SUPPLEMENTARY DATA

Effect of Intensive Diabetes Therapy on the Progression of Diabetic Retinopathy in Patients with Type 1 Diabetes: 18 Years of Follow-up in the DCCT/EDIC

The Diabetes Control and Complications Trial (DCCT)/Epidemiology of Diabetes Interventions and Complications (EDIC) Research Group

Supplementary Table 1 presents the baseline adjusted model for 3+step progression and PDR that yield the adjusted hazard ratios and risk reductions for intensive versus conventional therapy cited in the main text.

Supplementary Figures 1-4 compare the Weibull model estimated cumulative incidence with the Turnbull non-parametric estimate. Overall these show that the distribution-free Turnbull estimated cumulative incidence is in general is similar to the model-based result, and if anything suggests that the actual relative risk might be greater, and the group difference more significant, than is provided by the model-based computations.

SUPPLEMENTARY DATA

Supplementary Table 1. Weibull models* of the joint DCCT treatment group and EDIC baseline covariate associations with risk of further 3-step progression from DCCT closeout or new PDR in EDIC.

	Further 3+ Step Progression			**PDR**	
	Hazard ratio (95% CI) †	**p-Value**		**Hazard ratio (95% CI) †**	**p-Value**
Diabetes Duration at DCCT baseline (yr)	0.95 (0.93, 0.98)	**<.0001**		0.98 (0.94,1.01)	0.22
HbA1c at DCCT entry (%)	1.01 (1.01,1.02)	**<.0001**		1.02 (1.01,1.03)	**<.0001**
Retinopathy level at DCCT close out:					
Microaneurysms vs. no retinopathy	0.64 (0.52,0.79)	**<.0001**		2.50 (1.35,4.61)	**0.003**
Mild NPDR vs. no retinopathy	0.68 (0.52,0.87)	**0.003**		6.39 (3.47,11.76)	**<.0001**
Moderate or severe NPDR vs. no retinopathy	1.57 (1.17,2.12)	**0.003**		19.98 (10.51,37.99)	**<.0001**
Intensive vs. Conventional	0.54 (0.46, 0.64)	**<.0001**		0.54 (0.41, 0.71)	**<.0001**

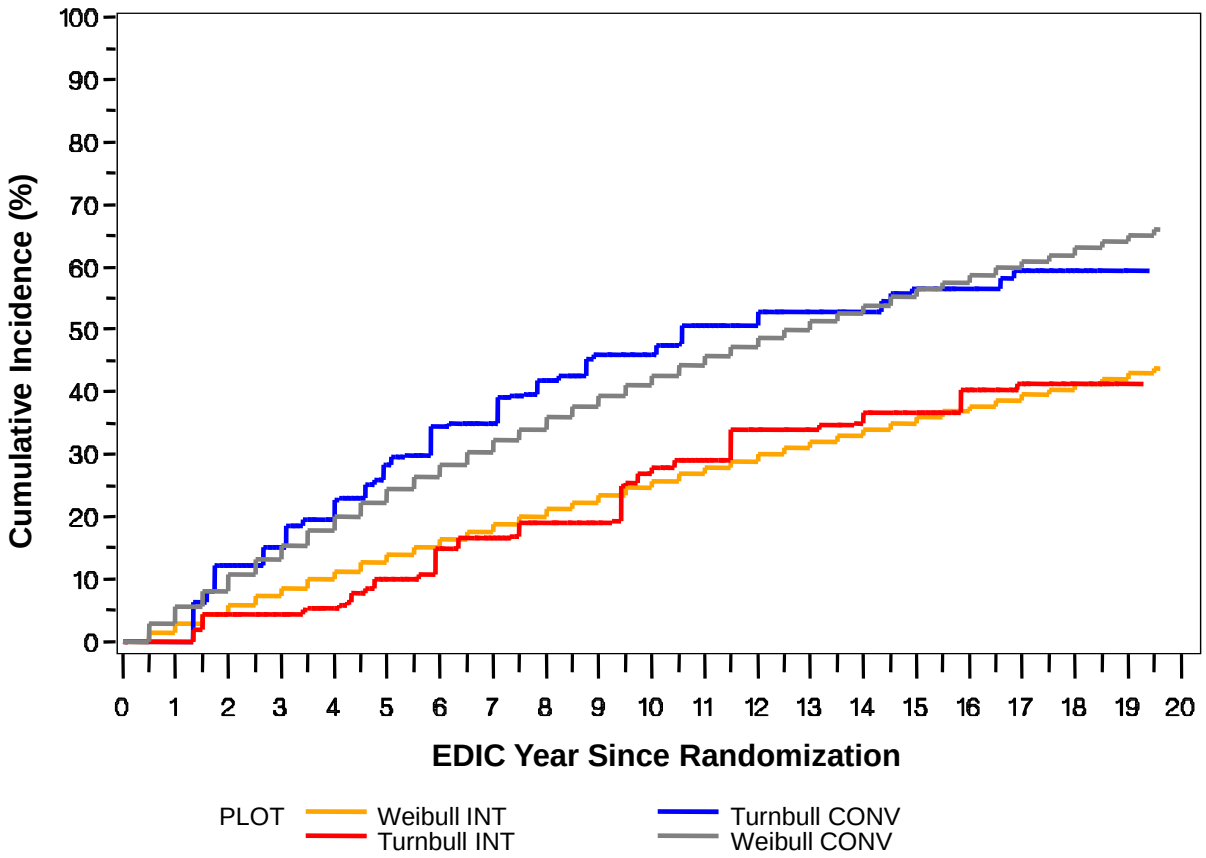
*Basic Weibull proportional hazards models evaluated the associations of DCCT treatment group with risk of further 3+ step progression or PDR in EDIC respectively, after adjustment for the primary vs. secondary cohort, diabetes duration, HbA1c at DCCT entry, and retinopathy level at DCCT closeout.

†Hazard ratio for covariates is evaluated per unit change in quantitative covariates, or status change in binary covariates unless noted otherwise.

Abbreviations: DCCT = Diabetes Control and Complications Trial; CI = confidence interval, NPDR = non proliferative diabetic retinopathy.

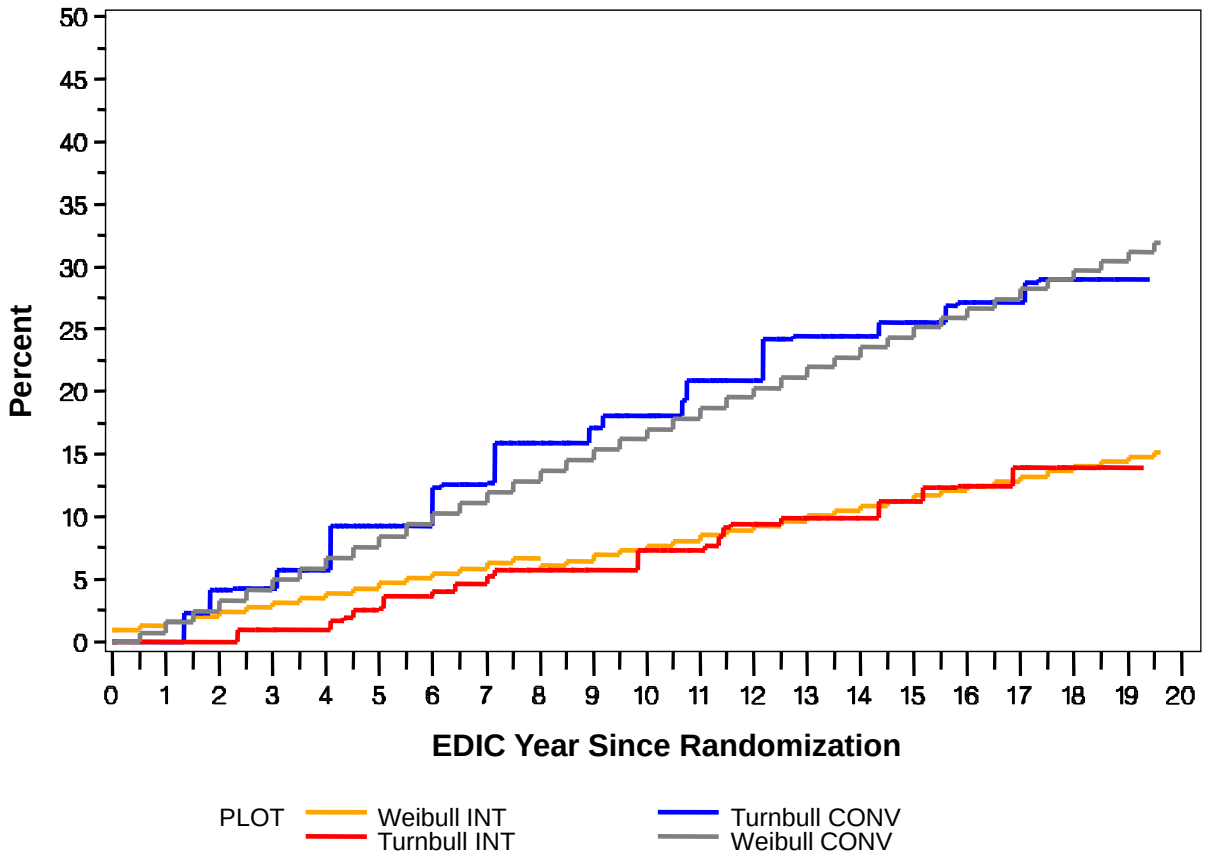
SUPPLEMENTARY DATA

Supplementary Figure 1. Cumulative Incidence of Further 3 Step Progression of Retinopathy between DCCT closeout and EDIC Year Eighteen Estimated from Weibull vs. Turnbull Nonparametric Method for Interval-Censored data



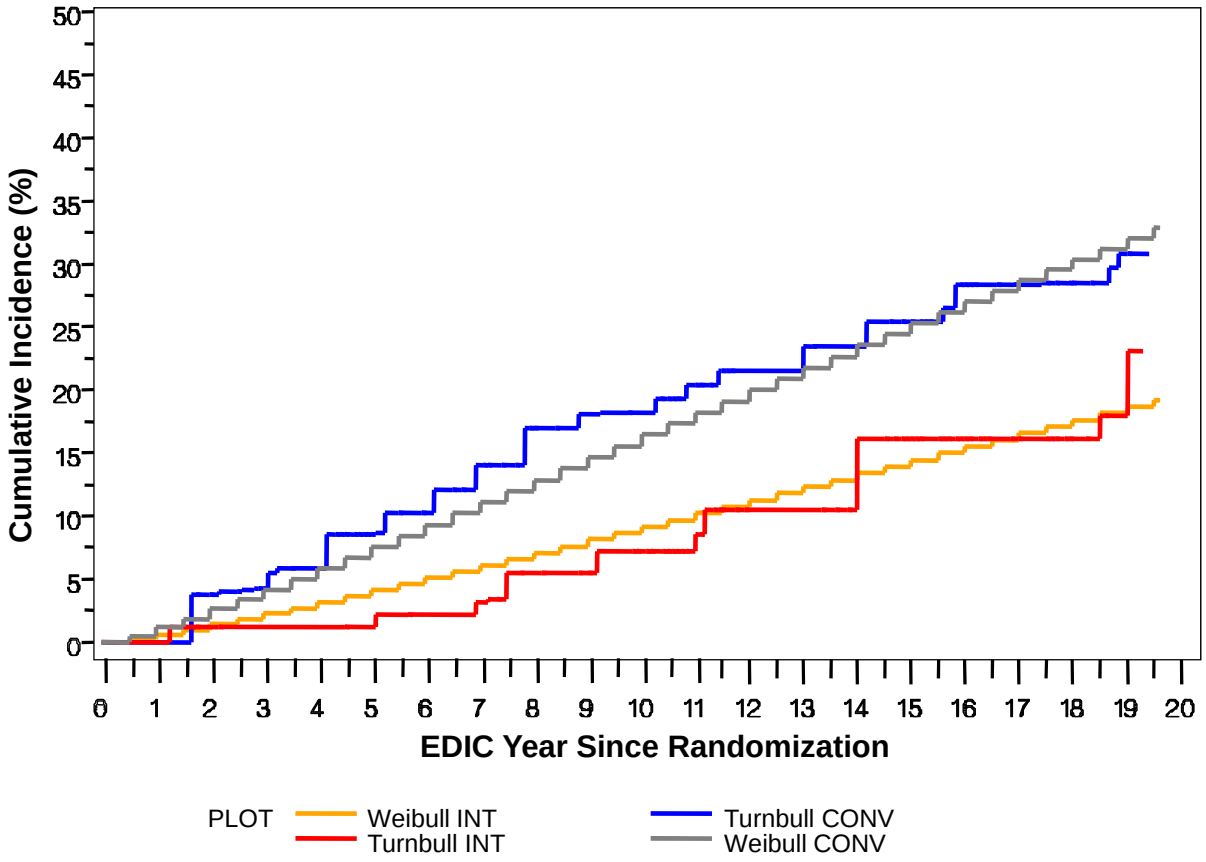
SUPPLEMENTARY DATA

Supplementary Figure 2. Cumulative Incidence of New Proliferative Diabetic Retinopathy between DCCT closeout and EDIC Year Eighteen Estimated from Weibull vs. Turnbull Nonparametric Method for Interval-Censored data



SUPPLEMENTARY DATA

Supplementary Figure 3. Cumulative Incidence of New Clinical Significant Macular Edema between DCCT closeout and EDIC Year Eighteen Estimated from Weibull vs. Turnbull Nonparametric Method for Interval-Censored data



SUPPLEMENTARY DATA

Supplementary Figure 4. Cumulative Incidence of New Photocoagulation between DCCT closeout and EDIC Year Eighteen Estimated from Weibull vs. Turnbull Nonparametric Method for Interval-Censored data