

554 Supplemental Table 1. Primer sets used for real time PCR analysis.

Gene	Symbol	Reference Sequence	Assay number*
DNA damage inducible transcript 3 ( <i>CHOP</i> )	<i>DDIT3</i>	NM_001195053	Hs00358796_g1
Activating transcription factor 4	<i>ATF4</i>	NM_001675	Hs00909569_g1
Glyceraldehyde-3-phosphate dehydrogenase	<i>GAPDH</i>	NM_001256799	Hs02758991_g1

555 \* Manufacturer: Applied Biosystems (Foster City, CA)

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556 Supplemental Table 2. Drugs with dose dependent or combined survival effect against oxidative stress  
 557 and/or UPR.

Drug	Drug concentration (% increased survival*)	Conditioning	Drug category
Atazanavir	100µM (49.27 %)	H <sub>2</sub> O <sub>2</sub>	Protease inhibitor
	20µM (25.03 %)	H <sub>2</sub> O <sub>2</sub>	
Cimaterol	100µM (33.28 %)	H <sub>2</sub> O <sub>2</sub>	Beta-adrenergic agonist
	20µM (87.32 %)	H <sub>2</sub> O <sub>2</sub>	
L-(+)- Epinephrine tartrate	100µM (43.94 %)	H <sub>2</sub> O <sub>2</sub>	Catecholamine
	20µM (34.74 %)	H <sub>2</sub> O <sub>2</sub>	
Ergothioneine	20µM (60.49 %)	H <sub>2</sub> O <sub>2</sub>	Thiourea derivative of histidine
	100µM (27.50 %)	Thapsigargin	
Finasteride	100µM (35.63 %)	H <sub>2</sub> O <sub>2</sub>	5-alpha-reductase inhibitor
	20µM (48.60 %)	H <sub>2</sub> O <sub>2</sub>	
Ketoprofen	100µM (41.73 %)	H <sub>2</sub> O <sub>2</sub>	Propionic acid derivatives (NSAID <sup>^</sup> )
	20µM (29.73 %)	H <sub>2</sub> O <sub>2</sub>	
Mefenamic acid	100µM (98.35 %)	H <sub>2</sub> O <sub>2</sub>	Fenamic acid derivatives (NSAID)
	100µM (27.52 %)	Thapsigargin	
Nimesulide	20µM (84.02 %)	H <sub>2</sub> O <sub>2</sub>	Selective COX-2 inhibitor (NSAID)
	20µM (25.49 %)	Thapsigargin	
Moxifloxacin	100µM (47.20 %)	H <sub>2</sub> O <sub>2</sub>	Fluoroquinolone
	20µM (66.16 %)	H <sub>2</sub> O <sub>2</sub>	
Nedaplatin	100µM (83.09 %)	H <sub>2</sub> O <sub>2</sub>	Platinum compound
	20µM (33.00 %)	H <sub>2</sub> O <sub>2</sub>	
Nicergoline	20µM (43.21 %)	H <sub>2</sub> O <sub>2</sub>	Ergot derivative
	20µM (30.42 %)	Thapsigargin	
Oxotremorine	100µM (35.44 %)	H <sub>2</sub> O <sub>2</sub>	Muscarinic receptor agonist
	20µM (27.07 %)	Thapsigargin	
Procainamide	100µM (92.45 %)	Thapsigargin	Sodium channel blocker
	20µM (31.81 %)	Thapsigargin	
Retinoic acid	100µM (92.16 %)	H <sub>2</sub> O <sub>2</sub>	Vitamin A
	20µM (66.48 %)	H <sub>2</sub> O <sub>2</sub>	

Stanozolol	100µM (80.48 %)	H <sub>2</sub> O <sub>2</sub>	Dihydrotestosterone derivative
	20µM (26.00 %)	H <sub>2</sub> O <sub>2</sub>	
(s)-(-)-Sulpride	100µM (47.26 %)	H <sub>2</sub> O <sub>2</sub>	Benzamide
	20µM (31.58 %)	H <sub>2</sub> O <sub>2</sub>	
Terazosin	100µM (63.75 %)	H <sub>2</sub> O <sub>2</sub>	Alpha 1 adrenergic antagonist
	20µM (25.85 %)	H <sub>2</sub> O <sub>2</sub>	
(+) -Tubocurarine chloride	100µM (37.86 %)	H <sub>2</sub> O <sub>2</sub>	Non-depolarizing neuromuscular blocker
	20µM (28.19 %)	H <sub>2</sub> O <sub>2</sub>	
Vidarabine	100µM (61.78 %)	H <sub>2</sub> O <sub>2</sub>	Adenine arabinoside
	20µM (83.37 %)	H <sub>2</sub> O <sub>2</sub>	

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559 \*increased luminescence (cell survival) compared to no drug treated controls exposed to H<sub>2</sub>O<sub>2</sub> or  
 560 thapsigargin.

561 ^Non-steroidal anti-inflammatory drug

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563 **Supplemental Figure Legend:**

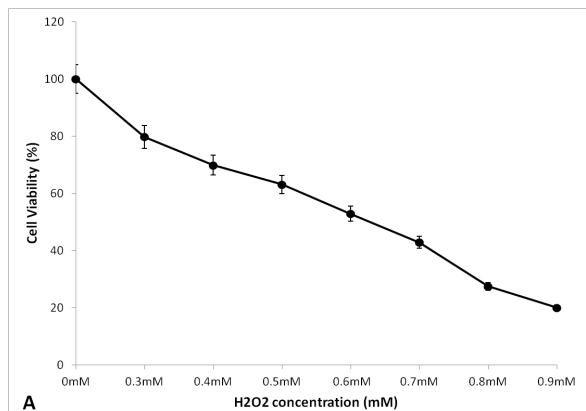
564 Supplemental Figure. Cytotoxic effects of H<sub>2</sub>O<sub>2</sub> (A) and thapsigargin (B) in cultured bovine corneal  
565 endothelial cells. Lethal dose 50 for H<sub>2</sub>O<sub>2</sub> and thapsigargin were 0.6 mM and 25.6 μM, respectively.

566 Results are expressed as mean ± SD.

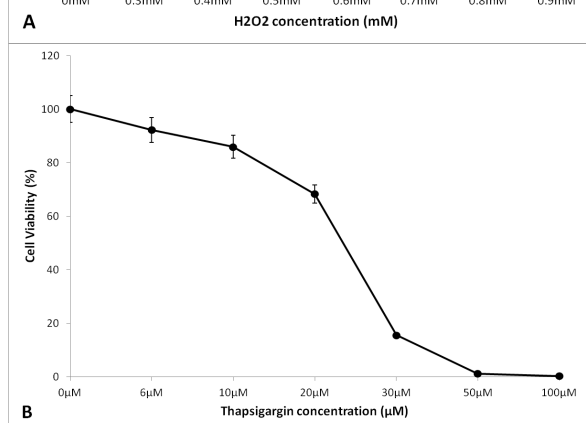
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Supplemental Figure.



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