



Company Presentation
January 2021



Introduction – Ancon Technology

Summary

- A UK-based MedTech company that has developed proprietary AI/M/L technology to detect, measure and profile pathogens in a single human breath (or the headspace from other fluids)
- Provides faster diagnosis, point of care non-invasive detection, higher sensitivity and an affordable alternative to current methods in detecting cancers, bacteria and viruses
- Target market is unsaturated, large and continuing to grow, with opportunities for Ancon and partner that are scalable and attractive
- Ancon has a potentially market leading position in the breath-based Covid-19 diagnostics sector
- Initial clinical study results for its proprietary Covid-19 breath test expected 1H2021
- Raised c.£6m of equity and grant funding to date

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Vision

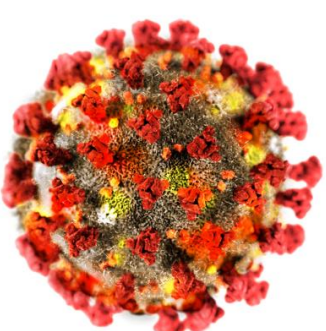
To save lives and make a difference to society from the early, accurate and actionable detection of pathogens from a single, affordable breath test

Near-term proposition



Unlocking Covid-19 and future pathogen outbreaks

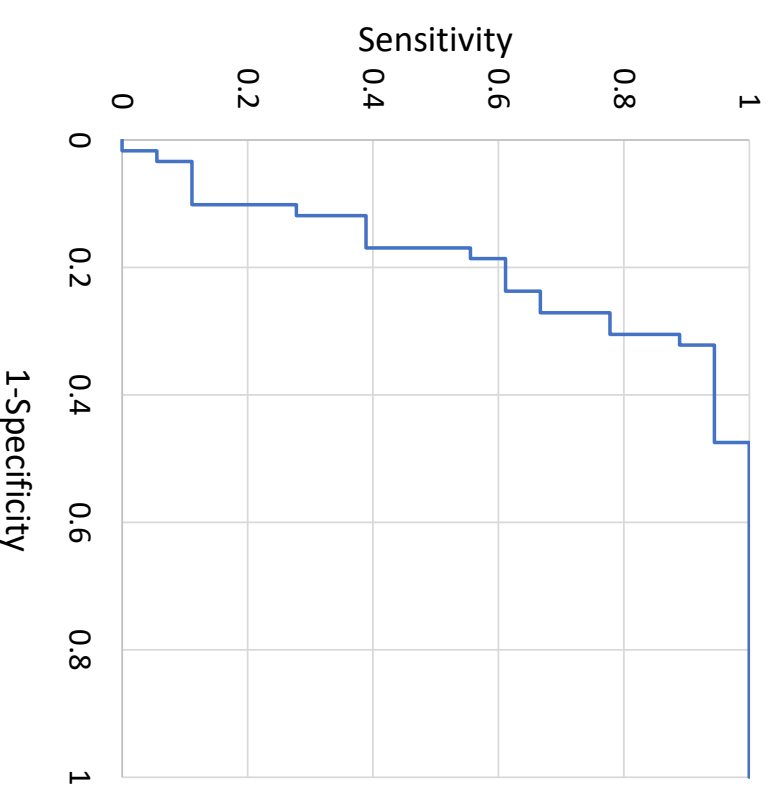
- Ancon's NBTv1 technology has the potential to **detect Covid-19**
- **Initial clinical study results** for Covid-19 breath test expected 1H2021
- Covid-19 clinical trials – US & UK
- **Clinical trial 1: Ashford and Chertsey NHS Trust, UK**
 - Initiated: June 2020 (NCT04459962)
 - Seeking detection of Covid-19 in symptomatic and pre-symptomatic / asymptomatic patients
 - Expected duration: 6 months, 330 participants
- **Clinical trial 2: London Heathrow (FALCON)**
 - Initiated: December 2020
 - Expected duration: 6 weeks, 100 participants
- **Clinical trial 3: Medical University of South Carolina**
 - Initiated: December 2020
 - Expected duration: 2 -3 months, 100 participants



Successful clinical studies in US & UK

Statistical analysis (ROC curve)**

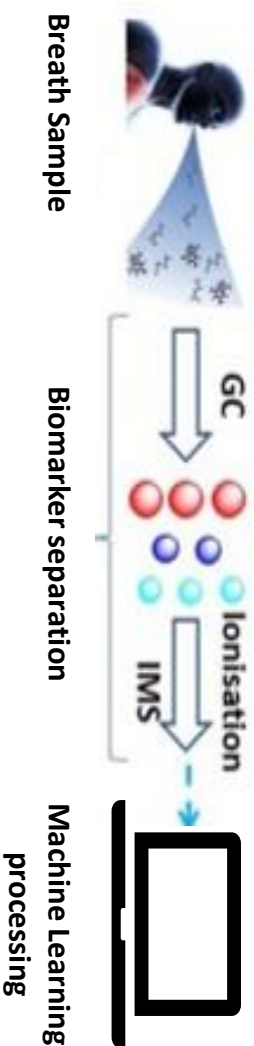
<p>Lung cancer & Leukaemia*</p> <ul style="list-style-type: none"> • Prof. Josep Sulé-Suso (UHNM, Keele University) • 2019 • <i>In-vitro</i> • ROC-AUC ~ 95% 	<p>Viral & microbial infections*</p> <ul style="list-style-type: none"> • Prof. D. Milton (School of Public Health, University of Maryland) • 2018 • 100 patients • Observed indications of viral and bacterial infections • Detected a non-Covid-19 corona virus 	<p>Bacterial vs viral infections**</p> <ul style="list-style-type: none"> • 2000 patients • breath diagnostic viral and microbial airborne infectious • 8 UK hospitals (2018/2019) • Strong evidence of detection of bacterial and viral infections with high accuracy: ROC-AUC is 75% to 80%
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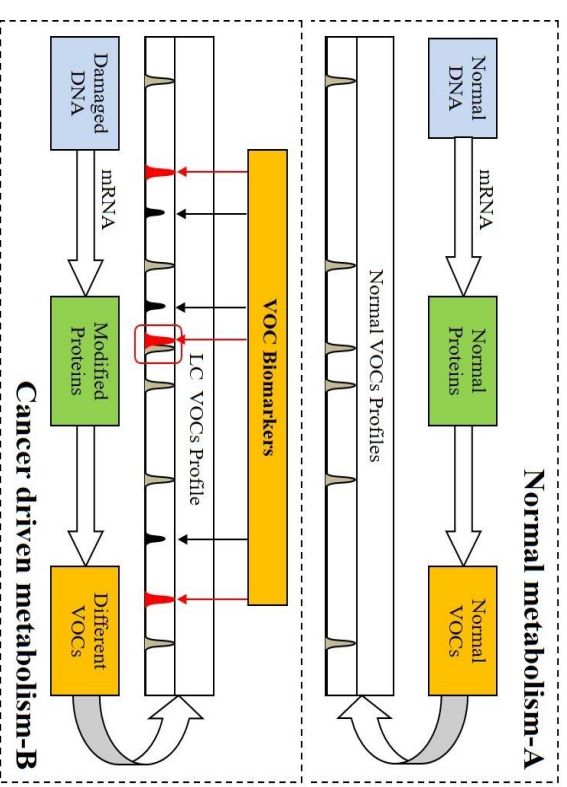
Ref: *Ancon Technology (data on file) **publication pending

— Ancon's technology - how does it work?

- Volatile organic compounds (VOCs) in exhaled breath bear the fingerprints of metabolic and biophysical processes going on in the human body; some VOCs are biomarkers of disease (specifically or in pattern)



Schematic of the current system: A breath sample is collected prior to initial separation of biomarkers by Gas-Chromatography (GC), followed by ionization and secondary separation using Ion Mobility Spectrometry (IMS). The resulting spectrum makes up the breath profile which is subsequently processed by Machine Learning (ML).

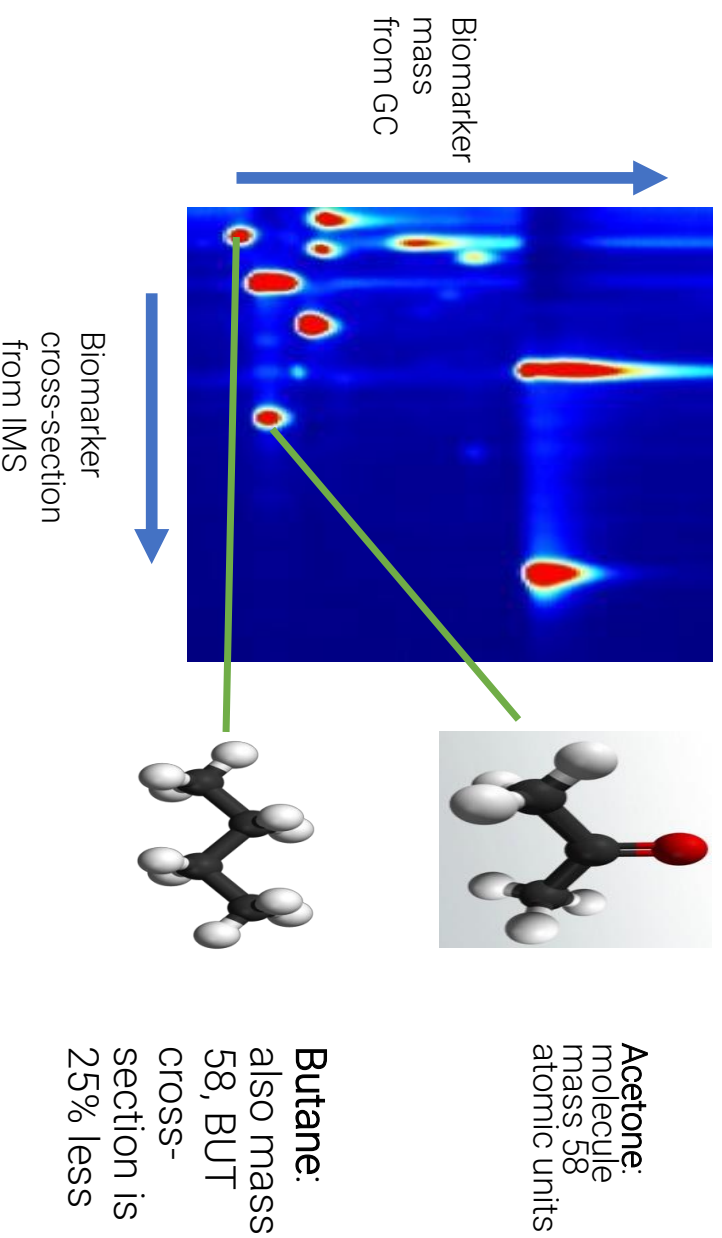


- A proprietary Artificial Intelligence algorithm and Machine Learning software then builds and develops biomarker profiles of VOCs within a cloud based environment (currently use a third-party GC-IMS)

Proprietary AI and machine learning software

2D profiling: sensitivity and specificity

- Two proprietary systems:
 - Data harmonisation
 - Processing raw 2D data
- 2D image converted to pattern analysis by Ancon's ML enabling better specificity and sensitivity
- Leading technology to be able to identify patterns of biomarkers



— Why is Ancon's AI/M/L technology so exciting?



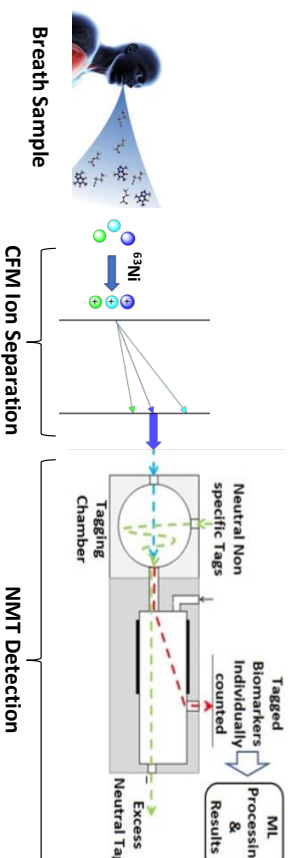
- **Point of Care** - rapid results on site within 10 minutes
- **Non-Invasive** - no injections, anaesthetic or bodily intrusions.
- **Increased accuracy vs reference testing due to powerful ML** - powerful proprietary ML means significantly better specificity and sensitivity due to pattern recognition
- **More specific than currently employed PCR tests** - NBT detects active/infectious viruses and bacteria. PCR detects both active and harmless DNA and RNA fragments
- **Easy to use** - minimal training required
- **Low Cost** - enable mass screening for many diseases
- **Mobile** - machine is light weight and portable.
- **Personalised** - trending and sequential tests available on an individual by individual basis
- **AI & ML technology** - enables continuous improvements in profiling
- **Early stage detection of disease**



➤ *Ancon's AI/M/L technology has the potential to be a powerful tool in both medical care becoming a fundamental part of digital healthcare, personalised medicine and offering better outcomes*

Next generation NBT – better, faster and cheaper

- **Better - Ultra high sensitivity** - 1000 times more sensitive than existing technology. The next generation NBT detects down to 1 ion per second of air flow, while the best competitor needs an air flow of 10,000 ions per second to detect a signal
- **Faster** - Diagnosis in under 1 minute
- **Cheaper** - c.90% reduction in COGs
- Technology at TRL6 and successfully tested by UK Ministry of Defence at Porton Down
- Opportunity to target **multiple markets** (primary focus medical and security)
- AI and ML already proven and trained with current NBT enabling shorter approval times
- Already **strong interest** from three leading security supplier corporates



Covid-19 market opportunity



Context

- Pandemic with 1.9m total deaths to date and total confirmed cases 8.2m*
- Testing is complementary to vaccines and therapeutics

'Even after vaccines are available, testing will continue to play a vital role and will remain a vital tool for controlling the pandemic. If you don't know where the virus is, you can't stop it.' - Tedros Ghebreyesus, Director General WHO, 27 Nov 2020

- Global issue; no country is immune; weak healthcare in many countries. A significant medical and economic impact on virtually every country

➤ *An evident requirement for a quick, non-evasive technology for screening. Early intervention saves lives and reduces costs*

Result

- Significant public and private investment in testing to protect each country's healthcare, security and economy

Opportunity

- No breath-based Covid-19 diagnostics have been approved by FDA or EMA to date; Ancon has a potentially market leading position



Market for Covid-19 tests forecast to be between \$9.5bn & \$16bn*



European Union Considers Trillion Dollar Stimulus as Tourism Expected to Plummet 70 Percent

Music festivals

UK live music and festival sector at risk of collapse due to coronavirus



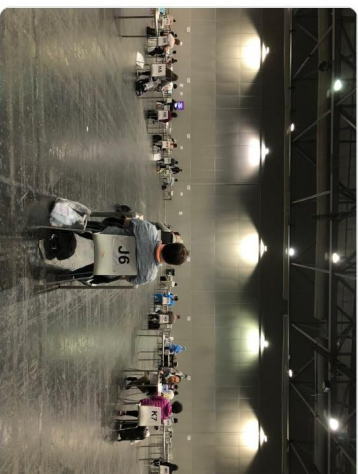
Airbus reduces jet production to cope with coronavirus crisis

Move comes as expert predicts impact of virus on aviation industry will be worse than 9/11



Airlines could lose a quarter of a trillion dollars in revenue this year, according to the International Air Transport Association, as travel comes to a standstill with countries locked down to fight the coronavirus. Most carriers will go bankrupt by the end of May if they can't find support,

I've landed in Hong Kong after flying from Paris CDG, via London Heathrow. I now have to wait ~8 hours before I get my #COVID19 test results and thus have ample time to tweet about my experience.



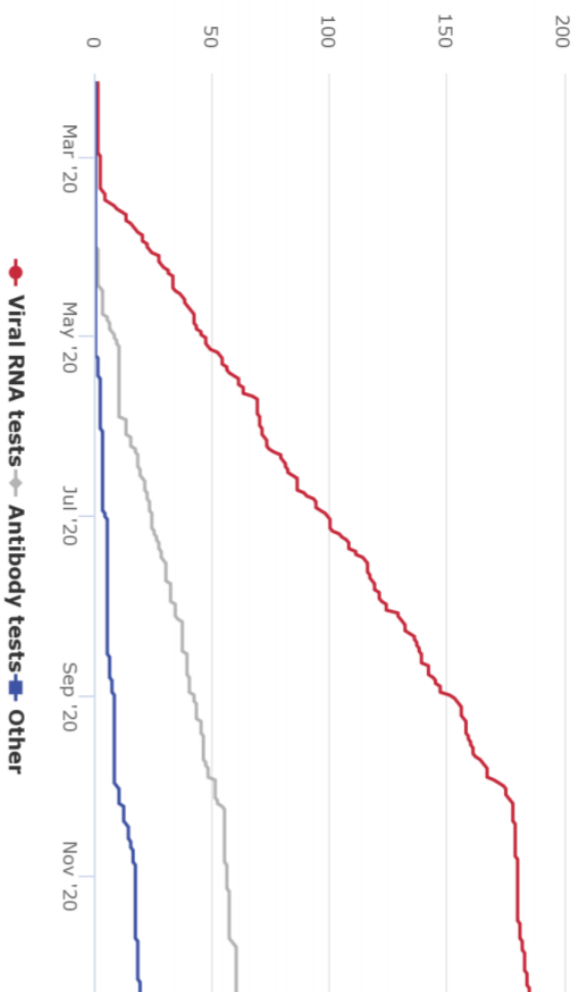
Hotels prepare for life after lockdown with thermal cameras and medical checks for guests

*Jeffries healthcare conference commentary May 20

Covid-19 *in vitro* diagnostics landscape

- 299 Covid-19 *in vitro* tests approved via FDA EUAs to date:
 - 230 viral RNA (PCR / LAMP) swab or saliva tests for diagnosis of acute infection
 - 61 antibody tests (plasma, serum) for diagnosis of recent or prior infection
 - 8 antigen tests (swab) for diagnosis of acute infection
- **No breath-based diagnostics approved by the FDA to date**

EUAs granted to Covid-19 tests



Source: EvaluateMedTech; FDA (14 Dec 2020)

Invasive vs non-invasive Dx

Nasal swab



FM Marty et al. N Engl J Med 2020;382:e76

Breath test



Ancon Medical

— Diagnostics opportunity beyond Covid-19

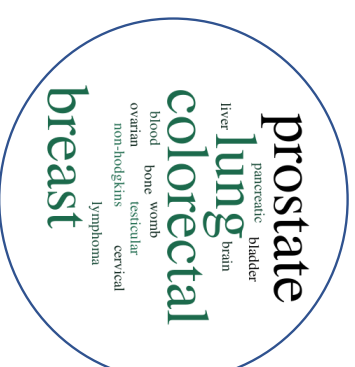


- Global in vitro diagnostics market estimated to grow from \$61bn in 2018 to \$87bn by 2026
- Multiple VOC indicators can be detected by Ancon's Technology including:

Infection & Inflammation



Cancer

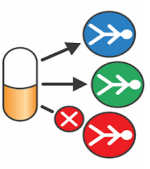


- In addition to Covid-19, Ancon is planning to prove the platform technology in other disease areas
- Initial planned indications include:
 - **Perioperative infections** – global opportunity, clear, identifiable pathway in public and private sector
 - **MRSA/MSSA** – global opportunity, clear, identifiable pathway in public and private sector
 - **Lung Cancer** – prove the technology for mass screening use
 - **Neurodegenerative disease** – significant unmet need

— Opportunity beyond diagnostics – platform technology



Health screening – point-of-testing screening for wide range of conditions. Can be located at supermarkets, private clinics, occupational health centres, workplaces



Companion diagnostics – identify which patient would benefit from a particular drug and to monitor the drug's effectiveness (particularly relevant with the trend toward value-based reimbursement)



Medical security (pandemic testing) – at airports, hotels, borders, large gatherings to enable medically secure movement



Diagnostic imaging – point-of-testing diagnostic imaging, integrated digital health, rapid analysis



Security – explosives, chemicals and narcotic detection

Management Team



Key Individuals

- **Dr Linda Pomeroy, Chief Executive**
 - Dr Pomeroy has over 20 years experience in the life sciences industry ranging from a global director within AstraZeneca, a financial equity analyst at an investment bank and as an entrepreneur
 - She has also founded and spearheaded a start-up medical device company. She has successfully led a global team to deliver an innovative platform technology for patients applying strong industry, therapeutic and scientific knowledge, and has developed business plans, strategy and insights, negotiated licensing deals and raised equity and grant funding
- **Dr Robert Muir, Chairman**
 - A co-founder of Ancon and a physical chemist with 30 year's experience as a senior executive in the oil and chemical industries, principally with Shell International Oil Company. As a member of the management team, he was responsible for fuels, business development and corporate strategy
 - Previously the Chief Executive of Ancon, he has recently stepped aside to become Chairman. He is currently in a transition period helping Dr Pomeroy settle in as Chief Executive, after which he will become Ancon's Non-Executive Chairman
- **Dr Boris Gorbunov, Chief Technology Officer**
 - Founder of Ancon, Dr Gorbunov is the inventor of Ancon's proprietary technology and has had 30 patents successfully granted in the USA, China, Japan, Taiwan and UK. He is the author of more than 150 scientific papers and has more than 25 years' experience as a leading scientist in characterisation, cancer research, medical device technology and instrument development
- **Ancon Technology Ltd**
 - Employs 14 people, 12 F/T, 2 P/T
 - 8 high-calibre R&D staff with specialist skills in trace volatile compound analysis and detection, nanotechnology, aerosol science, mechanical and chemical engineering and data analysis, AI and machine learning

Business proposal

- Activity is focused towards developing a protected technology in a highly valued and unsaturated market
- Flexible approach to partnering, with options to include:
 - Ancon to grant an exclusive, worldwide license, with the right to sublicense
 - Would include upfront, royalty and milestone payments
- Potential trade sale

AI = Artificial Intelligence

AUC = Area Under the Curve

CFM = Cross Flow Mobility

COG = Cost of Goods

EMA = European Medicines Agency

EUA = Emergency Use Authorization

FDA = US Food & Drug Administration

GC = Gas Chromatography

IP = Intellectual Property

IMS = Ion Mobility Spectrometry

LAMP = Loop-Mediated Isothermal Amplification

ML = Machine Learning

NBT = Nanoparticle Biomarker Tagging

PCR = Polymerase Chain Reaction

ROC = Receiver Operating Characteristic

TRL = Technology Readiness Level

VOC = Volatile Organic Compound

— Contact details



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