1. Optimal case-finding algorithms in Italian Administrative Databases for type 2 diabetes mellitus, hypertension and ischaemic heart disease all have high positive predictive value, but low sensitivity (this thesis)

2. Measures of compliance with standards of care for type 2 diabetes, hypertension and ischaemic heart disease from Italian Administrative Databases should be interpreted with caution. The balance between the number of false negatives and their reduced compliance, as well as access to diagnostic services contracted by the healthcare services, may change over time and between regions, and hamper the accuracy of estimates (this thesis)

3. Two different strategies were adopted in networks of databases using different terminologies: either terminology mapping was done once and for all, or it was tuned on a specific study variable. Understanding determinants of related validity loss is relevant (this thesis)

4. When designing an observational study in a multi-database network, it is recommended to adopt a component algorithm strategy to define the key study variables (this thesis)

5. It is a common misconception that predictive values of a case-finding algorithm depend on prevalence of the disease, while sensitivity and specificity do not (this thesis)

6. Science is a social construct (Niek Klazinga)

7. Harmonization across differently structured healthcare databases to facilitate safety signal detection may be an ambitious goal, but the results are nevertheless enlightening: there is no such thing as 'one size fits all' (Preciosa Miguel Coloma)

8. With great data comes great responsibility (Miguel Hernán)

9. The locally conformal Kaehler reduction of a compact Vaisman manifold is a Vaisman manifold, provided the action is Vaisman (and rank is 1) (with Liviu Ornea, Maurizio Parton and Paolo Piccinni)

10. During the Second World War, in Bletchley Park, we were not concerned about our careers, or about our future, because we didn't think we would have a future. Our concern was the beauty of the mathematics we were creating - and, yes, sure, cracking the Nazis' code (Peter Hilton, talking to an audience of young mathematicians, during an Algebraic Topology class in Milan, 1994)

11. La Nature est un temple où de vivants piliers/Laissent parfois sortir de confuses paroles;/L'homme y passe à travers des forêts de symboles/Qui l'observent avec des regards familiers (Charles Baudelaire, *Correspondences*)