Outcomes Committee 2026-04-13

Meeting summary

Quick recap

The meeting focused on reviewing ongoing projects related SLD. James presented a novel study analyzing the relationship between different 24-hour activity patterns, including sleep, sedentary behavior, and moderate-to-vigorous physical activity, and liver stiffness in patients with MASLD. The study used a unique approach to isolate these variables and found that sleep balance was significantly associated with liver stiffness, while sedentary behavior's association was partially explained by metabolic abnormalities. Lynn Gerber provided an overview of the Exercise Lifestyle Task Force's efforts to understand exercise recommendations for liver disease patients. The team discussed several other ongoing projects, including global MASLD studies, economic analyses, liver transplantation research, and stigma studies. Participants also addressed challenges with data collection, particularly in Europe due to GDPR restrictions, and discussed the importance of considering gender differences in future studies.

Next steps

- James: Complete final wrap-up and submission of the exercise/muscle manuscript after incorporating co-worker reviews.
- James: Conduct analysis of pediatric/adolescent SLD using restricted NHANES data, including activity data, at the CDC.
- Aleksander: Share examples of data sharing/privacy approvals from other countries with European team lawyers to facilitate data sharing under GDPR.
- Adrian, Linda, Zobair, Andrei: Review and integrate additional transplant patient data into the global transplant registry project; distribute to participating sites.
- Eliabe: Complete full text reading and start data extraction for the MASLD-HCC meta-analysis within the next two weeks.
- All site leads (e.g. teams in Brazil, Chile, Europe): Continue to recruit and provide additional patient and provider data for the ALD stigma survey, especially from underrepresented regions (Europe, Latin America).
- James and Maria: For all future GNC analyses, include gender-based analysis and, if possible, report gender interactions in main text or supplement.
- Fatema: Continue outreach to sites (including Mongolia) to enhance enrollment and follow-up in the global registry.

Summary

Project Updates and Initiatives Review

The team met to review ongoing projects and discuss new initiatives. Shira provided an update on the SPFQ project, mentioning that a paper is being submitted and several groups from the GNC network are interested in conducting validation studies. James was set to present on the Exercise and Muscle project, which is part of the Lifestyle project led by Lynn Gerber and involves a novel approach to analyzing activity patterns within a 24-hour period in relation to liver disease, particularly MASLD.

MASLD Behavior and Liver Stiffness

James presented his research on the association between different behaviors and liver stiffness among individuals with MASLD. He explained his approach of using balance scores to isolate independent variables and found that higher sleep ratios were associated with lower liver stiffness, while sedentary behavior's association was partially explained by metabolic abnormalities. The study also examined subgroups based on alcohol consumption history, revealing that for low drinkers, replacing sedentary time with moderate-to-vigorous physical activity was beneficial, while for former drinkers, replacing sedentary time with sleep was optimal. Zobair provided context about the different subgroups of MASLD patients and noted that while the study couldn't draw strong conclusions about metabolic ALD and ALD due to low prevalence, it provided valuable insights about behavior patterns in the MASLD population.

Chronic Liver Disease Exercise Study

Lynn presented an update on a task force examining exercise recommendations for patients with chronic liver disease. The task force, led by experts in exercise physiology and clinical research, aimed to understand the impact of physical activity on liver disease populations. They conducted two main projects: analyzing global exercise patterns and using NHANES data to explore correlations between sedentary behavior and liver stiffness. The findings indicated a correlation between sedentary behavior and liver stiffness, with sleep also being a significant factor in the 24-hour activity balance.

Presentation Feedback on Liver Study

Patrizia provided feedback on James's presentation, highlighting concerns about underreporting in people with low socioeconomic status and the potential influence of caffeine and cannabis use on liver disease. James confirmed that socioeconomic factors including income level, race, education,

and marital status were included as confounders in the multivariate analysis. Adrian suggested analyzing the geographic distribution of the population and proposed extending the study to pediatric populations in Latin America, noting that pediatric societies would find this data impactful.

Pediatric Liver Disease Data Projects

The team discussed two ongoing projects related to pediatric and adolescent liver disease data. Zobair explained that they received approval to analyze restricted NHAINS data on SLD in young populations, which will include alcohol consumption data that doesn't exist elsewhere globally. Aleksander raised concerns about defining former drinkers as a specific risk group, noting they appear to have higher relapse rates, though it's unclear whether this is due to undetected current drinking or metabolic factors. The discussion highlighted limitations in their current data set, particularly the lack of physiological and inflammatory marker data, with Zobair acknowledging that prospective collection will be needed to better address these challenges.

Research Findings and Future Directions

The group discussed research findings and potential areas for further exploration. Nicole raised questions about sleep apnea's impact on results and pharmacotherapy effects, particularly regarding GLP-1s and alcohol use disorder treatment. James confirmed that sleep apnea data was included in the analysis, though Zobair noted the enhanced data lacked comprehensive pharmacotherapy information. Wendy inquired about how physical activity data was categorized, to which James responded it was self-reported without distinction between vocational and avocational activity. Manal suggested analyzing treated versus untreated sleep apnea, particularly regarding CPAP usage and its potential impact on metabolic risk factors and liver disease. Zobair agreed this could be a promising future project with a larger patient population.

Liver Disease Research Progress Updates

The meeting focused on updates and progress across multiple ongoing research projects related to liver diseases, particularly Non-Alcoholic Steatohepatitis (NASH) and related conditions. Zobair provided updates on several published and ongoing studies, including the Global NASH LD project, economic analyses, and stigma-related research. Key discussions included challenges with data collection in Europe due to GDPR regulations, with Aleksander suggesting potential workarounds and the need to review legal permits in different countries. The team also discussed ongoing liver transplantation projects, a global transplant registry initiative led by Adrian, and a meta-analysis being conducted by Eliabe. The conversation ended with Linda mentioning the availability of a follow-up Global Consensus paper and an upcoming project on autoimmune hepatitis and liver transplantation.

Additional points to note:

• Future GNC analyses should include gender-based analyses and, when sample size allows, gender interaction analyses in either the main manuscript or supplementary materials.

• The Exercise and Muscle Mass project is close to finalization, with co-author feedback being incorporated; an oral presentation has also been accepted at EASL.

• Activity-pattern analyses will continue to consider MASLD subgroups based on alcohol-consumption history, including abstainers, former drinkers, and low drinkers, given their distinct behavioral and outcome profiles.

• The ALD stigma survey has enrolled both patient and provider participants, but additional recruitment is still needed, particularly from Europe and Latin America.

• Several Global MASLD projects are ongoing or under review, including analyses of NIT performance, lean MASLD, mortality drivers, SNPs, MetALD cohorts, MASLD with HIV/viral hepatitis, HCC, and central pathology reading.

• The global transplant registry project is being developed/expanded and is expected to capture waiting-list data, explant pathology, donor characteristics, post-transplant immunosuppression, complications, and NIT validation in transplant populations.

• The restricted NHANES pediatric/adolescent analysis has received CDC approval and will include SLD spectrum outcomes, alcohol-consumption data, and activity-pattern data.

• GDPR-related barriers remain a challenge for European data sharing; potential solutions include reviewing country-specific legal approvals, summary-data approaches, and alternative data-integration models.

• The MASLD guideline update has been accepted for publication in Clinical Gastroenterology, and the Global Consensus follow-up paper is now available online.