

Pursuing the Possibilities for Sustainability, Health, and Comfort

Basic R&D Concept

Global environmental problems, population and food problems, energy and resource problems, and various issues related to our daily lives and health — much is expected of chemistry, which has the potential to provide solutions to the myriad problems facing society.

The MCHC Group aims to help solving these problems and is enlisting the resources of the entire Group in pursuing R&D with eyes focused on everything from basic necessities like clothing, food, housing, to a wide range of industry sectors, like pharmaceuticals, automobiles, IT, and electronics, that are in the forefront of sound social development.

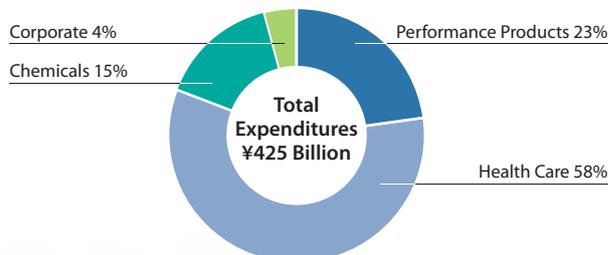
R&D Strategy

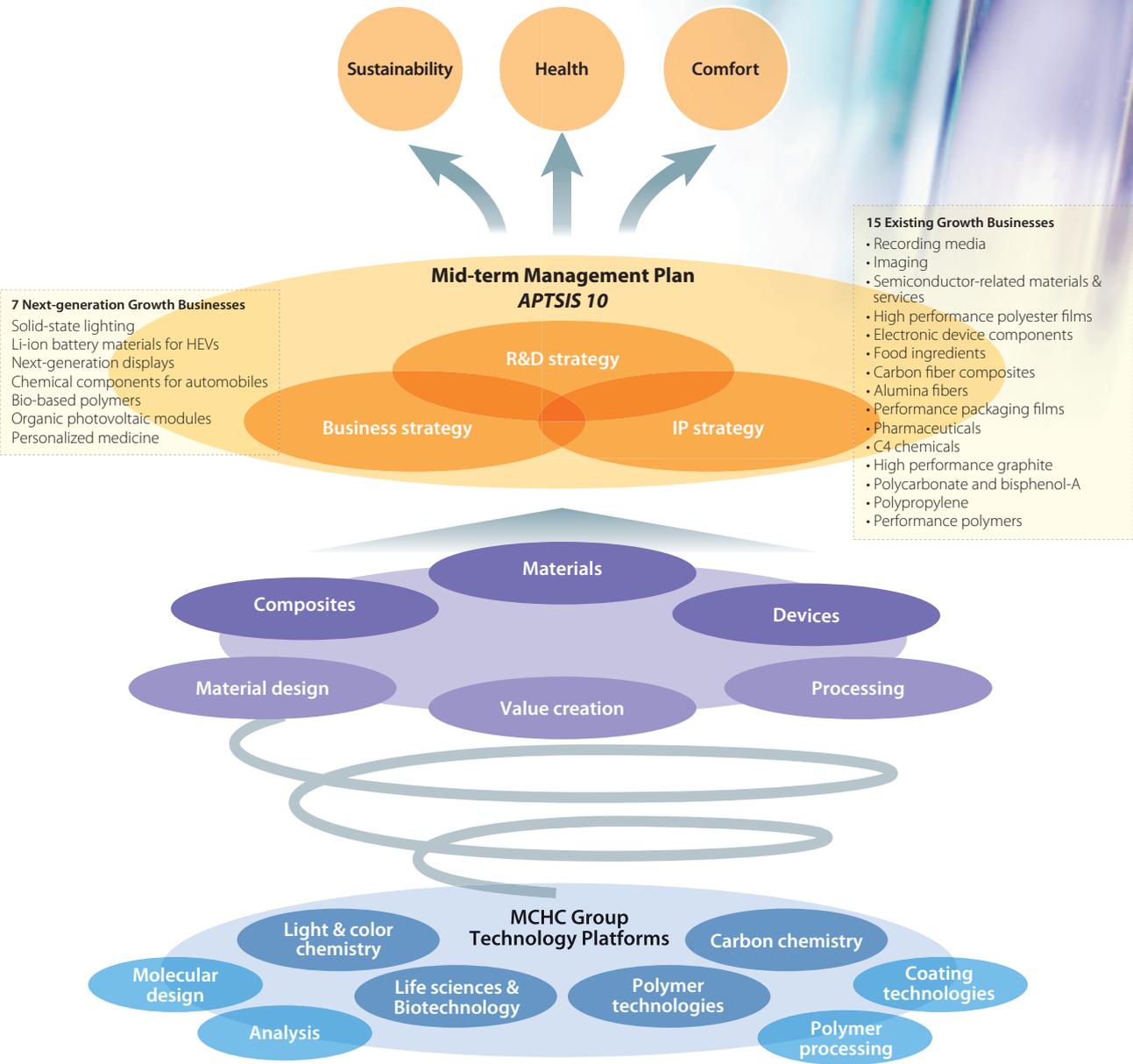
The MCHC Group, in order to rapidly apply research results to the problem of how to expand prosperity in modern society and bring forth new value that anticipates future demands, is advancing its R&D strategy together with its business strategy and intellectual property strategy. This R&D strategy is one that targets the realization of the MCHC Group's management strategy.

Founded on the management strategy of growing, innovating, and leaping ahead based on businesses consistent with the business activity decision criteria of Sustainability, Health, and Comfort, our R&D strategy consists largely of two parts. The first is using growth-oriented R&D to promote the development of the 15 existing growth businesses together with that of Group companies and business units. The second is focusing attention on the development of the seven next-generation growth businesses.

Regarding R&D, the technology platforms consisting of the combination of the diverse technologies held by Mitsubishi Chemical, Mitsubishi Plastics, and Mitsubishi Tanabe Pharma, are being applied as a common Group asset and efforts are being made to efficiently and speedily realize results.

R&D Expenditures in FY2008-2010 by Business Domain





Research & Development

Pharmaceutical Pipelines

The Mitsubishi Tanabe Pharma Group aims to continually develop new pharmaceuticals that will be used throughout the world. In implementing its R&D activities, the Group has positioned metabolism and circulation as key areas, with a special focus on diabetes and cerebral infarction.

In diabetes agents, the Group has a number of development compounds with different mechanisms of action, such as DPP4 inhibitors MP-513 and TA-6666 and SGLT-2 inhibitor TA-7284. The Group is moving forward with the development of these compounds, which are expected to become major products. The Group is also moving ahead with

the development of NS3-4A protease inhibitor MP-424, a new treatment for chronic hepatitis C.

The Group continues to develop Remicade, which plays a central role in the lifecycle management strategy, targeting the acquisition of approval in Japan for additional indications, following Crohn's disease and rheumatoid arthritis. Overseas, with a focus on the renal disease field, phase III trials of Non-absorbed phosphate binder MCI-196 and Uremic toxin adsorbent MP-146 in Europe and the US are making progress.

Following its merger in 2007, the Group has clarified its priorities for development products and will review its development pipeline.

Development Pipeline Status

New Molecular Entities | Additional Indications | Licensing-out

As of May 7, 2008

	Phase 1	Phase 2	Phase 3	Filed
Domestic	TA-7284 Diabetes Mellitus	MP-424 Chronic Hepatitis C	Maintate Chronic Heart Failure	Remicade Psoriasis
	TA-6666 Type 2 Diabetes Mellitus	Cholebine Type 2 Diabetes Mellitus	Anplag Cerebral Infarction	Remicade Rheumatoid Arthritis, dose escalation
	Cholebine Hyperphosphatemia	MP-513 Type 2 Diabetes Mellitus	Radicut ALS*1	Venoglobulin-IH Hypo-, Agammaglobulinemia, regimen change
	MP-214 Schizophrenia	MCC-847 Allergic Rhinitis	Modiodal OSAS*2	Venoglobulin-IH ImmunoglobulinG2 Deficiency
	CNT0148 Rheumatoid Arthritis	FTY720 Multiple Sclerosis	Remicade Ulcerative Colitis	Novastan HIT-Heparin Induced Thrombocytopenia
	MP-435 Rheumatoid Arthritis		Remicade Ankylosing Spondylitis	Venoglobulin-IH Polymyositis, Dermatomyositis
			APTA-2217 COPD*3	Neuart Toxemia of Pregnancy
			APTA-2217 Asthma	
			MCC-847 Asthma	
			TA-8317 Breakthrough Cancer Pain	
Overseas	TA-8995 Hyperlipidemia	MCC-135 Myocardial Infarction	Argatroban (EU) PCI in HIT*4	Argatroban (EU)* HIT*5
	MCI-186 Acute Cerebral Infarction	TA-6666 Type 2 Diabetes Mellitus	MCI-196 Hyperphosphatemia	
	MP-513 Type 2 Diabetes Mellitus	MCC-257 Diabetic Neuropathy	MP-146 Chronic Kidney Disease	
	TA-5493 Rheumatoid Arthritis, Psoriasis	TA-5538 Overactive Bladder		
	GB-1057 Stabilizing Agent			

* In preparation to file *1 Amyotrophic lateral sclerosis *2 Obstructive sleep apnea syndrome *3 Chronic obstructive pulmonary disease *4 HIT patients undergoing Percutaneous Coronary Intervention (PCI) *5 Heparin-induced Thrombocytopenia

Licensing-Out		TA-7284 Diabetes Mellitus	FTY720 Multiple Sclerosis	
		T-0047 Multiple Sclerosis		
		TA-1790 (US) Erectile Dysfunction		
		TA-1790 (Korea) Erectile Dysfunction		