0426 PRESCRIBED MEDICINES AND THE RISK OF ROAD TRAFFIC CRASHES: RESULTS OF A FRENCH REGISTRY-BASED STUDY

L Orriols*, B Delorme, B Gadegbeku, A Tricotel, B Contrand, B Laumon, L R Salmi, E Lagarde *Correspondence: Injury Prevention and Control Team, INSERM U897, Universite Victor Segalen Bordeaux 2, Case 11 146 rue Leo Saignat Bordeaux, Cedex 33 076, France*

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Background There is a growing concern over the impact of medicines on the risk of road traffic crashes. The French Health Products Safety Agency established a classification of medicines affecting driving abilities, using a labelling system with 4 levels of risk.

Objective To investigate the association between prescribed medicine use and the risk of road traffic crashes, providing risk and attributable fraction estimates, with particular focus on the French labelling system.

Methods We matched data from three exhaustive nationwide databases: the database on medicine reimbursing, police reports and the database of injurious crashes. Drivers involved in an injurious crash in France, from July 2005 to May 2008, and identified by their national healthcare number were included. We studied prescribed medicines grouped according to the four levels of the French classification (level 0 to level 3). We performed a responsibility and a case-crossover analysis.

Results 72 685 drivers were included. The results showed an increased risk of being responsible for a crash for users of medicines of level 2 (OR=1.31 [1.24 to 1.40]) and level 3 (OR=1.25 [1.12 to 1.40]). The fractions of road traffic crashes attributable to levels 2 and 3 medicine use were 2.9% (2.3–3.4%) and 0.6% (0.3–0.8%) respectively.

Conclusion Users of level 2 and 3 medicines are at increased risk of experiencing a road traffic crash. Further studies are needed to evaluate the impact of the French labelling system.