

Chugai's Business Strategy in Drastically Changing Environment of the Pharmaceutical Industry

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Osamu Nagayama
President and CEO
CHUGAI PHARMACEUTICAL CO.,LTD.

Challenges to Global Sustainability



Global Challenges

- Economic recession
- Potential protectionism
- Over-regulation
- Global climate change

- Explosive population growth
- Resource shortages
- Security of food supply
- Aging societies
- New diseases arising

Life Sciences' Challenges*

- Equal access to innovation (affordability)
- Many diseases without enough therapy
- Possible game changers
- Relationship between innovation and market share
- Increased interdisciplinarity and open innovation

*Sir William Castell (The Wellcome Trust) in BioJapan 2010



Environmental Changes of Pharmaceutical Industry

Global Prescription Drug Market Forecast (-FY2013)



World

Size: US\$ 975-1,005 bn CAGR 08-13: 4-7%

Europe *1

Size: US\$ 160-190 bn CAGR 08-13: 1-4% Japan

Size: US\$ 97-107 bn CAGR 08-13: 1-4%

United States

Size: US\$ 325-355 bn CAGR 08-13: 2-5%

"Pharmerging" market

Size: US\$ 160-190 bn CAGR 08-13: 13-16% **Rest of World**

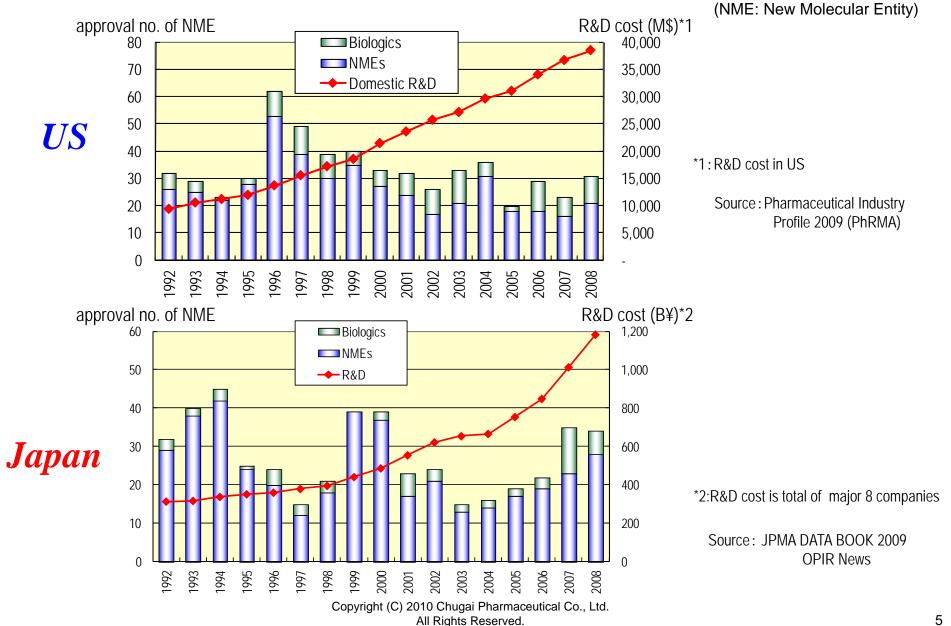
Size: US\$ 185-215 bn CAGR 08-13: 5-8%

^{*1} Top 5 Europe

^{*2} China, Brazil, Russia, Mexico, India, Turkey and South Korea Source: IMS Health, Market Prognosis, September 2009 (Copy and Re-print Restricted) IMS STRATEGIC MANAGEMENT REVIEW – GLOBAL PHARMACEUTICAL PERSPECTIVES

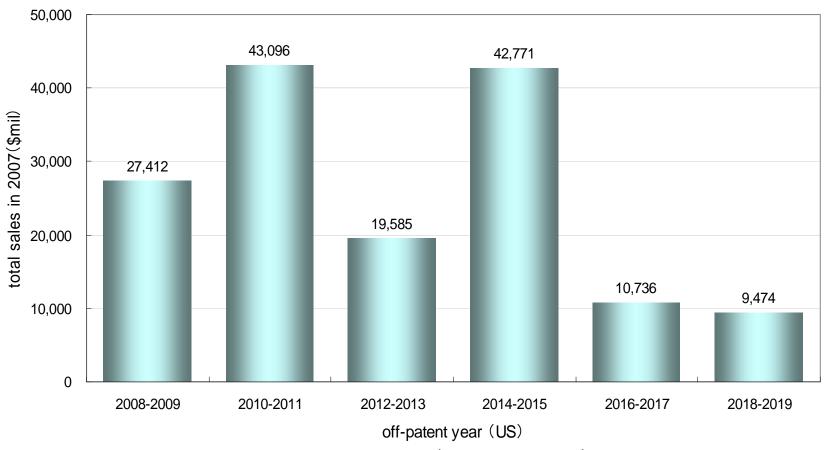


Decreasing R&D Efficiency: New Drugs/R&D Costs



CHUGAI Roche Roche Group

Patent Cliff around Year 2010 (Issue of 2010)

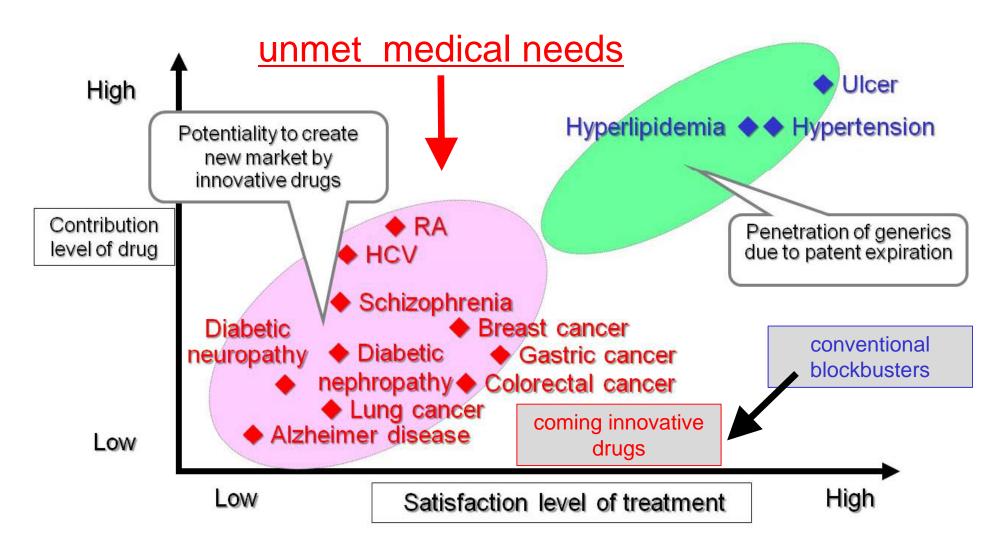


- 24 out of global top 50 products lose exclusivity (USD 90.1 billion) during FY2008-2013
- Approx. USD 132.9 billion will face patent expiries in 8 years by FY2015

=20% of global market in FY2007

Drug Target Shifts to Unmet Medical Needs

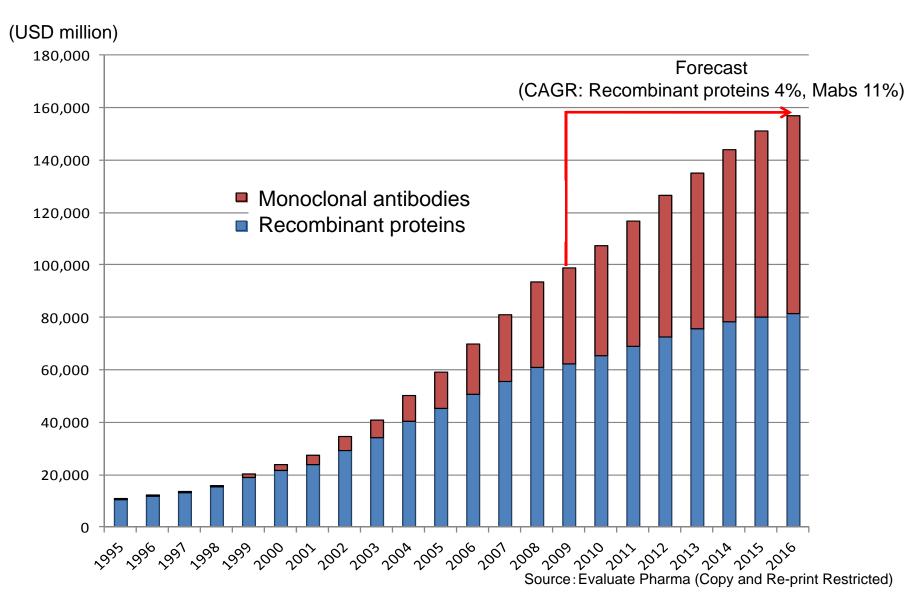




Source: Report issued by Japan Heath Science Foundation

Global Biopharmaceutical Market Forecast (-FY2016)

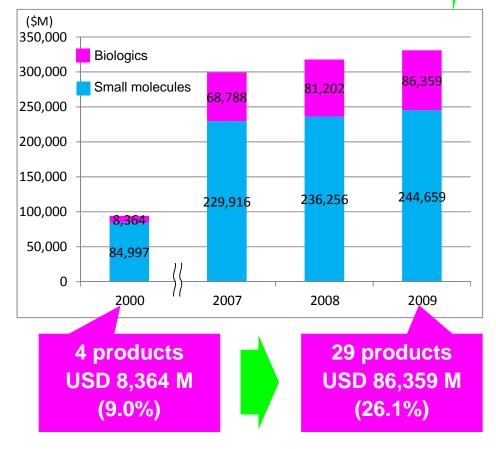




Increasing Biological Blockbusters



2000 Sales Company Rank Product name (million USD) Amgen/J&J/Kirin Epogen/Procrit/Espo 4,666 27 Intron A/Rebetron Schering-Plough 1,360 35 Neupogen/Gran Amgen 1,220 1,115 40 Humarin Eli Lilly



2009

Rank	Product name	Company	Sales (million USD)	
4	Remicade	J&J/Merck(SP)/Mitsubishi Tanabe	7,143	
5	Rituxan/MabT hera			
	Enbrel	6,216		
8	Avastin	Amgen/Wyeth/Takeda Roche/Chugai	5,994	
9	Humira	Abbotto/Eisai	5,560	
12	Herceptin	Roche/Chugai	5,073	
13	Epogen/Procrit/Espo	Amgen/J&J/KyowaHakko Kirin	5,026	
17	Lantus	sanofi-aventis	4,414	
28	Neulasta	Amgen	3,355	
32	Novorapid/Novomix	Novo Nordisk	3,130	
36	Aranesp/Nesp	Amgen/KyowaHakko Kirn	2,970	
41	Prevnar	Wyeth	2,766	
49	Lucentis	Roche/Novartis	2,386	
51	Avonex	ex Biogen Idec		
55	55 Rebif Merck Sereno 59 Erbitux Lilly/BMS/Merck Serono 63 Humalog Eli Lilly 66 Gardasil CSL/Merck/Sanofi-Pasteur 68 Betaferon Novartis/Bayer Schering 74 Pegasys Roche/Chugai 78 Epogin/NeoRecormon Chugai/Roche		2,203	
59			2,073	
63			1,959	
66			1,852	
68			1,789	
74			1,594	
78			1,503	
79	Tysabri	Elan/Bigen Idec	1,500	
	Neupogen/Gran	Amgen/KyowaHakko Kirn	1,414	
	89 Arepanrix Glaxo Smithkline		1,406	
93	93 NovoSeven Novo Nordisk		1,362	
	103 Kogenate Bayer		1,273	
	Synagis AstraZeneca		1,082	
127	7 Humulin Eli Lilly		1,022	
129	Levemir	Novo Nordisk	1,006	

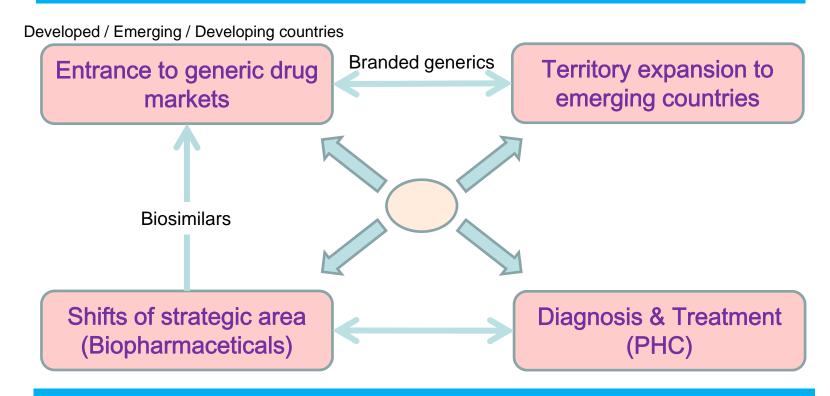
Antibody

Source: Pharma Future

Variety of Pharma's Strategic Options



Expansion of business territory (business, region)



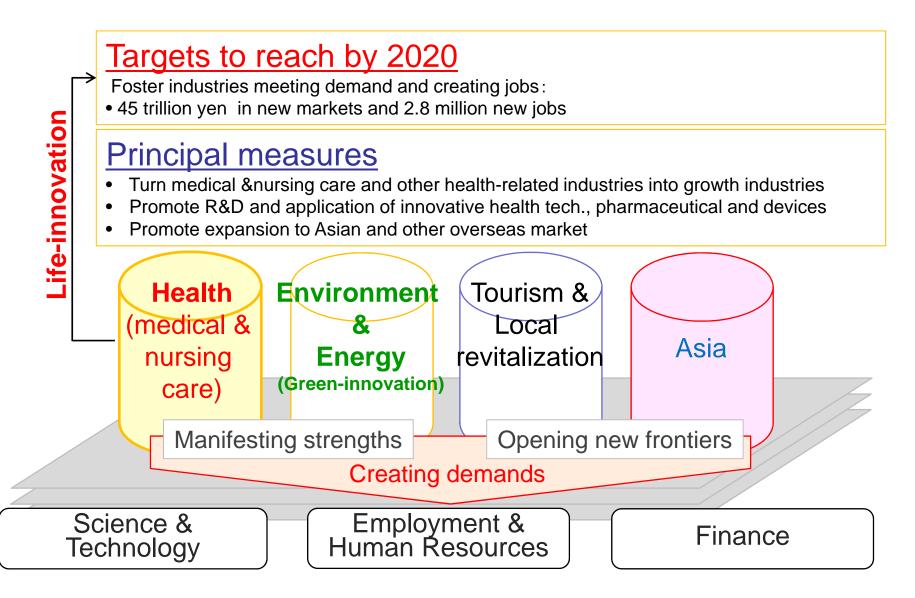
- **♦ Creation of innovative new drugs**
- **♦**Contribution to unmet medical needs
- Development of efficient medical treatment



2. Japan's New Growth Strategy and International Cooperation



Japan's New Growth Strategy (Healthcare area)



Asian Regions' Potentials

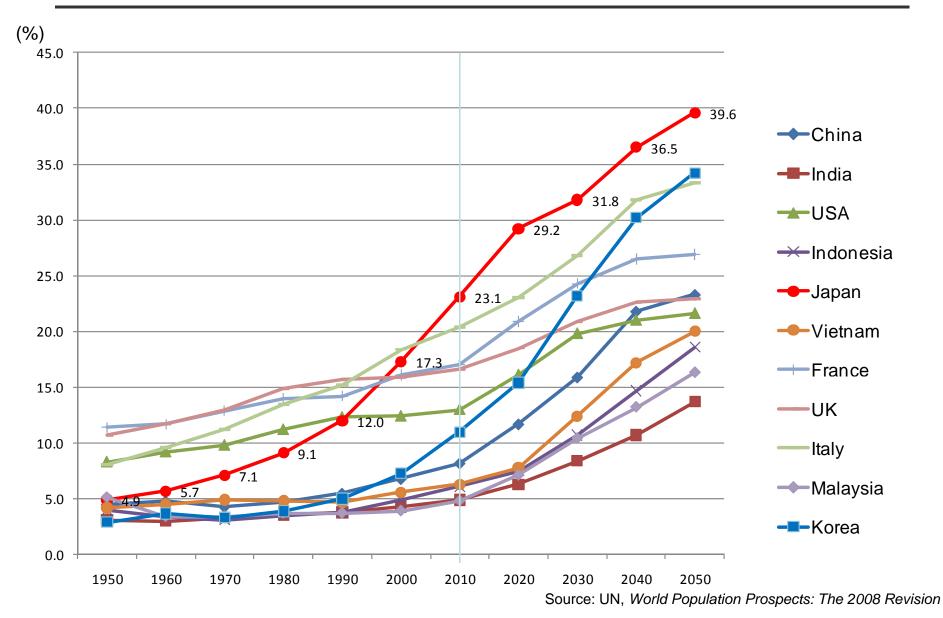


- Emerging economic growth
- Huge population and aging
- Improvement of social infrastructures
- Establishment of healthcare systems
- Upgrade of human capabilities and skills
- Increasing healthcare needs and consumers
- Accumulating knowledge and technologies
- Strong governments' initiative

- Rapid growth of market
- Creation of innovative products











Internationally collaborative clinical trials

Genomic databases (basic, clinical)



Integrated analyses in Asian populations

Rapid patient access of innovative drugs

Biomarkers for personalized medicine



Medical supply model in aging society

High quality and efficient medical services



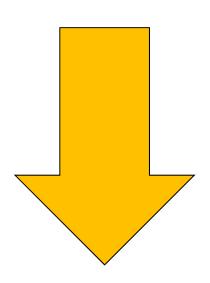
3. Chugai's Business Strategy to Adapt Drastic Environmental Change

Chugai / Roche Strategic Alliance



- Roche owns majority of Chugai stakes (>50.1%*)
- Chugai merges Nippon Roche
- Chugai maintains autonomous management (listing at TSE)

*Roche owns 59.9% of Chugai's share since FY2008





Win-Win Relationship with Network Management

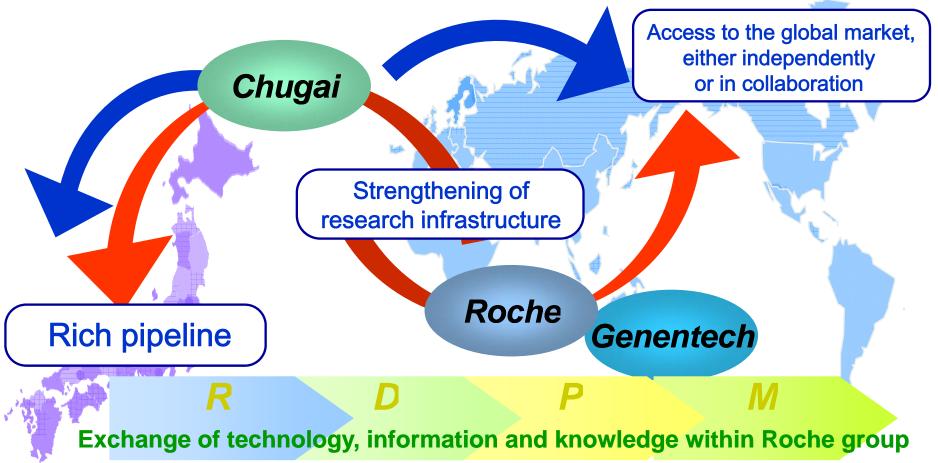
Establishment of Global Competitiveness



- ✓ Securing diversity & creativity through autonomous management
- ✓ Enhancing efficiency & productivity through mutual collaboration
- ✓ Competitiveness as the top bio-pharmaceutical group

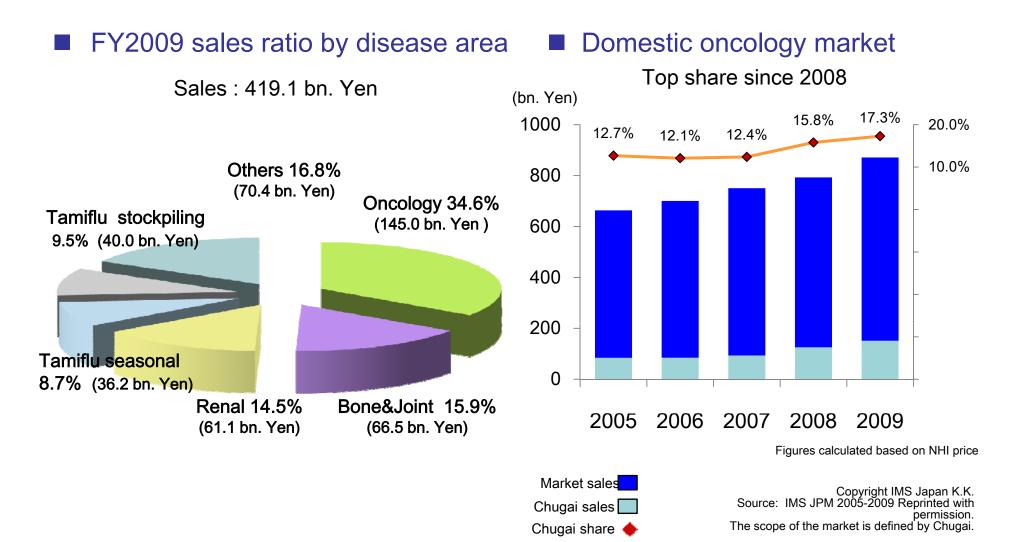


- Continuous drug creation by leveraging bio-technology
- ✓ Satisfying unmet medical needs, with a focus on cancer



Chugai's Strategic Areas and Sales

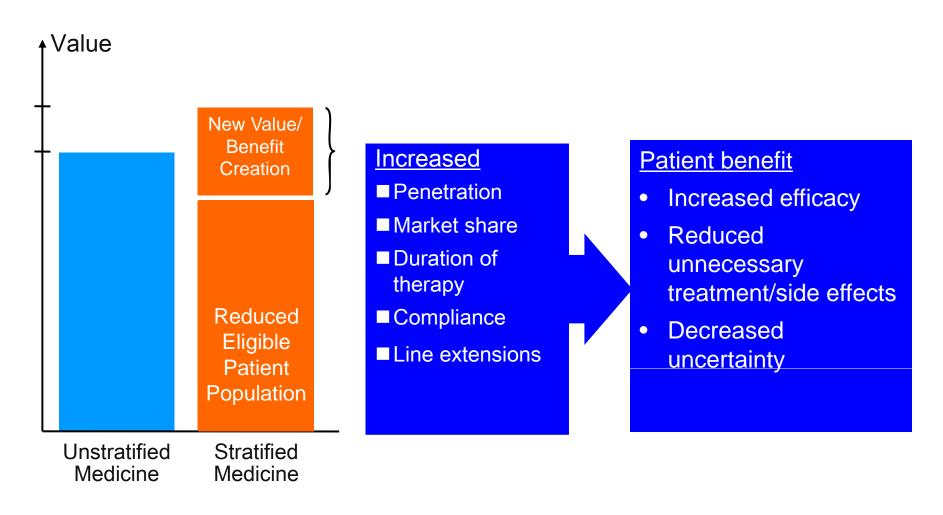




Personalized Healthcare, PHC

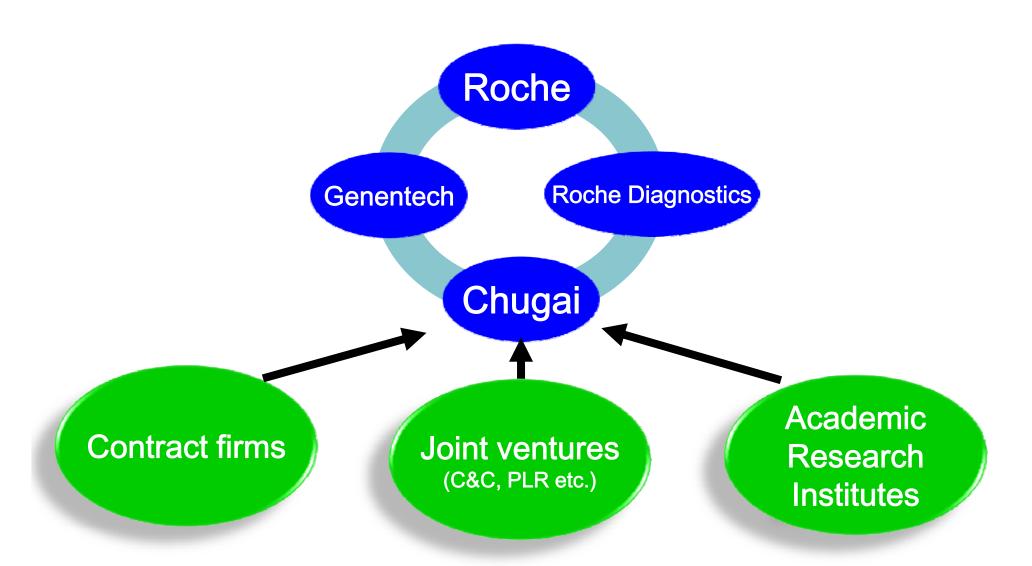


Create patient benefits and commercial incentives



Create New Drugs via Original Research Network





Chugai's Products from Industry-Academia Collaboration



Product	Mode of Action	Indication	Launch	Sales*	Industry-Academia Collaboration
Alfarol	Vitamin D3 derivative	Osteopolosis	1981	20,000 (2002)	Univ. of Wisconsin
Sigmart	NO donor / K channel opener	Angina Pectoris	1984	19,300 (2005)	Univ. of Tokyo
Neutrogin	rG-CSF	Neutoropenia	1991	39,200 (2007)	Univ. of Tokyo CEAI
Actemra	IL-6 receptor antibody	Rheumatoid Arthritis	2005	17,300 (2009)	Osaka Univ.

(*Peak or latest sales: JPY million)

Key success factors in Industry-Academia collaboration (Management of Diversity)

- ➤ Mutual understanding and respects of value each other
- > Consensus on the vector and interest toward a goal
- > Complement of technologies and know-how

Innovative and competitive technologies can attract Industry-Academia collaboration



Current Chugai's Challenges

Patient-oriented	Persistence to provide value for patients
Pursuit of innovation	Pursuit of first-in-class/best-in-class innovative products and services
Human capital development	Implementation of individual talent management
Interdivisional cooperation	Establishment of an organizational culture that proactively pursues innovations across divisional lines

Late 2010's "Top Pharma"

2010

Sales: 418.5 billion yen

OP: 70.0 billion yen

2012

Sunrise 2012

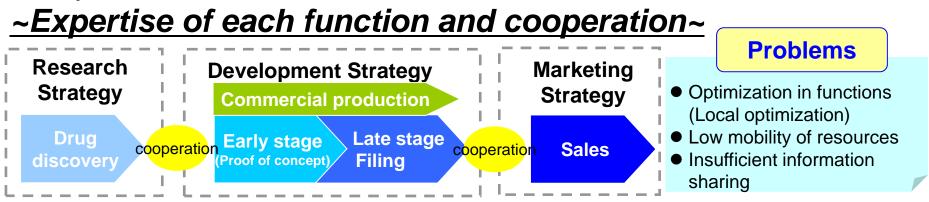
Sales: 460 billion yen

OP: 80 billion yen

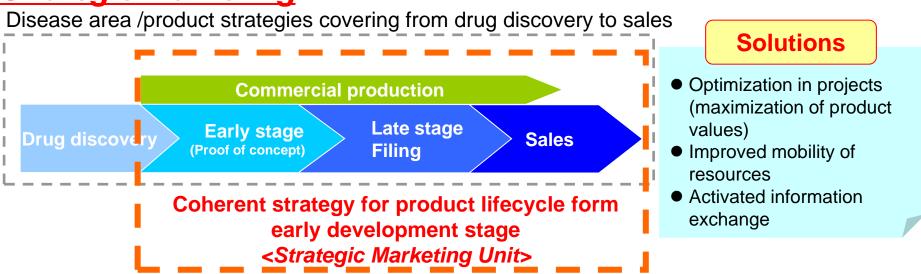
Introduction of Strategic Marketing Function



Past system



Strategic Marketing

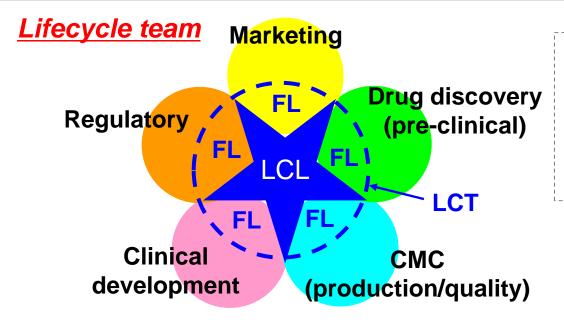




Promotion of Lifecycle Management

Lifecycle management from Sectional management

		Drug discovery (pre-clinical)	CMC (production /Quality)	Clinical development	Regulatory	Marketing	
	Project A						
Ĺ	Project B						Lifecycle team
	Project C						
	Project D						



LCL: Lifecycle leader (promoting Lifecycle management)

FL: Functional leader (representative from function/section)

LCT: Lifecycle team

Chugai's Human Capital Development



- Adaptation to drastically changing global market
- Explosive growth and globalization in business
- Global co-development of pipelines

Need of "Global Leader"

Build up Leaders for Lifecycle Management

Further Recruitment of Foreign Worker incl. Asian

Roche-Chugai Exchange Program

Establishment of Talent Management/Diversity Management System

Enhancement of Executive-class Training Program



Roche A member of the Roche group