Jazz Pharmaceuticals Announces Initiation of Biologics License Application Submission for JZP-458 for the Treatment of Acute Lymphoblastic Leukemia or Lymphoblastic Lymphoma

December 21, 2020

Application to be reviewed under FDA's Oncology Center of Excellence Real-Time Oncology Review pilot program

DUBLIN, Dec. 21, 2020 /PRNewswire/ -- Jazz Pharmaceuticals plc (Nasdaq: JAZZ) today announced that the company has initiated the submission of a Biologics License Application (BLA) to the U.S. Food and Drug Administration (FDA) seeking marketing approval for JZP-458 for use as a component of a multi-agent chemotherapeutic regimen for the treatment of acute lymphoblastic leukemia (ALL) or lymphoblastic lymphoma (LBL) in adult and pediatric patients who have developed hypersensitivity or silent inactivation to *E. coli*-derived asparaginase.

The BLA was initiated and will be reviewed under the Real-Time Oncology Review (RTOR) pilot program, an initiative of the FDA's Oncology Center of Excellence designed to expedite the delivery of safe and effective cancer treatments to patients.

"Given the urgent need for a reliable and high-quality recombinant asparaginase option for patients with hypersensitivity to *E. coli*-derived asparaginase, we are committed to bringing JZP-458 to market as quickly as possible and pleased to be initiating our BLA submission," said Robert Iannone, M.D., M.S.C.E., executive vice president, research and development of Jazz Pharmaceuticals. "Receiving a Fast Track designation for JZP-458 from the FDA in October 2019 and being able to submit the BLA under the RTOR program is significant, potentially allowing us to more quickly address patient need with a new asparaginase option."

The company continues to plan for a mid-2021 launch of JZP-458 following completion of the BLA submission and FDA review and approval.

An ongoing Phase 2/3 study is being conducted in collaboration with the Children's Oncology Group (COG) to evaluate JZP-458 as a potential treatment option for pediatric and adult patients with ALL or LBL who are hypersensitive to *E. coli*-derived asparaginases. Hypersensitivity reactions affect up to 30 percent of patients with ALL and LBL who are treated with *E. coli*-derived asparaginase.[1]

About JZP-458

JZP-458 is a recombinant *Erwinia* asparaginase that uses a novel *Pseudomonas fluorescens* expression platform. It is being developed for use as a component of a multi-agent chemotherapeutic regimen in the treatment of pediatric and adult patients with acute lymphoblastic leukemia (ALL) or lymphoblastic lymphoma (LBL) who are hypersensitive to *E. coli*-derived asparaginase products. JZP-458 was granted Fast Track designation by the U.S. Food and Drug Administration in October 2019 for the treatment of this patient population.

About Acute Lymphoblastic Leukemia

Acute lymphoblastic leukemia (ALL) is a cancer of the blood and bone marrow that can progress quickly if not treated.[2] Leukemia is the most common cancer in children, and about three out of four of these cases are ALL.[3] Although it is one of the most common cancers in children, ALL is among the most curable of the pediatric malignancies due to recent advancements in treatment.[4,5] Adults can also develop ALL, and about four of every 10 cases of ALL diagnosed are in adults.[6] The American Cancer Society estimates that almost 6,000 new cases of ALL will be diagnosed in the United States in 2019.[6] Asparaginase is a core component of multi-agent chemotherapeutic regimens in ALL.[7] However, asparaginase treatments derived from *E. coli* are associated with the potential for development of hypersensitivity reactions.[8]

About Jazz Pharmaceuticals plc

Jazz Pharmaceuticals plc (Nasdaq: JAZZ) is a global biopharmaceutical company dedicated to developing and commercializing life-changing medicines that transform the lives of patients with serious diseases - often with limited or no options. We have a diverse portfolio of marketed medicines and novel product candidates, from early- to late-stage development, in key therapeutic areas. Our focus is in neuroscience, including sleep and movement disorders, and in oncology, including hematologic malignancies and solid tumors. We actively explore new options for patients including novel compounds, small molecule advancements, biologics and innovative delivery technologies. Jazz is headquartered in Dublin, Ireland and has employees around the globe, serving patients in more than 90 countries. For more information, please visit www.jazzpharmaceuticals.com and follow @JazzPharma on Twitter.

"Safe Harbor" Statement under the Private Securities Litigation Reform Act of 1995

This press release contains forward-looking statements, including, but not limited to, statements related to potentially addressing patient needs with a new asparaginase option, plans for a mid-2021 launch of JZP-458, plans for completing the BLA submission, and other statements that are not historical facts. These forward-looking statements are based on Jazz Pharmaceuticals' current plans, objectives, estimates, expectations and intentions and inherently involve significant risks and uncertainties. Actual results and the timing of events could differ materially from those anticipated in such forward-looking statements as a result of these risks and uncertainties, which include, without limitation, risks and uncertainties associated with pharmaceutical product development, and other risks and uncertainties affecting Jazz Pharmaceuticals and its development programs, including those described from time to time under the caption "Risk Factors" and elsewhere in Jazz Pharmaceuticals plc's Securities and Exchange Commission filings and reports (Commission File No. 001-33500), including Jazz Pharmaceuticals' Quarterly Report on Form 10-Q for the quarter ended September 30, 2020 and future filings and reports by Jazz Pharmaceuticals. Other risks and uncertainties of which Jazz Pharmaceuticals is not currently aware may also affect Jazz Pharmaceuticals' forward-looking statements and may cause actual results and the timing of events to differ

materially from those anticipated. The forward-looking statements herein are made only as of the date hereof or as of the dates indicated in the forward-looking statements, even if they are subsequently made available by Jazz Pharmaceuticals on its website or otherwise. Jazz Pharmaceuticals undertakes no obligation to update or supplement any forward-looking statements to reflect actual results, new information, future events, changes in its expectations or other circumstances that exist after the date as of which the forward-looking statements were made.

Media Contact:
Jacqueline Kirby, Vice President, Corporate Affairs & Government Relations
Ireland +353 1 697 2141 U.S. +1 215 867 4910

Investor Contact:
Kathee Littrell, Vice President, Investor Relations
Ireland +353 1 634 7887 U.S. +1 650 496 2717

References:

1. Vrooman et al. Erwinia Asparaginase after Allergy to E. coli Asparaginase in Children with Acute Lymphoblastic Leukemia. *Pediatr Blood Cancer*. 2010 February; 54(2): 199–205. doi:10.1002/pbc.22225.
2. National Cancer Institute. Adult Acute Lymphoblastic Leukemia Treatment (PDQ®)–Patient Version. Available at www.cancer.gov/types/leukemia/patient/adult-all-treatment-pdq. Accessed December 3, 2019.
3. American Cancer Society. Key Statistics for Childhood Leukemia. Available at www.cancer.org/cancer/leukemia-in-children/about/key-statistics.html. Accessed December 3, 2019.
4. American Cancer Society. Cancer Facts & Figures 2019. www.cancer.org/research/cancer-facts-statistics/all-cancer-facts-figures/cancer-facts-figures-2019.html. Accessed December 3, 2019.
5. Pui C, Evans W. A 50-Year Journey to Cure Childhood Acute Lymphoblastic Leukemia. Seminars in Hematology. 2013;50(3), 185-196.
6. American Cancer Society. Key Statistics for Acute Lymphocytic Leukemia (ALL). Available at www.cancer.org/cancer/acute-lymphocytic-leukemia/about/key-statistics.html. Accessed December 3, 2019.
7. Salzer W, Bostrom B, Messinger Y et al. 2018. Asparaginase activity levels and monitoring in patients with acute lymphoblastic leukemia. Leukemia & Lymphoma. 59:8, 1797-1806, DOI: 10.1080/10428194.2017.1386305.
8. Hijiya N, van der Sluis IM. Asparaginase-associated toxicity in children with acute lymphoblastic leukemia. Leuk Lymphoma. 2016;57(4):748–757. DOI: 10.3109/10428194.2015.1101098.

View original content to download multimedia:http://www.prnewswire.com/news-releases/jazz-pharmaceuticals-announces-initiation-of-biologics-license-application-submission-for-jzp-458-for-the-treatment-of-acute-lymphoblastic-leukemia-or-lymphoblastic-lymphoma-301196718.html

SOURCE Jazz Pharmaceuticals plc