

Oxford BioDynamics announces US launch of its EpiSwitch® COVID-19 Severity Test (CST)

- *EpiSwitch® CST is a highly accurate prognostic test that predicts personalized risk of severe illness due to SARS-CoV-2 virus*
- *Precision medicine blood test with strong performance metrics: Accuracy: 92%, Sensitivity: 96%, Specificity: 86%, PPV: 92%, NPV: 93%*
- *Important tool to manage the uncertainty of daily life during the pandemic by identifying high-risk individuals and for those that cannot be vaccinated,*
- *Easy-to-interpret EpiSwitch® CST Risk Score helps to assess risk, to develop personal healthcare plans and guide patient care*
- *Next test to launch will be a predictive immune response profile for immuno-oncology (IO) checkpoint inhibitor treatments in 2021*

Oxford, UK – 23 March 2021 – Oxford BioDynamics Plc (AIM: OBD, the Company), a biotechnology company developing precision medicine tests for personalized healthcare based on the EpiSwitch® 3D genomics platform, has launched its EpiSwitch® COVID-19 Severity Test (CST), in line with the expanded strategy announced on 15 December 2020.

Requiring only a routine blood draw, this important prognostic test is able to identify high-risk individuals who, if exposed to the SARS-CoV-2 virus, are likely to experience the most severe COVID-19 complications and will potentially require hospitalization and intensive care unit (ICU) support. This test is also relevant to manage care for those individuals who because they are immunocompromised / immunosuppressed or for other medical reasons cannot be vaccinated.

Standard available COVID-19 tests can only detect current or previous infection. They cannot predict immune response. EpiSwitch® CST is a prognostic test which uses specific 3D genomic biomarkers to assess immune health and therefore can predict the likely severity of an individual's COVID-19 response ahead of infection.

People known to have a high risk of severe or critical disease may be able to benefit from increased infection mitigation, early aggressive medication, or early intervention in the event of infection. The score provided by the EpiSwitch® CST will better enable physicians and at-risk individuals to form effective healthcare management plans, including making informed clinical decisions, lifestyle choices and workplace strategies.

The EpiSwitch® CST is based on the findings of OBD's recently published, [genome-wide study of Covid-positive patients](#), which identified key 3D genomic biomarkers that determine severity of Covid response [1]. This precision medicine qPCR test was validated using international cohorts of COVID-19 patients (n=116) from North America, South America and the United Kingdom, with the full spectrum of severities of response [2]. It was shown to be robust for predicting critical (ICU) illness due to COVID-19, with high accuracy (92%), sensitivity (96%), specificity (86%), PPV (92%) and NPV (93%).

Dr Jon Burrows, CEO of Oxford BioDynamics, said:

“As COVID-19 continues to have a major impact on us all, smarter, not just more, testing is required, to enable us to make informed decisions and manage our lives and livelihoods. We are delighted today to

be launching our EpiSwitch® CST. I commend the entire OBD team on its outstanding execution of the strategic plan that was put forth in December 2020.

“Even with advanced national vaccination programs underway, millions of people (10 million in the US alone [3]) remain exposed to the risk of severe Covid disease because they are immunocompromised / immunosuppressed or for other medical reasons cannot be vaccinated. Understanding their individual risk will enable them and their physicians to formulate a proactive healthcare plan, and ensure they take appropriate infection mitigation measures.”

Further information about OBD’s EpiSwitch® CST is available at www.Covidseveritytest.com.

OBD is also continuing work on other products and indications, including rheumatoid arthritis, ALS, lymphoma and prostate cancer [4-7]. OBD will launch its predictive immune response profile for immuno-oncology (IO) checkpoint inhibitor treatments [8,9] in 2021. This EpiSwitch® IO response test aims to help physicians stratify complete and partial responders to targeted medicines, enabling improved treatment options and outcomes.

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About Oxford BioDynamics Plc

Oxford BioDynamics Plc (AIM: OBD) is a global biotechnology company, advancing personalized healthcare by developing and commercializing precision medicine tests for life-changing diseases.

The Company has developed a proprietary 3D genomic biomarker platform, EpiSwitch®, which can build molecular diagnostic classifiers for prediction of response to therapy, patient prognosis, disease diagnosis and subtyping, and residual disease monitoring in a wide range of indications.

Oxford BioDynamics has participated in more than 40 partnerships with big pharma and leading institutions including Pfizer, EMD Serono, Genentech, Roche, Biogen, Mayo Clinic, Massachusetts General Hospital and Mitsubishi Tanabe Pharma.

The Company has created a valuable technology portfolio, including biomarker arrays, molecular diagnostic tests, bioinformatic tools for 3D genomics and an expertly curated 3D genome

knowledgebase comprising hundreds of millions of data points from over 10,000 samples in more than 30 human diseases.

OBD is headquartered in Oxford, UK and is listed on AIM of the London Stock Exchange. It also has a commercial team in the US and a reference laboratory in Penang, Malaysia.

For more information, please visit the Company's website, www.oxfordbiodynamics.com, or follow on [Twitter](#) or [LinkedIn](#).

About EpiSwitch®

The 3D configuration of the genome plays a crucial role in gene regulation. By mapping this architecture and identifying abnormal configurations, EpiSwitch® can be used to diagnose patients or determine how individuals might respond to a disease or treatment.

Built on over 10 years of research, EpiSwitch® is Oxford Biodynamics' award-winning, proprietary platform that enables screening, evaluation, validation and monitoring of 3D genomic biomarkers. The technology is fully developed, based on testing of over 10,000 samples in 30 disease areas, and reduced to practice.

In addition to stratifying patients with respect to anticipated clinical outcome, EpiSwitch® data offer insights into systems biology and the physiological manifestation of disease that are beyond the scope of other molecular modalities. The technology has performed well in academic medical research settings and has been validated through its integration in biomarker discovery and clinical development with big pharma.

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