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Press release

Basilea announces submission of Investigational New Drug application for novel oncology drug candidate BAL0891

- **Potential to add third clinical-stage program to oncology pipeline**
- **Progressing patient enrolment towards interim analyses in lisavanbulin phase 2 study and in patient cohorts in FIDES-01 and FIDES-02 studies with derazantinib**

Basel, Switzerland, November 16, 2021

Basilea Pharmaceutica Ltd. (SIX: BSLN), a commercial-stage biopharmaceutical company committed to meeting the needs of patients with cancer and infectious diseases, announced today that it has submitted an Investigational New Drug (IND) application to the U.S. Food and Drug Administration (FDA), to start clinical studies with the company's novel drug candidate BAL0891 in cancer therapy. BAL0891 is a potential first-in-class small-molecule kinase inhibitor. If the IND is granted, Basilea plans to initiate a phase 1 study in patients with advanced solid tumors in the first quarter of 2022.

Dr. Laurenz Kellenberger, Chief Scientific Officer said: "We are very pleased with the progress made in the project. Submitting this IND is an important regulatory milestone for Basilea as we are moving closer to adding BAL0891 as the third oncology drug candidate to our clinical pipeline."

The two oncology drug candidates already in clinical development are derazantinib, an inhibitor of the fibroblast growth factor receptor (FGFR) family of kinases, which is currently in clinical studies for the treatment of bile duct (iCCA), urothelial and gastric cancers (the FIDES studies), and lisavanbulin, a tumor checkpoint controller, currently in clinical studies with patients with glioblastoma, the most aggressive primary brain cancer.

Dr. Marc Engelhardt, Chief Medical Officer, said: "We are expecting to complete enrolment of the number of patients required to support interim analyses in three oncology studies around year-end. This is the phase 2 study with lisavanbulin in glioblastoma patients whose tumors tested positive on the potentially response-predictive biomarker EB1. For derazantinib, this is the cohort of patients with urothelial cancer refractory to prior FGFR inhibitors in the FIDES-02 study and the cohort of patients with intrahepatic cholangiocarcinoma, or iCCA, with non-fusion FGFR2 genetic aberrations in the FIDES-01 study. With enrolment progressing, we now have more visibility on the timelines and expect that interim data read-outs will become available over the course of the first half of 2022."

About BAL0891

BAL0891 is a potential first-in-class small-molecule kinase inhibitor, which was in-licensed in 2018. The compound has shown anti-proliferative activity across diverse tumor cell lines in vitro and efficacy in in-vivo models of human cancers. Basilea has filed an Investigational New Drug application to the U.S. Food and Drug Administration, with the goal to initiate first-in-human clinical studies in the first quarter of 2022.

About derazantinib

Derazantinib is an investigational orally administered small-molecule FGFR inhibitor with strong activity against FGFR1, 2, and 3.[1] FGFR kinases are key drivers of cell proliferation, differentiation and migration. FGFR genetic aberrations, e.g. gene fusions, mutations or amplifications, have been identified as potentially important therapeutic targets for various cancers, including intrahepatic cholangiocarcinoma (iCCA), urothelial, breast, gastric and lung cancers.[2] In these cancers, FGFR genetic aberrations are found in a range of 5% to 30%.[3] Derazantinib also inhibits the colony-stimulating-factor-1-receptor kinase (CSF1R).[1, 4] CSF1R-mediated signaling is important for the maintenance of tumor-promoting macrophages and therefore has been identified as a potential target for anti-cancer drugs.[5] Pre-clinical data has shown that tumor macrophage depletion through CSF1R blockade renders tumors more responsive to T-cell checkpoint immunotherapy, including approaches targeting PD-L1/PD-1.[6, 7] Derazantinib has demonstrated antitumor activity and a manageable safety profile in a previous biomarker-driven phase 1/2 study in iCCA patients,[8] and has received U.S. and EU orphan drug designation for iCCA. Basilea is currently conducting three clinical studies with derazantinib. The first study, FIDES-01, is a phase 2 study in patients with inoperable or advanced iCCA. It comprises one cohort of patients with FGFR2 gene fusions and another cohort of patients with mutations or amplifications.[9] The second study, FIDES-02, is a phase 1/2 study evaluating derazantinib alone and in combination with Roche's PD-L1 checkpoint inhibitor, atezolizumab, in patients with advanced urothelial cancer, including metastatic, or recurrent surgically unresectable disease, expressing FGFR genetic aberrations.[10] The third study, FIDES-03, is a phase 1/2 study evaluating derazantinib alone and in combination with Lilly's anti-VEGFR2 antibody ramucirumab and paclitaxel, or with Roche's PD-L1 checkpoint inhibitor atezolizumab, in patients with advanced gastric cancer with FGFR genetic aberrations.[11] Basilea has in-licensed derazantinib from ArQule Inc., a wholly-owned subsidiary of Merck & Co., Inc., Kenilworth, N.J., U.S.A.

About lisavanbulin

Basilea's oncology drug candidate lisavanbulin (BAL101553, the prodrug of BAL27862)[12] is currently being developed as a potential therapy for glioblastoma.[13, 14, 15] In preclinical studies, lisavanbulin demonstrated in-vitro and in-vivo activity against diverse treatment-resistant cancer models, including tumors refractory to conventional approved therapeutics and radiotherapy.[16, 17, 18]

Lisavanbulin efficiently distributes to the brain, with anticancer activity in glioblastoma

models.[19, 20] In preclinical studies, end-binding protein 1 (EB1) was identified as a potential response-predictive biomarker in glioblastoma models and strong EB1-positivity was shown in about 5% of tissue samples from glioblastoma patients.[21, 22] The strongest expression of EB1 in non-glioblastoma tumors was detected in tissue samples from medulloblastomas and neuroblastomas, which are cancers that occur predominantly in the pediatric population. EB1-positive staining was also found in tissue samples from metastatic melanoma (skin cancer). Other tumors expressing slightly lower levels of EB1 staining include non-small cell lung cancer, colorectal cancer and triple-negative breast cancer.[22] The active moiety BAL27862 binds to the colchicine site of tubulin, with distinct effects on microtubule organization,[23] resulting in the activation of the "spindle assembly checkpoint" which promotes tumor cell death.[24]

About Basilea

Basilea is a commercial-stage biopharmaceutical company founded in 2000 and headquartered in Switzerland. We are committed to discovering, developing and commercializing innovative drugs to meet the needs of patients with cancer and infectious diseases. We have successfully launched two hospital brands, Cresemba for the treatment of invasive fungal infections and Zevtera for the treatment of severe bacterial infections. We are conducting clinical studies with two targeted drug candidates for the treatment of a range of cancers and have a number of preclinical assets in both cancer and infectious diseases in our portfolio. Basilea is listed on the SIX Swiss Exchange (SIX: BSLN). Please visit basilea.com.

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This press release can be downloaded from www.basilea.com.

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