Opyl

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Opyl achieves major milestone with AI platform that forecasts COVID19 clinical trial outcomes

- Opyl's technology improves clinical trials by identifying the drugs, vaccines, diagnostics or medical devices most likely to succeed
- Opyl is applying its platform towards COVID-19 therapeutic and vaccine programs in clinical studies to predict likelihood of success
- 475 COVID19 clinical trials, undertaken by labs arounds the world are included in the Opyl forecasting model

Melbourne, Australia – Opyl (ASX:OPL) announced today that it has developed a software that uses artificial intelligence (AI) to make a probability of success prediction on the likelihood of a vaccine, drug, diagnostic or medical device succeeding in clinical trials.

The software platform can be applied to any therapeutic area or any drug, diagnostic, vaccine or medical device.

To illustrate a 'proof-of concept' the company has applied this platform to the current vaccines and therapies targeting COVID in a major proof-of-concept study and has found:

1. Therapies show a much higher probability of success in clinical studies than vaccines
2. To date Opyl has identified the two vaccines most likely to succeed their current stage of development (Phase) compared to all others
3. Antibody therapies (at least one) has the best probability of success of getting a positive Phase III outcome over all other programs

"We can see significant value in using the tool to inform clinical and treatment strategies, early procurement decision making and investments," said Chief Executive Officer (CEO) Michelle Gallaher.

"The early outcome of this software trial, investigating the 475 registered COVID19 clinical trials related to vaccines or treatments, has delivered results that give us an indication of the power of the predictive platform in identifying the COVID19 trials, or any drug or device trial, with the greatest chance of success".

Previous studies demonstrated that, on average only 13.8% of all drugs in Phase I clinical trials eventually win approval from regulators and enter the market[1]. Typically, vaccines have higher success rate (33.4%) than most other drugs, while cancer drugs have a far lower rate of success (3%).

The application of the Opyl software platform is to work with drug and device development companies to refine their clinical trial approaches to improve the outcomes of their clinical studies, which reduces costs and accelerates the timeline to get new treatments to patients.

The uncertainty and delays around clinical trials remains a frustrating challenge and significant risk for biopharmaceutical companies, investors, clinical strategists and medical researchers who would value the ability to predict the outcome of an individual clinical trial and have the opportunity to adjust the variable to improve its chances of success. Knowing

the predicted probability score, having an opportunity before the trial commences to improve upon the trial design, will save hundreds of millions of dollars.

Opyl's trial predictor platform has delivered confident early results that are more accurate than previously published models and with more functional features including the potential to optimise trial design.

"Our approach is to use AI to not just predict the outcome, but to demonstrate that changing specific clinical trials variables can improve the probability of success," Gallaher stated.

"Our goal is to improve the efficiency, improve the application of research funding and ultimately the return on investment for scientists, clinicians, health technology developers and investors."

With hundreds of COVID19 clinical trials currently being undertaken around the globe, the company has available data for its AI platform. The AI Platform uses current and historical global data and considers everything from the numbers of participants in each trial; the dropout rate from those trials; how long each trial will take; the end point for each trial relative to related studies, through to the mode of action such as type of protein or vector being employed in a program.

The next stage of the platform's development will involve increasing the data pool from additional clinical data sources and expanding the variables in order to further train the algorithm and refine the specificity and reliability.

"Although looking at the current pipeline of COVID-19 programs is an initial application of the AI platform, we are not limiting ourselves to just COVID19 trials," Gallaher stated. "The AI platform can be applied to all drugs, diagnostics, vaccines and medical devices about to begin or in clinical trials, and our goals is to improve the clinical trial process which will in turn save money, time and ensure patients can access treatment options sooner.

Opyl is reaching out to those groups, such as Governments and collaboration organisations that may have an interest in the findings from the COVID-19 work, as well as ongoing discussions with companies and partners on other applications of the technology.

Opyl, works at the intersection of artificial intelligence, social media and healthcare. It delivers market insights from social media data and improves the efficiency and value of the clinical research process by employing artificial intelligence and emerging digital tools.

The Board has authorised this announcement for release to the ASX.

Reference; [1]Wong Chi, Lo, **Estimation of Clinical Trial Success Rates and Parameters**. 2018 https://alo.mit.edu/wp-content/uploads/2018/02/Estimation-of-Clinical-Trial-Success-Rates-and-Related-Perameters.pdf Biostatistics (2018) 00, 00, pp. 1–14
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Who is Opyl? (ASX:OPL)

Opyl is a new generation Australian company that provides leading biopharma and health organisations access to emerging AI-assisted technologies and real-world data insights to understand and improve healthcare design, development and delivery.

Opyl works at the intersection of clinical trials, artificial intelligence and social media

Our key offering for biopharma, medtech, government and healthcare organisations:

- clinical trial recumbent and retention solutions
- clinical trial predictive analytics
- deep social media insights

Our vision is to improve health and wellness by optimising data assets and digital activation to advance technologies for life.