

## About Genomic Expression

**Industry:** Healthcare

**RNA diagnostic company in infectious disease COVID-19 and Oncology**

**Stage:** Commercial launch of RNA sequencing platform into the diagnostic market

**Regulatory approvals:** Obtained CLIA certification and filed FDA EUA for COVID-19 for US

**Why RNA:** RNA codes for proteins and proteins are targets for drugs, furthermore today RNA is directly a target for drugs and a drug itself (e.g. Moderna). Our data support that RNA outperforms DNA sequencing and enables truly individualized medicine.

**Technology:** Proprietary RNA sequencing technology that enables sequencing of *real* clinical samples and interpret the data clinically. Leveraging RNA sequencing technology to massively scale COVID-19 test to 1 million test/run on the NextSeq platform.

**Clinical Programs:** 3 funded clinical programs in oncology data from 2 studies in Women's cancer: data in breast and ovarian cancer to be published in 6-12 months. Moving COVID-19 to self collection in saliva and leveraging the NGS platform to massively scale COVID-19 testing to enable population screening.

**Impact in oncology:** Data from clinical programs indicate that OneRNA® could enable better outcome for most patients taking the OneRNA® test by identifying a handful of already approved drugs interrogating growth mechanism. Truly individualizing treatment by testing first and selecting treatment based on the OneRNA® data would disrupt the current standard of care regime where only 1 out of 4 cancer drugs prolongs life because we treat all the patients the same way while we are spending \$100B on cancer drugs and 8 million patients die every year. The OneRNA® platform enables a paradigm shift from ONE disease, ONE marker, and ONE drug to ONE patient, MANY markers, and MULTIPLE treatment options that go beyond drugs. Our data suggests that we can prolong life for most patients with the existing drugs as the toolbox. In contrast to drugs that takes decades to developed a CLIA certification have already been obtained thus we can cure cancer now.

**Impact in COVID-19:** We launched a PCR test under FDA EUA first and are leveraging our OneRNA chemistry to massive scaling the detection of COVID-19 to the level of population screening which could enable containment of the pandemic. We stipulate that we can produce up to 1 million tests in 1 Nextseq run. There are +3000 of these machines in the world, which means that we can screen 20% of the population in 1 week !. To produce 1 million test with the most automatic PCR platform requires a capital investment of \$700M (COBIS by Roche). PCR simply does not scale well which is why we are experiencing lack of access to this critical test. Video <http://bit.ly/OneCOVID19>

**Vision for the future:** *By analyzing RNA we can monitor health, detect disease and design next generation cures.* Your DNA is not your fate. Most diseases are caused by life style or environmental factors including virus. We believe that we need to enable people to monitor their health in order to maintain health. Going to the doctor once/year to do a standard set of tests that still doesn't include any markets for cancer - the #2 killer simply doesn't make sense anymore. Disease doesn't happen overnight and many chronic diseases takes decades to develop. Intervention is often non-therapeutic during this time. Combining our

OneRNA® platform with eg the saliva self testing can enable a powerful platform to sustain health. Enable people monitor of their health is the only way we can reduce cost of care. Today diagnostics is only 2% of total healthcare cost.

**Background:** Genomic Expression raised \$8M, \$6.5M in grants, to clinically validate its Next Generation Sequence based treatment decision platform OneRNA® in 4 types of cancer focusing on women's cancer first. We are raising a funds to launch OneRNA® in our existing lab in Boston. That brings our OneRNA® platform from a \$1B tool market into the \$20B diagnostic market. We are currently generating revenue from our collaborations.

**Company History:** Genomic Expression was the diagnostic partner in Denmark's first large sequence based project called "Genome Denmark". The project was funded by the Innovation Fund Denmark with \$32 million. One of the objectives was to find novel oncovirus. The OneRNA® technology and vision was created as a result of this public private partnership. Access to historical samples in a single payer system enables GEx to develop various algorithms for any disease. We have subsequently received grants from Eurostars and Horizon2020 to validate OneRNA® in specific indications.

**OneRNA® is portable outside oncology with an update to the cloud:** Because OneRNA® is not using panels, but uniquely identify and quantify +20,000 RNA's in ONE assay, it can keep pace with the rate of new discovery by updating the OneRNACloud™ platform. OneRNA® is portable outside oncology with an update to the actionable database making OneRNACloud™ database and is therefore exponentially scalable.

#### **Genomic Expression Highlights:**

- Raised +\$6.5M in grants to validate OneRNA™ in several types of cancers
- Opened lab in Boston: Sequencing capacity 5000 tests/year
- Top placement in Women's Founders Network, XTC (Richard Branson), Molecular Tri-Conference, Red Herring, MedTech Innovator, won the Lyfebulb-Helsinn Award, won EIC Life Science award and EUtop50, Featured in [Forbes](#)
- Presented for European Commission & UN addressing sustainability goals in health
- Reinvented the business model producing revenue while validating OneRNA™
- Regulatory approvals have been obtained May 2020: CLIA certification obtained and filed EUA with the FDA on COVID-19 PCR test
- In the semi-finals of the XPRIZE and finals of Guidewell accelerator - Blue Cross Blue Shield in Florida

**Partners:** [Rutgers Cancer Institute](#), [Nation Cancer Institute \(NCI\)](#), [The Danish Cancer Society](#), [OvaCure](#), [The Val Skinner Foundation](#)

**Team:** Team with a ton of startup RNA: strong competencies in commercialization, deals and fundraising ([Gitte Pedersen, CEO](#)) oncology drug discovery ([Jesper Zeuthen, CMO](#)), Genomics platforms ([Morten Pedersen CSO](#)), and big data/AI ( [Bill Southworth](#), Executive VP), Medical Director [Gyorgy Abel](#), Harvard Medical and resident at Mass General Hospital.

#### **More information**

- 1 min Product Video: <http://bit.ly/OneRNAMovie>
- 1 min Company video: <http://bit.ly/GExCorp>
- Website: <http://www.genomicexpression.com/>
- Twitter: @dnabarcodes (50,000 followers)