

Main R&D Activities -1 (Feb 4 , 2013 Release)

Ph III ~ Application submitted

※No Changes from the previous announcement
(Nov 7, 2012)

Stage		Compound/ Code	Therapy area/Action	Origin	Features	Comments
Japan	Overseas					
※Application submitted (8/2012)		Pentasa (suppository)	Ulcerative colitis	Ferring Pharmaceuticals	Consideration of a new dosage form for the active phase of ulcerative colitis (once a day)	<ul style="list-style-type: none"> •Development of a new dosage form •PhⅢcompleted(2/2012)
※Application submitted (9/2012)	(US) SkyePharma : Application submitted (3/2009) (Europe) Mundipharma :Launched(9/2012)	KRP-108 (Inhalant)	Anti-asthmatic	SkyePharma PLC	An ICS/LABA combination product, which offers better compliance and convenience to the patients	<ul style="list-style-type: none"> •License agreement with SkyePharma (4/2008) •Domestic Ph II completed (4/2010) •PhⅢcompleted(3/2012)
※PhⅢ (9/2012)	(Europe) Almirall : Launched(9/2012) (US) Forest Pharmaceuticals : Launched (12/2012)	KRP-AB1102 (Inhaled drug)	Chronic Obstructive Pulmonary Disease (COPD)	Almirall	<ul style="list-style-type: none"> - New Chemical Entity: Acclidinium Bromide - Long Acting Muscarinic Agonist (LAMA) - Twice Daily administration -Onset of Action on the first day Genuair® 1) Designed with a feedback system, which through a 'colored control window' and an audible click helps confirm that the patient has inhaled correctly 2) Counter for remaining doses 3) Safety features such as an anti-double-dosing mechanism and an end-of-dose lock-out system to prevent use of an empty inhaler	License agreement with Almirall (2/2011)

Main R&D Activities -2 (Feb 4 , 2013 Release)

POC Project (Pre-clinical ~ Ph II)

※No Changes from the previous announcement
(Nov 7, 2012)

Stage		Compound/ Code	Therapy area/Action	Origin	Features	Comments
Japan	Overseas					
Ph II (5/2012)	(Europe & US) Almirall: Ph III (US) Forest Laboratories : Ph III	KRP-AB1102F (Fixed dose combination inhaled drug)	Chronic Obstructive Pulmonary Disease (COPD)	Almirall	Combination of acclidinium bromide with the long acting beta agonist formoterol : This combination is aimed at providing higher efficacy than each component alone,as well as the improved convenience of having the two products in the same easy to use inhalation device.This is currently in phase III clinical development.	
Ph II (8/2011)	Ph III Merz	KRP-209	Tinnitus	Merz	KRP-209 (Neramexane) is expected to improve the patients' annoyance and difficulties in their life caused by tinnitus, mainly through its two pharmacological properties: 1) NMDA antagonistic activity and 2) Nicotinic acetylcholine antagonistic activity	License agreement with Merz (11/2009) Merz:Ph I clinical trial of Japanese patients in US completed (3/2010)
Ph I (12/2010)	Ph II (POC) (12/2010) (Novartis)	KRP-203	Transplantation, autoimmune diseases,and IBD	In-house	An immunosuppressant with a novel mechanism called an S1P-agonist. It may have a better safety profile than previous ones as well as an excellent effect under concomitant use with other types of immunomodulator.	License agreement with Novartis (2/2006) New license agreement IBD (11/2010)
Ph I (8/2011)		KRP-AM1977X (Oral agent)	New quinolone synthetic antibacterial agent	In-house	①Superior ability to combat drug-resistant gram- positive bacteria (incl. MRSA) ②Outstanding ADME (oral absorption, tissue migration) ③High degree of safety expected since safety hurdles cleared prior to clinical trials	
Ph I (7/2012)		KRP-AM1977Y (Injection)	New quinolone synthetic antibacterial agent	In-house		