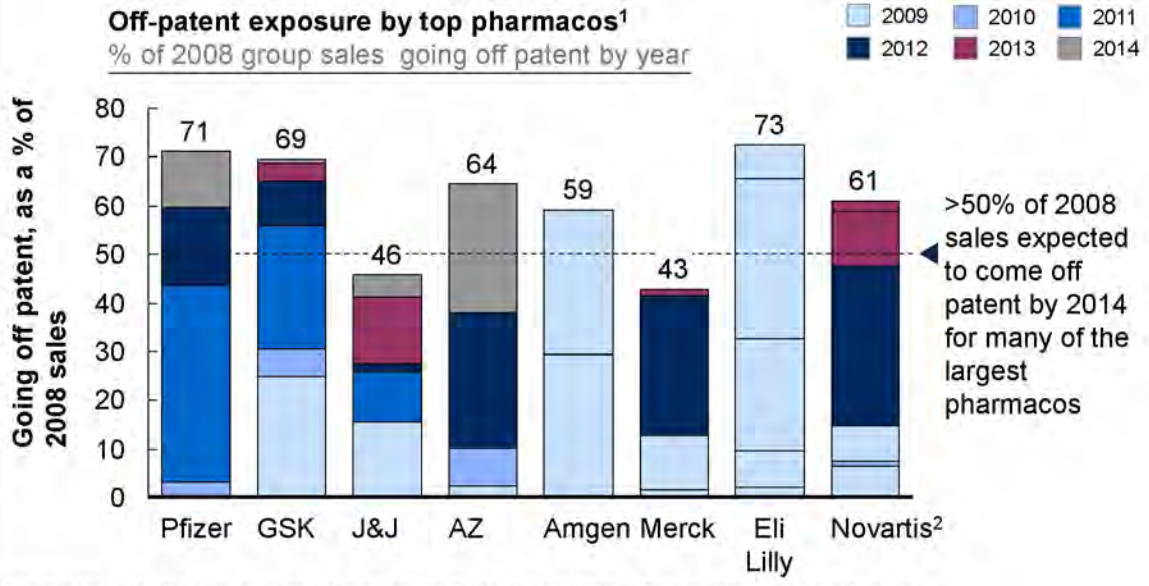
However, recent trends have been less favorable…



SOURCE: Compustat; Datastream

Top pharmacos have faced huge "patent cliffs", with many losing over average half of their top sales sources between 2009 and 2014

~50% of top 10 pharmacos' sales are at risk due to expected patent cliff



1 Selected based on 2008 sales revenue. Does not include Roche as most patent loss not expected till 2014 or beyo not ex
2 Merck excluding Schering-Plough

SOURCE: Evaluate; team analysis

5

This analysis examines how much revenue of the top pharma companies is at risk of going off patent and in which years. For example, Amgen is forecast to have difficult years in 2012 and 2013, whereas Pfizer's exposure is highest in 2011, primarily due to Lipitor's patent expiration.

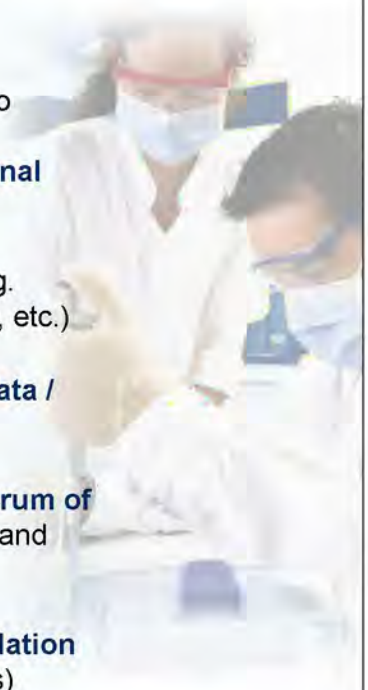
… due to several industry "headwinds"

Headwinds driving sub S&P 500 performance for the pharma industry

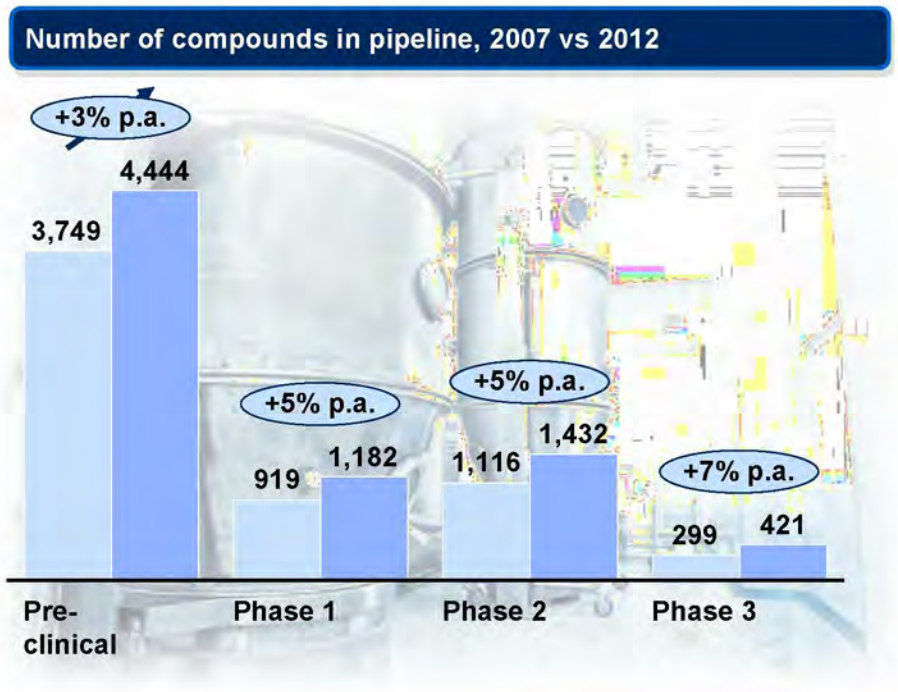
- Declining R&D productivity driven by:
  - Exhaustion of "easy targets" for new compounds
  - Increase in higher risk development opportunities (i.e. "unvalidated" targets/pathways and compounds)
- Large wave of loss of exclusivity for previous blockbusters
- Declining access to physicians
- Increased regulatory scrutiny, impacting both ability to gain product approval and oversight of committee activities
- Strong push back from payors (both government and commercial) on costs and growth
- Slowing GDP growth in developed markets

As a response, pharmacos are repositioning themselves on 6 fronts to succeed in this new, more challenging environment

1. **Increasing "shots on goal"**
2. **Innovating** – transition from "me-too" primary care focus to **specialty drugs** by leveraging scientific advances in **personalized medicine** while broadening access to **external sources of growth** (e.g. AMCs, VCs)
3. **Increasing operational efficiency** and cost reduction (e.g. reducing commercial footprint, streamlining manufacturing, etc.)
4. **Building market access, HEOR capabilities, and big data / information technology** to prepare for new challenges
5. **Positioning themselves to take advantage of the spectrum of growth opportunities (**emerging and developed markets and across different product segments)
6. **Continuing to focus on unmet needs of an aging population** (e.g. oncology, rheumatology, CNS diseases, and diabetes)



1 Industry is taking more "shots on goal" across every phase of development

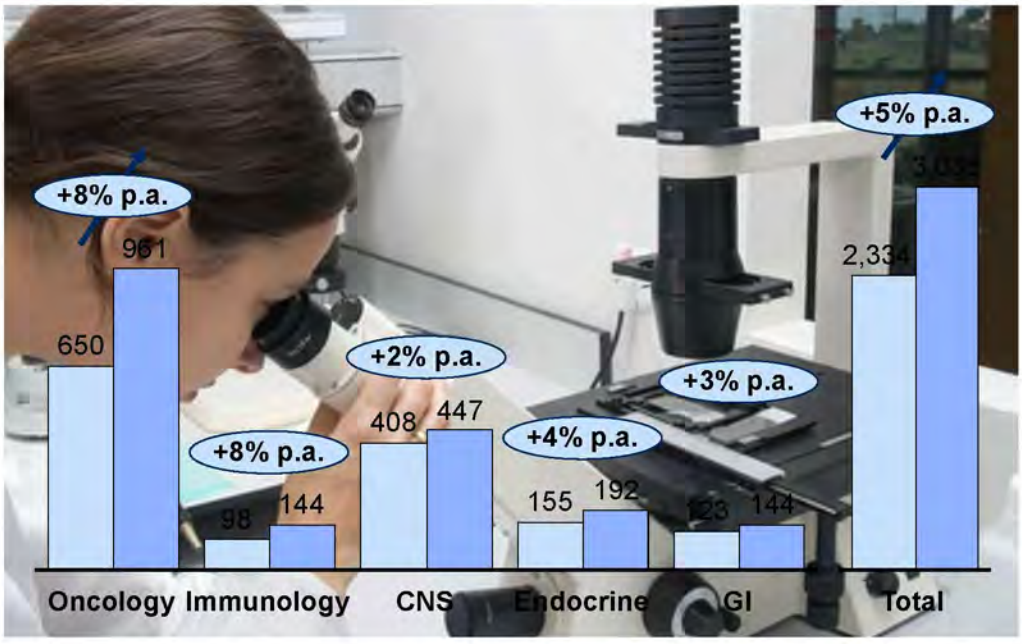


SOURCE: PharmaProjects, McKinsey analysis

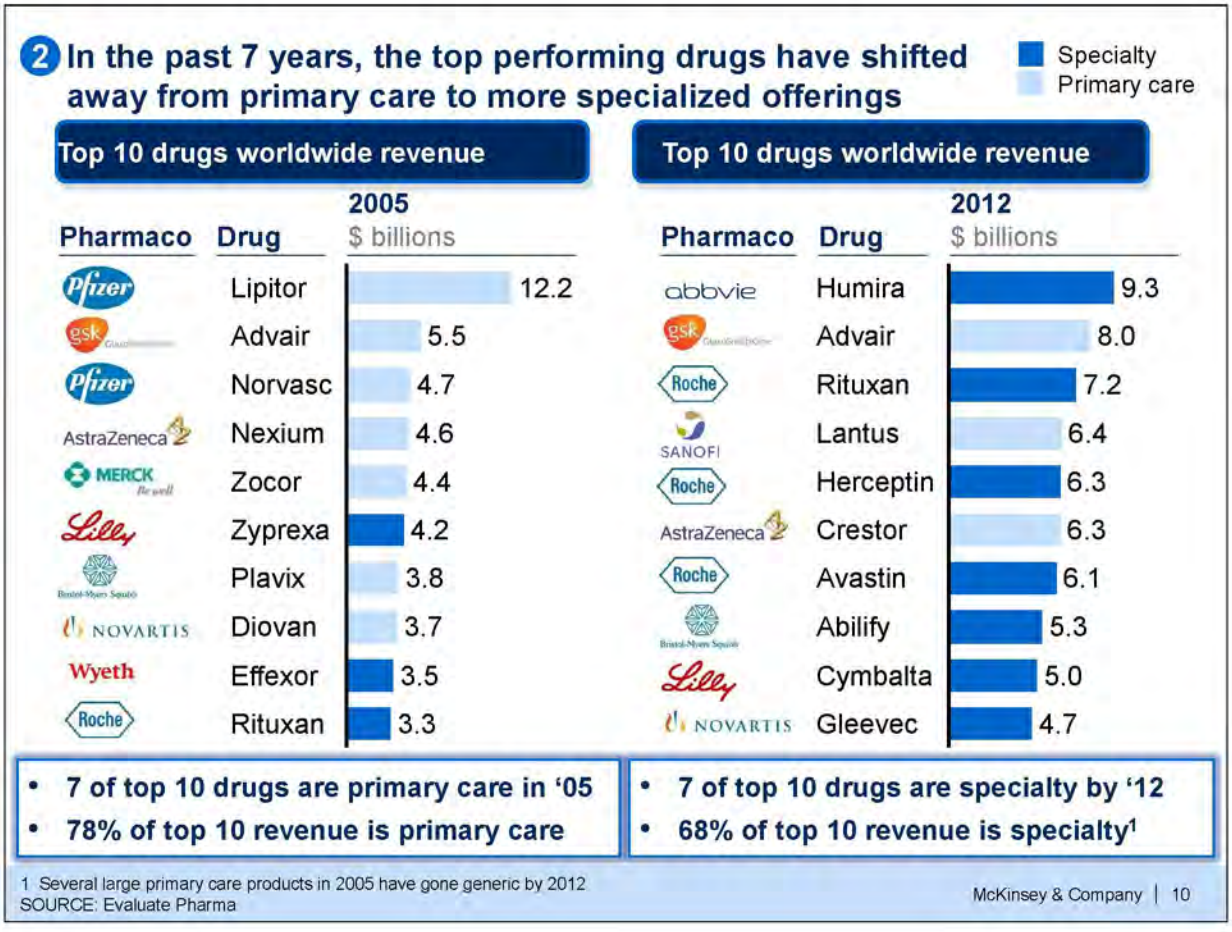
1 Pharma has steadily grown its pipeline with a particular focus on growing Oncology and Immunology

2007
2012

Total number of compounds in clinical development (phase I-III), 2007-2012



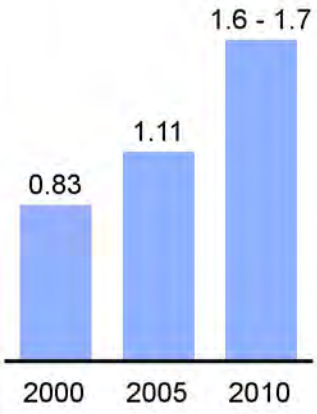
SOURCE: PharmaProjects; McKinsey analysis



2 Cost of R&D has doubled so to cost effectively fuel pipeline expansion, pharmacos are increasingly accessing external sources of innovation

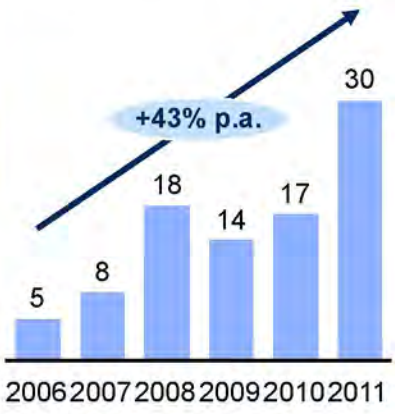
Average cost per NME

Average cost[1] USD, bn



Pharma-academic partnerships

Number of new partnerships (n=92)[1]



Examples	Partners
KOL grants to address specific questions	SANOFI, MIT
Share data/ resources with consortium	Sage, gsk, J&J, AstraZeneca
Collaborate on a targeted therapeutic area	AstraZeneca, Washington University in St. Louis
Mutli-disciplinary collaborative relationship	Pfizer, UCSF

Estimated >30% of scientifically novel compounds originated in academics

1 Top 500 pharmaceutical and biotech

SOURCE: Nat Rev Drug Discovery, IN VIVO, Elsevier's strategic transactions, press search, McKinsey analysis

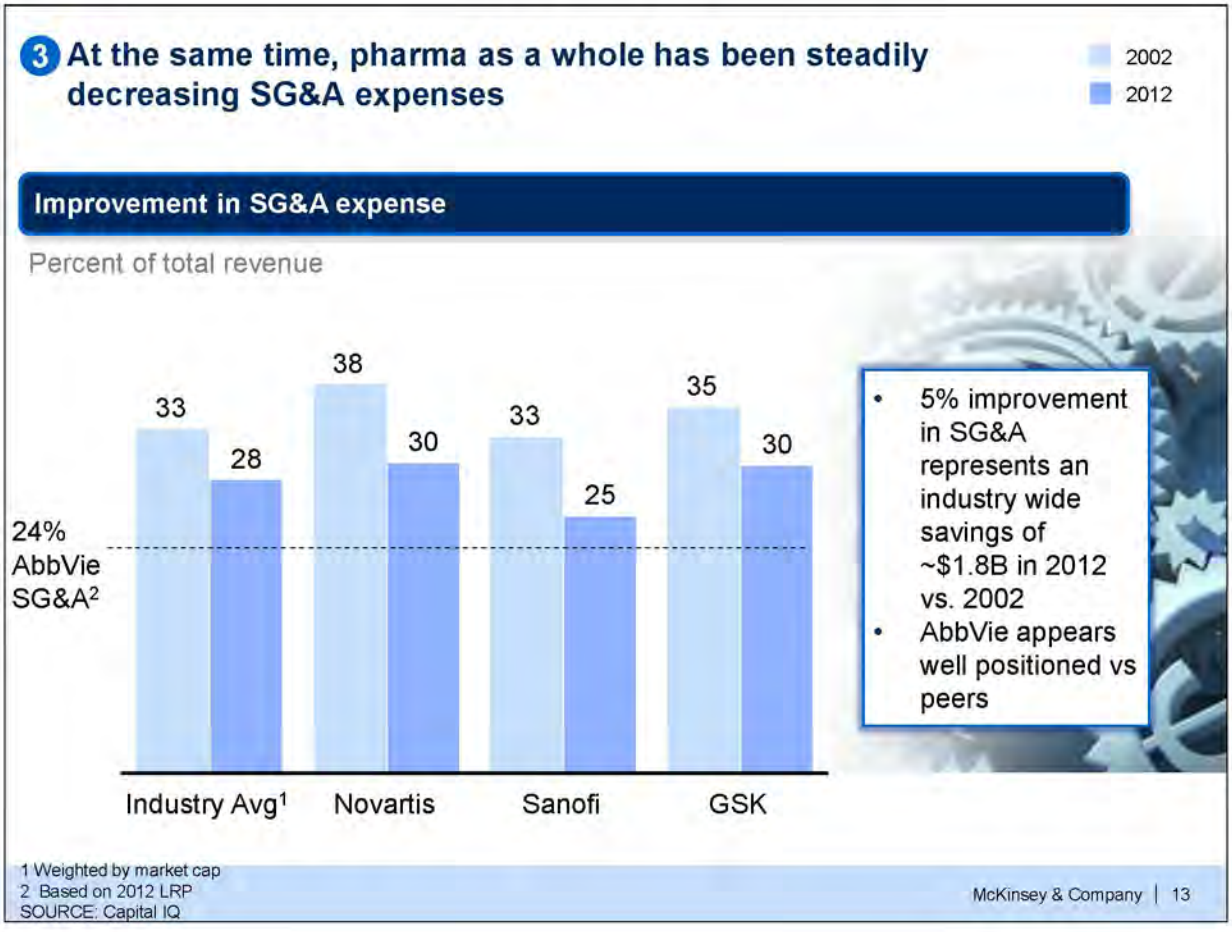
2 ... and expanding use of personalized medicine and genomics

Increased use of personalized medicine, particularly in oncology and orphan

- >70 approved drugs utilized some form of personalize as part of approval by 2011
  - Over 30 include pharmacogenomic biomarkers in their drug labels (mostly in oncology and orphan indications)
- Overall increase in pipeline compounds that rely on biomarker data
  - 30% of all treatments in late clinical development rely on biomarker data
  - 50% of treatments in early clinical development rely on biomarker data
  - 60% of all compounds in preclinical development rely on biomarker data
- 10% of marketed drugs inform or recommend genetic testing for optimal treatment

SOURCE: Evaluate, press search

3 At the same time, pharma as a whole has been steadily decreasing SG&A expenses



1 Weighted by market cap
2 Based on 2012 LRP
SOURCE: Capital IQ

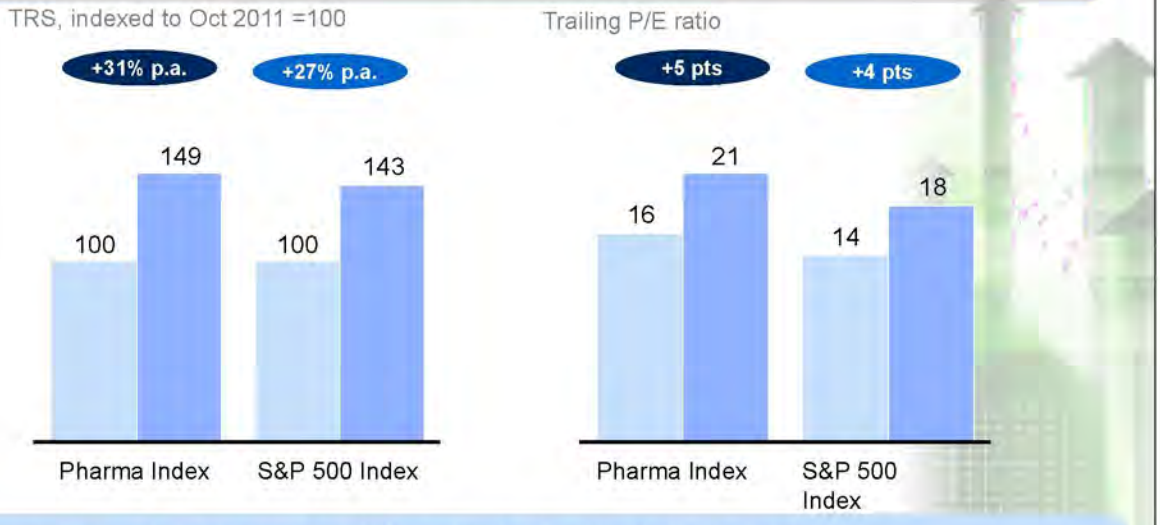
As a result of pharmaceutical companies' adaptation and turnaround, the industry as a whole is rebounding

- **A** Pharma index has once again begun to outperform the market
- **B** Pharma P/E ratios are rebounding, suggesting investors have renewed belief in longer-term growth
- **C** Increase in the number of product approvals
- **D** Underlying pharmaceutical sector profit pool remains large and attractive compared to other industries

A Pharma index has begun to rebound

Oct. 2011
Apr. 2013

Comparison between Pharma Index and S&P 500, October 2011 to present



- Pharma index increase points to renewed enthusiasm in the sector
- "The global pharmaceutical industry is likely to experience a return to earnings growth in 2013 as fewer top-selling drugs lose their patent protection compared with last year" – Moody's

SOURCE: Capital IQ, analyst reports

C FDA approvals have trended upward after several years of stagnation

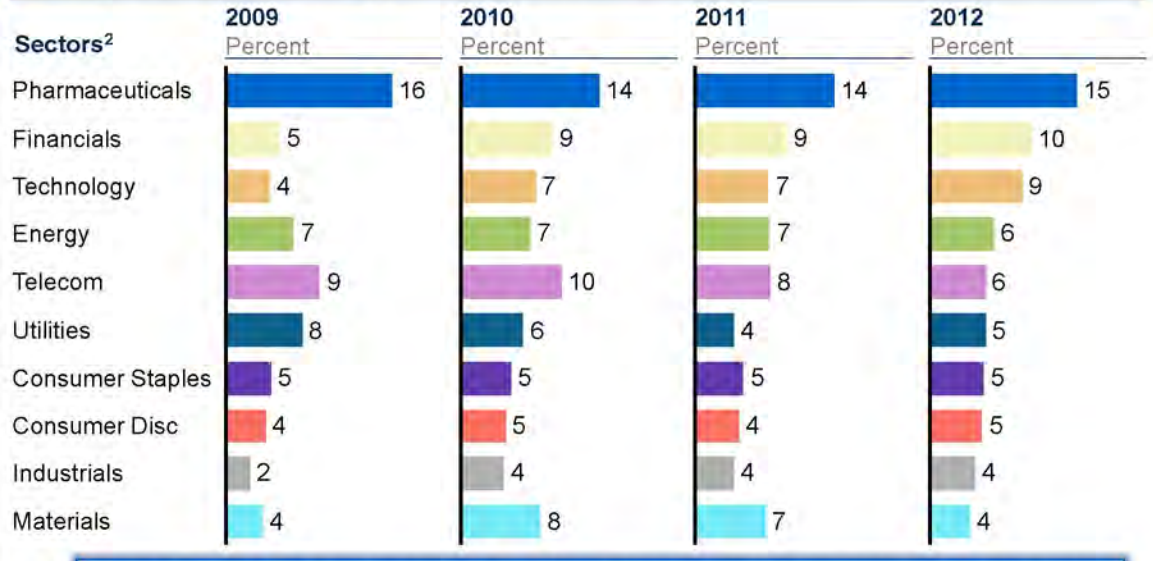
FDA New molecular entities approvals by year

- Increasing number of priority approvals for first in class compounds or areas of high unmet need
  - ~30% in 2008 vs ~50% in 2012
- 2012 highlights:
  - 20 of 39 approvals were first-in-class
  - 13 of 39 approvals for orphan drugs
- 2013 expected to be similar highlighting sustained uptick

SOURCE: FDA data, McKinsey analysis

D The underlying pharmaceutical sector profit pool remains very attractive compared to other sectors

Comparison of profit margin across economic sectors



Overall profitability indicates ongoing growth opportunities for winners in pharma space

1 Industry average, weighted by revenues in US$
2 Sample includes global companies with US$500 Million in revenue and above from 2008 onwards

SOURCE: Corporate Performance Analysis Tool

Given existing landscape and trends, we believe the next 10 years will be considerably different than the last

Several "sure bets"

- Increased role of consumer (both in decision making financially)
- Further M&A activity (both to gain access to innovative new therapies and cost synergies)
- Shift towards more integrated care (e.g. ACOs and IDNs)
- Further limited access to physicians creating demand for a new commercial model
- Rise of pharmaco-genomics and biomarkers to treat increasingly specific sub-populations
- Requirements for health economic and clear clinical benefit vs standard of care for premium reimbursement
- Ongoing pricing (and utilization) pressure on healthcare industry putting a premium on unique TPPs with demonstrated value

However there are also several "wild cards" that are less certain but have opportunity to greatly influence the market

Wild cards

- Will the industry crash through the next wave of innovation and return to historic productivity?
- Will the day of the $100K+ therapy be over?
- Will the "bubble burst" on valuations?
- When will Emerging Markets reach enough scale to drive significant portion of industry profits?
- Will increasing pricing and data transparency dramatically change fortunes?
- Will some markets place draconian measures on pricing and intellectual property?

We believe winners in the market can capture disproportionate share and growth

Keys to success in this new environment

- Focus on specialty products with clear differentiation vs standard of care in areas where the company can add unique value (rather than following the herd)
- Build cutting edge capabilities that will be required to win in the new world (e.g., Market Access / Pricing, Health Economics / Outcomes, Medical Affairs)
- Increasingly externalize R&D (in particular R) to cost effectively access new sources of innovation while leveraging advances in personalized medicine to more efficiently target therapies and development
- Focus on value creating M&A for required assets, talent and technology
- Drive a "lean / mean" low-cost organization and operational model to maintain cash flow while still being able to invest in growth
- Foster a culture of innovation, accountability, rapid decision-making, cross-functional cooperation and strong external orientation