

---

**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549**

**FORM 6-K**

**REPORT OF FOREIGN PRIVATE ISSUER  
PURSUANT TO RULE 13a-16 OR 15d-16  
UNDER THE SECURITIES EXCHANGE ACT OF 1934**

**For the Month of April 2021**

**Commission File Number: 001-39997**

---

**Adagene Inc.**

(Exact Name of Registrant as Specified in Its Charter)

---

**4F, Building C14, No. 218  
Xinghu Street, Suzhou Industrial Park  
Suzhou, Jiangsu Province, 215123  
People's Republic of China  
+86-512-8777-3632**  
(Address of principal executive offices)

---

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F.

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

---

---

## SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

### **Adagene Inc.**

By: /s/ Peter (Peizhi) Luo

Name: Peter (Peizhi) Luo

Title: Chief Executive Officer

Date: April 13, 2021

## **EXHIBIT INDEX**

**Exhibit****Description**

99.1

Press Release titled “Adagene Presents Preclinical Data from Lead SAFEbody™ Program, ADG126, at the American Association for Cancer Research (AACR) Annual Meeting 2021”

**Adagene Presents Preclinical Data from Lead SAFEbody™ Program, ADG126, at the American Association for Cancer Research (AACR) Annual Meeting 2021**

SAN FRANCISCO, Calif. and SUZHOU, China, April 13, 2021 — Adagene Inc. (“Adagene”) (Nasdaq: ADAG), a platform-driven, clinical-stage biopharmaceutical company committed to transforming the discovery and development of novel antibody-based immunotherapies, today announced updated preclinical data from its lead SAFEbody™ program, ADG126, are being presented at the American Association for Cancer Research (AACR) Annual Meeting 2021.

“There is a critical unmet need for new anti-CTLA-4 therapies, and we are encouraged by the data generated to date, which demonstrate ADG126 has the potential to overcome the severe immune-mediated adverse reactions associated with the class,” said Peter Luo, Ph.D., Co-founder, Chief Executive Officer and Chairman of Adagene. “By leveraging our SAFEbody platform technology, designed to precisely and very efficiently mask the antibody binding interface and activate specifically within the tumor microenvironment, our preclinical data continues to highlight the opportunity to effectively deliver treatment; ADG126 has demonstrated superior systemic safety profile at efficacious dose levels with a significantly enlarged therapeutic index (TI). Our ongoing global Phase 1 trial is expected to provide clinical validation for our SAFEbody platform and our SAFEbody product candidate, ADG126. We have successfully finished DLT evaluation of 3 patients at 0.1 mg/kg of ADG126 and remain on track to report topline safety and efficacy data in the second half of 2021.”

A copy of the poster presentation, entitled “A Novel Anti-CTLA-4 Checkpoint Inhibitor Prodrug to Address On-target Off-tumor Toxicity for Cancer Immunotherapy,” is available on the AACR website and is also available for download via our website (<https://www.adagene.com/>).

The data presented show:

- **Notable Findings:** ADG126 demonstrated an impressive safety margin while maintaining its potent antitumor activity.
  - **Unique Epitope with Broad Species Cross-Reactivity:** ADG126 targets a conserved epitope of CTLA-4 with broad species cross-reactivity and is an activatable prodrug for tumor suppression in multiple syngeneic mouse models in single and combination therapies.
  - **Differentiated Mechanism of Action:** Although the activated ADG126 is softer in blocking CTLA-4 binding with its ligands than ipilimumab, the activated ADG126 exhibited more potent antibody dependent cellular cytotoxicity (ADCC) in the tumor microenvironment.
  - **Intra-Tumoral Treg Depletion:** Treg cells in tumor tissues exhibited higher CTLA-4 expression than in peripheral tissues and were efficiently depleted upon treatment with ADG126 in the immune-competent mouse syngeneic colon tumor model.
  - **Human T-Cell Activation in Vitro:** Activated ADG126 potently enhanced T-cell activation, measured by IL-2 secretion, whereas the masked ADG126 did not.
  - **In Vivo Monotherapy Antitumor Activity:** ADG126 exhibited potent antitumor activity as a single agent in different immune-competent syngeneic mouse tumor models.
  - **In Vivo Combination Antitumor Activity:** ADG126 combined synergistically with other IO agents, such as anti-PD-1 antibody, to inhibit tumor growth in vivo. Combination therapy significantly slowed tumor growth and caused complete regression in 50% of Lewis lung cancer mouse models.
  - **Safety and Tolerability:** ADG126 was well tolerated in animals suggesting the potential for high therapeutic index. The highest non-severely toxic dose (HNSTD) was determined to be 200 mg/kg/dose, which is one of the highest reported HNSTD for anti-CTLA-4 antibodies.
-

## About ADG126

ADG126 is a fully human antagonistic mAb targeting a novel epitope of CTLA-4 and has been shown to specifically deplete regulatory T-cells in tumors. ADG126 is Adagene's lead SAFEbody™ product candidate. The SAFEbody technology, developed using Adagene's AI-powered platform, enables binding of an antibody to a specific target only after conditional activation of the antibody in target tissues.

In preclinical studies, ADG126 was well tolerated in cynomolgus monkeys and demonstrated an encouraging antitumor response in multiple immune-competent mouse tumor models in a dose-dependent manner both as a single agent and in combination with anti-PD-1 and other therapies.

Unlike anti-PD-1/PD-L1 check point inhibitors, anti-CTLA-4 is known for its dose-dependent clinical response in single and combination therapies, which is severely limited by the narrow therapeutic window available to current anti-CTLA-4 therapies. The large safety margin shown by ADG126 GLP toxicology studies of up to 200 mg/kg in targeting CTLA-4 will make it possible to dose patients for their optimal clinical benefits in single and combination therapies.

## About Adagene

Adagene Inc. (Nasdaq: ADAG) is a platform-driven, clinical-stage biopharmaceutical company committed to transforming the discovery and development of novel antibody-based cancer immunotherapies. Adagene combines computational biology and artificial intelligence to design novel antibodies that address unmet patient needs. Powered by its proprietary DPL platform, composed of NEObody, SAFEbody, and POWERbody technologies, Adagene's highly differentiated pipeline features novel immunotherapy programs. Adagene has forged strategic collaborations with reputable global partners that leverage its technology in multiple approaches at the vanguard of science.

For more information, please visit: <https://investor.adagene.com>.

## Safe Harbor Statement

This press release contains forward-looking statements, including statements regarding data from the ADG126 preclinical studies and Phase I clinical trial, the potential implications of clinical data for patients, and Adagene's advancement of, and anticipated clinical development, regulatory milestones and commercialization of ADG126. Actual results may differ materially from those indicated in the forward-looking statements as a result of various important factors, including but not limited to Adagene's ability to demonstrate the safety and efficacy of its drug candidates; the clinical results for its drug candidates, which may not support further development or regulatory approval; the content and timing of decisions made by the relevant regulatory authorities regarding regulatory approval of Adagene's drug candidates; Adagene's ability to achieve commercial success for its drug candidates, if approved; Adagene's ability to obtain and maintain protection of intellectual property for its technology and drugs; Adagene's reliance on third parties to conduct drug development, manufacturing and other services; Adagene's limited operating history and Adagene's ability to obtain additional funding for operations and to complete the development and commercialization of its drug candidates; Adagene's ability to enter into additional collaboration agreements beyond its existing strategic partnerships or collaborations, and the impact of the COVID-19 pandemic on Adagene's clinical development, commercial and other operations, as well as those risks more fully discussed in the "Risk Factors" section in Adagene's filings with the U.S. Securities and Exchange Commission. All forward-looking statements are based on information currently available to Adagene, and Adagene undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law.

---

Investors Contact:

Raymond Tam  
Adagene  
86-512-8777-3626  
[ir@adagene.com](mailto:ir@adagene.com)

Bruce Mackle

LifeSci Advisors  
646-889-1200  
[bmackle@lifesciadvisors.com](mailto:bmackle@lifesciadvisors.com)

Media Contact:

Annie Starr  
6 Degrees  
973-768-2170  
[astarr@6degreespr.com](mailto:astarr@6degreespr.com)

---