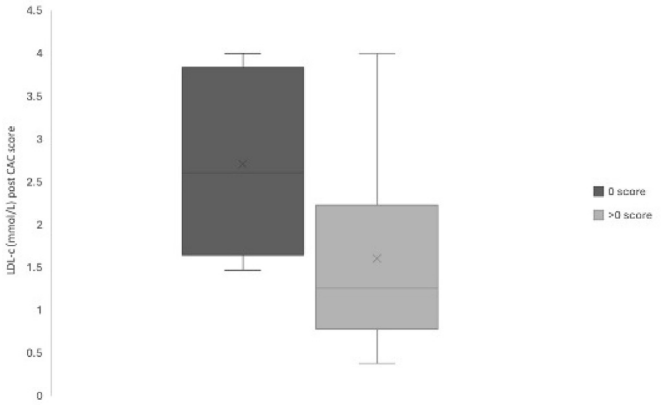

CAC	0 score	>0 score
N	8	22
Baseline LDL-c (mmol/L)	5.5 (5.3-6.4)	6.1 (4.8-7.1)
LDL-c pre CAC score (mmol/L)	3.7 (3.4-5.2)	3.3 (3.0-3.9)
Target NICE	<2.8	<3.0
Target EAS/ESC	<1.8	
LDL-c post CAC score (mmol/L)	2.6 (1.8-3.6)	1.3 (0.8-2.0)

Conclusions: Conclusion The significant difference in post CAC score LDL-c levels between patients with scores >0 and those with 0 suggests a positive impact. CAC scoring is a valuable tool for identifying high-risk HeFH patients who may benefit from intensification of lipid lowering therapy to help them achieve their treatment target. Future strategies for identifying high-risk patients beyond LDL-c levels are essential for effective HeFH management.

P294 / #477

Poster Topic: *AS03 DYSLIPIDEMIA AND RISK FACTORS / AS03.05 Inherited dyslipidemias*

From genes to hypercholesterolemia: The benefits of inclisiran therapy for GCKR polymorphisms in a statin-intolerant patient – A clinical case

Maxima Mendez Castillo [1], Valery Carrion [2], Daniela Salado [2], Milton Lazo [2], Jenny Cepeda-Marte [3], Limber Rojas Perez [4]

[1] *Cli-Lipid, Santo Domingo, Dominican Republic;* [2] *UNIBE School Of Medicine, Santo Domingo, Dominican Republic;* [3] *Imtsag, UNIBE School Of Medicine, Santo Domingo, Dominican Republic;* [4] *Nephrology, Hospital General Plaza de la Salud, Santo Domingo, Dominican Republic*

Background and Aims: A 73-year-old female with severe dyslipidemia, hypertension, type 2 diabetes mellitus, and diabetic nephropathy was referred to the lipid clinic due to an acute elevation in creatinine levels secondary to statin therapy. Her medical history included familial hypercholesterolemia, coronary artery disease, and recurrent transient ischemic attacks. Her treatment consisted of nifedipine, nebivolol, clopidogrel, insulin glargine, and memantine.

Methods: Given statin-intolerance and familial hypercholesterolemia, a genetic test was performed and revealed an uncertain variant in the glucokinase regulator (GCKR) gene, which follows a heterozygous autosomal dominant inheritance pattern and has an allele frequency of 0.37% in the Latino population (Table 1). Initial laboratory analyses confirmed dyslipidemia, with lipid levels as follows: total cholesterol (TC) 608 mg/dL, low-density lipoprotein cholesterol (LDL-C) 375 mg/dL, triglycerides (TG) 513 mg/dL, and Lipoprotein(a) (Lp(a)) 117 mg/dL. A calcium score of 62 AU indicated mild calcification.

Table 1: Genetic Sequence Variant(s)

Gene Transcript	Mode of Inheritance, Gene OMIM	DNA Variants, Predicted Effects, Zygosity	ClinVar ID	Highest Allele Frequency in a gnomAD Population	In Silico Missense Predictions	Interpretation
GCKR, NM_001486.3	Unknown, 600842	c.1768C>T, p.His590Tyr, Heterozygous	1194285	0.37% Latino	Tolerated	UNCERTAIN

Table 2: Laboratory Analysis Before and After Inclisiran Therapy At 0, 8, and 28 Weeks

Lipids (mg/dL)	Weeks			Percent Change
	Zero	Eight	Twenty Eight	
Total Cholesterol	608	260	254	29.44 %
LDL-C	375	207	107	56.15 %
TG	513	432	298	18.73 %
Lp(a)	117	117	117	0 %

Results: New treatment consisted of Inclisiran and Omega-3 fatty acids. Over the course of 28 weeks, all lipid markers showed significant reductions, including a 56.15% decrease in LDL-C (Table 2). However, Lp(a) levels remained unchanged. These results suggest a positive treatment response, likely due to the effects of Inclisiran on lipoprotein particles, potentially influenced by the identified GCKR indeterminate gene.

Conclusions: The GCKR gene encodes the glucokinase regulatory protein (GKRP), which plays a key role in regulating glucose and lipid metabolism in the liver. Evidence supports the benefits of Inclisiran therapy for statin-intolerant individuals, particularly those with familial hypercholesterolemia unrelated to LDL receptor defects. While it has been shown to effectively lower LDL-C levels, even though no reduction in Lp(a) levels was observed in this case, Inclisiran may help prevent further lipid accumulation when conventional therapies are not tolerated.

P295 / #327

Poster Topic: *AS03 DYSLIPIDEMIA AND RISK FACTORS / AS03.05 Inherited dyslipidemias*

Remnant cholesterol has a stronger association with established coronary artery disease compared with LDL-C or non-HDL-C in familial hypercholesterolemia: Findings from the HELLAS-FH registry

Christos Rizos [1], Theodosios Filippatos [2], Niki Katsiki [3], George Liamis [1], Ioannis Skoumas [4], Loukianos Rallidis [5], Anastasia Garoufi [6], George Sfikas [7], Genovefa Kolovou [8], Konstantinos Tziomalos [9], Emmanouil Skalidis [10], Kimon Stamatelopoulos [11], Vasileios Kotsis [12], Michalis Doumas [13], Vaia Lambadiari [14], Panagiotis Anagnostis [15], Amalia Boufidou [16], Vasiliki Giannakopoulou [17], Georgia Anastasiou [1,18], Ermioni Petkou [1], Charalambos Vlachopoulos [4], Ioanna Dima [4], Konstantinos A. Papathanasiou [5], Georgios Fakas [5], Achilleas Attilakos [19], Charalambos Koumaras [7], Vana Kolovou [8], Dimitrios Agapakis [9], Evangelos Zacharis [10], Christina Antza [12], Chrysoula Boutari [13], Haralampos Milionis [1], Elisavet Prodromiadou [20], Evangelos Liberopoulos [20]

[1] *Department Of Internal Medicine, Medical School, University of Ioannina, Ioannina, Greece;* [2] *Department Of Internal Medicine, Medical School, University of Crete, Heraklion, Greece;* [3] *Department Of Nutrition And Dietetics, School Of Health Sciences, International University of Greece, Sindos, Greece;* [4] *1st Cardiology Department, Lipids' Clinic, Athens Medical School, National and Kapodistrian University of Athens, Athens, Greece;* [5] *Department Of Cardiology, Medical School, Attikon University General Hospital, National and Kapodistrian University of Athens, Athens, Greece;* [6] *Second Department Of Pediatrics, Medical School, General Children's Hospital 'p. & A. Kyriakou', National and Kapodistrian University of Athens, Athens, Greece;* [7] *Department Of Internal Medicine 424 General Military Training Hospital, Thessaloniki, Greece;* [8] *Cardiometabolic Center, Lipid Clinic, La Apheresis Unit, Metropolitan Hospital, Athens, Greece;* [9] *1st Propedeutic Department Of Internal Medicine, Medical School, Ahepa Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece;* [10] *Cardiology Clinic, University General Hospital of Heraklion, Heraklion, Greece;* [11] *Department Of Clinical Therapeutics, School Of Medicine, National and Kapodistrian University of Athens, Athens, Greece;* [12] *3rd Department Of Internal Medicine, Medical School, Papageorgiou General Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece;* [13] *Department Of Internal Medicine, Medical School, Hippokration General Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece;* [14] *2nd Propaedeutic Internal Medicine Department And Diabetes Research Unit, Attikon University General Hospital, National and Kapodistrian University of Athens, Athens, Greece;* [15] *Department Of Endocrinology, Police Medical Centre, Thessaloniki, Greece;* [16] *1st Department Of Cardiology, Medical School, Ahepa Hospital, Aristotle University of Thessaloniki, Thessaloniki, Greece;* [17] *Cardiology Clinic, Tzaneio General Hospital, Piraeus, Greece;* [18] *Department Of Medicine, Beth Israel Deaconess Medical Center, Harvard Medical School, Boston, United States of*