

2. SciMiner Tables

2.1 SciMiner query list

This table contains the different SciMiner queries tried. Queries took a very long time to run, so only the most promising were run.

PubMed Query	# DEGs in top 25		# DEGs expressed in same direction	
	8wk	24wk	8wk	24wk
“endoplasmic reticulum stress” OR “ER stress”	0	4	0	4
Chaperone[mesh]	0	4	0	4
Cholesterol/biosynthesis[Majr]	0	4	0	3
Autophagy[mesh]	1	4	1	2
Lysosome[mesh] AND Review[ptyp]	0	3	0	2
Mitosis[mesh] AND Review[ptyp]	1	2	1	2
Protein Folding[mesh] AND Review[ptyp]	0	2	0	2
Synapse[mesh] AND Review[ptyp]	0	2	0	1
Apoptosis[mesh] AND Review[ptyp]	1	1	1	1
Proteasome[mesh]	1	1	1	1
Ubiquitination[mesh]	1	1	1	1
Alzheimer’s Disease[mesh] AND Review[ptyp]	0	1	0	1
Amyotrophic Lateral Sclerosis[mesh]	0	1	0	1
Diabetic Neuropathy[mesh]	0	1	0	1
Histone[mesh] AND Review[ptyp]	0	1	0	1
Genetic Epigenesis[mesh] AND Review[ptyp]	0	1	0	1
Myelin Sheath[mesh]	0	1	0	1
Oxidative Stress[mesh] AND Review[ptyp]	0	1	0	1
Lipid Metabolism[mesh] AND Review[ptyp]	0	1	0	1
Cell junction[mesh] AND Brain[mesh] AND Review[ptyp]	0	1	0	1
DNA repair[mesh] AND Review[ptyp]	1	0	1	0
Ribosome[mesh] AND Review [ptyp]	1	0	1	0
Vascular Dementia[mesh]	0	0	0	0
Inflammation[mesh] AND Review[ptyp]	0	0	0	0
Mitochondria[mesh] AND Review[ptyp]	0	0	0	0
Carbohydrate Metabolism[mesh] AND Review[ptyp]	0	0	0	0
Calcium[mesh] AND Review[ptyp]	0	0	0	0

PubMed Query	# DEGs in top 25	# DEGs expressed in same direction
Protein transport[mesh] AND Review[ptyp]	0	0

2.2. SciMiner top 25 for: “ER Stress” OR “Endoplasmic Reticulum Stress”

This table contains the genes in the top 25 most frequent genes when searching PubMed for “ER Stress” OR “Endoplasmic Reticulum Stress” that were also differentially regulated at 24 weeks (none were differentially regulated at 8 weeks).

Mouse Entrez ID	Symbol	Name	Fold Change	Manuscripts with Gene	SciMiner Rank
14828	Hspa5	heat shock protein 5 DNA-damage inducible transcript	0.84	1407	1
13198	Ddit3	3	0.8	853	2
22433	Xbp1	X-box binding protein 1	0.8	510	8
22027	Hsp90b1	heat shock protein 90, beta (Grp94), member 1	0.84	419	17

2.3. SciMiner top 25 for: Chaperone [MeSH]

This table contains the genes in the top 25 most frequent genes when searching PubMed for Chaperone [MeSH] that were also differentially regulated (none were differentially regulated at 8 weeks).

Mouse Entrez ID	Symbol	Name	Fold Change	Manuscripts with Gene	SciMiner Rank
14828	Hspa5	heat shock protein 5	0.84	2264	7
15528	Hspe1	heat shock protein 1 (chaperonin 10)	0.88	1697	9
22027	Hsp90b1	heat shock protein 90, beta (Grp94), member 1	0.84	1211	16

15499	Hsf1	heat shock factor 1	0.85	1084	24
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