# Article information:

Latent class analysis to predict intensive care outcomes in Acute Respiratory Distress Syndrome: a proposal of two pulmonary phenotypes - PMC  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8060783/>

# Article summary:

1. Acute respiratory distress syndrome (ARDS) is a heterogeneous syndrome that has been difficult to effectively diagnose and treat.

2. Latent class analysis was used to identify two distinct pulmonary phenotypes of ARDS based on respiratory mechanics, gas-exchange and computed tomography-derived gas- and tissue-volumes.

3. Patients belonging to the “recruitable” phenotype had a higher intensive care mortality rate than those belonging to the “non-recruitable” phenotype.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article titled “Latent class analysis to predict intensive care outcomes in Acute Respiratory Distress Syndrome: a proposal of two pulmonary phenotypes” is an interesting study that provides insight into the use of latent class analysis as a tool for identifying distinct pulmonary phenotypes of ARDS. The authors provide evidence for their findings by conducting a retrospective analysis of a prospective cohort of 238 patients with ARDS who were monitored for clinical variables, respiratory mechanics, and computed tomography scans at predefined PEEP levels.

The article is generally well written and provides clear evidence for its claims. However, there are some potential biases that should be noted. First, the study was conducted retrospectively which may lead to bias in the results due to recall bias or selection bias. Additionally, the sample size was relatively small which could limit the generalizability of the results. Furthermore, it is unclear if any other factors such as age or gender were taken into account when analyzing the data which could also affect the results. Finally, it would have been beneficial if more information had been provided about how exactly latent class analysis was used in this study as well as what criteria were used to determine which patients belonged to each phenotype group.

In conclusion, this article provides an interesting look at how latent class analysis can be used to identify distinct pulmonary phenotypes of ARDS and their associated outcomes. However, there are some potential biases that should be taken into consideration when interpreting these results such as recall bias or selection bias due to its retrospective nature as well as its small sample size which could limit generalizability.

# Topics for further research:

* ARDS pulmonary phenotypes
* Latent class analysis
* Retrospective cohort study
* Respiratory mechanics
* PEEP levels
* Selection bias in research

# Report location:

<https://www.fullpicture.app/item/c88915b3a591e53c23fd71a63dfba5d7>