Table 2. Caucasian adult population studies reporting the association between the Pro12Ala polymorphism of the *PPARγ* gene and obesity features. Updated from Ochoa *et al*, 2008 [36].

Sample	Association with the polymorphism		Ala allele frequency	Ref.
Argentinean (European ancestry) non diabetic subjects (n=572)	Positive	Higher BMI	MetS: 0.1 No MetS: 0.06	[92]
Italian nondiabetic subjects (n= 566)	Positive	Higher BMI in men	0.11	[93]
T2D Napolitan patients (n=343)	Positive	Higher BMI	0.12	[94]
Hispanic and non-Hispanic white males (n=314)	Positive	Association with fat mass	0.11	[95]
Adult Finnish subjects (n=311)	Positive	High weight at birth, weight gain and waist circumference in adulthood.	0.19	[96]
Swedish men (n=284)	Positive	Higher BMI and HOMA index	0.16	[97]
Czech healthy adult population, T2D patients, and obese women	Positive	Higher waist to hip ratio in obese women and lower insulin levels in diabetic subjects		[98]
Canadian obese subjects (n=126) and controls (n=103)	Positive	Association with obesity	Obese: 0.25 Control: 0.13	[99]
Mexican-American families (n=453)	Positive	Higher insulin and leptin levels. Higher waist circumference.	0.14	[100]
Mexican American subjects (n=921)	Positive	Higher BMI, waist circumference and levels of serum leptin.	0.11	[101]
French adults (n= 839)	Positive	Association with higher BMI, height and waist circumference.	0.11	[102]
Finnish obese subjects (n=170)	Positive	Higher BMI in women	0.14	[103]
Caucasian lean and moderately obese subjects (n=517) and severity obese subjects (n=169)	Positive	Higher BMI		[104]
Spanish obese subjects (n=145) and controls (n=317)	Negative	Lower BMI in men	0.09	[105]
T2D patients (n = 1,107), non-diabetics from Glasgow (n = 186), non-diabetics from Dundee (n = 254) and a healthy group undergoing physical training (n = 148)	Negative	Lower BMI	0.11	[93]

Finnish middle-aged (n= 333) and elderly subjects (n=973)	Negative	Lower BMI and improved insulin sensitivity	0.14	[38]
Polish post-menopausal women (n=318)	Negative	Higher cholesterol and triglicerides No association with obesity	0.28	[106]
Polish healthy men (n=176)	Null	No association with obesity	0.84	[107]
San Luis Valley 1,850 nuclear families (USA)	Null	No association with obesity		[108]
Obese French adults (n= 1,102) and controls (n=611)	Null	No association with obesity	0.12	[109]
Hispanic (n=293) and Non-Hispanic (n=414) subjects	Null	No association with obesity	0.12	[110]
Italian subjects (n=1,215)	Null	No association with BMI	0.14	[111]
Spanish T2D patients (n=167) and controls (n=63)	Null	Higher leptin serum levels in women		[112]
Australian obese subjects (n=292) and controls (n=371)	Null	Lower HDL and higher triglycerides levels in obese subjects	Obese: 0.14 Control: 0.12	[113]
German obese subjects (n=200) and controls (n=192)	Null	Higher leptin levels in control carriers and no association with obesity	0.15	[114]
Italian non diabetic severely obese (n=92) and controls (n=280)	Null	No association with severe obesity or metabolic syndrome	0.16	[115]
French Caucasian morbidly obese (n=372), T2D patients (n=402) and controls (n=295)	Null	No association with obesity or T2D	Obese: 0.11 T2D: 0.08 Control: 0.09	[116]
Danish Caucasian obese men (n=752) and controls (n=869)	Null	Obese Ala12Ala carriers had higher BMI and control carriers had a lower BMI	Obese : 0.14 Control: 0.16	[39]

BMI: Body Mass Index
HOMA: Homeostasis Model Assessment
T2D: Type 2 Diabetes
MetS: Metabolic Syndrome
PPARγ: Peroxisome proliferator-activated receptor γ