

**Drug sensitivity profiling and molecular characteristics of cells from pleural effusions of patients with lung adenocarcinoma**

**Additional file 1: Chemotherapeutic agents used in cytotoxicity assay.**

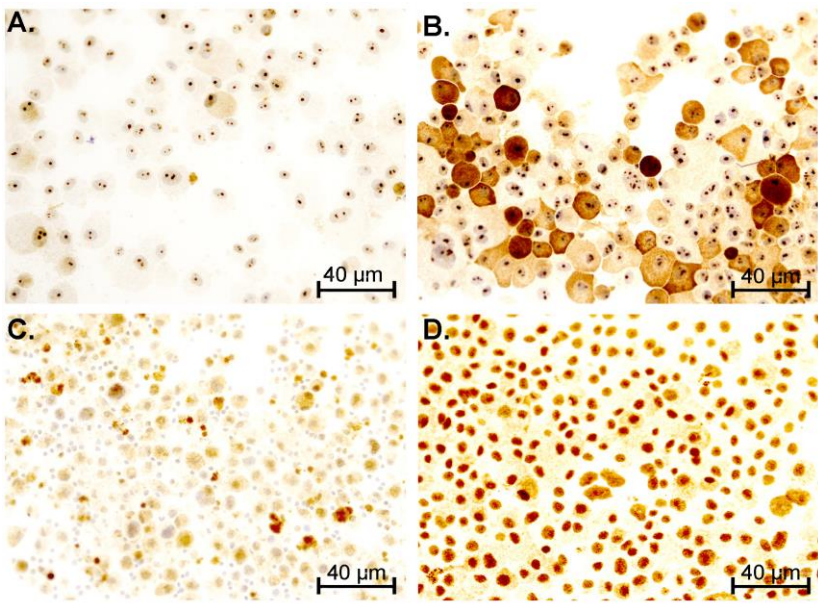
			<i>In vitro</i> concentrations (µg/ml)	
<b>Alkylating Agents</b>	Nitrogen mustard	Chlorambucil	83.3	
		Aziridine	Mitomycin C	0.3 - 0.6
		Tetrazine	Dacarbazine	16.7
<b>Platinum drugs</b>		Cisplatin	0.2	
		Carboplatin	1.7	
		Oxaliplatin	4.2	
<b>Antimetabolites</b>	Pyrimidine analogues	Fluorouracil	41.7	
		Cytarabine	8.3 - 16.7	
		Gemcitabine	33.3	
	Purine analogues	Mercaptopurine	69.4	
		Fludarabine	20.8 - 41.7	
		Cladribine	0.8	
	<b>Antimicrotubule agents</b>	Antifolates	Methotrexate	4.2 - 20.8
Pemetrexed			20.8	
Other		Hydroxyurea	41.7	
		Taxanes	Paclitaxel	3.3
			Docetaxel	8.3
<b>Topoisomerase inhibitors</b>	Vinca alkaloids	Vinblastine	0.8 - 8.3	
		Vincristine	0.2 - 0.8	
		Vinorelbine	1.7 - 8.3	
	Type I	Topotecan	0.2 - 1.7	
		Irinotecan	16.7	
	Type II	Etoposide	16.7	
		Amsacrine	4.2	
<b>Proteasome inhibitor</b>		Bortezomib	2.9	
<b>Multifunctional drugs</b>	Anthracycline	Daunorubicin	4.2 - 16.7	
		Doxorubicin	0.8 - 1.7	
		Epirubicin	1.7	
	Other	Actinomycin D	0.1 - 0.4	
		Bleomycin	2.5 - 12.5*	
<b>Enzyme</b>		Asparaginase	0.6 - 8.3*	
<b>Corticosteroid</b>		Prednisolone	16.7 - 20.8	

Drugs are divided according to their mechanism of action. \* = IU/ml.

**Additional file 2: Antibodies used in these experiments.**

Target	Abbreviation	Antibody	Dilution	Supplier	Product code
Epithelial cell adhesion molecule	EpCAM	Mouse monoclonal	1:1000	2	M0804
Calretinin		Mouse monoclonal	1:100	2	M7245
Thyroid transcription factor-1	TTF-1	Mouse monoclonal	1:100	2	M3575
Napsin A		Mouse monoclonal	1:200	1	NCL-L-Napsin A
Leukocyte common antigen	CD45	Mouse monoclonal	1:400	1	NCL-LCA
Excision repair cross-complementation group 1	ERCC1	Mouse monoclonal Ab-2 (clone 8F1)	1:200	3	MS-671
Ribonucleotide reductase M1	RRM1	Rabbit polyclonal	1:50	4	Ab81085

Suppliers: 1 = Leica Microsystems GmbH, Wetzlar, 2 = Dako, Glostrup, Denmark, 3 = Thermo Fisher Scientific Inc, Waltham, MA, USA. 4 = Abcam, Cambridge, UK.



**Additional file 3: RRM1 and ERCC1 immunoreactivity of lung adenocarcinoma cells.** Representative micrographs presenting the RRM1 and ERCC1 immunocytochemical staining's. A: weak RRM1 staining intensity (score 1), B: strong RRM1 staining intensity (score 3), C: weak ERCC1 staining intensity (score 1) and D: strong ERCC1 staining intensity (score 3), respectively. Scale bar = 100  $\mu\text{m}$ .