

Table 5 Genetic variations in Arab patients with type 2 diabetes mellitus (T2DM)

Author (reference)	Country	Year	Sample size	Main findings	Notes
Alkhateeb (78)	Jordan	2013	650	Number of subjects carrying variants of ADIPOQ gene was significantly higher in diabetic group. All subjects were Jordanians	T2DM: 420 Controls: 230
Mtiraoui (73)	Tunisia	2012	1665	Significantly higher number of the diabetic patients carried 6 of 13 variants of ADIPOQ gene. All subjects were unrelated Tunisians	T2DM: 917 Controls: 748
Zadjali (77)	Oman	2013	328	rs266729 variant in ADIPOQ gene (identified in Tunisian and Jordanian diabetics as well) was associated with body weight ($P = 0.001$), waist circumference ($P = 0.037$), BMI ($P = 0.015$) and percentage of total body fat ($P = 0.003$) in Omani subjects	All subjects from one extended Omani family
Wakil (81)	Saudi Arabia	2006	1173	Frequency of P allele of PPAR- γ gene was 0.974 and 0.968 in T2DM patients and controls respectively	Underpowered due to high incidence in both groups
Nemr (89)	Lebanon	2012	1422	Average of minor allelic frequency of 2 variants of CDKALI gene was significantly higher in Lebanese type-2 diabetic patients ($P < 0.001$). All subjects were unrelated Lebanese patients	T2DM: 630 Controls: 792
Nemr (92)	Lebanon	2012	1150	Two variants of IGF2BP2 gene (rs4402960 and rs1470579) were significantly associated with T2DM in Lebanese patients	T2DM: 544 Controls: 606
Almawi (93)	Lebanon	2013		Five variants (rs792837 in COL8A1, rs2237892 and rs2237895 in KCNQ1, rs729287 in ALX4 and rs4430796 in HNF1) were associated with T2DM	T2DM: 995 Controls: 1076