



PEMED 2018

Personalized and Precision Medicine
International Conference

June 25-27, 2018 | Paris

Pharmacogenomics of drug-induced liver injury

Prof. Ann Daly

Newcastle University, UK

Drug-induced liver injury (DILI) is a rare but serious adverse reaction with certain widely prescribed drugs and can result in liver failure. It is also a relatively common cause of attrition during drug development. Using genome-wide association studies, highly significant associations with particular HLA genotypes have been detected for idiosyncratic DILI with a number of specific drugs, for example flucloxacillin, co-amoxiclav and terbinafine. Examples of these associations and possible underlying mechanisms, including how these may relate to reported HLA associations for other types of adverse drug reactions, will be considered. Not all forms of idiosyncratic DILI show HLA gene associations. Genes relevant to the innate immune system and to drug disposition appear to represent additional risk factors for DILI but, as with the associations involving HLA, risk factors are mainly but not exclusively dependent on the individual drug. The genetic associations we have seen, involving both HLA and non-HLA genes, provide new insights into the underlying mechanisms for idiosyncratic DILI and may assist in the development of improved strategies for its prediction and diagnosis.

www.premc.org/conferences
pemed2018@premc.org