



RESPONSE TO COMMENT ON NORDWALL ET AL.

Impact of HbA_{1c}, Followed From Onset of Type 1 Diabetes, on the Development of Severe Retinopathy and Nephropathy: The VISS Study (Vascular Diabetic Complications in Southeast Sweden). *Diabetes Care* 2015;38:308–315

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We thank Dr. Takahara (1) for the comment on our recent article exploring the impact of HbA_{1c} followed from diabetes onset, on the development of severe microvascular complications (2). As suggested, we have validated our results with Cox hazards analysis with severe microvascular events, i.e., laser-treated proliferative retinopathy and macroalbuminuria as a dependent variable and HbA_{1c} (mmol/mol) as a time-dependent covariate.

For laser-treated proliferative retinopathy, we found a hazard ratio of 1.038 (95% CI 1.025–1.052, $P < 0.001$) and for macroalbuminuria, a hazard ratio of 1.075 (95% CI 1.050–1.100, $P < 0.001$).

Analyzing our data with Cox hazards analysis thus shows the strong influence of long-term HbA_{1c} on severe

microvascular complications, in agreement with our previous conclusions.

In our article, we chose to analyze and present the results in a way that was perhaps easier for a clinician to interpret and apply in clinical routine. With life-table analysis we found that the incidence of both laser-treated proliferative retinopathy and macroalbuminuria increased sharply and occurred earlier with increasing long-term weighted mean HbA_{1c}. In the same manner, the prevalence of microvascular complications increased steeply with higher long-term weighted mean HbA_{1c}, categorized in different groups.

In conclusion, our study irrespective of statistical methods shows a strong association between development of late complications and long-term mean HbA_{1c}, and keeping the average HbA_{1c}

below 7.6% (60 mmol/mol) seemed sufficient to prevent microvascular complications for at least up to 20 years.

Duality of Interest. No potential conflicts of interest relevant to this article were reported.

References

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