## Kyowa Hakko Kirin Announces Initiation of the Phase III Clinical Study of KHK7580 (evocalcet) for Hypercalcemia in Patients with Parathyroid Carcinoma or Primary Hyperparathyroidism

Tokyo, Japan, October 30, 2017---Kyowa Hakko Kirin Co., Ltd. (Tokyo: 4151, President and CEO: Nobuo Hanai, "Kyowa Hakko Kirin") announces today the initiation in Japan of a phase III clinical study of KHK7580 (generic name: evocalcet) for hypercalcemia in patients with parathyroid carcinoma or primary hyperparathyroidism who are unable to undergo parathyroidectomy or relapse after parathyroidectomy.

This phase III study is an open label study in Japan to evaluate the efficacy and safety of KHK7580 oral administration.

"We are delighted to start the phase III study of evocalcet," said Mitsuo Satoh, Ph.D., Executive Officer, Vice President Head of R&D Division of Kyowa Hakko Kirin. "We believe evocalcet could provide more efficient treatment for parathyroid carcinoma and primary hyperparathyroidism, in addition to secondary hyperparathyroidism."

KHK7580 is a small molecular compound and a novel type of calcimimetics discovered by Mitsubishi Tanabe Pharma Corporation (President & Representative Director, CEO: Masayuki Mitsuka, "Mitsubishi Tanabe Pharma"). Kyowa Hakko Kirin signed a license agreement of KHK7580 with Mitsubishi Tanabe Pharma for the rights to cooperative research, develop, market and manufacture the product in Japan and some parts of Asia in March 2008. The application for KHK7580 was submitted to Japan's Ministry of Health, Labor and Welfare in April 2017, seeking approval for secondary hyperparathyroidism in maintenance dialysis patients.

The Kyowa Hakko Kirin Group companies strive to contribute to the health and well-being of people around the world by creating new value through the pursuit of advances in life sciences and technologies.

Target Disease	hypercalcemia in patients with parathyroid carcinoma or primary hyperparathyroidism who are unable to undergo parathyroidectomy or relapse after parathyroidectomy
Study Design	Open label study
Primary Endpoint	Number and percentage of subjects whose corrected serum calcium level is maintained $\leq$ 10.3 mg/dL for 2 weeks in the evaluation period (up to 24 weeks).
Group	KHK7580
Country/Region	Japan

## < Summary of the Study >

## Hypercalcemia in patients with parathyroid carcinoma or primary hyperparathyroidism under inability parathyroidectomy or relapse after parathyroidectomy

Parathyroid carcinoma and primary hyperparathyroidism (PHPT) are diseases in which serum calcium levels elevates due to over autonomous secretion of parathyroid hormone (PTH) from tumors of the parathyroid gland. Parathyroidectomy (PTx) is the only reliable method to treat parathyroid carcinoma and PHPT. Control of hypercalcemia can prove challenging in cases of PHPT where PTx cannot be considered because of concomitant diseases or where PHPT recur after PTx and

parathyroid carcinoma, although patients with such hypercalcemia are very rare. Hypercalcemia causes symptoms of fatigue, polyuria, thirst, and renal impairment and severe hypercalcemia can result in death due to a hypercalcemic crisis.