



Health Technology Review	
Technology Ref.:	HTA21023
Technology Name:	Exponential Deep Examination (EDE)
Approvals by International Bodies:	-
Company name:	International Holding Company - IHC
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Short Description of the Technology:	This technology catches the electromagnetic waves from people and identifies Spectral Signature that is compatible with COVID-19 RNA molecule for an infected person. It consists of three elements: an EDE Detector – which measures electromagnetic waves, a Targeting Device: IOS enabled device connected to the internet to transmit information and point to a certain individual and a ML (machine learning) Model for identifying Spectral Signature compatible with COVID-19.
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Health Technology Assessment Team Recommendation:	Approved
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Summary of Review:

The technology catches the electromagnetic waves to detect infected people with COVID-19. The EDE detector will be installed within 2-5m radius and the targeting device will be portable by almost 1m away from the tested individual that will show the result by machine learning analysis.

Scientific data provided by the company based on 21,342 patients blindly tested, concluded a sensitivity 96,7% and specificity of 98,12%. Abu Dhabi validation in cooperation with SEHA and Union71 lab in 1,093 samples confirms similar accuracy with sensitivity of 93.5% and specificity of 83%.

Considering that RT-PCR is a diagnostic test, not perfectly suitable to screening purposes (in particular due to its long processing time) EDE can add an additional layer of safety by additional screening with an accuracy similar to RT-PCR (and much better than thermal cameras and every other screening technology available)

Advantages	Disadvantages
Results obtained in real-time (immediately) adding a further layer of safety to communities that currently does not exist	Scientific evidence has been demonstrated, but due to the novelty of the technology more data have to be collected from routine application ("post marketing surveillance" for further validation)
The Detector picks up electromagnetic waves in a 2m-5m radius	Targeting device must be ~1m away from the individual being tested and without obstructions
It can be used for people in their vehicles but windows are rolled down	Local validation test/clinical trial is required to show the accuracy and precision

Qualitative result (Positive or Negative)	The price and cost of the technology is still unclear
Does not impacted by heat	No international approvals found
No direct contact with people so there is no harm	Risk of failure due to internet interruption

We recommend an **approval of using this technology for use in screening under the following condition:**

1. Using EDE as a screening technology only (not diagnostic device)
2. Referring patients being tested "COVID-19 positive" by EDE to confirmatory RT-PCR test in a certified laboratory in Abu Dhabi, recording false positive EDE results
3. Establishing a proper quality monitoring process and reporting of any adverse events or unwarranted consequences including safety issues of employees during validation or clinical trial.
4. Provision of regular updates and reports about the product to DOH upon request.

Moreover, DOH has the right to stop the product at any stage if deemed necessary, initial conditions and any subsequent conditions must be satisfied before obtaining final approval. Failure to do so will reflect in provoking the approval.

Technology Image

