Pathway	Description	RF		SVM		Known/plausible in DILI?	Citation(s)
		Padj	Gene Ratio	Padj	Gene Ratio		
Arachidonic acid metabolism	Kegg_arachidonic_acid_metabolism	-	-	0.0111	4/19	Involvement in Acetaminophen and galactosamine/endotoxin induced liver injuries	Suciu, M. et al. 2015 (2015)[1]; Xue-Jun M. et al. (1994)[2]
	Reactome_arachidonic_acid_metabolism	-	-	0.0124	4/19		
Biotransformation	Wp_metapathway_biotransformation_phase_i_and_ii	0.0318	4/17	0.02	4/19	Biotransformation reactions on drugs responsible for liver injuries	Xinsheng, G. et al. (2012)[3]; Mitchell, J.R. et al. (1976)[4]; Yuan, L. et al (2013)[5]
	Reactome_phase_i_functionalization_of_compounds	-	-	0.0010	6/19		
	Reactome_biological_oxidations	-	-	0.0014	6/19		
Cytochrome p450	Kegg_metabolism_of_xenobiotics_by_cytochrome_p450	0.0374	3/17	0.0272	3/19	Involvment in drugs metabolism and pathogenesis of several liver diseases. Inhibition of CYP is an indicator of drug-induced hepatotoxicity	Villeneuve, J.P. et al. (2004)[6]; Feng, S. et al. (2013)[7]
	Reactome_cytochrome_p450_arranged_by_substrate_type	-	-	0.0010	5/19		
	Wp_oxidation_by_cytochrome_p450	-	-	0.0272	3/19		
Fatty acid metabolism	Reactome_fatty_acid_metabolism	-	-	0.0374	4/19	Involvment in Acetaminophen and Divalproex sodium induced liver injuries	Suciu, M. et al. (2015)[1]; Wang W. et al. (2012)[8]
Linoleic acid metabolism	Kegg_linoleic_acid_metabolism	-	-	0.0237	3/19	Conjugated Linoleic Acid provokes fulminant hepatitis	Bilal, M. et al. (2015)[9]; Nortadas, R. et al. (2012)[10]
Metabolism of lipids	Reactome_metabolism_of_lipids	-	-	0.0047	9/19	Involvement in drug-induced toxicity	Xu, S. et al. (2019)[11]; Begriche K. et al. (2011)[12]
Nuclear receptors in lipid metabolism and toxicity	Wp_nuclear_receptors_in_lipid_metabolism_and_toxicity	-	-	0.0292	3/19	Nuclear receptors control all phases of hepatic drug metabolism and are xenobiotic sensors	Rudraiah, S. et al. (2016)[13]
Progesterone mediated oocyte maturation	Kegg_progesterone_mediated_oocyte_maturation	-	-	0.04381	4/19	Progesterone contributes to worsen DILIs	Toyoda, Y. et al. (2012)[14]

Prostaglandin synthesis and regulation	Wp_prostaglandin_synthesis_and_regulation	0.0318	4/17	-	-	Role in liver injuries	Peltekian,K.(1996)[15] et al; Cavar, I. et al. (2010)[16]
Regulation of tp53 activity through phosphorylation	Reactome_regulation_of_tp53_activity_through_phosphorylation	0.0318	4/17	-	-	Involvement in Acetaminophen induced liver injuries	Huo Y. et al. (2017)[17]

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