

## SUPPLEMENTARY TABLE

Supplementary Table 1. HTS results for selecting compounds that induce cytotoxicity or ROS levels in senescent HDFs.

Low proliferation			High ROS level		
Cell and drug conc.	HGPS 5 $\mu$ M	HDF 0.5 $\mu$ M	Cell and drug conc.	HGPS 5 $\mu$ M	HDF 0.5 $\mu$ M
Drug name	ROS level	Proliferation	Drug name	ROS level	Proliferation
OSI-027	0.94	0.686	Afatinib	2.25	0.838
Saracatinib	0.9	0.658	Dovitinib	2.48	0.908
SGI-1776 free base	1.24	0.657	Ponatinib	2.49	1.672
WYE-125132	1.16	0.653	CCT129202	3.64	1.267
PD184352	1.4	0.649	AZD5438	2.42	0.839
Bosutinib	1.66	0.648	IKK-16	2.37	0.886
Selumetinib	1.05	0.603	AZD3463	3.35	1.235
			GZD824	2.22	1.274
			BIO	2.38	0.882

  

Low proliferation and Low ROS level			Low proliferation and High ROS level		
Cell and drug conc.	HGPS 5 $\mu$ M	HDF 0.5 $\mu$ M	Cell and drug conc.	HGPS 5 $\mu$ M	HDF 0.5 $\mu$ M
Drug name	ROS level	Proliferation	Drug name	ROS level	Proliferation
LY2784544	0.88	0.678	Nintedanib	2.04	0.680
NVP-BHG712	0.75	0.677	Axitinib	2.1	0.619
R406 (Tamatinib)	0.81	0.645			