Additional file 2: Ingenuity Pathway analysis

2a: results from Top Canonical Pathways, Diseases and Disorders, Nephrotoxicity and Top Upstream Regulators.

Top Canonical Pathways	p-value	Overlap
Primary Immunodeficiency	6.76E-04	16.0% 8/50
Signalling		
Molecular Mechanisms of	1.28E-03	7.2 % 29/402
Cancer		
B Cell Receptor Signalling	2.02E-03	8.6 % 17/197
Triacylglycerol	2.53E-03	14.6 % 7/48
Biosynthesis		
Retinoate Biosynthesis I	9.94E-03	14.7 % 5/34

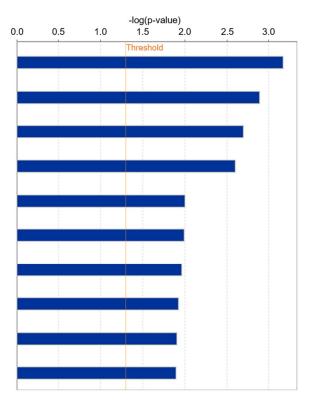
Diseases and Disorders	p-value range	# Molecules
Cancer	1.47E-02 – 7.49E-15	797
Organismal Injury and	1.47E-02 – 7.49E-15	801
Abnormalities		
Gastrointestinal Disease	1.46E-02 – 5.60E-09	692
Endocrine System Disorders	1.42E-02 – 1.16E-08	634
Dermatological Diseases and	1.42E-02 – 1.60E-07	470
Conditions		

Nephrotoxicity	p-value range	# Molecules
Renal Atrophy	5.69E-01 – 4.23E-03	3
Renal Inflammation	1.00E00 – 1.42E-02	14
Renal Nephritis	1.00E00 – 1.42E-02	14
Nephrosis	4.58E-01 – 2.30E-02	6
Renal Hydronephrosis	7.69E-02 - 3.49E-02	8

Top Upstream	p-value	Predicted Activation
Regulators		
CDK4	2.08E-05	
miR-145-5p (and other	5.18E-04	
miRNAs w/seed		
UCCAGUU)		
CCND1	5.79E-04	Inhibited
gefitinib	5.84E-04	
ITGA9	1.30E-03	

2b: Top 10 canonical pathways

Primary Immunodeficiency Signaling Molecular Mechanisms of Cancer B Cell Receptor Signaling Triacylglycerol Biosynthesis Retinoate Biosynthesis I Opioid Signaling Pathway IL-7 Signaling Pathway Hematopoiesis from Pluripotent Stem Cells GABA Receptor Signaling B Cell Development



Additional file 2: Ingenuity Pathway Analyses for progressors VS non-progressors. The top results are presented in table format (2a) and the Top 10 Canonical Pathways are additionally presented as a graph (2b). The top disease was "Cancer", even though we compared two forms of cancer that were histologically identically and came from closely matched patients.