

PREVALENCE OF RETINOPATHY AND MICROALBUMINURIA IN PEOPLE LIVING WITH TYPE 1 DIABETES 15 YEARS AFTER DIAGNOSIS, BY DECADE OF DIAGNOSIS : A CROSS-SECTIONAL, REAL-WORLD OBSERVATIONAL STUDY

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INTRODUCTION

BACKGROUND: New insulin analogs, novel glucose lowering therapies, advanced insulin pump systems and glucose measurement methods have changed diabetes care over the past decades.

AIM: To investigate the prevalence of complications in people with type 1 diabetes (T1D) ±15 years after diagnosis, as well as the impact of the decade of diagnosis using the data from the Belgian Initiative for Quality improvement and Epidemiology in Diabetes (IQED), collecting nationwide data.

METHODS

WHO: People living with type 1 diabetes (>16 years of age), diagnosed in three decades: 1988-1997, 1998-2007 and 2008-2010. All were younger than 30 years at clinical diagnosis.

WHAT: Prevalence of retinopathy and microalbuminuria (based on the patient's most recently available data).

TIMEPOINT: 15 years after diagnosis (range 12 - 17 years).

HOW: The prevalence of complications was analyzed using Generalized Estimating Equations (SAS9.4). Model predictions are presented with their 95%CI. Statistical comparisons were adjusted using the Tukey method.

RESULTS

Table 1. General characteristics

Decade	1988-1997	1998-2007	2008-2010
N =	1126	1078	213
Male, %	58	59	51
Median age, years	33	30	30
Median age at diagnosis, years	18	15	17
Median diabetes duration, years	15	15	13
Mean HbA1c, mmol (%)	68 (8.3)	65 (8.1)	62 (7.9)

Figure 1. Prevalence of retinopathy and albuminuria by decade, adjusted for age at diagnosis and sex

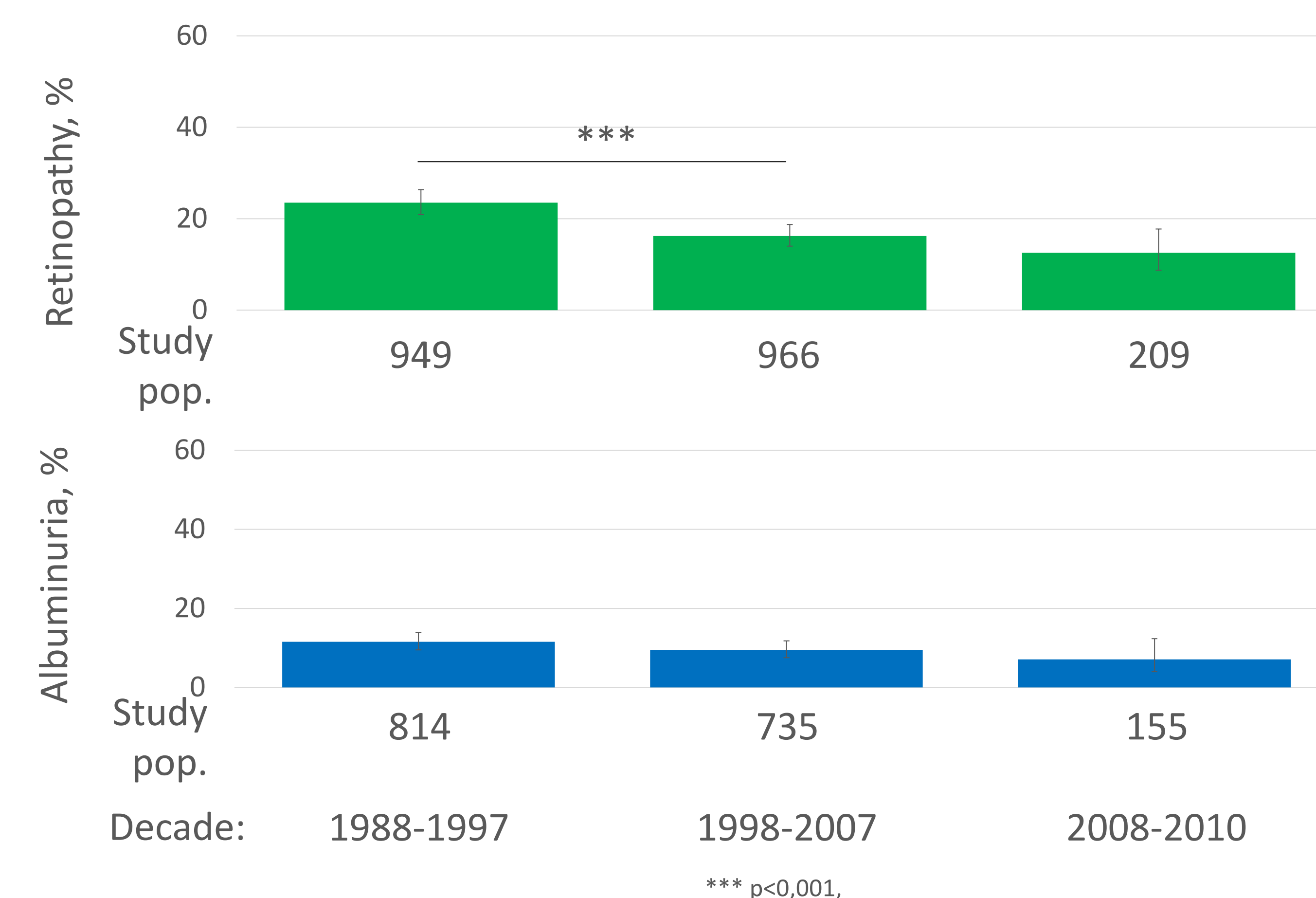
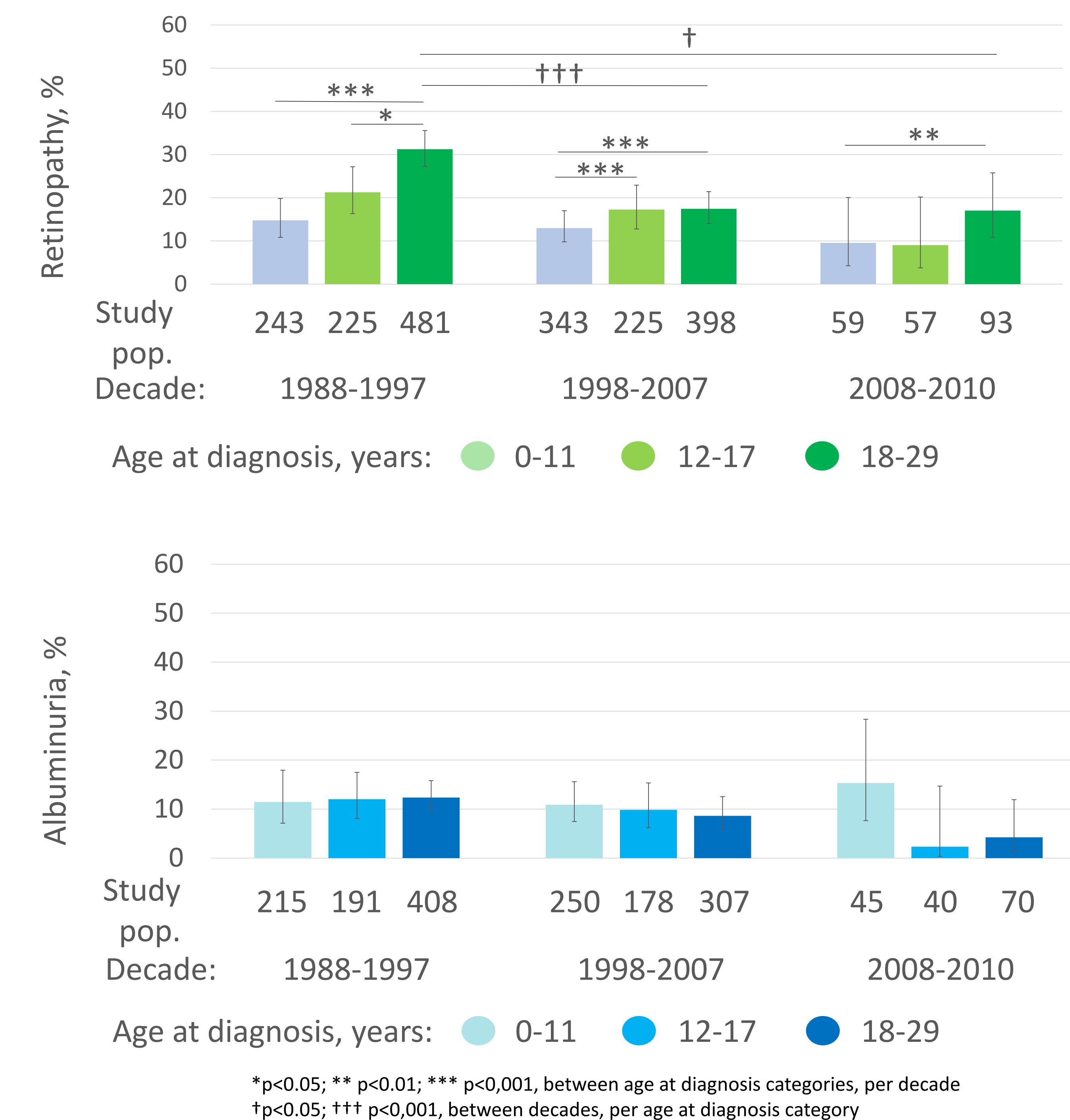


Figure 2. Prevalence of retinopathy and albuminuria by age at diagnosis and decade, adjusted for sex



CONCLUSION

- **Decade of diagnosis** impacted the prevalence of **microvascular complications** in people living with T1D 15 years after diagnosis, with a decrease in prevalence for those **diagnosed after 1997**.
- The most important **decrease** was observed for **retinopathy** in those **diagnosed after the age of 17 years**.