

Supplementary material

Mortality in ICU Patients with COVID-19-Associated Pulmonary Aspergillosis

Table S1. Comorbidities of 1,437 CAPA patients included in the review.

Author, [reference number] publication's year	Comorbidities
Araya-Rojas[1], 2021	Chronic kidney disease 9.1% Chronic obstructive pulmonary disease 9.1% Diabetes mellitus 63.6% Hypertension 45.4% Neutropenia 9.1% Obesity 63.6%
Bartoletti[2], 2021	Cerebrovascular disease 10% Chronic kidney disease 20% Chronic obstructive pulmonary disease 13% Coronary disease 10% Diabetes mellitus 17% Hypertension 59% Malignancies 7% Obesity 37% Solid organ transplant 3%
Bentvelsen[3], 2022	Chronic obstructive pulmonary disease 25% Immunocompromised 4.4% Obesity 28.1% Pulmonary disease 59.1%
Bretagne[4], 2021	NA
Calderon-Parra[5], 2022	Chronic cardiac failure 21.4% Chronic renal failure 25% Chronic respiratory disease 48.1% Diabetes mellitus 39.3% Hematologic cancer 14.3% Hypertension 64.3% Immunocompromised 42.9% Ischemic heart disease 21.4% Liver cirrhosis 7.1% Solid malignancy 7.1% Solid organ transplant 17.9%
Casalini[6], 2022	Cardiovascular disorders 57.1% Chronic kidney disease 4.2% Diabetes 17.3% Hepatic disorders 2.4% Immune system disorders 4.2% Obesity 35.7%

	<p>Oncological disorders 8.3%</p> <p>Respiratory disorders 10.1%</p>
De Almeida[7], 2022	<p>Diabetes 57%</p> <p>Heart disease 36%</p> <p>Hypertension 50%</p> <p>Cancer 21%</p> <p>Chronic renal failure 7%</p> <p>Chronic obstructive pulmonary disease 36%</p>
Delliere[8], 2020	<p>Asthma 9.5%</p> <p>Chronic obstructive pulmonary disease 0</p> <p>Coronary disease 9.5%</p> <p>Diabetes 42.9%</p> <p>Hypertension 66.7%</p> <p>Immunocompromised 9.5%</p> <p>Obesity 19%</p>
Dupon[9], 2021	<p>Asthma 21.1%</p> <p>Chronic obstructive pulmonary disease 21.1%</p> <p>Chronic renal failure 10.5%</p> <p>Diabetes 36.8%</p> <p>Hypertension 36.8%</p> <p>Obesity 5.3%</p> <p>Solid cancer 15.8%</p>
Er[10], 2022	<p>Asthma 4.7%</p> <p>Chronic obstructive pulmonary disease 9.3%</p> <p>Chronic renal failure 18.6%</p> <p>Collagen tissue disease 2.3%</p> <p>Congestive heart failure 23.3%</p> <p>Coronary artery disease 30.2%</p> <p>Diabetes mellitus 37.2%</p> <p>Hypertension 46.5%</p> <p>Solid organ transplantation 2.3%</p> <p>Solid organ tumor 23.3%</p>
Erami[11], 2022	<p>Acute lymphoblastic leukemia 5.9%</p> <p>Acute myeloblastic leukemia 11.7%</p> <p>Chronic myeloblastic leukemia 5.9%</p> <p>Diabetes mellitus 70.6%</p> <p>Heart failure 29.4%</p> <p>Kidney disorder 35.3%</p> <p>Liver transplantation 17.6%</p>
Ergun[12], 2021	<p>Autoimmune disease 5.1%</p> <p>Cardiovascular disease 41%</p> <p>Chronic kidney disease 2.6%</p> <p>Diabetes mellitus 25.6%</p> <p>Hematological malignancy 2.6%</p> <p>Pulmonary disease 23.1%</p> <p>Solid organ malignancy 10.3%</p> <p>Solid organ transplant 2.6%</p> <p>Stem cell transplant 2.6%</p>
Fischer[13],	<p>Asthma 0</p>

2022	<p>Autoimmune disease 0</p> <p>Cardiovascular disease 46.2%</p> <p>Cerebrovascular disease 30.8%</p> <p>Chronic obstructive pulmonary disease 15.4%</p> <p>Diabetes 30.8%</p> <p>Hematologic disease 7.7%</p> <p>Hypertension 61.5%</p> <p>Neoplasm 7.7%</p> <p>Other pulmonary disease 0</p>
Fortun[14], 2023	<p>Active hematologic disorder 8%</p> <p>Active solid tumor 5.8%</p> <p>Chronic renal failure 10.9%</p> <p>Diabetes mellitus 26.8%</p> <p>Hepatic insufficiency (acute or chronic) 10.9%</p> <p>Progenitor hematologic transplant 2.9%</p> <p>Renal insufficiency (acute or chronic) 35%</p> <p>Solid organ transplant 1.4%</p>
Gangneux[15], 2022	<p>Asthma 7%</p> <p>Chronic obstructive pulmonary disease 11%</p> <p>Diabetes 34%</p> <p>Dyslipidemia 3%</p> <p>Hypertension 47%</p> <p>Immunodepression 14%</p> <p>Solid organ transplantation 11%</p>
Giacobbe[16], 2022	NA
Giusiano[17], 2022	<p>Chronic obstructive pulmonary disease 10.5%</p> <p>Diabetes 31.6%</p> <p>Emphysema 5.3%</p> <p>HIV infection 5.3%</p> <p>Hypertension 47.4%</p> <p>Lymphoma 5.3%</p> <p>Obesity 26.3%</p> <p>Renal insufficiency 5.3%</p> <p>Ulcerative colitis 5.3%</p> <p>Vasculitis 5.3%</p>
Hashim[18], 2022	<p>Chronic kidney disease 7.7%</p> <p>Chronic liver disease 5.4%</p> <p>Chronic pulmonary disease 23%</p> <p>Coronary artery disease 7.7%</p> <p>Diabetes mellitus 60.3%</p> <p>HIV infection 1.4%</p> <p>Hypertension 45.9%</p> <p>Malignancy 2.7%</p> <p>Renal transplantation 2.7%</p>
Hatzl[19], 2021	NA
Huang[20], 2022	<p>Chronic airway diseases 0</p> <p>Chronic kidney diseases 27%</p> <p>Cirrhosis 9%</p> <p>Diabetes mellitus 45%</p>

	Malignancies 9%
Iqbal[21], 2021	Diabetes mellitus 73.8% Cirrhosis 8.2% Hypertension 49.2% Malignancy 21.3%
Janssen[22], 2021	Asthma 2% Cardiovascular disease 60% Chronic obstructive pulmonary disease 19% Diabetes mellitus 21% HIV/AIDS 7% Liver cirrhosis 0 Rheumatological disease 12% Solid organ malignancy 7%
Kim[23], 2022	Diabetes mellitus 23.5% Hypertension 64.7% Chronic heart disease 11.8% Chronic lung disease 29.4% Chronic kidney disease 0 Malignancy 5.9% Chronic hepatitis 0 Neurologic disease 5.9%
Koukaki[24], 2022	Chronic respiratory diseases 14.3% Diabetes 14.3% Hypertension 35.7% Hypothyroidism 7.1% Immunosuppression 21.4%
Lahmer[25], 2021	Asthma 0 Atrial fibrillation 9% Chronic obstructive pulmonary disease 18% Coronary heart disease 9% Chronic kidney disease 9% Diabetes mellitus 27% Hypertension 63%
Lee[26], 2022	Chronic kidney disease 20% Chronic liver disease 20% Chronic obstructive pulmonary disease 20% Diabetes mellitus 50% Heart failure 10% Hematologic malignancies 20% History of hematopoietic stem cell transplantation 10% History of solid organ transplantation 0 Solid cancer 10%
Leistner[27], 2022	AIDS/HIV 0 Cancer 11% Diabetes mellitus 32% Heart disease 15% Liver disease 23% Lung disease 40% Peptic ulcer 4% Renal disease 87% Rheumatic disease 4%

	<p>Neurologic disease 6%</p> <p>Vascular disease 17%</p>
Marta[28], 2022	<p>Cardiovascular disease 31.4%</p> <p>Chronic pulmonary disease 22.8%</p> <p>Diabetes mellitus 25.7%</p> <p>Dyslipidemia 51.4%</p> <p>Hypertension 65.7%</p> <p>Obesity 34.3%</p>
Melchers[29], 2022	<p>Active oncologic disease 15%</p> <p>Cardiac disease 62%</p> <p>Chronic respiratory disease 31%</p> <p>Diabetes mellitus 62%</p> <p>Renal insufficiency 15%</p>
Permpalung[30], 2022	<p>Alcohol abuse 2.6%</p> <p>Anemia, blood loss 10.3%</p> <p>Anemia, nutritional deficiency 71.8%</p> <p>Chronic pulmonary disease 41%</p> <p>Coagulopathy 51.3%</p> <p>Congestive heart failure 46.2%</p> <p>Depression 30.8%</p> <p>Diabetes mellitus complicated 38.5%</p> <p>Diabetes mellitus uncomplicated 38.5%</p> <p>Drug abuse 7.7%</p> <p>Fluid and electrolytic disorders 97.4%</p> <p>HIV/AIDS 2.6%</p> <p>Hypertension 74.4%</p> <p>Hypertension complicated 56.4%</p> <p>Hypothyroidism 10.3%</p> <p>Liver disease 35.9%</p> <p>Lymphoma 2.6%</p> <p>Monoclonal gammopathy 0</p> <p>Multiple myeloma 5.1%</p> <p>Obesity 41%</p> <p>Other neurologic disorders 53.8%</p> <p>Paralysis 17.9%</p> <p>Peptic ulcer disease excluding bleeding 7.7%</p> <p>Peripheral vascular disorders 15.4%</p> <p>Pulmonary vascular diseases 41%</p> <p>Psychosis 12.8%</p> <p>Renal failure 43.6%</p> <p>Rheumatoid arthritis/collagen vascular diseases 2.6%</p> <p>Solid organ transplant 0</p> <p>Solid tumor 25.6%</p> <p>Weight loss 35.9%</p>
Prattes[31], 2022	<p>Active malignant disease 10.3%</p> <p>Cardiovascular disease 57.8%</p> <p>Diabetes mellitus 29.4%</p> <p>History of smoking 13.3%</p> <p>Obesity 28.2%</p> <p>Pulmonary disease 23.9%</p>

	Solid organ transplantation 4.9%
Ranhel[32], 2021	Alzheimer’s disease 10% Atrial fibrillation 10% Chronic obstructive pulmonary disease 30% Diabetes mellitus 20% Dyslipidemia 30% Hypertension 50% Hypothyroidism 30% Mono nephrectomy 10% Nephropathy 10% Obesity 20% Osteoporosis 20% Psoriasis 10% Solid organ transplantation 30% Sjogren syndrome 10%
Rouze[33], 2022	Diabetes mellitus 28.6% Chronic heart failure 0 Chronic kidney disease 7.1% Chronic respiratory failure 7.1% Cirrhosis 0 Chronic obstructive pulmonary disease 14.3% Heart disease 14.3% Hematologic malignancy 7.1% HIV 0 Immunosuppression 14.3% Immunosuppressive drugs 14.3% Organ transplant 0 Solid cancer 0
Sivasubramanian[34], 2021	Coronary artery disease 35% Diabetes mellitus 64% Hypertension 79% Liver disease 12% Lung disease 25% Obesity 45% Renal disease 25% Stroke/dementia 22%
Velez Pintado[35], 2021	Cancer 19% Chronic obstructive pulmonary disease 6% Diabetes mellitus 31% Hypertension 25% Obesity 38% Overweight 50%
White[36], 2020	Alzheimer’s disease 4% Autoimmune disease 8% Cardiac disease 4% Chronic kidney disease 8% Chronic respiratory illness 48% Diabetes mellitus 24% Essential thrombocythemia 4% Hematologic malignancy 4% Hypertension 32%

	<p>Liver disfunction 4%</p> <p>Obesity 24%</p> <p>Solid cancer 20%</p> <p>Vasculitis 4%</p>
<p>Xu[37], 2021</p>	<p>Autoimmune disease 3.3%</p> <p>Cerebrovascular disease 12.8%</p> <p>Chronic cardiac disease 16.7%</p> <p>Chronic kidney disease 3.9%</p> <p>Chronic liver disease 6.4%</p> <p>Chronic pulmonary disease 6.4%</p> <p>Coronary disease 10.3%</p> <p>Diabetes mellitus 48.7%</p> <p>Hypertension 48.7%</p> <p>Liver cirrhosis 1.3%</p>
<p>Zhang[38], 2021</p>	<p>Asthma 18%</p> <p>Chronic obstructive pulmonary disease 24%</p> <p>Diabetes mellitus 36%</p> <p>End stage renal disease 12%</p> <p>Hyperlipidemia 21%</p> <p>Hypertension 58%</p> <p>Obesity 21%</p>