mRNA に対して各種の創薬を進める Veritas In Silico

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Introduction to Veritas In Silico, the emerging biotech focusing on mRNA (¹Veritas In Silico Inc.) OShingo Nakamura, ¹

Veritas In Silico is a biotech company working to create small molecule drugs and nucleic acid drugs that target mRNAs, with the aim of creating a society where every patient, especially those with diseases that currently have no satisfactory treatment, can look forward to a brighter future. Our proprietary drug discovery technology platform ibVIS®, consists of the identification of target sites starting with the structural analysis of mRNAs, screening of compounds, measurements of compounds' binding to RNAs and their activities, and the optimization of the obtained compounds. These are carried out by our RNA specialists and supporting software such as rule-based AI. Our company is together managed by a business development team that links these research capabilities to business, a public relations and investor relations team that appropriately discloses our business to society and receives appropriate evaluation, and an administration team that supports these activities. Under this framework, we aim to sustainably provide as many treatments as possible, as early as possible. Since going public last year, we have been focusing especially on creating pipelines as well as conducting our current platform business.

Keywords: mRNA; mRNA-targeted drug discovery; small molecule drug; antisense oligonucleotide; rule-based AI

Veritas In Silico は、どんな疾患の患者さまも治療法がないと諦めたり、最適な治療が受けられないと嘆いたりすることのない、そんな希望に満ちたあたたかい社会の実現を目指し、mRNA を標的とした低分子医薬品および核酸医薬品の創出に取り組むバイオテク企業です。その根幹は、mRNA の構造解析から始まるターゲット部位の同定、化合物スクリーニング、化合物の RNA への結合の測定と活性測定、さらには得られた化合物の最適化よりなる創薬技術プラットフォーム ibVIS® です。これらが、RNA を専門とする研究者と、研究者を支えるルールベースド AI 等のソフトウェアによって実施されています。こうした研究能力を、継続する事業につなげる事業開発、さらに事業を社会に適切に開示して適切に評価いただく広報・IR 活動、これらを支える本社管理機能によって、当社は運営されています。これにより、できるだけたくさんの治療法をできるだけ早期に作りつつ、持続的に治療法を提供することを目指しています。本講演では、本年の上場以降、主として低分子医薬品の創出を行うプラットフォーム事業だけでなく、核酸医薬品等のパイプラインの創出にも大いに力を入れている現状をご紹介いたします。

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- 2) Probing RNA-Small Molecule Interactions Using Biophysical and Computational Approaches. A. Shino, M. Otsu, K. Imai, K. Fukuzawa, E. C. Morishita, *ACS Chem Biol.* **2023**, 18(11), 2368-2376.
- 3) Recent applications of artificial intelligence in RNA-targeted small molecule drug discovery. E. C. Morishita, S. Nakamura, *Expert Opin Drug Discov.* **2024**, 19(4), 415-431.