

## ADDITIONAL FILE

### Evidence of SARS-CoV-2 Spike protein on retrieved thrombi from COVID-19 patients

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**Running heads:** SARS-CoV-2 Spike protein in COVID-19 clots

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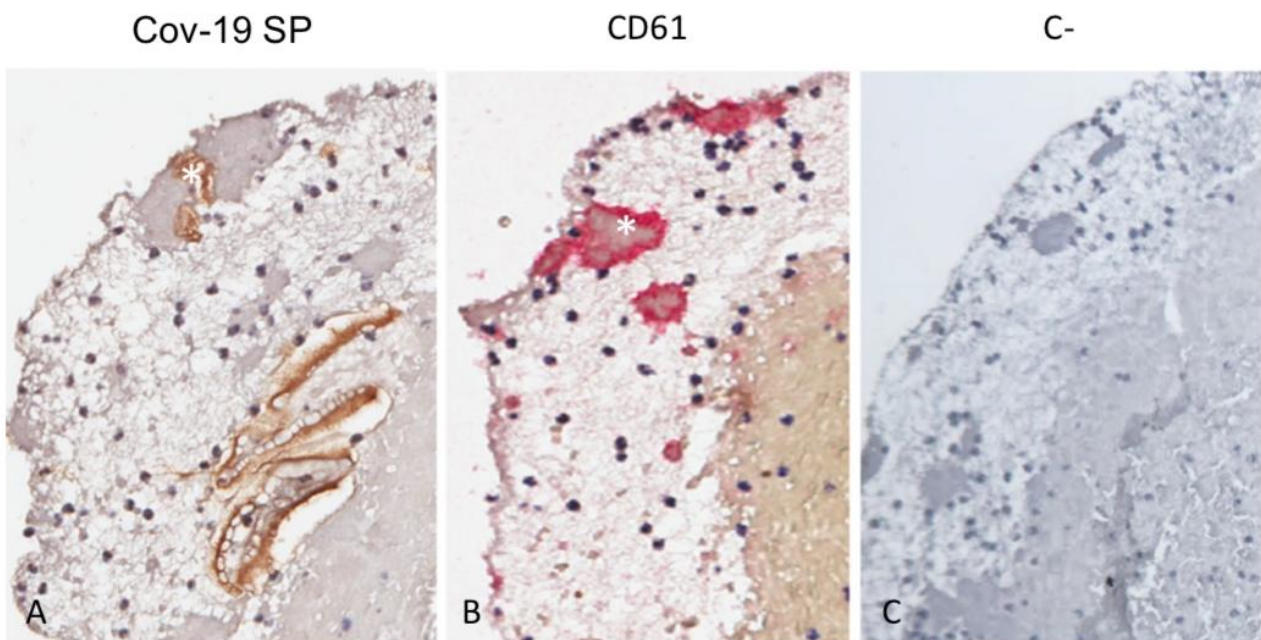
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**Supplementary Table. Demographics and other clinical characteristics of the study patients**

|  | <b>LVO AIS patients with COVID-19</b><br>n=3 | <b>LVO AIS patients without COVID-19</b><br>n=4 | <b>AMI patient</b><br>n=1 |
|--|--|---|---------------------------|
| <b><i>Demographics</i></b>                                 |  |   |                           |
| Age, yrs (n. of pts with available data)                   | (3/3)  | (4/4)   | 43                        |
| - mean   | 67   | 69.8  |                           |
| Sex, male  | 2/3  | 3/4   | 1                         |
| <b><i>Vascular risk factors and comorbidities</i></b>      |  |   |                           |
| Smoking  | 0  | 0   | -                         |
| Hypertension   | 1/3  | 1/4   | -                         |
| Diabetes mellitus  | 1/3  | 0   | -                         |
| Atrial fibrillation  | 2/3  | 1/4   | -                         |
| Dyslipidemia   | 1/3  | 1/4   | -                         |
| Ischemic cardiopathy                                       | 0  | 0   | -                         |
| Previous stroke/TIA  | 1/3  | 0   | -                         |
| Anemia   | 1/3  | 0   | -                         |
| Hypothyroidism   | 0  | 0   | -                         |
| Carotid artery stenosis >50%                               | 0  | 2/4   | -                         |
| Valvulopathy   | 0  | 0   | -                         |
| Neoplasm   | 0  | 0   | -                         |
| <b><i>Medications prior to admission</i></b>               |  |   |                           |
| Antiplatelets  | 1/3  | 2/4   | -                         |
| Anticoagulants   | 0  | 0   | -                         |
| Beta-blockers  | 1/3  | 0   | -                         |
| ACE-I/ACEIIR-I   | 1/3  | 2/4   | -                         |
| Diuretics  | 0  | 1/4   | -                         |
| Calcium antagonists  | 0  | 0   | -                         |
| Lipid lowering medications                                 | 0  | 0   | -                         |
| Blood glucose lowering medications                         | 0  | 0   | -                         |
| <b><i>Admission</i></b>                                    |  |   |                           |
| Time from diagnosis of COVID-19 to AIS or AMI onset (days) | (2/3)  | Not applicable                                  | 24                        |
| - mean   | 0  |   |                           |
| NIHSS at admission   | (3/3)  | (4/4)   | Not applicable            |
| - mean   | 11.7   | 19.3  |                           |
| - median   | 8.0  | 21.5  |                           |
| NIHSS at 24 h  | (3/3)  | (4/4)   | Not applicable            |
| - mean   | 8.0  | 13.5  |                           |
| - median   | 8.0  | 12.5  |                           |
| Artery occlusion   | 3/3  | 4/4   |                           |
| - MCA-M1   | 2  | 3   | 0                         |
| - MCA-M2   | 1  | 0   | 0                         |
| - ICA-MCA, tandem occlusion                                | 0  | 1   | 0                         |
| - Coronary artery  | 0  | 0   | 1                         |
| IV rt-PA   | 1/3  | 3/4   | -                         |
| Endovascular treatment                                     | 3/3  | 3/4   | 1                         |
| Stroke volume, cm <sup>3</sup>                             | 3/3  | 4/4   | Not applicable            |
| - mean   | 20.93  | 20.05   |                           |
| - median   | 8.30   | 18.00   |                           |
| Pneumonia  | 2/3  | 0   | 1                         |

Abbreviations: ACE-I/ACEIR-I, Angiotensin Converting Enzyme Inhibitors/Angiotensin Converting Enzyme-II Receptor Inhibitors; AIS, acute ischemic stroke; AMI, acute myocardial infarction; ICA, internal carotid artery; IV, intravenous; MCA, middle cerebral artery; NIHSS, National Institutes of Health Stroke Scale; rt-PA, recombinant tissue plasminogen activator; TIA, transient ischemic attack.

**Supplementary Figure.**



Representative images of serial sections of the clot from the COVID-19 patient with acute myocardial infarction, stained for SP (in brown - A) and CD61 for platelets identification (in red - B). There is a substantial overlap between the patchy areas of CD61 staining and SP protein (white asterisks). C- represents the negative control (omitting the primary antibody).

Abbreviation: Cov-19 SP: SARS-CoV-2 spike protein