



21 December 2012

## Press Release

Nippon Boehringer Ingelheim Co., Ltd.

Astellas Pharma Inc.

Approval for Manufacturing and Marketing of "Micamlo® Combination Tablets BP," an Antihypertensive Drug

- The first combination drug of a high-dose ARB and a long acting CCB with a powerful antihypertensive effect lasting for 24 hours in Japan -

**Tokyo, Japan, December 21, 2012** – Nippon Boehringer Ingelheim Co., Ltd. (Headquarters: Shinagawa-ku, Tokyo; President: Yoshiaki Aono; hereinafter "NBI") and Astellas Pharma Inc. (Tokyo:4503, Headquarters: Chuo-ku, Tokyo; President & CEO: Yoshihiko Hatanaka; hereinafter "Astellas") today announced that they have obtained approval for manufacturing and marketing of "Micamlo<sup>®</sup> Combination Tablets BP," a combination drug of telmisartan 80 mg, a long-acting angiotensin II type 1 (AT<sub>1</sub>) receptor blocker (ARB), and amlodipine 5 mg, a long-acting calcium channel blocker (CCB).

"Micamlo<sup>®</sup> Combination Tablets BP" is the first combination drug of high dose ARB and CCB in Japan. While "Micamlo<sup>®</sup> Combination Tablets AP" is a combination drug of telmisartan 40 mg and amlodipine 5 mg, the amount of telmisartan in "Micamlo<sup>®</sup> Combination Tablets BP" has been increased to 80 mg. This is, therefore, expected to maintain a more potent antihypertensive effect for 24 hours compared with that of the conventional ARB/CCB combination drug.

"Micamlo<sup>®</sup> Combination Tablets BP" can be, in principle, administered when blood pressure is not adequately controlled by any one of treatments with "telmisartan 80 mg in combination with amlodipine 5 mg," "telmisartan 80 mg," "telmisartan 40 mg in combination with amlodipine 5 mg," or "Micamlo<sup>®</sup> Combination Tablets AP."

In a Phase III clinical study of "Micamlo® Combination Tablets BP" conducted in Japan,

173 patients analysed with essential hypertension not having achieved a blood pressure control target (diastolic blood pressure  $\geq 90~\text{mmHg}$ ) with telmisartan 80 mg/day were randomized into either the "Micamlo® Combination Tablets BP"/day or telmisartan 80 mg/day group and received the treatment for 8 weeks. The results showed that systolic blood pressure decreased from baseline by 3.5 mmHg in the telmisartan 80 mg/day group and 18.4 mmHg in the "Micamlo® Combination Tablets BP"/day group. The difference in the decrease in blood pressure between the two groups was 14.9 mmHg; therefore, a potent antihypertensive effect of "Micamlo® Combination Tablets BP" was demonstrated. In addition, diastolic blood pressure decreased by 3.1 mmHg in the telmisartan 80 mg/day group and 12.3 mmHg in the "Micamlo® Combination Tablets BP"/day group. The difference in the decrease in blood pressure between the two groups was 9.1 mmHg, showing a potent antihypertensive effect of "Micamlo® Combination Tablets BP"."

In a Japanese long-term study, 255 patients analysed and received "Micamlo<sup>®</sup> Combination Tablets AP" for 6 weeks. Treatment with "Micamlo<sup>®</sup> Combination Tablets AP" was continued in patients whose diastolic blood pressure lowered to < 90 mmHg and was switched to "Micamlo<sup>®</sup> Combination Tablets BP" and continued for 8 weeks in patients who did not achieve a blood pressure control target (diastolic blood pressure ≥ 90 mmHg). Thereafter, dosage changes and co-administration with other drugs were permitted, and the treatment was continued further for 40 weeks. The results revealed that systolic blood pressure decreased by 6.9 mmHg at Week 8 and 8.6 mmHg at Week 48 in the "Micamlo<sup>®</sup> Combination Tablets BP" group; thus, it demonstrated a potent antihypertensive effect. Diastolic blood pressure also decreased by 5.2 mmHg at Week 8 and 7.3 mmHg at Week 48, showing a potent antihypertensive effect.

In an overseas Phase III clinical study, 562 patients analysed with stage I to II essential hypertension (diastolic blood pressure of  $\geq 95$  to  $\leq 119$  mmHg), in whom ambulatory blood pressure monitoring (ABPM) could be performed, were randomized into any one of 4 x 4 groups, telmisartan 0, 20, 40 or 80 mg/day in combination with amlodipine 0, 2.5, 5 or 10 mg/day, and received the treatment for 8 weeks. The results demonstrated that more potent antihypertensive effects lasted for 24 hours in the telmisartan 80 mg/day in combination with amlodipine 5 mg/day group<sup>3</sup> than in telmisartan 80 mg/day group.

In all Japanese clinical studies, 869 patients received telmisartan/amlodipine 40 mg/5 mg or 80 mg/5 mg, and adverse drug reactions including abnormal laboratory values occurred in 3.0% (26/869) of them. Main adverse drug reactions included dizziness (0.5%, 4/869) and dizziness postural (0.3%, 3/869)<sup>4</sup>.

With the existing telmisartan drugs, "Micardis<sup>®</sup> Tablets 20 mg/40 mg/80 mg," "Micombi<sup>®</sup> Combination Tablets AP/BP," a combination drugs of telmisartan and hydrochlorothiazide (HCTZ) diuretic of the thiazide class, and "Micamlo<sup>®</sup> Combination Tablets AP," a combination drug of telmisartan and long-acting CCB amlodipine, "Micamlo<sup>®</sup> Combination Tablets BP", obtained approval for manufacturing and marketing today, constitutes the Micardis<sup>®</sup> family.

As in the previous cases for the telmisartan drugs, "Micamlo<sup>®</sup> Combination Tablets BP" will be manufactured by NBI, distributed by Astellas, and co-promoted by the two companies. They remain committed to continuously maximising the value of Micardis<sup>®</sup> family products and further contributing to hypertension treatment.

# The following is a summary of the approval:

Date of approval: 21/December/2012

Product name: Micamlo<sup>®</sup> Combination Tablets BP Generic name: Telmisartan/ amlodipine besylate

Specification/content: "Micamlo® Combination Tablets BP:"

Each tablet contains telmisartan 80~mg/ amlodipine besylate 6.93~mg (5 mg of

amlodipine).

Indication: Hypertension

Dosage and administration: Usually for adults, this fixed dose combination (telmisartan/amlodipine 40 mg/5 mg or 80 mg/5 mg) is orally administered once a day. This fixed dose combination is not indicated for initial therapy of hypertension.

(underlined portion was added by this approval)

#### About telmisartan

Telmisartan, discovered and developed by Boehringer Ingelheim, is a drug marketed in some 100 countries around the world including Japan, the USA and European countries. Telmisartan demonstrates an excellent antihypertensive effect with its strong AT1 receptor blocker effect<sup>5</sup> and selective PPARγ activation effect<sup>6</sup>. Moreover, it is expected to play an active role in the treatment of hypertension of the metabolic syndrome as a metabolic sartan that brings about positive effects on metabolism including insulin resistance improvement<sup>7</sup>. The landmark ONTARGET trial as clinical study of ARB published in 2008 confirmed the effect of telmisartan to prevent cardiovascular events as strong as that of ACE inhibitor ramipril<sup>8</sup>. In Japan, all the telmisartan drugs, "Micardis<sup>®</sup> Tablets 20 mg/40 mg/80 mg," Micombi<sup>®</sup> Combination Tablets AP/BP," and "Micamlo<sup>®</sup> Combination Tablets AP/BP" will be manufactured by NBI, marketed by Astellas, and co-promoted by the two companies. The indication of all of these drugs is "hypertension" in Japan.

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# **Company Outlines**

# ♦ Nippon Boehringer Ingelheim Co., Ltd.(www.boehringer-ingelheim.co.jp)

Established: June 1961

Headquarters: ThinkPark Tower, 2-1-1 Osaki, Shinagawa-ku, Tokyo

Representative: Yoshioka Aono, President

Sales: 199,807 million yen (January – December 2011 NHI Sales)

Number of employees: 1,754 (as of 31 December 2011)

Business activities: • Research & development, import, manufacturing, and

marketing of pharmaceuticals

• Import/export and marketing of pharmaceutical active

ingredients and intermediates

## ♦ **Boehringer Ingelheim GmbH** (www.boehringer-ingelheim.com)

Established: 1885

Location: Ingelheim, Federal Republic of Germany
Representative: Dr. Andreas Barner, Chairman of the Board

Sales (consolidated) 13,171 million euros (January – December2009)

Number of employees

(consolidated): Approximately 44,000

Business activities: Research & development, manufacturing and marketing of

prescription medicines, consumer health care products,

veterinary medicine, biopharmaceuticals, and chemicals

Affiliated companies: 145

### ♦ Astellas Pharma Inc. (www.astellas.com/jp)

Incorporated: April 2005

Headquarters: 2-3-11 Nihonbashi-Honcho, Chuo-ku, Tokyo

Representative: Yoshihiko Hatanaka, President & CEO

Sales (consolidated): 969.3 billion yen (for year ending March 2012)

Number of employees

(consoidated): 17,085 (as of 31 March 2012)

Business activities: Manufacturing, marketing and import/export of

pharmaceuticals