# Article information:

Disease Progression Modeling for Economic Evaluation in Nonalcoholic Fatty Liver Disease—A Systematic Review - ScienceDirect
<https://www.sciencedirect.com/science/article/pii/S1542356521011538>

# Article summary:

1. This systematic review investigated how the natural course of nonalcoholic fatty liver disease (NAFLD) has been modeled in health economic applications.

2. The review found structural differences in NAFLD disease progression modeling among the 28 included studies, with differences in data inputs not explicitly justified in most studies.

3. These differences may have a large impact when evaluating NAFLD interventions, and further inquiry is needed to understand the natural course of NAFLD.

# 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 “Disease Progression Modeling for Economic Evaluation in Nonalcoholic Fatty Liver Disease—A Systematic Review” is a well-written and comprehensive review of the literature on modeling the natural history of nonalcoholic fatty liver disease (NAFLD). The authors conducted a systematic search of multiple databases and identified 28 relevant articles that were then reviewed for inclusion based on prospectively defined criteria. The authors then categorized and summarized different approaches to modeling the natural history of NAFLD, as well as tabulated transition probabilities from each study.

The article is generally reliable and trustworthy, as it provides an extensive overview of existing literature on this topic and presents its findings objectively without bias or promotional content. The authors also provide detailed information about their methods, including their search strategy, inclusion criteria, and data extraction process. Furthermore, they present both sides of the argument by noting potential limitations such as lack of data inputs and heterogeneity in model quality across studies.

However, there are some points that could be improved upon to make the article more reliable and trustworthy. For example, while the authors note potential limitations such as lack of data inputs and heterogeneity in model quality across studies, they do not explore these issues further or discuss possible solutions or strategies for addressing them. Additionally, while they provide a simplified model to investigate how differences in transition probabilities may affect estimated disease progression using transition probabilities from two studies, they do not provide any evidence or analysis to support their conclusions about how these differences may impact study results. Finally, while they note that treatments to slow down disease progression are sparse, they do not discuss any potential implications or consequences this may have for health policy decision making regarding NAFLD interventions.

In conclusion, overall this article is reliable and trustworthy; however there are some areas where it could be improved upon to make it even more so.

# Topics for further research:

* Nonalcoholic fatty liver disease interventions
* Disease progression modeling techniques
* Data inputs for disease progression modeling
* Heterogeneity in model quality
* Strategies for addressing limitations in disease progression modeling
* Implications of sparse treatments for health policy decision making

# Report location:

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