Cross Matching: An Improved Method to Obtain Comprehensive and Consolidated Evidence

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Abstract : At present safety, assessment starts with animal tests although their predictivity is often poor. Even after extended human use experimental data are often judged as the core information for risk assessment. However, the best opportunity to generate true evidence is to match all available information. Cross matching methodology combines the different fields of knowledge and types of data (e.g. in-vitro and in-vivo experiments, clinical observations, clinical and epidemiological studies, and daily life observations) and gives adequate weight to individual findings. To achieve a consolidated outcome, the information from all available sources is analysed and compared with each other. If single pieces of information fit together a clear picture becomes visible. If pieces of information are inconsistent or contradictory careful consideration is necessary. 'Cross' can be understood as 'orthographic' in geometry or as 'independent' in mathematics. Results coming from different sources bring independent and; therefore, they result in new information. Independent information gives a larger contribution to evidence than results coming repeatedly from the same source. A successful example of cross matching is the assessment of Ginkgo biloba where we were able to come to the conclusive result: Ginkgo biloba leave extract is well tolerated and safe for humans.

Keywords : cross-matching, human use, safety assessment, Ginkgo biloba leave extract **Conference Title :** ICT 2015 : International Conference on Toxicology

Conference Location : London, United Kingdom

Conference Dates : February 16-17, 2015