



**April 2, 2021**  
**Taiho Pharmaceutical Co., Ltd.**  
**Taiho Oncology, Inc.**

## **FDA Grants Breakthrough Therapy Designation for Taiho Pharmaceutical Originated Futibatinib for Treatment of Advanced Cholangiocarcinoma**

Taiho Pharmaceutical Co., Ltd. and Taiho Oncology, Inc. today announced that the U.S. Food and Drug Administration (FDA) has granted Breakthrough Therapy Designation (BTD) for futibatinib (TAS-120), a covalently-binding *FGFR* inhibitor, for the treatment of patients with previously treated locally advanced or metastatic cholangiocarcinoma harboring *FGFR2* gene rearrangements, including gene fusions. Futibatinib is an investigational therapy and has not been approved by any regulatory authority for use in patients.

The decision by FDA to grant this designation is based on efficacy and safety results from the Phase 2 FOENIX-CCA2 study, which will be presented at the American Association for Cancer Research (AACR) Annual Meeting 2021, taking place April 9-14, 2021.

“We are very pleased with the designation of futibatinib as a breakthrough therapy by the FDA,” said Teruhiro Utsugi, Ph.D., Senior Managing Director at Taiho. “We will continue to advance our research and development efforts to deliver futibatinib, discovered in our research center, as one of the agents which may benefit cholangiocarcinoma patients around the world awaiting for new treatment options.”

“Patients living with locally advanced and metastatic intrahepatic cholangiocarcinoma, or bile duct cancer, currently have poor prognosis,<sup>1,2</sup> particularly since there is no standard treatment after the failure of first-line chemotherapy<sup>3</sup>,” said Martin J. Birkhofer, MD, Senior Vice President and Chief Medical Officer, Taiho Oncology, Inc. “We are pleased that the FDA has recognized the potential benefit of futibatinib in previously treated CCA patients. We look forward to continued dialogue with FDA and other Health Authorities as we work toward global availability of futibatinib for cholangiocarcinoma patients.”

Through research and development of innovative treatments, Taiho aims to contribute to patients and healthcare professionals around the world.

### **About Breakthrough Therapy Designation**

The FDA states that Breakthrough Therapy Designation is intended to expedite the development and review of drugs for serious or life-threatening conditions. The criteria

for Breakthrough Therapy Designation require preliminary clinical evidence that demonstrates the drug may have substantial improvement on at least one clinically significant endpoint over available therapy.

### **About Cholangiocarcinoma**

Cholangiocarcinoma (CCA), also known as bile duct cancer, is not common. About 8,000 people in the U.S. are diagnosed with CCA each year.<sup>4</sup> This includes both intrahepatic (inside the liver) and extrahepatic (outside the liver) cancers. CCA can occur at younger ages, but it is seen mainly in older people. The average age of people in the U.S. diagnosed with cancer of the intrahepatic bile ducts is 70, and for cancer of the extrahepatic bile ducts it is 72.<sup>3</sup> The five-year survival rates of intrahepatic CCA (all SEER stages\* combined) is 9%.<sup>1</sup>

\*SEER stages: Surveillance Epidemiology and End Results (SEER) database of National Cancer Institute groups cholangiocarcinoma into 3 stages; localized, regional, and distant.

According to the National Cancer Center, the incidence of bile duct and gall bladder cancer in Japan is reported to be approximately 22,000 cases and 18,000 deaths per year. Of these, intrahepatic cholangiocarcinoma accounts for about 10-15% and is considered to be one of the rare cancers.<sup>5</sup>

The main treatment for CCA is surgery. Radiation therapy and chemotherapy may be used if the cancer cannot be entirely removed with surgery and in cases where the edges of the tissues removed at the operation show cancer cells (also called a positive margin). Both stage III and stage IV cancers cannot be completely removed surgically. Currently, standard treatment options are limited to radiation, palliative therapy, liver transplantation, surgery, chemotherapy and interventional radiology.<sup>2</sup>

### **About Futibatinib (TAS-120)**

Futibatinib (TAS-120) is an investigational, oral, potent, selective, and irreversible small-molecule inhibitor of *FGFR1*, 2, 3 and 4 being studied as a potential treatment for patients with advanced solid tumors with *FGFR1-4* genetic aberrations, including cholangiocarcinoma, who were previously treated with chemotherapy or other therapies. Futibatinib selectively and irreversibly binds to the ATP binding pocket of *FGFR1-4* resulting in the inhibition of *FGFR*-mediated signal transduction pathways, reduced tumor cell proliferation and increased tumor cell death in tumors with *FGFR1-4* genetic aberrations.

In May 2018, the FDA Office of Orphan Drug Development granted futibatinib orphan drug status for the treatment of cholangiocarcinoma.

### **About Taiho Pharmaceutical Co., Ltd. (Japan)**

Taiho Pharmaceutical, a subsidiary of Otsuka Holdings Co., Ltd., is an R&D-driven specialty pharma company with a focus on oncology. Taiho Pharmaceutical also has development programs in allergy and immunology, urology and consumer healthcare

products. Our corporate philosophy is simple: “We strive to improve human health and contribute to a society enriched by smiles.”

For more information about Taiho Pharmaceutical Co., Ltd., please visit:

<https://www.taiho.co.jp/en/>

### **About Taiho Oncology, Inc. (U.S.)**

Taiho Oncology, Inc., a subsidiary of Taiho Pharmaceutical Co., Ltd. and Otsuka Holdings Co., Ltd., has established a world class clinical development organization that works urgently to develop innovative cancer treatments and has built a commercial business in the U.S. Taiho has an oral oncology pipeline consisting of both novel antimetabolic agents and selectively targeted agents. Advanced technology, dedicated researchers, and state of the art facilities are helping us to define the way the world treats cancer. It’s our work; it’s our passion; it’s our legacy.

For more information about Taiho Oncology, please visit:

<https://www.taihooncology.com/us/>

<sup>1</sup> American Cancer Society. Survival Rates for Bile Duct Cancer. <https://www.cancer.org/cancer/bile-duct-cancer/detection-diagnosis-staging/survival-by-stage.html>. Accessed March 2021.

<sup>2</sup> Banales, J. et al. Cholangiocarcinoma 2020: the next horizon in mechanism and management. Nat Rev Gastroenterol Hepatol. 2020; 17(9):557-588. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7447603/>. Accessed March 2021.

<sup>3</sup> The Cholangiocarcinoma Foundation. Treatment Options. <https://cholangiocarcinoma.org/the-disease/treatment-options>. Accessed February 2021.

<sup>4</sup> American Cancer Society. Key Statistics for Bile Duct Cancer. <https://www.cancer.org/cancer/bile-duct-cancer/about/key-statistics.html#references>. Accessed February 2021.

<sup>5</sup> In-hospital Cancer Registration in Designated Cancer Hospitals National Aggregate Report 2018 [https://ganjoho.jp/data/reg\\_stat/statistics/brochure/2018\\_report.pdf](https://ganjoho.jp/data/reg_stat/statistics/brochure/2018_report.pdf). Accessed March 2021