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University of Bern
Department for BioMedical Research
Translational Organoid Recourse (TOR)

Bern, May 25th 2023.

To the Prix Galien Committee

Dear Distinguished Prix Galien Committee Members,

I am writing to provide my enthusiastic endorsement of DarwinHealth as a biotechnology/biopharmaceutical company that has achieved a level of innovational excellence, commercial success, and international stature, based on a series of breakthrough scientific and medical discoveries, to merit the Prix Galien 2023 Award in the "Best Startup" category.

I am confident that the distinguished members of the Prix Galien Committee members will diligently review—and be duly impressed by—the remarkable scientific and clinical accomplishments published in the scientific and medical literature by DarwinHealth principals; and, that they will also receive other written testimonials by from the world's leading scientists and innovators describing the company's innovation-driven molecular diagnostic and drug discovery platforms, including DarwinOncoTarget/Treat and their DarwinOncoDiscovery, Compound-2-Clinic Drug Discovery pipeline.

While I could also recite these landmark accomplishments for your consideration, I would like to base my unqualified endorsement of this "startup" based on my experience with single cancer patient (see below) with advanced disease who, in my view, exemplifies the power, precision, and translational importance that DarwinOncoTreat technology is already exerting at the "human level"—namely, at the challenging intersection between physician-oncologist and a person with a refractory, progressive malignancy who would require a virtual "miracle" to extend his life with an acceptable quality of life.

As we all know, these are extremely challenging cases. As the Chair of the Scientific Review Board of the Bernese Center for Precision Medicine and Research Group Leader, Urology Research Group, Department for Biomedical Research, Inselspital, University of Bern, I receive many such referrals from oncology centers around the world, especially for patients who have become refractory to all standard-of-care therapies and are faced with the prospect of therapeutic cessation simply because there are no validated roadmaps or molecular diagnostic markers to suggest what drug might be used to treat their cancer at an advanced stage.

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In this regard, I was asked to consult on a patient in the mid-40s who had widespread metastatic thyroid cancer to the bone, lymph nodes, and liver. The patient had been treated with standard-of-care and by the time I was asked to consult on technologies—including organoid platforms—that might successfully predict a treatment regimen that would induce remission the patient had undergone rapid, progressive deterioration. I recommended to the consulting clinical oncologist that tumor samples be sent for a DarwinOncoTreat/Target analysis, which would provide a readout of those drugs predicted to decommission the molecular architecture at the transcriptional level governing and driving the patient's cancer cell state.

The DarwinOncoTreat analysis was performed on multiple metastatic lesions, and based on the confirmatory results organoid models, belinostat was prioritized. The patient was started on belinostat, underwent two-and-one-half cycles. A follow-up CT scan showed significant reductions in metastatic lesions at all sites, which was accompanied by clinical improvement as well. After 2 ½ cycles of treatment, the patient could no longer tolerate the drug due to side effects, and the medication was stopped. Upon cessation of the predicted therapy, a follow scan showed recurrence of the metastatic and the patient was referred for alternative therapy.

Based on the clinical history and response to treatment, the treating physician and I concluded that had it not been for a specific, precision-based pharmacotherapeutic intervention that could only have been identified by the DarwinHealth's CLIA-approved OncoTreat technology, the patient would not have had the dramatic response we observed. His case is consistent with others reported by the DarwinHealth scientific/medical teams in the world's high impact literature.

Although this is only a single, anecdotal case, it speaks vividly to the universal application of DarwinHealth's methods and platforms across an exceedingly broad range of advanced cancers for which empirical therapy has failed us—and more significantly, our patients—time and time again. In fact, I have been so impressed by the DarwinOncoTreat methodology that we have initiated major clinical trials in pancreatic and bladder cancer based on their technologies.

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In summary, I believe DarwinHealth's technologies—including their patient-centric molecular diagnostics and drug selection platforms—are already revolutionizing how we discover and validate cancer drugs; and, on a more immediate and "human condition" level, direct us with unprecedented precision to how and when drugs in our current arsenal of cancer therapies should be aligned with which patients and tumors based on Master Regular proteins that transcriptionally govern the cancer cell state.

In summary, DarwinHealth is a truly exceptional "start-up" that is transforming the paradigm of cancer care at the front lines of patient care—where it counts the most. As this single case demonstrates, theirs is a scientifically enlightened and laser-sharp vision focused on improving the human condition. Therefore, it is with enormous pleasure that I communicate my enthusiastic support for their submission in the "Best Startup" category in the Prix Galien Award competition.

Sincerely,

Best regards,

Marianna Kruithof-de Julio

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