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Data Article

Data on polymorphisms in CYP2A6 associated to risk and predispose to smoking related variables

Luis A. López-Flores [a,1], Gloria Pérez-Rubio [a,1], Alejandra Ramírez-Venegas [b], Enrique Ambrocio-Ortiz [a], Raúl H. Sansores [c], Ramcés Falfán-Valencia [a,*]

[a] Laboratorio HLA, Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas, México City, Mexico
[b] Departamento de Investigación en Tabaquismo y EPOC, Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas, México City, Mexico
[c] Centro Respiratorio de México, Mexico

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ABSTRACT

This article contains data on the single nucleotide polymorphisms (SNPs) rs1137115, rs1801272 and rs28399433 rs4105144 in *CYP2A6* associated to smoking related variables in Mexican Mestizo smokers (Pérez-Rubio et al., 2017) [1]. These SNPs were selected due to previous associations with other populations. Mexican Mestizo smokers were classified according their smoking pattern. A genetic association test was performed.

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* Corresponding author.
E-mail address: rfalfanv@iner.gob.mx (R. Falfán-Valencia).
[1] These authors contributed equally to this work.

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Specifications Table

Subject area	Genomic medicine
More specific subject area	Genetic epidemiology
Type of data	Table and figure
How data was acquired	Smoking pattern survey, allelic discrimination assay by real-time PCR (Applied Biosystems, Foster City, CA, USA).
Data format	Analyzed (Figs. 1, 2, 3 and Table 1)
Experimental factors	Peripheral blood sample, DNA extraction by BDtract DNA isolation kit (Maxim Biotech, Inc. San Francisco, California, USA).
Experimental features	Genotyping was performed using 3 μL of DNA at 15 ng/μL concentration and TaqMan probes (Applied Biosystems Foster City CA, USA). In each template, we included 3 non-template controls, and 1% of the samples were genotyped in duplicate as an allele assignment control.
Data source location	Instituto Nacional de Enfermedades Respiratorias Ismael Cosío Villegas (INER) at México City
Data accessibility	Accessible from this article; DNA sample and raw data are available for further analyses in collaborative studies.

Value of the data

- Genetic association studies in Latin American populations as Mexican mestizos are scarce and show distinct values due to the admixture in the genetic structure.
- Mexican mestizo smokers exhibit a different smoke pattern compared with other populations.
- There are few data about genetic risk for smoking behavior associated with *CYP2A6* in Mexican mestizo population.
- Mexican mestizo smokers who carry some risk alleles in *CYP2A6* could predispose to smoking behavior variables.

1. Data

Single nucleotide polymorphisms (SNPs) rs1137115, rs1801272 and rs28399433 rs4105144 in *CYP2A6* associated to smoking related variables in Mexican Mestizo smokers [1].

Mexican Mestizo subjects were classified into five groups according to their birthplace geographic region in: Northwest (NW; Baja California, Baja California Sur, Chihuahua, Sinaloa and Sonora), Northeast (NE; Coahuila, Durango, Nuevo León, San Luis Potosí and Tamaulipas), West (WE; Aguascalientes, Colima, Guanajuato, Jalisco, Michoacán, Nayarit, Querétaro and Zacatecas), Central (CE; Mexico city, Mexico state, Guerrero, Hidalgo, Morelos, Puebla and Tlaxcala) and Southeast (SE; Campeche, Chiapas, Oaxaca, Quintana Roo, Tabasco, Veracruz and Yucatán). Most of the participants were from CE (83%), followed by WE and SE (8% each), and NE and NW had a minor proportion ($<1\%$) (Fig. 1).

2. Experimental design, materials and methods

2.1. Subjects

We selected subjects with ≥ 40 years old, men and women. To determine Mexican Mestizo ancestry, subjects were asked about their parents and grandparents ancestry and not belong to an indigenous group.