

Ayala Pharmaceuticals Presents Poster on AL102 in Desmoid Tumors at the Connective Tissue Oncology Society (CTOS) 2022 Annual Meeting

November 17, 2022

REHOVOT, Israel and WILMINGTON, Del., Nov. 17, 2022 (GLOBE NEWSWIRE) -- Ayala Pharmaceuticals, Inc. (Nasdaq: AYLA), a clinical-stage oncology company focused on developing and commercializing small molecule therapeutics for patients suffering from rare tumors and aggressive cancers, today is announcing a poster presentation highlighting interim results from the Phase 2 segment / Part A of the RINGSIDE Pivotal Phase 2/3 clinical trial in desmoid tumors at the Connective Tissue Oncology Society (CTOS) 2022 Annual Meeting, taking place in-person November 16-19 in Vancouver, Canada.

The ongoing RINGSIDE Pivotal Phase 2/3 clinical trial is evaluating the investigational new drug AL102, a potent, selective, oral gamma-secretase inhibitor. Positive interim results from the Phase 2 segment of this study were previously presented at ESMO 2022.

"We are pleased to update the positive interim data from RINGSIDE with the oncology community at this year's CTOS meeting, which is the largest gathering of connective tissue oncologists worldwide," said Roni Mamluk, PhD, President and CEO of Ayala. "This poster highlights the efficacy demonstrated at the 1.2 mg dose that was selected for the Phase 3 segment of the study, with responses seen as early as 16 weeks that deepened over time. AL102 was generally well tolerated with a manageable safety profile."

Details of the poster presentation are as follows:

Abstract Title: Initial Results of RINGSIDE, a Phase 2/3 Trial of AL102 for the Treatment of Desmoid Tumors

Abstract Number: 2206585

Session Title: Sarcoma of the Year: Desmoid Fibromatosis
Session Date and Time: Thursday, November 17, 2022, 5 PM-7 PM PST

Poster Highlights:

- Desmoid tumor is an invasive proliferative disease of the connective tissue characterized by a variable and often unpredictable clinical course with no FDA-approved therapies.
- AL102 is a potent, orally available, selective gamma-secretase inhibitor being evaluated in the RINGSIDE Pivotal Phase 2/3 trial in desmoid tumors.
- The Phase 2 segment of the study enrolled 42 patients which were dosed in AL102 monotherapy cohorts of 1.2 mg (daily), 2mg (2 days on, 5 days off), or 4mg (2 days on, 5 days off).
- The activity of AL102 was measured by the change in tumor volume (central MRI readings) and response (per RECIST 1.1) as determined by blinded independent central review. At the data cut-off (July 14, 2022), 28 patients were evaluable for tumor volume and 29 were evaluable for RECIST with a scan at baseline and at least one additional scan at week 16.
- 12 patients had at least 2 MRI scans at data cut-off and were evaluable for efficacy.
- First partial response (PR) was observed at week 16 and three additional PRs were observed over the follow-up period: two at week 28 and one at week 40.
- 3 out of 4 PRs were observed at the 1.2 mg once-daily dose that was selected for the Phase 3 segment of the study.
- AL102 was generally well tolerated at all doses, with low rates of grade 3, and no grade 4 or 5 adverse events. Adverse events were consistent with mechanism of action of GSIs.
- Adverse events leading to discontinuation were all Grade 1 3 and occurred within 3 months of treatment initiation
- Adverse events related to ovarian dysfunction was observed in 22% of women of childbearing potential (N=23), and were all Grade 1 or 2
- 1.2 mg once daily was selected as the dose to advance into the Phase 3 portion of RINGSIDE.

Enrolment has begun in the Phase 3 segment of RINGSIDE, the randomized portion of the study Patients are also being enrolled in an open-label extension study.

About the RINGSIDE study

The RINGSIDE pivotal Phase 2/3 study is a randomized global multi-center trial. The Phase 2 segment of the study evaluated the efficacy, safety, tolerability, and tumor volume by MRI after 16 weeks of AL102 in patients with desmoid tumors. It enrolled 42 patients and evaluated 3 doses of AL102. Patients who participated in the Phase 2 segment of the study are eligible to enroll into an open-label extension study at the selected dose of 1.2 mg daily, and long-term efficacy and safety will be monitored.

The Phase 3 segment of the study has been initiated. This is a double-blind, placebo-controlled segment enrolling up to 156 patients with progressive disease that compares AL102 at 1.2 mg once daily to placebo. The primary endpoint for the Phase 3 segment is progression-free survival (PFS), with

secondary endpoints including objective response rate (ORR), duration of response (DOR), tumor volume reduction, and patient-reported Quality of Life (QOL) measures. For more information on the RINGSIDE Phase 2/3 study with AL102 for the treatment of desmoid tumors, please visit ClinicalTrials.gov and reference Identifier NCT04871282 (RINGSIDE).

About Desmoid Tumors

Desmoid tumors also called aggressive fibromatosis or desmoid-type fibromatosis, are rare connective tissue tumors that typically arise in the upper and lower extremities, abdominal wall, head and neck area, mesenteric root, and chest wall with the potential to arise in additional parts of the body. Desmoid tumors do not metastasize, but often aggressively infiltrate neurovascular structures and vital organs. People living with desmoid tumors are often limited in their daily life due to chronic pain, functional deficits, general decrease in their quality of life and organ dysfunction. Desmoid tumors have an annual incidence of approximately 1,700 patients in the United States and typically occur in patients between the ages of 15 and 60 years. They are most commonly diagnosed in young adults between 30-40 years of age and are more prevalent in females. Today, surgery is no longer regarded as the cornerstone treatment of desmoid tumors due to a high rate of recurrence post-surgery and there are currently no FDA-approved systemic therapies for the treatment of unresectable, recurrent, or progressive desmoid tumors.

About Ayala Pharmaceuticals

Ayala Pharmaceuticals, Inc. is a clinical-stage oncology company focused on developing and commercializing small molecule therapeutics for patients suffering from rare tumors and aggressive cancers. Ayala's approach is focused on predicating, identifying and addressing tumorigenic drivers of cancer through a combination of its bioinformatics platform and next-generation sequencing to deliver targeted therapies to underserved patient populations. The company has two product candidates under development, AL101 and AL102, targeting the aberrant activation of the Notch pathway with gamma secretase inhibitors to treat a variety of tumors including Adenoid Cystic Carcinoma (ACC), T-cell Acute Lymphoblastic Leukemia (T-ALL), and Desmoid Tumors. AL101, has received Fast Track Designation and Orphan Drug Designation from the U.S. FDA and is currently in a Phase 2 clinical trial for patients with ACC (ACCURACY) bearing Notch activating mutations. AL102 received Fast Track Designation from the U.S. FDA and is currently in a Pivotal Phase 2/3 clinical trials for patients with desmoid tumors (RINGSIDE). For more information, visit www.ayalapharma.com. Contacts:

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Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. All statements contained in this press release that do not relate to matters of historical fact should be considered forward-looking statements, including statements relating to the completion of the our merger with Advaxis and the anticipated impact of the merger, the timing of our communications with the FDA, our development of AL101 and AL102, the promise and potential impact of our preclinical or clinical trial data, the timing of and plans to initiate additional clinical trials of AL101 and AL102, the timing and results of any clinical trials or readouts, our participation at scientific or medical conferences, the sufficiency of cash to fund operations, and the anticipated impact of COVID-19, on our business. These forward-looking statements are based on management's current expectations. The words "may," "will," "should," "expect," "plan," "anticipate," "could," "intend," "target," "project," "estimate," "believe," "predict," "potential" or "continue" or the negative of these terms or other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These statements are neither promises nor guarantees, but involve known and unknown risks, uncertainties and other important factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements, including, but not limited to, the following: the announcement and pendency of the Merger (as defined herein) could have an adverse effect on our business; failure to consummate the Merger within the expected timeframe or at all could have a material adverse impact on our business, financial condition and results of operations; certain provisions of the Merger Agreement (as defined herein) may discourage third parties from submitting competing proposals, including proposals that may be superior to the transactions contemplated by the Merger Agreement; failure to consummate the Merger may result in the terminating party paying a termination fee to the non-terminating party and could harm the terminating party's common stock price and its future business and operations; if we do not successfully consummate the Merger with Advaxis (as defined herein), our board of directors may dissolve or liquidate our assets to pursue a dissolution and liquidation; our directors and executive officers have interests in the Merger that are different from our stockholders, and that may influence them to support or approve the Merger without regard to our stockholders' interests; if the Merger is not completed, our stock price may fluctuate significantly; the announcement and pendency of the Merger, whether or not consummated, adversely affected the trading price of our common stock and may continue to adversely affect the trading price of our common stock; the failure to successfully integrate the businesses and operations of Ayala and Advaxis in the expected time frame may adversely affect the combined company's future results; we have incurred significant losses since inception and anticipate that we will continue to incur losses for the foreseeable future. We are not currently profitable, and we may never achieve or sustain profitability; we will require additional capital to fund our operations, and if we fail to obtain necessary financing, we may not be able to complete the development and commercialization of AL101 and AL102; we have identified conditions and events that raise substantial doubt about our ability to continue as a going concern; we have a limited operating history and no history of commercializing pharmaceutical products, which may make it difficult to evaluate the prospects for our future viability; we are heavily dependent on the success of AL101 and AL102, our most advanced product candidates, which are still under clinical development, and if either AL101 or AL102 does not receive regulatory approval or is not successfully commercialized, our business may be harmed; due to our limited resources and access to capital, we must prioritize development of certain programs and product candidates; these decisions may prove to be wrong and may adversely affect our business; the outbreak of COVID-19, may adversely affect our business, including our clinical trials; our ability to use our net operating loss carry forwards to offset future taxable income may be subject to certain limitations; our product candidates are designed for patients with genetically defined cancers, which is a rapidly evolving area of science, and the approach we are taking to discover and develop product candidates is novel and may never lead to marketable products; we were not involved in the early development of our

lead product candidates; therefore, we are dependent on third parties having accurately generated, collected and interpreted data from certain preclinical studies and clinical trials for our product candidates; enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside our control; if we do not achieve our projected development and commercialization goals in the timeframes we announce and expect, the commercialization of our product candidates may be delayed and our business will be harmed; our product candidates may cause serious adverse events or undesirable side effects, which may delay or prevent marketing approval, or, if approved, require them to be taken off the market, require them to include safety warnings or otherwise limit their sales; the market opportunities for AL101 and AL102, if approved, may be smaller than we anticipate; we may not be successful in developing, or collaborating with others to develop, diagnostic tests to identify patients with Notch-activating mutations; we have never obtained marketing approval for a product candidate and we may be unable to obtain, or may be delayed in obtaining, marketing approval for any of our product candidates; even if we obtain FDA approval for our product candidates in the United States, we may never obtain approval for or commercialize them in any other jurisdiction, which would limit our ability to realize their full market potential; we have been granted Orphan Drug Designation for AL101 for the treatment of ACC and may seek Orphan Drug Designation for other indications or product candidates, and we may be unable to maintain the benefits associated with Orphan Drug Designation, including the potential for market exclusivity, and may not receive Orphan Drug Designation for other indications or for our other product candidates; although we have received Fast Track designation for AL101 and AL102, and may seek Fast Track designation for our other product candidates, such designations may not actually lead to a faster development timeline, regulatory review or approval process; we face significant competition from other biotechnology and pharmaceutical companies and our operating results will suffer if we fail to compete effectively; we are dependent on a small number of suppliers for some of the materials used to manufacture our product candidates, and on one company for the manufacture of the active pharmaceutical ingredient for each of our product candidates; any future collaborations will be, important to our business. If we are unable to maintain our existing collaboration or enter into new collaborations, or if these collaborations are not successful, our business could be adversely affected; enacted and future healthcare legislation may increase the difficulty and cost for us to obtain marketing approval of and commercialize our product candidates, if approved, and may affect the prices we may set; if we are unable to obtain, maintain, protect and enforce patent and other intellectual property protection for our technology and products or if the scope of the patent or other intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize products and technology similar or identical to ours, and we may not be able to compete effectively in our markets; we may engage in acquisitions or in-licensing transactions that could disrupt our business, cause dilution to our stockholders or reduce our financial resources; and risks related to our operations in Israel could materially adversely impact our business, financial condition and results of operations.

These and other important factors discussed under the caption "Risk Factors" in our Quarterly Report on Form 10-Q for the three months ended September 30, 2022 filed with the U.S. Securities and Exchange Commission (SEC) on November 3, 2022 and our other filings with the SEC, could cause actual results to differ materially from those indicated by the forward-looking statements made in this press release. Any such forward-looking statements represent management's estimates as of the date of this press release. New risk factors and uncertainties may emerge from time to time, and it is not possible to predict all risk factors and uncertainties. While we may elect to update such forward-looking statements at some point in the future, except as required by law, we disclaim any obligation to do so, even if subsequent events cause our views to change. Although we believe the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. These forward-looking statements should not be relied upon as representing our views as of any date subsequent to the date of this press release.