

Retrospective clinical investigation into the association between abnormal blood clotting, oral anticoagulant therapy and medium-term mortality in a cohort of COVID 19 patients

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SUPPLEMENTARY MATERIALS

| | |
|-----------|------|
| Figure S1 | p. 2 |
| Figure S2 | p. 2 |
| Figure S3 | p. 3 |
| Table S1 | p. 4 |

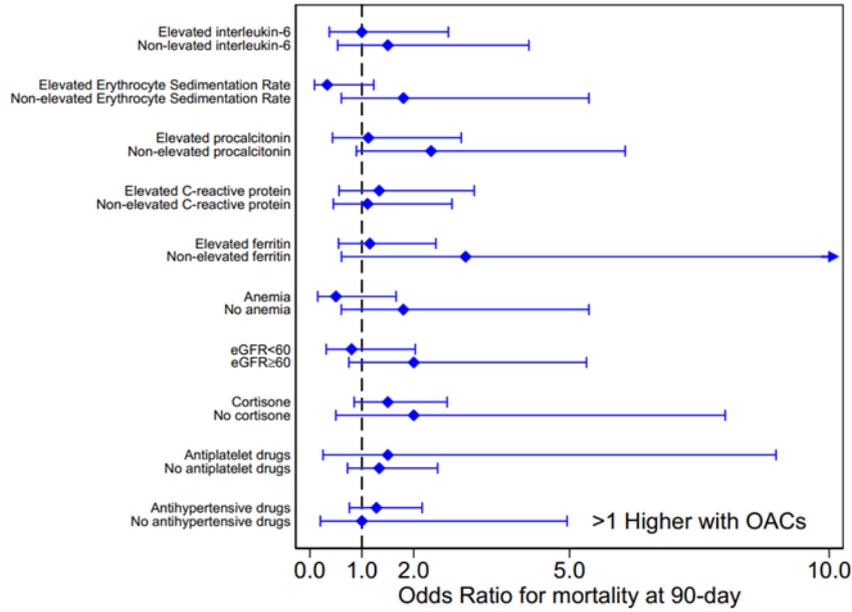


Figure S1. Analysis of Odds Ratios for subgroups encompassing laboratory parameters and pharmacological therapies at admission for investigating the association between oral anticoagulant therapy and mortality.

OAC, oral anticoagulant (DOAC or VKA); eGFR, estimated glomerular filtration rate; **Cortisone** stands for anti-inflammatory corticosteroids (cortisone acetate, prednisone); **Antiplatelet drugs**: acetylsalicylic acid (ASA), clopidogrel; **Antihypertensive drugs**: Beta blockers (bisoprolol, nebivolol, atenolol, metopropol, carvedilol, propranolol), calcium channel blockers (nifedipin, amlodipine, verapamil).

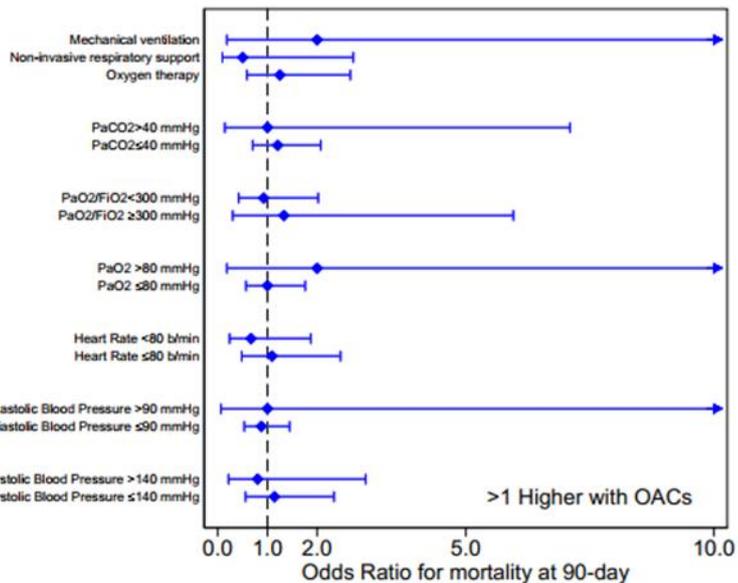
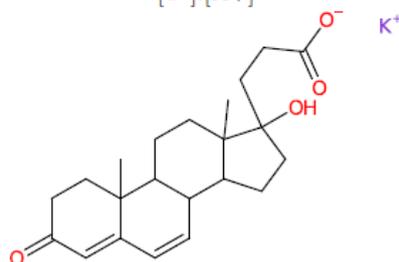


Figure S2. Analysis of Odds Ratios for subgroups encompassing clinical and respiratory parameters at admission for the association between oral anticoagulant therapy and mortality.

OAC, oral anticoagulant; FiO₂, fraction of inspired oxygen; PaCO₂, partial pressure of arterial carbon dioxide; PaO₂, partial pressure of arterial oxygen.

Target fishing

smiles: CC12CCC(=O)C=C1C=CC1C2CCC2(C)C1CCC2(O)CCC(=O)[O-].[K+]



| Target | score | reliable |
|--|-------|----------|
| Cytochrome P450 19A1:Homo sapiens | 9.45 | yes |
| Androgen Receptor:Homo sapiens | 9.30 | yes |
| Glucocorticoid receptor:Homo sapiens | 9.22 | yes |
| Androgen Receptor:Rattus norvegicus | 9.07 | yes |
| Mineralocorticoid receptor:Homo sapiens | 8.36 | yes |
| Testis-specific androgen-binding protein:Homo sapiens | 8.23 | yes |
| Tyrosinase:Agaricus bisporus | 8.23 | yes |
| Progesterone receptor:Bos taurus | 8.11 | yes |
| Corticosteroid binding globulin:Homo sapiens | 8.01 | yes |
| Progesterone receptor:Homo sapiens | 7.61 | yes |
| Adenosine A3 receptor:Homo sapiens | 7.23 | yes |
| Dopamine transporter:Homo sapiens | 7.18 | yes |
| MAP kinase ERK1:Homo sapiens | 7.13 | yes |
| Constitutive androstane receptor:Mus musculus | 7.02 | yes |
| Estrogen receptor beta:Homo sapiens | 6.68 | yes |
| Estrogen receptor alpha:Homo sapiens | 6.67 | yes |
| Cytochrome P450 2C19:Homo sapiens | 6.57 | yes |
| Bile salt export pump:Homo sapiens | 6.33 | yes |
| Steroid 5-alpha-reductase 2:Homo sapiens | 5.66 | no |
| Niemann-Pick C1-like protein 1:Homo sapiens | 5.54 | no |
| Acetylcholinesterase:Homo sapiens | 5.53 | no |
| 11-beta-hydroxysteroid dehydrogenase 1:Mus musculus | 5.52 | no |
| Protein-tyrosine phosphatase 1B:Homo sapiens | 5.47 | no |
| Testis-specific androgen-binding protein:Rattus norvegicus | 5.42 | no |
| 11-beta-hydroxysteroid dehydrogenase 1:Homo sapiens | 5.39 | no |
| G-protein coupled bile acid receptor 1:Homo sapiens | 5.37 | no |
| 11-beta-hydroxysteroid dehydrogenase 2:Homo sapiens | 5.34 | no |
| Cytochrome P450 3A4:Homo sapiens | 5.29 | no |
| Solute carrier organic anion transporter family member 1A1:Rattus norvegicus | 5.27 | no |
| Sigma opioid receptor:Homo sapiens | 5.27 | no |

Figure S3. Output report from target fishing analysis of potassium canrenoate by PLATO - Polypharmacology pLATform prediction (<https://prometheus.farmacia.uniba.it/plato/>)

Table S1. Laboratory data of blood count and serum proteins of patients at hospital admission according to 90-day mortality.

| | Survivors | Non-survivors | <i>p</i> |
|---|-------------|---------------|----------|
| | n = 247 | n = 247 | |
| <i>Blood Count</i> | | | |
| Basophiles (10 ³ /μL) | 0.021±0.024 | 0.023±0.031 | 0.912 |
| Basophiles (%) | 0.28±0.26 | 0.25±0.27 | 0.031 |
| Eosinophilic (10 ³ /μL) | 0.032±0.068 | 0.026±0.073 | 0.017 |
| Eosinophilic (%) | 0.50±1.08 | 0.29±0.72 | 0.003 |
| Hematocrit (%) | 39±6 | 38±7 | 0.040 |
| Hemoglobin (g/dL) | 12.7±2.2 | 12.3±2.2 | 0.008 |
| Lymphocytes (10 ³ /μL) | 1.08±0.91 | 0.98±0.95 | 0.008 |
| Lymphocytes (%) | 16±10 | 13±10 | < 0.001 |
| Mean Corpuscular Hemoglobin (pg) | 29.1±3.4 | 28.8±3.2 | 0.287 |
| Mean Corpuscular Hemoglobin Conc (g/dL) | 32.8±1.3 | 32.4±1.6 | 0.007 |
| Mean Cell Volume (fL) | 89±9 | 89±9 | 0.604 |
| Monocytes (10 ³ /μL) | 0.57±0.56 | 0.59±0.88 | 0.721 |
| Monocytes (%) | 8±5 | 7±7 | < 0.001 |
| Neutrophils (10 ³ /μL) | 5.7±3.3 | 7.6±4.7 | < 0.001 |
| Neutrophils (%) | 75±13 | 80±13 | < 0.001 |
| Platelets (10 ³ /μL) | 220±94 | 218±99 | 0.909 |
| Red Blood Cells (10 ⁶ /μL) | 4.41±0.81 | 4.29±0.82 | 0.039 |
| Red Cell Distribution Width (%) | 14.4±2.5 | 15.2±3.1 | < 0.001 |
| Red Cell Distribution Width (fl) | 46±8 | 49±9 | < 0.001 |
| White Blood Cells (10 ³ /μL) | 7.4±3.6 | 9.2±5.1 | < 0.001 |
| <i>Serum Proteins</i> | | | |
| Albumin (g/dL) | 48±5 | 46±6 | < 0.001 |
| Alpha-1 (g/dL) | 7.2±1.6 | 8.3±2.1 | < 0.001 |
| Alpha-2 (g/dL) | 15.6±3.0 | 16.0±3.3 | 0.503 |
| Beta-1 (g/dL) | 6.09±0.78 | 6.04±0.90 | 0.557 |
| Beta-2 (g/dL) | 6.2±1.1 | 6.8±1.8 | 0.006 |
| Gamma (g/dL) | 16.5±3.8 | 16.8±4.7 | 0.784 |
| Albumin/Globulin | 0.96±0.20 | 0.88±0.20 | < 0.001 |