

Glycaemic and Weight Control in People Aged 65 or Younger Newly Diagnosed with Type 2 Diabetes in Spain: Insights from the PRIORITY-T2D Study

Supplementary material

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Supplementary material

Supplementary Table S1. Proportion of patients with HbA1c <6.5% at the five assessment time points during follow-up by baseline HbA1c levels

	HbA1c at baseline					
	<7.5% (N=4115)		7.5% to <8.5% (N=842)		≥8.5% (N=1687)	
	n/N valid	Percentage	n/N valid	Percentage	n/N valid	Percentage
Year 1	1520/2431	62.5	183/515	35.5	408/992	41.1
Year 2	1006/1822	55.2	108/356	30.3	232/708	32.8
Year 3	690/1374	50.2	75/278	27.0	104/445	23.4
Year 4	398/828	48.1	61/176	34.7	53/255	20.8
Year 5	95/223	42.6	10/48	20.8	18/67	26.9

HbA1c, glycated haemoglobin.

Supplementary Table S2. Significant differences between subjects with HbA1c <6.5% versus ≥6.5% at Year 1 of follow-up with respect to treatment patterns

	Subjects with HbA1c <6.5% at Year 1 of follow-up		Subjects with HbA1c ≥6.5% at Year 1 of follow-up		Between-group p-value
	n/N valid	Percentage	n/N valid	Percentage	
Subjects on treatment at Year 1 of follow-up	2324/2868	81.0	2180/2432	89.6	<0.001
Subjects with a combined therapy at baseline	436/2592	16.8	447/2187	20.4	0.002
Subjects with a combined therapy at Year 1 of follow-up	466/2324	20.1	716/2180	32.8	<0.001
Subjects with a very high efficacy treatment at Year 1 of follow-up	167/2324	7.2	331/2180	15.2	<0.001
Metformin	2215/2592	85.5	1,813/2187	82.9	0.017
Sulfonylurea	63/2592	2.4	139/2187	6.4	<0.001
DPP-4i	128/2592	4.9	154/2187	7.0	0.003
DPP-4i/metformin	222/2592	8.6	266/2187	12.2	<0.001

DPP-4i, dipeptidyl peptidase 4 inhibitor; HbA1c, glycated haemoglobin.

Supplementary Table S3. Significant differences between subjects with HbA1c <6.5% at any of the five assessment time points during the study versus ≥6.5% at all assessment time points during the study, with respect to treatment patterns

	Subjects with HbA1c <6.5% at any time during follow-up (N valid=4,121)		Subjects with HbA1c ≥6.5% at all times during follow-up (N valid=2,928)		Between-group p-value
	n	Percentage	n/N valid	Percentage	
Subjects with a combined therapy at baseline	648	15.7	626	21.4	<0.001
Subjects with a very high efficacy treatment at baseline	425	10.3	377	12.9	0.001
Insulin	357	8.7	339	11.6	<0.001
Metformin	3511	85.2	2390	81.6	<0.001
Sulfonylurea	114	2.8	174	5.9	<0.001
SGLT-2i	237	5.8	207	7.1	0.028
DPP-4i	205	5.0	215	7.3	<0.001
DPP-4i/metformin	332	8.1	358	12.2	<0.001
SGLT-2i/metformin	325	7.9	274	9.4	0.032

DPP-4i, dipeptidyl peptidase 4 inhibitor; HbA1c, glycated haemoglobin; SGLT-2i, sodium glucose transporter 2 inhibitor.

Supplementary Table S4. Proportion of patients with HbA1c <6.5% at the five assessment time points during follow-up by percentage body weight loss from baseline

	Percentage weight loss from baseline					
	<5%		5% to <10%		≥10%	
	n/N valid	Percentage	n/N valid	Percentage	n/N valid	Percentage
Year 1	500/1087	46.0	263/364	72.3	203/241	84.2
Year 2	269/668	40.3	103/191	53.9	92/136	67.6
Year 3	187/523	35.8	51/130	39.2	60/110	54.5
Year 4	103/310	33.2	37/89	41.6	50/82	61.0
Year 5	23/70	32.9	5/30	16.7	17/24	70.8

HbA1c, glycated haemoglobin.

Supplementary Table S5. Adjusted logistic regression model of factors associated with HbA1c <6.5% at Year 1 post T2D diagnosis

Parameter		Reference Category	Category	Effect Multivariant ^a		
				(Pr > ChiSq)	Odds Ratio	[95% CI]
Sex		Female	Male	0.723	-	-
HbA1c		-	-	0.050	-	-
HbA1c categorical		HbA1c ≥ 6.5	HbA1c < 6.5	<0.001	7.107	5.604 9.069
Comorbidity	Acute coronary syndrome	No	Yes	0.001	0.506	0.333 0.763
	Hyperlipidaemia	No	Yes	0.003	1.321	1.101 1.586
	Hypertension	No	Yes	0.323	-	-
	Obesity	No	Yes	0.532	-	-
Combined treatment during baseline		No	Yes	0.005	1.615	1.160 2.253
5% to <10% weight loss at Year 1 of follow-up, compared to weight values at baseline (yes/no)		No	Yes	<0.001	2.868	2.114 3.925
≥10% weight loss at Year 1 of follow-up, compared to weight values at baseline (yes/no)		No	Yes	<0.001	6.992	4.570 11.094
LDL		No	Yes	0.412	-	-
HDL		No	Yes	0.902	-	-
Treatments	Insulin	No	Yes	0.230	-	-
	Metformin	No	Yes	0.106	-	-
	Sulphonylurea	No	Yes	<0.001	0.367	0.237 0.557
	DPP4i	No	Yes	0.226	-	-
	DPP4i/metformin	No	Yes	0.089	-	-
Number of observations used in regression		3113				
Total number of observations		8973				

Logistic regression against having an HbA1c<6.5% at the first year after being diagnosed. All variables are taken at baseline except weight loss targets.

^a Multivariable regression model was adjusted for factors with p-value <0.01 in the univariate models. Odds ratio is only shown for those variables with a p-values <0.05.

ChiSq, chi squared; CI, confidence interval; DPP4i, dipeptidyl peptidase 4 inhibitor; HbA1c, glycated haemoglobin; HDL, high-density lipoprotein cholesterol; LDL, low-density lipoprotein cholesterol; Pr, probability.

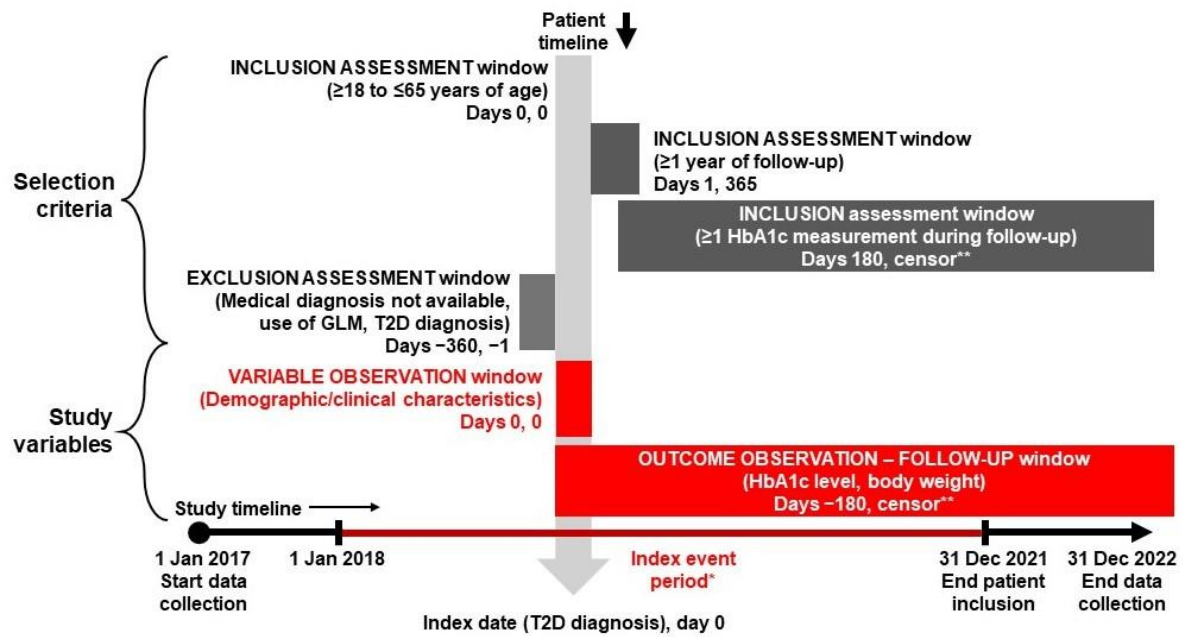
Supplementary Table S6. Cox regression model of factors associated with time to first HbA1c <6.5% determination

Parameter	Reference Category	Category	Effect Multivariant ^a			
			(Pr > ChiSq)	Hazard Ratio	[95% CI]	
Baseline HbA1c	-	-	0.432	-	-	-
5% to <10% weight loss, compared to weight values at baseline (yes/no) during the first year of follow-up	No	Yes	<0.001	1.511	1.320	1.729
≥10% weight loss, compared to weight values at baseline (yes/no) during the first year of follow-up	No	Yes	<0.001	1.554	1.335	1.809
Baseline treatments: SGLT2i/metformin	No	Yes	0.106	-	-	-
Number of observations used in regression	2794					
Total number of observations	8973					

Cox regression against time to the first HbA1c <6.5%.

^a Multivariable regression model was adjusted for factors with p-values <0.1 in the univariate models. Hazard ratio is only shown for those variables with a p-values <0.05.

ChiSq, chi squared; CI, confidence interval; HbA1c, glycated haemoglobin; Pr, probability; SGLT2i, sodium glucose cotransporter-2 inhibitor.



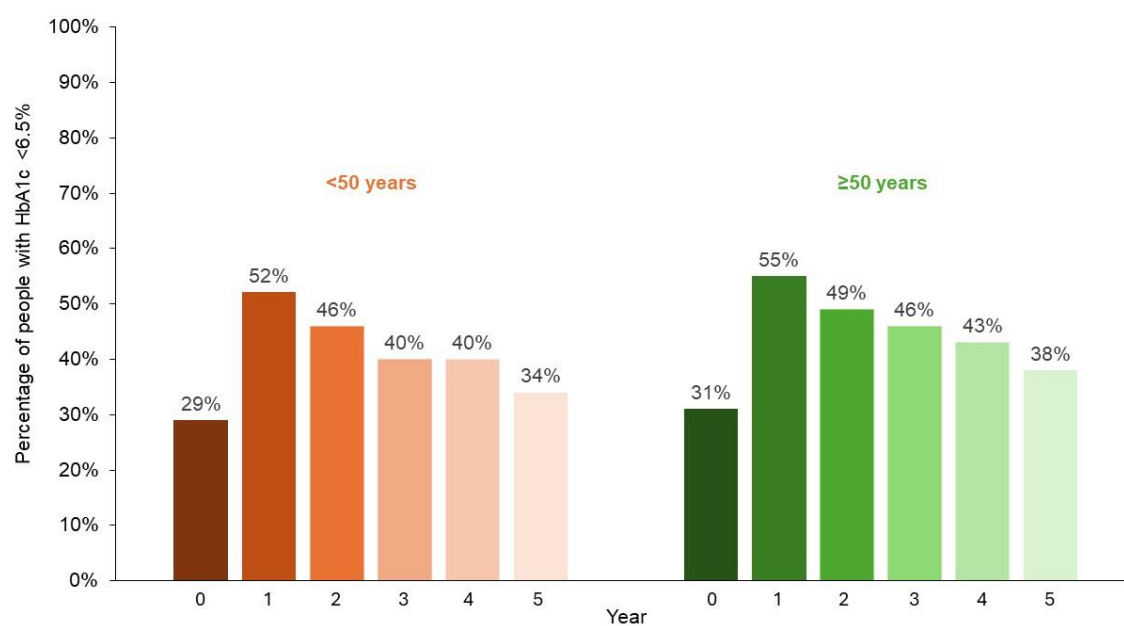
Supplementary Figure S1. Study design.

The horizontal arrow illustrates the study timeline, and the vertical arrow illustrates subject's timeline referent to index date.

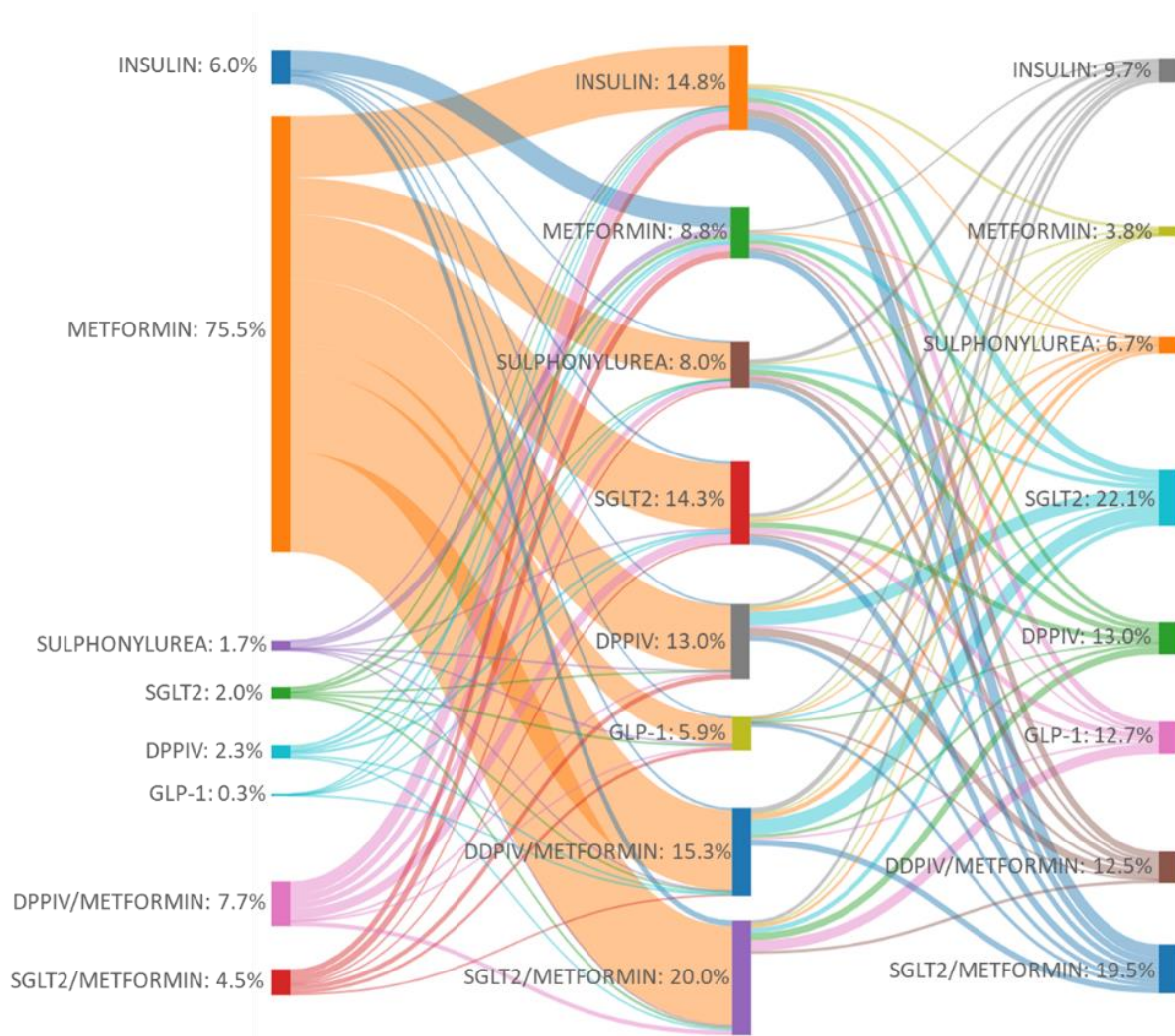
*T2D diagnosis, from 1 January 2018 to 31 December 2021

**Censored at the end of follow-up, latest date available (lost to follow-up or death) or end of study, whichever came first.

GLM, glucose-lowering medication; HbA1c, glycated haemoglobin; T2D, type 2 diabetes.



Supplementary Figure S2. Percentage of people with stringent glycaemic control (HbA1c <6.5%) according to age.
HbA1c, glycated haemoglobin.



Supplementary Figure S3. Sankey diagram of the first three lines of treatment for the included population.

DPPIV, dipeptidyl peptidase 4 inhibitor; GLP-1, glucagon-like peptide-1 receptor agonist SGLT2, sodium glucose cotransporter 2 inhibitor;