

## SUPPLEMENTAL MATERIAL

**Table 1: Prevalence of retinopathy stratified by grade according to duration of disease (5–10 years versus >10 years) in adolescents with type 1 diabetes (last observation per individual)**

Presence of retinopathy & severity	Duration disease (years)		Total
	5–10	>10	
<b>Number</b>	1,403	932	2,335
<b>Retinopathy (%)</b>	278 (19.8)	339 (36.4)	617
<b>Mild NPDR (grade 21)</b>	224 (16.0)	241 (25.9)	465
<b>Moderate NPDR (grade 31)</b>	54 (3.9)	88 (9.4)	142
<b>Moderate NPDR (grade 41)</b>	0 (0)	6 (0.6)	6
<b>Severe NPDR (grade 51)</b>	0 (0)	2 (0.2)	2
<b>Proliferative DR (grade 61)</b>	0 (0)	2 (0.2)	2

**Table 2: Patient demographics in adolescents with type 1 diabetes and severe NPDR or PDR (last observation per individual)**

Characteristic	Pooled	Adolescent 1	Adolescent 2	Adolescent 3	Adolescent 4
<b>Sex (female, %)</b>	2 (50)	Y	N	N	Y
<b>Age (years)</b>	15.6 [15.49-16.83]	18.0	15.7	15.6	15.4
<b>Age at diagnosis (years)</b>	2.8 [1.98-3.54]	2.4	1.6	3.8	3.2
<b>Duration (years)</b>	13.2 [11.96-14.85]	15.6	14.1	11.7	12.2
<b>HbA1c %</b>	9.7 [8.55-10.8]	10.3	8.1	11.3	9.0
<b>HbA1c mmol/mol</b>	82 [70-95]	89	65	100	75
<b>HbA1c &lt;7%</b>	0/4 (0)	N	N	N	N
<b>Insulin therapy</b>					
<b>1-2 injections</b>	0/0 (0)	-	-	-	-
<b>MDI</b>	4/4 (100)	4 injections	4 injections	3 injections	3 injections
<b>CSII</b>	0/0 (0)	-	-	-	-
<b>Insulin dose (units/kg/day)</b>	1.05 [0.81-1.17]	1.13	0.97	0.65	1.20
<b>Height SDS</b>	-1.31 [-2.56 to -0.73]	-1.51	-3.60	-1.11	-0.34
<b>Weight SDS</b>	-0.01 [-1.98 to 1.18]	0.70	-3.25	-0.71	1.67
<b>BMI SDS</b>	0.51 [-0.55 to 1.55]	1.27	-0.84	-0.26	1.83
<b>Overweight*</b>	1/4 (25)	N	N	N	Y
<b>Obeset</b>	1/4 (25)	N	N	N	Y
<b>SBP SDS</b>	-0.13 [-0.45 to 0.59]	1.01	-0.42	-0.48	0.16
<b>DBP SDS</b>	0.81 [0.37-0.95]	0.81	1.08	-0.07	0.81
<b>Cholesterol (mmol/L)</b>	6.0 [3.8-6.5]	3.8	-	6	6.5
<b>Cholesterol &gt;5.5mmol/L</b>	2/3 (66.7)	N	-	Y	Y
<b>Socioeconomic disadvantage</b>	1/4 (25)	N	Y	N	N
<b>Retinopathy grade</b>	51-61	PDR (61)	PDR (61)	Severe NPDR (51)	Severe NPDR (51)
<b>Diabetic macular edema</b>	2/4 (50)	N	N	Y	Y

Data are n (%), mean  $\pm$  SD, or median [IQR], yes = Y, no = N.