CONTROL ID: 2938400

TITLE: Prognostic risk score of genotypic characteristics in oral cancer based on logistic regression model

PRESENTATION TYPE: Poster

CURRENT METHODOLOGICAL TOPICS: Risk analysis and risk management

CURRENT APPLICATION AREAS: Health services

ABSTRACT BODY:

Abstract Body: The prediction models represent the only way to stop or reduce the incidence of oral cancer in the population, especially some socio cultural vulnerable population; and allow the development of a preventive intervention protocol. These methodologies should be applied more rigorously to pre-cancerous lesions that can be considered early stages of oral cancer. The purpose of this work was to evaluate the genotypic characteristics of patients with oral cancer and precancerous in order to develop a statistical risk score, in order to improve their prevention, treatment and follow-up. In order to identify prognostic factors, models were built through classification methods such as logistic regression. The logistic regression can be assimilated to a classifier in the context of two classes. If x is a p-dimensional vector of covariates, and a variable indicating class 1 (1 if it belongs to class 1, 0 if not) and f (x) the conditional density of Y given x, then the fundamental assumption of the logistic proposal used in the context of the discriminant analysis is the linearity of the log of the ratio of conditional densities, this is log[f(x)/(1-f(x))]=βo+β'x, , where βo and βx=(β1…βp)' represents p + 1 parameters to be estimated. The latter assumption implies that the probability of belonging to class 1 conditional on the observed vector x is given by π1(x)=exp(βo+β'x)/[1+ exp(βo+β'x)]. The analyzed data are obtained from patients with oral cancer and precancerous lesions, who's attended at Dentistry School of National University of Cordoba and participated of research oral cancer project about single nucleotide polymorphisms.

AUTHORS (FIRST NAME, LAST NAME): María Fernanda Galíndez[2], Andres Carrica[2], Julieta Don[1], Victoria Unamuno[1], Ignacio Gonzalez Segura[1], Viviana Centeno[1], Dante Secchi[2], Ana María zarate[1], Jose Luis Barra[3], Mabel Brunotto[1]

CONTACT (EMAIL ONLY): brunottomabel@gmail.com

Visa Letter Request - Contributed Submission: I will not need a visa letter.

IS THIS AUTHOR A STUDENT?:

María Fernanda Galíndez : No
Andres Carrica : No
Julieta Don : Yes
Victoria Unamuno : No
Ignacio Gonzalez Segura : Yes
Viviana Centeno : No
Dante Secchi : No
Ana María zarate : No
Jose Luis Barra : No
Mabel Brunotto : No

INSTITUTIONS (ALL):

1. Biología Bucal, Universidad Nacional de Córdoba, Córdoba-Capital, Córdoba, Argentina.
2. Patología Bucal, Universidad Nacional de Córdoba, Córdoba, Córdoba, Argentina.
3. CIQUIBIC CONICET-Fac Cs Químicas- Química Biológica, Universidad Nacional de Córdoba, Córdoba, Córdoba, Argentina.

PRESENTER: Mabel Brunotto

PRESENTER (COUNTRY ONLY): Argentina

PRESENTER (INSTITUTION ONLY): Universidad Nacional de Córdoba

AWARDS: