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Pre-Proposal Draft (5/24/2021):

## Advanced Diagnostic Imaging & Therapeutic Support for Covid-19 Cases and Post-Coronavirus Disorders

For all health agencies and medical centers, the clinical diagnostic and research teams at Bard Diagnostic Imaging wish to submit this preliminary proposal to conduct a coordinated set of Post-Covid treatment support diagnostic imaging services for POST-COVID DISORDERS also known as 'Long Haulers Syndrome'. Our professional coalition called the **LONG-HAULERS DIAGNOSTIC GROUP (LHD)** wishes to join the 'medical front lines' of the Covid-19 pandemic crisis through this comprehensive program by offering advanced diagnostic care and innovative data gathering for patients living with PASC.

As the Coronavirus infection cases continue its lethal effects in many areas of the globe, the list of post-treatment disorders also gains new mobility in its collection of health issues. A rise in numbers, severity and complexity from MILD FATIGUE to severe ORGAN DAMAGE to the heart, lungs and brain. A growing list of critical issues like Ischemic Stroke, Seizures, Guillain-Barre Syndrome/Paralysis and increased risk to developing Parkinson's disease and Alzheimer's disease.

Our LONG-HAULERS DIAGNOSTIC GROUP is comprised of highly credentialed diagnostic professionals united to bring joint clinical care for all existing medical centers or agencies. We are also equipped to join clinical trials and research projects to gather new data on all disorders related to Covid-19. Under this joint collaborative effort, our LHD alliance is a value added resource and response-driven support to all Post-Covid treatment centers everywhere.

The following programs are presented in this draft for consideration:

- 1) CLINICAL CARE SERVICE PROGRAM 1 - COVID CV-DIAGNOSTIC SCAN:** Formerly called the LUNGSCAN, this comprehensive Cardiovascular Diagnostic Imaging System is a multi-disciplinary program that covers an integrative assessment of the vital organs from the entry pathway of the Covid-19 virus to the effects on the heart and circulatory system. For currently infected patients to post-treatment survivors, our LUNGSCAN PROGRAM can provide a comprehensive scan of these vital areas (including a full-body scan) for critical answers to the patient's physiology and the re-

maining 'damage' that the virus had left behind. Our Covid CV-SCAN also screens and tracks other potential reactions to therapeutics (including potential results from inoculations) such as the recently discovered post-vaccination reactive nodes as well as a variety of potential auto-immune disorders.

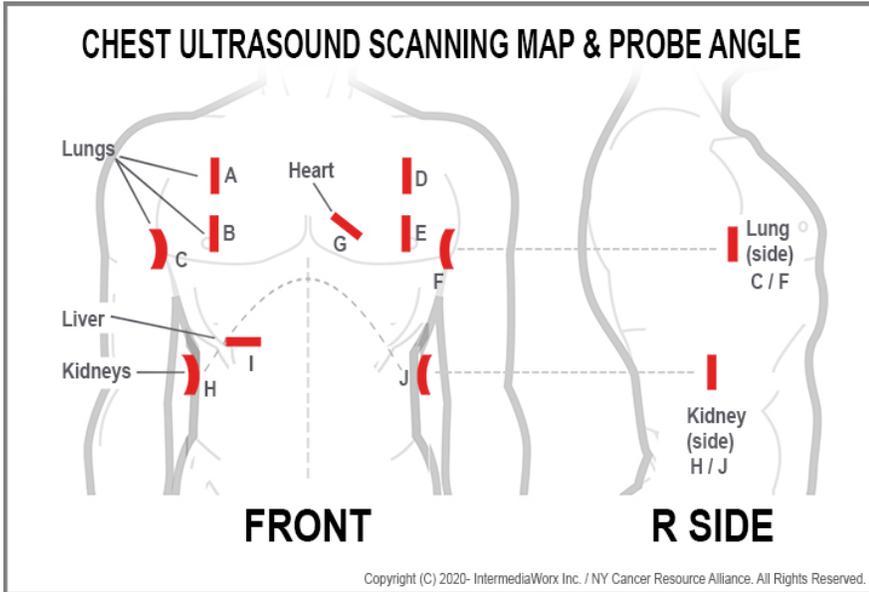
\*\*The Bard Diagnostic Team proposes to install our CV-DIAGNOSTIC SCAN PROGRAM and to lead a fully supported investigative program within any current health facility. Collaborative discussions with the receiving health agency are required to fully design and install this custom program.

**2) RESEARCH PROGRAM – EXPANDED POST-COVID PATIENT DIAGNOSTIC ANALYSIS:** LHD Group (and its partners) are seeking to partner with health agencies or research groups to support research for continued exploration of comorbidities, therapy effects (and side effects) and other post-covid issues. With expanded patient access, centralized facilities and technology acquisitions, this research program stands to offer vast knowledge and data to contribute to the 'race' for more effective and efficient solutions to post-covid disorders. This level of group diagnostic expertise offers a combination of FDA recognized and FDA approved diagnostic technologies for optimal data gathering. Other diagnostic protocols may be included as part of our proposal - including fMRI, CMR, genetic sequencing and NeuroNavigated TMS (Transcranial Magnetic Stimulation) for diagnosing brain diseases and disorders.

\*\*Further discussions with the prospective medical board as to the presentation of this multi-parametric research proposal is required. Additional information is needed to define the realistic integration of this research program with the current agency's resource access to correctly implement this program.

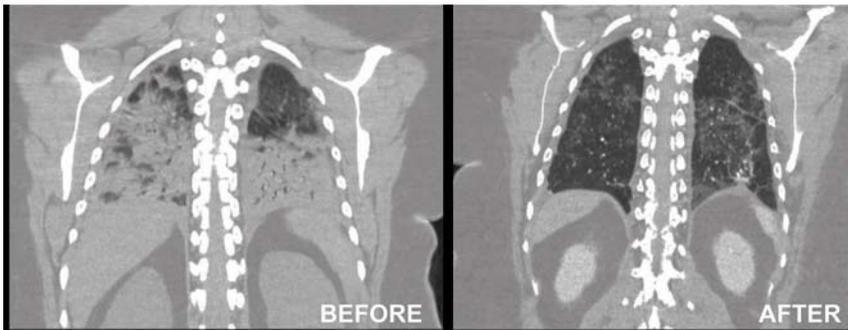
## CLINICAL POST-COVID FINDINGS (FROM SURVIVORS)

The LHD Network spans a list of colleagues who share, collaborate and support each other's clinical capacities. Our network carries a synergistic alliance of diagnostic talent, expertise and technologies that adds to global access of treatment solutions. Below are samples of Covid-related findings using various technologies to validate/confirm the state of each disorder (for discussion only).



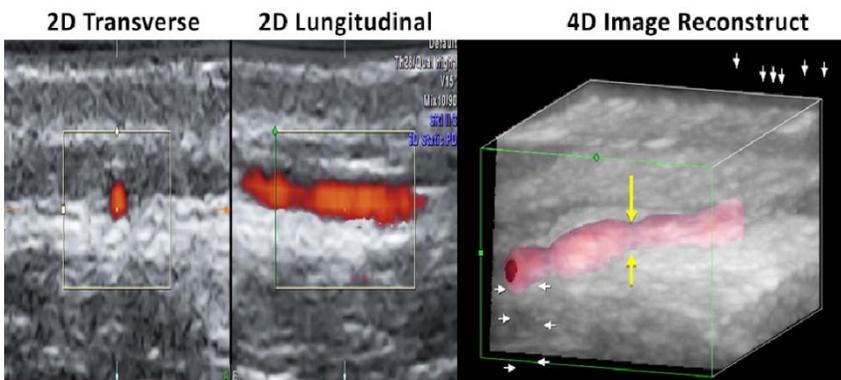
### ULTRASOUND CHEST SCAN FOR POST-COVID SCREENING 1:

A dedicated 20Mhz ultrasound provides visual evidence of many organs in their current state or condition. This first pass report provides a starter review of the major organs known to show post-covid issues (HEART, LUNG, LIVER, KIDNEYS). We search for abnormalities in these areas including inflammation or nodules/growths.



Courtesy of: FLCCC.net

BEFORE/AFTER CT SCAN images of a Covid-19 patient, therapist treated with a specialized protocol (including Methylprednisolone)- resulting in the clearing of the massive infection leaving patchy peripheral traces of pneumonia. The absence of pleural effusion portends rapid recovery.

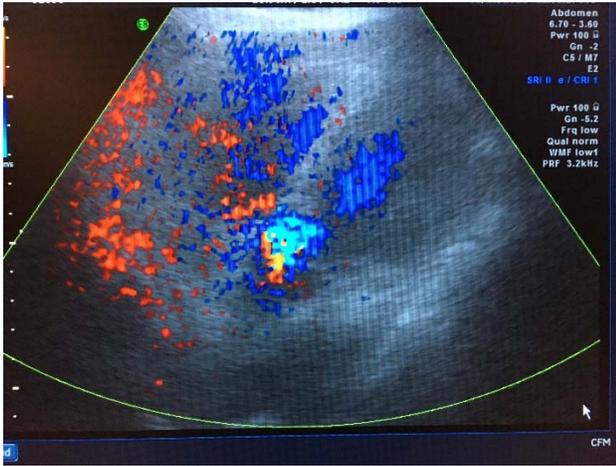


Arterial narrowing in patient with headache / visual changes

### TEMPORAL ARTERITIS / STROKE-

"In one autopsy series, there was a widespread presence of small clots with acute stroke observed in over 25%. In a recent review of the incidence of stroke in COVID-19, almost 2% of all hospital patients suffered a stroke, which is 8x higher than in patients with influenza."

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### SCAN FOR HEART DISORDERS

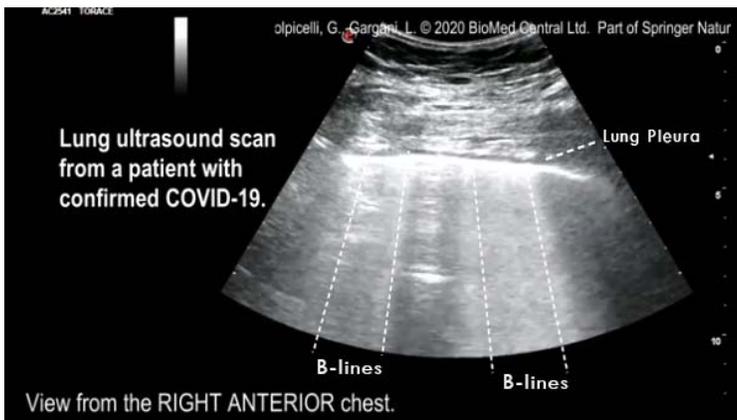
*“Part of our chest scan for Covid-19 and post-covid issues is using an ultrasound to scan the heart- starting from the bottom of the lungs underneath the right and left rib cage. In the case of this image (L), an abnormal pulsation leads the investigation of the aortic valve with the spectral Doppler, only to show an abnormal doppler flow color pattern (yellow and teal) in the aortic valve indicating inflammation causing thickening of the valve, producing narrowing, then stenosis and turbulence. Once you find a cardiac abnormality, it could be related to Thromboemboli from the lower extremities or from the inferior vena cava*

*that (in Covid cases) may show clots. These revelations lead to other confirmatory tests such as pet CT, pulmonary ventilation, and perfusion scans and perhaps MRI.”*



*BLUE TOES and fingers are a newly recognized feature of microemboli from Covid-19. The growing population of patients with hyper coagulable comorbidities or exposure to the viral pandemic make the risk of increased thrombosis a real consideration when initiating cosmetic treatments. High resolution Doppler sonography documents altered vascular flow and images dermal and subdermal lesions such as cysts, cancers and inflammatory disorders that may be associated with discolored areas. Risk of blindness from filler procedures has been documented worldwide for ten years from intravenous or intra-arterial injection. Foreign bodies (old or new fillers) may dislodge and produce vascular compromise at a distance from the point of entry. Preoperative vessel and facial nerve mapping with 4D image reconstruction is used to guide needle placement in certain situations. Advanced vascular imaging (30-100 mhZ sonography units, 3D/4D Doppler, RCM, OCT) may be useful in differential diagnosis of embolic phenomenon. Image guided treatment with Doppler assistance can reopen occluded vessels in a timely manner.*

Embolitic particles from ulcerated atheroma deep femoral artery



### ULTRASOUND/B-LINES

*“When conducting lung ultrasound scanning, you look for signs of B-LINES. The more B lines you have equals a bad lung ultrasound score – indicating a high risk of deterioration. For any treatment protocol, if a patient whose lung ultrasound scan was getting worse, we might want to start escalating therapy.”*

- Undisclosed source



**PET/CT SCAN OF VACCINE RECIPIENT:**

A 65 year old female with extensive endometrial carcinoma as a very large intense mass limited to the pelvis; (Arrow A). Two days prior to a FDG PET/CT study the patient received a COVID-19 vaccine. Uptake at injection site at the left shoulder skin from injection; (Arrow B). Multiple level I, II, and III left axillary reactive nodes to vaccination itself; (Arrow C).

Many of our patients have been vaccinated for COVID-19 by the time we see them. Approximately 50-60% demonstrate these types of benign reactive nodes on the FDG PET/CT scans. Usually not an issue as we just call them benign. The benefit of PET resides in the repeat scans which allows us to track lesions over time which will usually confirm the suspected diagnosis. - LHD TEAM

**This draft is produced strictly for the private use of this presentation for health agencies and medical centers and is not for public distribution or publication in any way.** For additional information, contact Bard Diagnostic Imaging at: 212-355-7017 – attn.: Dr. Robert Bard or Lennard Gettz - Dir. of Special Programs.

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