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Does ABO/Rh Blood Groups and P1 Antigen Associate with Type II Diabetes Mellitus

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ABSTRACT The World Health Organisation has determined that in the Middle East, Saudi Arabia consider as the second-highest diabetes prevalence. ABO blood group system and Rhesus factor (Rh) previously showed an association with diabetes; however, no study found an association between P1 antigen and type-2-diabetes mellitus (TIIDM). This study aims to assess the association of ABO, Rh, and P1 antigens with TIIDM in Jeddah, Saudi Arabia. A case-control study, including 150 cases and 120 controls, was phenotyped and analysed using a Chi-square test. B and P1 antigens were positively associated with TIIDM ($\chi^2= 4.509$, P value = 0.0337) and ($\chi^2= 4.049$, P value= 0.0441), respectively. Rh distribution was equal between both groups, with no association between Rh and TIIDM. There is no association between P1 and Rh antigen in TIIDM.