

tailored for use in pediatric populations. We present results of a systematic performance testing of a slate of methods in this setting.

- Daniel Weibel: PREVENT: infrastructure for rigorous vaccine safety studies in low and middle income countries (LMIC).

Vaccination exposure, morbidity outcome, and demographic data have been collected within different infrastructures in Africa. We evaluated the quality of such available surveillance systems for use in: 1) observational post-licensure vaccine safety studies, and 2) future scale up for rapid vaccine benefit - risk surveillance and hypothesis testing in LMIC.

- Eelko Hak : European Universal Influenza Vaccine (UNISEC) project

The conventional annual influenza vaccination strategy may result in cost-inefficiency and poor protection if mismatched. UNISEC is designing phase IIb studies to evaluate the safety, immunogenicity and cross-seasonal clinical efficacy of two universal influenza vaccines.

80. Risk of Hip Fractures Associated with Benzodiazepines: Applying Common Protocol To a Multi-Database Nested Case-Control Study. The PROTECT Project

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Background: The association between benzodiazepines (BZD) and hip fractures has been estimated in several observational studies although diverse methodologies and definitions have hampered comparability.

Objectives: To evaluate the discrepancies in the risk estimates of hip/femur fractures associated with BDZs across different databases and to assess the impact of different matching strategies.

Methods: A case control study nested in a cohort of BZD users, examining their association with the risk of hip/femur fracture between 2001 and 2009, was performed within 3 databases, the BIFAP (Spain), the CPRD (UK) and the Mondriaan (Netherlands) database. A risk set sampling matching was performed using two strategies: 1) controls matched by age (up to ± 2 years), sex and time in the cohort (up to ± 6 months) and 2) controls selected with the smallest Manhattan distance according same matching factors. Co-morbidity and co-medication adjusted OR and (95% confidence intervals) were estimated for current use (up to 30 days after last supply) vs. past (>60 days after current use) using conditional logistic regression models. Sensitivity analysis was performed in CPRD including matching by general practice (GP).

Results: Adjusted ORs (matching 1) for current use were 1.14 (1.03-1.27) in BIFAP; 1.32 (1.22-1.42) in CPRD, and 1.34 (0.63-2.82) in Mondriaan. Matching 2 resulted in ORs of 1.09 (1.03-1.27), 1.29 (1.17-1.42) and 1.28 (0.60-2.71) in BIFAP, CPRD and Mondriaan respectively. In CPRD, adding GP-practice as a matching factor to matching strategy 1 increased the OR to 1.46 (1.35-1.59).

Conclusions: By applying a common protocol, the estimated risk of hip/femur fractures associated to BZD was consistent between studies. The different matching strategies did not influence the risk estimates substantially, however the inclusion of GP-practice as matching factor should be carefully considered in further studies.

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81. Effect of Allopurinol on Cardiovascular Outcomes in Hyperuricemic Patients: A Cohort Study

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