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5 July 2022

Cizzle Biotechnology Holdings Plc

("Cizzle Biotechnology" or the "Company")

Update on the Development of Proprietary Antibodies for Early-Stage Lung Cancer Detection Tests and Initial Indications in Detecting Other Cancers

Cizzle Biotechnology, the UK based diagnostics developer, is pleased to provide an update on the Company's progress to develop antibodies for use in its proprietary early lung cancer tests, and to announce a new project that may extend the range of early-stage cancers that its technology can detect, with a focus initially on breast cancer.

Highlights

- Monoclonal antibody ("mAb") to CIZ1B now in assay optimisation
- mAb reporter protein developed and ready for test development
- mAb supplier agreements extended to increase use case diversity
- Work initiated to extend use case to breast cancer

Background

Cizzle Biotechnology is developing a blood test for the early detection of lung cancer. Its technology is based on the ability to detect a stable plasma biomarker, a variant of CIZ1 known as CIZ1B. CIZ1 is a naturally occurring cell nuclear protein involved in DNA replication, and the targeted CIZ1B variant is highly correlated with early-stage lung cancer.

On 22 July 2021 the Company announced a collaboration with FairJourney Biologics ("FJB") for the development and supply of proprietary key monoclonal antibodies and other detector proteins that are required for developing an enzyme-linked immunosorbent assay (sandwich "ELISA"). Since that time the Company has significantly increased its knowledge on reagent performance and assay formats and is pleased to announce that monoclonal reporter antibodies have been successfully produced by FJB

The Company also recognises that it is important to develop a range of monoclonal antibodies to detect CIZ1B and additional suppliers have been engaged. The Company is pleased to report that it has a mouse monoclonal antibody that specifically detects CIZ1B and that assay conditions for its use are now being optimised. Further work is being done to isolate rabbit monoclonals arising from the Company's initial proof of concept studies.

In parallel, new projects have been initiated to evaluate the use of CIZ1B for the detection of other cancers, which has led to an initial focus on breast cancer, which could widen the utility of this important cancer biomarker.

According to World Cancer Research Fund International, lung cancer is the second most common cancer worldwide, and the most common cancer in men and the second most common cancer in women. In total there were more than 2.2 million new cases of lung cancer in 2020*. Breast cancer is the most commonly occurring cancer in women and the most common cancer overall. There were more than 2.26 million new cases of breast cancer in women worldwide in 2020. Survival rates vary for different cancers and it is accepted that progress in the early detection, and so early treatment of cancer, can lead to a dramatic increase in the number of cancer survivors.

*[Lung cancer statistics | World Cancer Research Fund International \(wcrf.org\)](https://www.wcrf.org/)

Commenting, Allan Syms, Executive Chairman of Cizzle Biotechnology, said:

“It is an unfortunate fact that in the UK alone every two minutes someone is diagnosed with cancer**. That is compounded by the fact that in its early stage, cancer can be asymptomatic and remain undetected until the disease has advanced, lowering survival rates. Simple, inexpensive, blood tests for early cancer detection can help save lives. The recent progress made in developing these tests at Cizzle Biotechnology, not just for lung cancer, but for a range of other cancers is a significant step forward in our ambitions to provide the right tools to improve cancer patient outcomes.”

** [Cancer Statistics for the UK \(cancerresearchuk.org\)](https://www.cancerresearchuk.org/)

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Notes to Editors:

About Cizzle Biotechnology

Cizzle Biotechnology is developing a blood test for the early detection of lung cancer. Cizzle Biotechnology is a spin-out from the University of York, founded in 2006 around the work of Professor Coverley and colleagues. Its proof-of-concept prototype test is based on the ability to detect a stable plasma biomarker, a variant of CIZ1 known as CIZ1B. CIZ1 is a naturally occurring cell nuclear protein involved in DNA replication, and the targeted CIZ1B variant is highly correlated with early-stage lung cancer.

For more information, please see <https://cizzlebiotechnology.com>

You can also follow the Company through its twitter account @CizzlePlc and on LinkedIn.