

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%

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

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

	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%

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

	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>
Xu[37], 2021	<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>
Zhang[38], 2021	<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>