

## **In IBD Patients High-Dose Curcumin Fails to Produce Lasting Gut Microbiome Changes**

Researchers assessed health-related quality of life (HRQoL) and four-year mortality in [intensive care unit](#) (ICU)-treated patients with coronavirus disease 2019 (COVID-19)-associated acute respiratory distress syndrome (ARDS).



### **Study**

In the present study, researchers evaluated four-year mortality and HRQoL among ICU-treated COVID-19 ARDS patients in Poland in a single-center cohort conducted at a temporary hospital. Eligible subjects were adults admitted to a temporary hospital between December 2020 and July 2021 with [severe acute respiratory syndrome coronavirus 2](#) (SARS-CoV-2) infection and ARDS requiring invasive mechanical ventilation.

Baseline clinical variables included demographics, comorbidities, vital signs, respiratory parameters, and laboratory markers. In addition, the length of ICU stay, the interval between symptom onset and intubation, and the [acute physiology](#) and chronic health evaluation (APACHE) II score were included. Primary endpoints were assessed at 30 days and four years after ICU admission. Four years after ICU admission, subjects were contacted for a telephone interview, and vital status was also determined from electronic or administrative records. The study had a retrospective–prospective (ambispective), single-center cohort design, and follow-up interviews were conducted between April and August 2025.

The study's primary outcomes included all-cause mortality at 30 days and four years post-ICU admission. Secondary outcomes were financial burden, [sleep disturbance](#), cognitive complaints, time to return to work, and indirect costs. In secondary analyses, late mortality (between 30 days and four years post-ICU admission) was assessed among 30-day survivors, and long-term outcomes, including functional status, HRQoL, and dyspnea, were evaluated among four-year survivors.

The post-COVID-19 functional status (PCFS) scale was used to assess global functional status. The [modified Medical Research Council](#) (mMRC) and the fatigue assessment scales were used to measure dyspnea and fatigue, respectively. Two screening items from the cognitive failures questionnaire were used to capture subjective difficulties with memory and attention.

HRQoL was assessed using the five-level EuroQol-5 Dimension instrument (EQ-5D-5L) and the EuroQol visual analogue scale (EQ-VAS). [Insomnia](#) was examined using a screening question to capture sleep disturbance. Additional interview items captured rehospitalization, rehabilitation

status and duration, employment status, subjective financial burden, and time to return to work. Multivariable logistic regression models were used to examine factors associated with (early and late) mortality.

### **Findings**

The study included 283 patients with COVID-19-associated ARDS who received ICU treatment. Among these, 29% died within the first 30 days; among the 30-day survivors, 44 additional subjects died over the follow-up. Overall, the cumulative mortality over four years after ICU admission was 44.5%, reflecting both early ICU mortality and additional deaths occurring during long-term follow-up rather than a continuous uniform risk over time. Patients who died in the first 30 days were older and had higher lactate dehydrogenase levels, [white blood cell](#) (WBC) counts, D-dimer levels, and lower platelet counts than 30-day survivors.

Non-survivors also had a longer ICU stay and higher APACHE II scores than survivors. In adjusted analyses, higher WBC count and older age were associated with 30-day mortality. Likewise, late non-survivors (those who died after 30 days) had a more severe acute-phase profile. Coronary heart disease, [chronic obstructive pulmonary disease](#), and chronic kidney disease were prevalent among late non-survivors. However, ICU length of stay did not differ significantly between long-term survivors and those who died between day 31 and year four. In multivariable analyses, only older age remained independently associated with late mortality.

Among the 157 survivors at four years, 81 completed the follow-up interview. Of these, 30% reported functional limitation and 47% reported insomnia. About 27.5% had clinically relevant fatigue, 21.3% reported moderate or worse discomfort/pain, and 15% did not return to full-time work. Because only 81 of 157 eligible four-year survivors completed interviews, these long-term [symptom](#) estimates may be influenced by survivorship and response bias.

Further, 39% received rehabilitation, and 30% were re-hospitalized at least once. The median quality-adjusted life years (QALYs) were estimated at 3.7 years. Participants with cognitive complaints, [rehabilitation](#), or clinically relevant fatigue or dyspnea, and those who did not return to full-time work, had reduced QALYs at four years, likely reflecting greater baseline impairment rather than an adverse effect of rehabilitation itself.

### **Conclusion**

Taken together, four-year mortality was substantially high (~45%) among COVID-19 [ARDS patients](#) in Poland in this single-center cohort. Higher WBC count and older age were associated with early mortality, while only the latter was independently associated with late mortality. Among four-year survivors, a considerable proportion had lingering symptoms and limitations, including dyspnea, sleep disturbance, reduced functioning, and cognitive complaints.

### **Source:**

<https://www.news-medical.net/news/20260302/High-dose-curcumin-fails-to-produce-lasting-gut-microbiome-changes-in-IBD-patients.aspx>