

Press release

Basilea announces that FDA approves expanded use of antifungal Cresemba[®] (isavuconazole) in the United States in children with invasive aspergillosis and invasive mucormycosis

Allschwil, Switzerland, December 11, 2023

Basilea Pharmaceutica Ltd, Allschwil (SIX: BSLN), a commercial-stage biopharmaceutical company committed to meeting the needs of patients with severe bacterial and fungal infections, announced today that its license partner Astellas Pharma US, Inc. (“Astellas”) received the approval of Cresemba[®] (isavuconazole) for the treatment of invasive aspergillosis (IA) and invasive mucormycosis (IM) in pediatric patients by the US Food and Drug Administration (FDA). Cresemba for injection is approved for adults and now for pediatric patients 1 year of age and older. Cresemba capsules are approved for adults and now for pediatric patients 6 years of age and older, who weigh 16 kilograms and greater.

Dr. Marc Engelhardt, Chief Medical Officer of Basilea, said: “We congratulate Astellas on the approval of Cresemba for the use in children who suffer from invasive aspergillosis or mucormycosis. These severe mold infections primarily affect children suffering from hematologic malignancies, or other immunodeficiency disorders and there is a high unmet medical need for new antifungal treatment options in the pediatric population. We are pleased that access to Cresemba is now available to this vulnerable patient population.”

The approval is based on results from two pediatric clinical studies, including a phase 2 open label, non-comparative, multicenter study evaluating the safety, efficacy and pharmacokinetics of Cresemba for the treatment of IA and IM in pediatric patients aged 1 to 17 years old.^{1,2}

In addition, the FDA granted pediatric exclusivity for Cresemba, which extends the period of market exclusivity for Cresemba in the United States by an additional six months to September 2027.

In Europe, Basilea submitted a similar application for a pediatric label extension of Cresemba in August 2023. This application is currently under assessment by the European Medicines Agency (EMA). Basilea anticipates a decision by the European Commission in the first half of 2024. Upon completion of this regulatory procedure, Cresemba would be eligible to an additional two years of market exclusivity in the European Union, until October 2027.

Cresemba is approved in 76 countries to date and is currently marketed in 71 countries, including the United States, most EU member states and additional countries inside and outside of Europe. According to the latest available market data, total global in-market sales of Cresemba in the



twelve months between July 2022 and June 2023 amounted to USD 421 million, a 19 percent growth year-on-year.³

About Cresemba® (isavuconazole as isavuconazonium sulfate)

Isavuconazole, is an intravenous (i.v.) and oral azole antifungal, commercialized under the trade name Cresemba®. Basilea has entered into several license and distribution agreements for isavuconazole covering approximately 115 countries. In the 27 European Union member states, as well as in Iceland, Liechtenstein, Norway and the U.K., isavuconazole is approved for the treatment of adult patients with invasive aspergillosis and for adult patients with mucormycosis for whom amphotericin B is inappropriate.⁴ Isavuconazole is also approved in several additional countries in Europe and beyond, including Japan and China.⁵ It has orphan drug designation in the US, Europe and Australia for its approved indications.

In the United States, Cresemba is indicated for the treatment of invasive aspergillosis and invasive mucormycosis as follows:

- Cresemba for injection: adults and pediatric patients 1 year of age and older
- Cresemba capsules: adults and pediatric patients 6 years of age and older, who weigh 16 kilograms and greater

Specimens for fungal culture and other relevant laboratory studies (including histopathology) to isolate and identify causative organism(s) should be obtained prior to initiating antifungal therapy. Therapy may be instituted before the results of the cultures and other laboratory studies are known. However, once these results become available, antifungal therapy should be adjusted accordingly.

Important US Safety Information for Cresemba (isavuconazonium sulfate)

Contraindications

- Cresemba is contraindicated in persons with known hypersensitivity to isavuconazole
- Coadministration of strong CYP3A4 inhibitors, such as ketoconazole or high-dose ritonavir (400 mg every 12 hours), with Cresemba is contraindicated because strong CYP3A4 inhibitors can significantly increase the plasma concentration of isavuconazole
- Coadministration of strong CYP3A4 inducers, such as rifampin, carbamazepine, St. John's wort, or long acting barbiturates with Cresemba is contraindicated because strong CYP3A4 inducers can significantly decrease the plasma concentration of isavuconazole
- Cresemba shortened the QTc interval in a concentration-related manner. Cresemba is contraindicated in patients with familial short QT syndrome

Warnings and Precautions

Hepatic Adverse Drug Reactions (e.g., elevations in ALT, AST, alkaline phosphatase, total bilirubin) have been reported in clinical trials and were generally reversible and did not require discontinuation of Cresemba. Cases of severe hepatic adverse drug reactions including hepatitis, cholestasis or hepatic failure, including death, have been reported in patients with serious underlying medical conditions (e.g., hematologic malignancy) during treatment with azole antifungal agents, including Cresemba. Evaluate liver tests at the start and during therapy. Monitor patients who develop liver abnormalities during Cresemba therapy for severe hepatic injury. Discontinue if clinical signs and symptoms consistent with liver disease develop that may be attributable to Cresemba.

Infusion-Related Reactions including hypotension, dyspnea, chills, dizziness, paresthesia, and hypoesthesia were reported during intravenous administration of Cresemba. Discontinue the infusion if these reactions occur.

Hypersensitivity Reactions: Anaphylactic reactions, with fatal outcome, have been reported during treatment with Cresemba. Serious skin reactions, such as Stevens Johnson syndrome, have been reported during treatment with other azole antifungal agents. Discontinue Cresemba if anaphylactic or serious skin reactions occur, and initiate supportive treatment as needed.

Embryo-Fetal Toxicity: During pregnancy, Cresemba may cause fetal harm when administered, and Cresemba should only be used if the potential benefit to the patient outweighs the risk to the fetus. Women who become pregnant while receiving Cresemba are encouraged to contact their physician.

Drug Interactions: Coadministration of Cresemba with strong CYP3A4 inhibitors such as ketoconazole or high-dose ritonavir and strong CYP3A4 inducers such as rifampin, carbamazepine, St. John's Wort, or long acting barbiturates is contraindicated.

Drug Particulates: Following dilution, Cresemba intravenous formulation may form precipitate from the insoluble isavuconazole. Administer Cresemba through an in-line filter.

Adverse Reactions

In adult patients, the most frequently reported adverse reactions among Cresemba-treated patients were nausea (26%), vomiting (25%), diarrhea (22%), headache (17%), elevated liver chemistry tests (16%), hypokalemia (14%), constipation (13%), dyspnea (12%), cough (12%), peripheral edema (11%), and back pain (10%).

In adult patients, the adverse reactions which most often led to permanent discontinuation of Cresemba therapy during the clinical trials were confusional state (0.7%), acute renal failure



(0.7%), increased blood bilirubin (0.5%), convulsion (0.5%), dyspnea (0.5%), epilepsy (0.5%), respiratory failure (0.5%), and vomiting (0.5%).

In pediatric patients, the most frequently reported adverse reactions were diarrhea (26%), abdominal pain (23%), vomiting (21%), elevated liver chemistry tests (18%), rash (14%), nausea (13%), pruritus (13%), and headache (12%).

In general, adverse reactions in pediatric patients (including serious adverse reactions and adverse reactions leading to permanent discontinuation of Cresemba) were similar to those reported in adults.

For Full US Prescribing Information, please visit here: <https://www.astellas.us/docs/cresemba.pdf>

About invasive aspergillosis and invasive mucormycosis

Invasive aspergillosis (IA) and invasive mucormycosis (IM) are life-threatening mold infections that predominantly affect immunocompromised patients, including patients with hematologic malignancies (blood cancer), transplant patients, or patients with other immunodeficiency disorders. These infections are associated with high morbidity and mortality, also in pediatric patients.^{6, 7, 8}

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 severe bacterial and fungal infections. We have successfully launched two hospital brands, Cresemba for the treatment of invasive fungal infections and Zevtera for the treatment of bacterial infections. In addition, we have preclinical and clinical anti-infective assets 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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