Capsule Commentary on Castro et al., Statin Use, Diabetes Incidence and Overall Mortality in Normoglycemic and Impaired Fasting Glucose Patients

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Every medical decision is a balance between potential benefit and potential risk. Statins have recently been associated with an increased risk of developing diabetes, which has raised concerns given their widespread use.¹ Castro et al.² investigated the association between statin use and the risk of diabetes and overall mortality in an observational cohort study of over 18,000 non-diabetic patients over a 6-year period. The authors found that statins were associated with an increased risk of developing diabetes and a similar reduction in mortality, and conclude that the overall benefit of statins outweighs the incident diabetes risk.

This study has a number of important strengths. The focus on mortality data adds to the information that clinicians need in order to balance risk and benefit. Although the study lacked a matched control group, the authors excluded participants not on medications, as these patients were presumably younger and healthier. Some weaknesses are also noteworthy. As the authors note, data on dosages, fill records, and duration of statin use were unavailable. It is possible that as hyperglycemia progressed in statin-treated patients, physicians discontinued or decreased statin therapy, leading to an attenuation of the observed effect. Importantly, as this was observational data, causal relationships are impossible to prove and should be viewed with skepticism.

This work adds to the growing body of information to help patients and providers make more informed decisions. Other

studies have reported increased diabetes risk over a longer duration,³ and long-standing diabetes has been shown to increase the risk of coronary heart disease.⁴ The long-term impact on the incidence of diabetes and mortality remains to be seen.

However, based on the available data, the balance of benefit and risk falls in favor of continuing to prescribe statins according to current guidelines, even in patients with impaired fasting glucose. The authors suggest a reasonable approach with periodic fasting glucose monitoring. Not to be ignored is the impact of lifestyle modification on mortality risk; in this study, the hazard ratio for smoking as a predictor of mortality far exceeds any of the other variables that were included.

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Compliance with Ethical Standards:

Conflict of Interest: The author declares that she does not have a conflict of interest.

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