

May 17, 2023

To the Prix Galien Committee:

Dear Distinguished Prix Galien Committee Members,

I am writing to provide my enthusiastic and unqualified support and endorsement of DarwinHealth as a biotechnology/biopharmaceutical company worthy of your consideration for the Prix Galien 2023 Award in the “Best Startup” category.

The breakthrough methodologies and technologies that DarwinHealth has pioneered and currently markets both in the areas of patient care and drug discovery first emerged on my radar when, as Global Head of Early Oncology Development at Daiichi Sankyo, I approved an extremely successful collaboration that employed their Compound-2-Clinic, “DarwinOncoDiscovery” platform to prioritize and mechanistically analyze 40 late-stage compounds across a broad spectrum of cancer subtypes. The results, actionable insights, and scientific rigor they applied to this outstanding collaboration were stellar on all levels.

In contrast to so many other biotech “startups,” which frequently rehash conventional approaches to cancer drug discovery based on incremental changes, oftentimes without scientific literature backing, DarwinHealth distinguishes itself by leveraging transformative, cutting-edge systems biology-based technologies initially developed at Columbia University to reshape approaches to cancer treatment at a much more foundational and scientifically grounded level. Their technology is based on transformative illuminations of cancer biology they have produced through methodologies for the systematic discovery of Master Regulator proteins that mechanistically implement the transcriptional governance of cancer cell states. Notably, their products and CLIA-approved drug prioritization technologies, DarwinOncoTarget and DarwinOncoTreat, have been rigorously and extensively validated in the literature, including in large-scale preclinical trials; and, more critically, in two clinical trials for metastatic breast cancer.

I was so impressed with the ground-breaking technology, actionable discoveries, and forward-looking vision of the DarwinHealth enterprise that, subsequently, as Global Head of Research and Development and Chief Medical Officer at Hookipa Pharma, an immunotherapy-focused biotechnology company, we partnered again to deploy their VIPER-based technologies. Specifically, by extending their methodologies to the single-cell level they helped us identify entirely novel (cryptic) human immunotranscripts, whose expression was homeostatically controlled by Master Regulator proteins, that could be coupled to proprietary vectors for use as vaccines in the setting of cancer-focused immunotherapy. In my current role as Global Head of the Oncology Therapeutic Area at Ipsen, we are now considering a co-discovery project that would extend recent work in targeting Master Regulators (MR) via their DarwinOncoDiscovery platform.

What makes the DarwinHealth “start-up” unique is that this company has already developed and marketed products and platforms that provide hardwired, mechanistically- and experimentally-based readouts of novel cancer targets—in particular, MR protein-based regulatory states that can be precisely identified by their proprietary VIPER technology and can then be matched with cancer drugs shown to invert and dismantle the cancer-promoting transcriptional state. The ability of their validated experimental and computational platform to make these drug-target match ups on a tumor-by-tumor, patient-by-patient basis—and, even, at the single-cell level—positions their solutions to address the heterogeneity problem in cancer treatment above all others.

In addition to their seminal publications in the world’s highest impact journals—among them, *Cancer Discovery*, *Cancer Cell*, *Nature Cancer*, *Nature Genetics* and others—DarwinHealth’s notable accomplishments have also received extensive, well-deserved coverage in the international general media, including in *Science Magazine* (the official publishing organ of the American Academy of

Sciences), the *Wall Street Journal*, *Nature*, *The Journal of Precision Medicine*, *The Economist*, and many others. This is virtually unheard for typical startup companies in the biopharmaceutical space. Moreover, I am not aware of any other start-ups that, in such a small amount of time, have been as successful in translating pioneering scientific discoveries incubated in the academic world and then evolving, refining, and applying these edge technologies to two critical nodes where the most important advances in cancer therapeutics are currently being made: (1) in the patient-centric sphere, where their DarwinOncoTreat/Target molecular diagnostic products optimize the alignment among specific cancer drugs and specific tumors in individuals suffering from advanced, refractory malignancies at the front lines of clinical care; and (2) in the basic and translational R&D spheres where their scientific partnerships with global pharmaceutical based on their Compound-2-Clinic cancer drug discovery platform have already produced a robust pipeline of novel drugs under development.

Although still only in its start-up phase, DarwinHealth and its proprietary technologies/products have already evolved to the point where they are making a direct impact on the front lines of cancer care. This fact alone sets it apart from 99% of all other start-up companies in the biopharmaceutical space. By matching patients suffering from a broad spectrum of poorly responsive malignancies to the drugs most likely to target the molecular dependencies of their specific tumors—critically, on a patient-by-patient basis—DarwinOncoTarget and DarwinOncoTreat address the urgent, unmet need to advance from empirical deployment of marginal therapies, especially in refractory cases, to more effective cancer drugs shown, through MR targeting facilitated by DarwinHealth technologies, to produce more enduring clinical outcomes. And, on a broader, industry level, by identifying MR proteins as mechanism-based targets, it provides validated approaches for prioritizing early-stage lead compounds for further development. Finally, by providing mechanism-based biomarkers, predictive of drug response, it helps clinical investigators enroll patients who are most likely to benefit from the treatment, thus decreasing costs and increasing the likelihood of positive clinical trials.

Although DarwinHealth is still a “start-up” company by name and features, its track record of accomplishments, products, and innovation-based technologies already being applied at the forefront of cancer treatments extend beyond what even most mid-sized biopharmaceutical have managed to achieve after many years.

Theirs is a truly exceptional “start-up” rooted in extraordinary innovation, scientific rigor, and a noble vision focused on improving the human condition. Accordingly, it is with great pleasure and sincere conviction that I am happy to provide my unqualified and enthusiastic endorsement for their submission in the “Best Startup” category in the Prix Galien Competition.

Sincerely,



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