Topic: Amyotrophic Lateral Sclerosis

NATURAL MEDICINE RESEARCH

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Amyotrophic Lateral Sclerosis

08/25/2014

Additional Research

- Neurodegenerative Diseases
- Excitotoxicity
- Neuroprotective Agents

What is Cumulative Knowledge, and Why Should it Interest Me?

Cumulative Knowledge is determined by ascribing a numerical value to all the articles indexed on our database. The GreenMedInfo.com algorithm appraises a study's overall evidentiary power and quality by generating a numerical value. This "Cumulative Knowledge" score incorporates variables such as study type, with the following types listed in descending order by their power: Meta-Analysis, Human Study, Human: Case Study, Animal:Transgenic, Animal, In Vitro, Review, and Commentary. The cumulative total will provide you an idea about the depth and quality of information that this topic has accumulated on our site. For instance, if you downloaded a document on "**Cancers: All**", you might see "**Curcumin**" with a **Cumulative Knowledge** of **677** and **Resveratrol** with a **Cumulative Knowledge** of **175**. This does not mean that **Curcumin** is better, but just that we have gathered more quality research on the Substance **Curcumin**.
Click here to read a more in depth explanation

How are Topics and Articles Sorted in this PDF?

Articles in this document are placed within their respective **Topic** category. If you download a document on the Disease "**Cancers: All**" and are interested in all articles pertaining to the Substance "**Curcumin**" with regard to "**Cancers: All**", you will find them under the "**Curcumin**" sub-section underneath the **Cumulative Knowledge** section . **Topics** are sorted based on their **Cumulative Knowledge** in relation to the main topic of the download. In the previous example, it would be in relation to "**Cancers: All**". Articles are then sorted based on the articles **Published Date**. **Articles** are sorted in a descending fashion, which means that the most recent articles are displayed first. **Articles** may appear more than once in this document. For each **Topic** that an **Article** contains, it will be displayed in that sub-section. For example, if an **Article** contains the **Substances** "**Pterostilbene**" and "**Resveratrol**", the article will be displayed under each **Topic**.

Quick Summary: 63 Substances

Name	Cumulative Knowledge	Article Count
Vitamin E	43	6
Coenzyme Q10	25	5
Vitamin B-12	21	3
Vitamin B12: methylcobalamin	21	3
Progesterone	19	7
Testosterone	18	5
Glycoaminoglycans	16	8
Antioxidant formulas	13	3
Estradiol (E(2))	13	8
Insulin-like Growth Factor (IGF-1)	13	7
Cannabinoids	12	7
Vitamin D	12	2

Glutathione	11	2
B-complex	10	1
Copper	10	1
Fruit: All	10	1
Omega-3 Fatty Acids	10	1
Polyunsaturated Fatty Acids (PUFAs)	10	1
Selenium	10	1
Superoxide dismutase	10	1
Traditional Chinese Medicine: JWSJZ Decoction	10	1
Vegetables: All	10	1
Whey	10	1
Zinc	10	1
Cannabis	9	5
Resveratrol	9	6
Curcumin	6	5
EGCG (Epigallocatechin gallate)	5	3
5-HTP (5-Hydroxytryptophan)	4	2
Bee Venom	4	3
Stilbenes	4	3
Alpha-Lipoic Acid	3	2
Ginkgo biloba	3	2
Melatonin	3	3
Amino Acids: Branched Chain	2	1
Arginine	2	1
Arginine-alpha-ketoglutarate (AAKG)	2	1
Caprylic Acid	2	1
Creatine	2	1
EPA (Eicosapentaenoic Acid)	2	1
GABA (gamma-Aminobutyric Acid)	2	1
Galactooligosaccharides	2	1
Genistein	2	1
Medium Chain Triglycerides	2	1
Polyphenols	2	2
Prebiotics	2	1
Pyruvate	2	1
Red Wine Extract	2	2
Rosemaric Acid	2	1
Rosemary	2	1
S-Adenosylmethionine (SAMe)	2	1
Scolopendra subspinipes mutilans	2	1
Wen Pi Tang	2	1
phytoestrogens	2	1
Carnitine	1	1
Flavonoids	1	1
Folic Acid	1	1
Herbal Therapies (Unspecified in Abstracts)	1	1
Hesperidin	1	1
Panax Ginseng	1	1
Tauroursodeoxycholic acid	1	1
Tibetan Herbal Formula: Padma 28	1	1
Wine	1	1

Quick Summary: 11 Problem Substances

Name	Cumulative Knowledge	Article Count
Lead	25	4
Pesticides	21	3
Statin Drugs	20	2

Tobacco	20	2
Lyme's Disease (Borrelia burgdorferi)	15	5
Agricultural Chemicals	10	1
L-glutamic Acid	10	1
Monosodium Glutamate (MSG)	10	1
Nicotine	10	1
Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)	3	2
Excitotoxins	1	1

Quick Summary: 13 Therapeutic Actions

Name	Cumulative Knowledge	Article Count
Acupuncture	20	2
Stem Cell Related Therapy	20	7
Exercise	15	4
Hypnosis	10	1
Spiritual/Religious Practice	10	1
Therapeutic Breathing	10	1
Dietary Modification: Low Carbohydrate/Ketogenic	7	5
Yoga	3	1
Electroacupuncture	2	1
Intermittent Hypoxia (low oxygen)	2	1
Aquatic therapy	1	1
Dietary Modification: High-Fat/Low-Carbohydrate	1	1
Mindfullness Training	1	1

Quick Summary: 1 Problematic Actions

Name	Cumulative Knowledge	Article Count
Electromagnetic Fields	20	1

Quick Summary: 41 Diseases

Name	Cumulative Knowledge	Article Count
Amyotrophic Lateral Sclerosis	465	109
Amyotrophic lateral sclerosis (ALS)	84	33
Motor Neuron Disease	27	15
Oxidative Stress	26	7
Neurodegenerative Diseases	25	14
Parkinson's Disease	25	6
Hyperhomocysteinemia	20	2
Smoking	20	2
Alzheimer's Disease	19	8
Multiple Sclerosis	15	5
Lead Poisoning	12	2
Stroke	12	2
High Homocysteine	11	2
Mitochondrial Diseases	11	2
Autoimmune Diseases	10	1
Celiac Disease	10	1
Epilepsy	10	1
Neuromuscular Diseases	10	1
Nicotine/Tobacco Toxicity	10	1
Supranuclear Palsy: Progressive	10	1
Vitamin D Deficiency	10	1
Guillain-Barre Syndrome	6	2
Huntington Disease	5	4
Brain Damage	4	2
Lipid Peroxidation	4	2
Lou Gehrig Disease	4	2

Peripheral Neuropathies	4	2
Spinal Cord Injuries	4	4
Bulbar palsy	3	1
Motor Neuron Disease: Amyotrophic Lateral Sclerosis	3	3
Aging	2	1
Brain: Microglial Activation	2	1
Stroke: Attenuation/Recovery	2	1
Abnormalities	1	1
Brain Inflammation	1	1
Drug-Induced	1	1
Endocannabinoid Disorders	1	1
Endocannabinoid System	1	1
Excitotoxicity	1	1
Inflammation	1	1
Neuroblastoma	1	1

Total Distinct Articles in this Document - 133

Category: Substances

Topic: Vitamin E

A high intake of poluunsaturated fatty acids and vitamin E is associated with a 50-60% decreased risk of developing ALS. - GMI Summary

Pubmed Data : J Neurol Neurosurg Psychiatry. 2007 Apr;78(4):367-71. Epub 2006 Apr 28. PMID: 16648143

Article Published Date : Apr 01, 2007

Authors : J H Veldink, S Kalmijn, G-J Groeneveld, W Wunderink, A Koster, J H M de Vries, J van der Luyt, J H J Wokke, L H Van den Berg

Study Type : Human Study
Additional Links
Substances : Polyunsaturated Fatty Acids (PUFAs) : CK(98) : AC(14), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Serum vitamin E levels have a protective effect on ALS risk. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Frontotemporal Degener. 2013 May ;14(4):246-51. Epub 2013 Jan 4. PMID: 23286756

Article Published Date : Apr 30, 2013

Authors : D Michal Freedman, Ralph W Kuncl, Stephanie J Weinstein, Nea Malila, Jarmo Virtamo, Demetrius Albanes

Study Type : Human Study
Additional Links
Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Vitamin E intake decreases the risk of amyotrophic lateral sclerosis: a pooled analysis of data from 5 prospective cohort studies.. - GMI Summary

Pubmed Data : Am J Epidemiol. 2011 Mar 15 ;173(6):595-602. Epub 2011 Feb 18. PMID: 21335424

Article Published Date : Mar 14, 2011

Authors : Hao Wang, Éilis J O'Reilly, Marc G Weisskopf, Giancarlo Logroscino, Marjorie L McCullough, Arthur Schatzkin, Laurence N Kolonel, Alberto Ascherio

Study Type : Human Study
Additional Links

Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Vitamin E supplementation may contribute to preventing amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Ann Neurol. 2005 Jan;57(1):104-10. PMID: 15529299

Article Published Date : Jan 01, 2005

Authors : Alberto Ascherio, Marc G Weisskopf, Eilis J O'reilly, Eric J Jacobs, Marjorie L McCullough, Eugenia E Calle, Merit Cudkowicz, Michael J Thun

Study Type : Human Study
Additional Links
Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

The progression of ALS is associated with oxygen radical-induced lipid peroxidative damage, indicating that antioxidant therapy may be useful. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Jul 1;53(1):66-77. PMID: 9670993

Article Published Date : Jul 01, 1998

Authors : E D Hall, P K Andrus, J A Oostveen, T J Fleck, M E Gurney

Study Type : Animal Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443

Article Published Date : Dec 01, 2009

Authors : Barkha P Patel, Mazen J Hamadeh

Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Coenzyme Q10

Coenzyme Q10 levels as high as 3,000 mg a day are safe and well-tolerated in ALS patients. - GMI Summary

Pubmed Data : Neurology. 2005 Dec 13;65(11):1834-6. PMID: 16344537

Article Published Date : Dec 13, 2005

Authors : K L Ferrante, J Shefner, H Zhang, R Betensky, M O'Brien, H Yu, M Fantasia, J Taft, M F Beal, B Traynor, K Newhall, P Donofrio, J Caress, C Ashburn, B Freiberg, C O'Neill, C Paladenech, T Walker, A Pestronk, B Abrams, J Florence, R Renna, J Schierbecker, B Malkus, M Cudkowicz

Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

There is increased mitochondrial oxidative damage in patients with sporadic amyotrophic lateral sclerosis - GMI Summary

Pubmed Data : J Neurol Sci. 2008 Apr 15;267(1-2):66-9. Epub 2007 Oct 24. PMID: 17961597
Article Published Date : Apr 15, 2008
Authors : Takahiko Murata, Chigumi Ohtsuka, Yasuo Terayama
Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Mitochondrial Diseases : CK(157) : AC(57), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944
Article Published Date : Dec 31, 2013
Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino
Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Coenzyme Q10 demonstrated significant therapeutic effects in transgenic mouse model of ALS and Huntington's disease. - GMI Summary

Pubmed Data : Free Radic Res. 2002 Apr;36(4):455-60. PMID: 12069110
Article Published Date : Apr 01, 2002
Authors : M Flint Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Vitamin B-12

Methylcobalamin may prevent muscle wasting in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Muscle Nerve. 1998 Dec;21(12):1775-8. PMID: 9843082

Article Published Date : Dec 01, 1998

Authors : R Kaji, M Kodama, A Imamura, T Hashida, N Kohara, M Ishizu, K Inui, J Kimura

Study Type : Human Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Vitamin B12 as methylcobalamin significantly prolongs survival time in Amyotrophic Lateral Sclerosis. - GMI Summary

Pubmed Data : Brain Nerve. 2007 Oct;59(10):1141-7. PMID: 17969354

Article Published Date : Oct 01, 2007

Authors : Yuishin Izumi, Ryuji Kaji

Study Type : Human Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Methyl Vitamin B12 rescues a motor neuron-like cell line from homocysteine-mediated cell death. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2011 Mar 15;251(3):217-25. Epub 2011 Jan 13. PMID: 21237187

Article Published Date : Mar 15, 2011

Authors : Richelle A Hemendinger, Edward J Armstrong, Benjamin Rix Brooks

Study Type : In Vitro Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), High Homocysteine : CK(387) : AC(58), Neuroblastoma : CK(51) : AC(31)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Vitamin B12: methylcobalamin

Methylcobalamin may prevent muscle wasting in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Muscle Nerve. 1998 Dec;21(12):1775-8. PMID: 9843082

Article Published Date : Dec 01, 1998

Authors : R Kaji, M Kodama, A Imamura, T Hashida, N Kohara, M Ishizu, K Inui, J Kimura

Study Type : Human Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Vitamin B12 as methylcobalamin significantly prolongs survival time in Amyotrophic Lateral Sclerosis. - GMI Summary

Pubmed Data : Brain Nerve. 2007 Oct;59(10):1141-7. PMID: 17969354

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Methyl Vitamin B12 rescues a motor neuron-like cell line from homocysteine-mediated cell death. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2011 Mar 15;251(3):217-25. Epub 2011 Jan 13. PMID: 21237187

Article Published Date : Mar 15, 2011

Authors : Richelle A Hemendinger, Edward J Armstrong, Benjamin Rix Brooks

Study Type : In Vitro Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), High Homocysteine : CK(387) : AC(58), Neuroblastoma : CK(51) : AC(31)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Progesterone

Progesterone levels correlate positively with survival and prognosis in ALS patients. - GMI Summary

Pubmed Data : Acta Neurol Scand. 2011 Jan;123(1):60-7. PMID: 20545634

Article Published Date : Jan 01, 2011

Authors : G Gargiulo Monachelli, M Meyer, G E Rodríguez, L I Garay, R E P Sica, A F De Nicola, M C González Deniselle

Study Type : Human Study
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Progesterone has neuroprotective properties in a mouse model of spinal cord motor neuron degeneration disease. - GMI Summary

Pubmed Data : Neurobiol Dis. 2002 Dec;11(3):457-68. PMID: 12586554

Article Published Date : Dec 01, 2002

Authors : María Claudia Gonzalez Deniselle, Juan José López-Costa, Jorge Pecci Saavedra, Luciana Pietranera, Susana L Gonzalez, Laura Garay, Rachida Guennoun, Michael Schumacher, Alejandro F De Nicola

Study Type : Animal Study
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Steroid hormones may have neuroprotective properties in ALS. - GMI Summary

Pubmed Data : Cell Mol Neurobiol. 2001 Jun;21(3):237-54. PMID: 11569536

Article Published Date : Jun 01, 2001

Authors : M C González Deniselle, S L González, A F De Nicola

Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14), Progesterone : CK(70) : AC(26), Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Progesterone has neuroprotective properties in traumatic central nervous system and motor neuron degeneration. - GMI Summary

Pubmed Data : Front Neuroendocrinol. 2009 Jul;30(2):173-87. Epub 2009 Mar 24. PMID: 19318112

Article Published Date : Jul 01, 2009

Authors : Alejandro F De Nicola, Florencia Labombarda, Maria Claudia Gonzalez Deniselle, Susana L Gonzalez, Laura Garay, Maria Meyer, Gisella Gargiulo, Rachida Guennoun, Michael Schumacher

Study Type : Review
Additional Links
Substances : Progesterone : CK(70) : AC(26)

Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Motor Neuron Disease: Amyotrophic Lateral Sclerosis : CK(336) : AC(69), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Testosterone

Free testosterone is significantly decreased in ALS, indicating that supplementation with testosterone may have a therapeutic role in ALS treatment. - GMI Summary

Pubmed Data : J Neurol Sci. 2002 Mar 15;195(1):67-70. PMID: 11867076
Article Published Date : Mar 15, 2002
Authors : Alessandra Militello, Gaetano Vitello, Christian Lunetta, Antonio Toscano, Gianni Maiorana, Tommaso Piccoli, Vincenzo La Bella
Study Type : Human Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Steroid hormones may have neuroprotective properties in ALS. - GMI Summary

Pubmed Data : Cell Mol Neurobiol. 2001 Jun;21(3):237-54. PMID: 11569536
Article Published Date : Jun 01, 2001
Authors : M C González Deniselle, S L González, A F De Nicola
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14), Progesterone : CK(70) : AC(26), Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Testosterone may have neuroprotective properties. - GMI Summary

Pubmed Data : Neurosci Lett. 2009 Nov 13;465(2):123-7. Epub 2009 Sep 6. PMID: 19735695
Article Published Date : Nov 13, 2009
Authors : Randall E Wilson, Kellie D Coons, Dale R Sengelaub
Study Type : Animal Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Damage : CK(85) : AC(39), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Glycoaminoglycans

Co-administration of IGF-I and glycosaminoglycans greatly delays motor neuron disease in the mouse model. - GMI Summary

Pubmed Data : J Neurochem. 2002 Apr;81(1):194-202. PMID: 12067233
Article Published Date : Apr 01, 2002
Authors : Alfredo Gorio, Elena Lesma, Laura Madaschi, Anna Maria Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Glycoaminoglycans have neurotrophic and neuroregenerative effects in a mouse model of motor neuron disease. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Mar 1;51(5):559-62. PMID: 9511999
Article Published Date : Mar 01, 1998
Authors : A Gorio, L Vergani, E Lesma, A M Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuritogenic : CK(112) : AC(51), Neuroprotective Agents : CK(990) : AC(508)

Glycosaminoglycans boost insulin-like growth factor-I-promoted neuroprotection, indicating their potential value in motor neuron disease and peripheral neuropathies. - GMI Summary

Pubmed Data : Neuroscience. 1999;93(2):565-72. PMID: 10465440
Article Published Date : Jan 01, 1999
Authors : L Vergani, M Losa, E Lesma, A M Di Giulio, A Torsello, E E Müller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Peripheral Neuropathies : CK(191) : AC(31)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Drug Synergy : CK(341) : AC(151)

Glycosaminoglycans co-administration enhance insulin-like growth factor-I neuroprotective and neuroregenerative activity in traumatic and genetic models of motor neuron disease. - GMI Summary

Pubmed Data : Int J Dev Neurosci. 2000 Jul-Aug;18(4-5):339-46. PMID: 10817918
Article Published Date : Jul 01, 2000
Authors : A M Di Giulio, E Germani, E Lesma, E Muller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Neurorestorative : CK(50) : AC(14)
Additional Keywords : Natural Substance Synergy : CK(155) : AC(86)

Topic: Antioxidant formulas

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810
Article Published Date : Jan 01, 1995
Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson
Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

The progression of ALS is associated with oxygen radical-induced lipid peroxidative damage, indicating that antioxidant therapy may be useful. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Jul 1;53(1):66-77. PMID: 9670993
Article Published Date : Jul 01, 1998
Authors : E D Hall, P K Andrus, J A Oostveen, T J Fleck, M E Gurney
Study Type : Animal Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Effects of natural antioxidants in neurodegenerative disease. - GMI Summary

Pubmed Data : Nutr Neurosci. 2012 Jan ;15(1):1-9. PMID: 22305647
Article Published Date : Dec 31, 2011
Authors : Sonia Luz Albarracin, Ben Stab, Zulma Casas, Jhon Jairo Sutachan, Ismael Samudio, Janneth Gonzalez, Luis Gonzalo, Francisco Capani, Ludis Morales, George E Barreto
Study Type : Review
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Polyphenols : CK(484) : AC(182)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Topic: Estradiol (E(2))

Estradiol slows neurodegeneration in a female mouse experimental model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Neurol Sci. 2008 May 15;268(1-2):40-7. Epub 2007 Dec 4. PMID: 18054961
Article Published Date : May 15, 2008
Authors : Chan-Il Choi, Young-Don Lee, Byoung Joo Gwag, Sung Ig Cho, Sung-Soo Kim, Haeyoung Suh-Kim
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Female sex hormones such as estradiol and exercise have a possible neuroprotective role in female patients with ALS. - GMI Summary

Pubmed Data : Med Hypotheses. 2009 Apr;72(4):434-43. Epub 2009 Jan 19. PMID: 14561497
Article Published Date : Apr 01, 2009
Authors : J H Veldink, P R Bär, E A J Joosten, M Otten, J H J Wokke, L H van den Berg
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Gender Differences : CK(63) : AC(8)

Steroid hormones may have neuroprotective properties in ALS. - GMI Summary

Pubmed Data : Cell Mol Neurobiol. 2001 Jun;21(3):237-54. PMID: 11569536
Article Published Date : Jun 01, 2001
Authors : M C González Deniselle, S L González, A F De Nicola
Study Type : Animal Study
Additional Links

Substances : Estradiol (E(2)) : CK(21) : AC(14), Progesterone : CK(70) : AC(26), Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Treatment with estradiol (E2) may also delay disease progression of post-menopausal women with ALS. - GMI Summary

Pubmed Data : Brain Res. 2004 Sep 17;1021(1):128-31. PMID: 15328040
Article Published Date : Sep 17, 2004
Authors : G J Groeneveld, F L Van Muiswinkel, J M Sturkenboom, J H J Wokke, P R Bär, L H Van den Berg
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Estradiol may play a role in the neuroprotection of spinal astrocytes in amyotrophic lateral sclerosis patients. - GMI Summary

Pubmed Data : Neurobiol Dis. 2005 Nov;20(2):461-70. PMID: 15893467
Article Published Date : Nov 01, 2005
Authors : Paola Platania, Giovanna Seminara, Eleonora Aronica, Dirk Troost, Maria Vincenza Catania, Maria Angela Sortino
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Estrogen Receptor Modulators : CK(32) : AC(25), Neuroprotective Agents : CK(990) : AC(508)

Estradiol protects spinal motor neurons from excitotoxic insults in vitro, and may have application as a treatment for ALS. - GMI Summary

Pubmed Data : Neuroreport. 2000 Nov 9;11(16):3493-7. PMID: 11095506
Article Published Date : Nov 09, 2000
Authors : T Nakamizo, M Urushitani, R Inoue, A Shinohara, H Sawada, K Honda, T Kihara, A Akaike, S Shimohama
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Estrogen may have therapeutic value in the treatment of amyotrophic lateral sclerosis and spinal cord injury. - GMI Summary

Pubmed Data : J Endocrinol. 2011 Feb;208(2):171-82. Epub 2010 Nov 10. PMID: 21068071
Article Published Date : Feb 01, 2011
Authors : Arabinda Das, Joshua A Smith, Cameron Gibson, Abhay K Varma, Swapan K Ray, Naren L Banik
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Tumor Necrosis Factor (TNF) Alpha Inhibitor : CK(1002) : AC(357)

Topic: Insulin-like Growth Factor (IGF-1)

Co-administration of IGF-I and glycosaminoglycans greatly delays motor neuron

disease in the mouse model. - GMI Summary

Pubmed Data : J Neurochem. 2002 Apr;81(1):194-202. PMID: 12067233
Article Published Date : Apr 01, 2002
Authors : Alfredo Gorio, Elena Lesma, Laura Madaschi, Anna Maria Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Glycosaminoglycans boost insulin-like growth factor-I-promoted neuroprotection, indicating their potential value in motor neuron disease and peripheral neuropathies. - GMI Summary

Pubmed Data : Neuroscience. 1999;93(2):565-72. PMID: 10465440
Article Published Date : Jan 01, 1999
Authors : L Vergani, M Losa, E Lesma, A M Di Giulio, A Torsello, E E Müller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Peripheral Neuropathies : CK(191) : AC(31)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Drug Synergy : CK(341) : AC(151)

Glycosaminoglycans co-administration enhance insulin-like growth factor-I neuroprotective and neuroregenerative activity in traumatic and genetic models of motor neuron disease. - GMI Summary

Pubmed Data : Int J Dev Neurosci. 2000 Jul-Aug;18(4-5):339-46. PMID: 10817918
Article Published Date : Jul 01, 2000
Authors : A M Di Giulio, E Germani, E Lesma, E Muller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Neurorestorative : CK(50) : AC(14)
Additional Keywords : Natural Substance Synergy : CK(155) : AC(86)

IGF-I prevents glutamate-induced motor neuron programmed cell death. - GMI Summary

Pubmed Data : Food Chem Toxicol. 2009 Jan 15. PMID: 15193297
Article Published Date : Jan 15, 2009
Authors : Andrea M Vincent, Bret C Mobley, Andrew Hiller, Eva L Feldman
Study Type : In Vitro Study
Additional Links
Substances : Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Excitotoxicity : CK(57) : AC(34)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)

Topic: Cannabinoids

A cannabinoid CB2 receptor selective compound, delays disease progression in a mouse model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Eur J Pharmacol. 2006 Aug 7;542(1-3):100-5. Epub 2006 May 20. PMID: 16781706
Article Published Date : Aug 07, 2006

Authors : Kathline Kim, Dan H Moore, Alexandros Makriyannis, Mary E Abood
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Cannabinol may have therapeutic value in ameliorating symptoms in ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2005 Sep;6(3):182-4. PMID: 16183560
Article Published Date : Sep 01, 2005
Authors : Patrick Weydt, Soyon Hong, Anke Witting, Thomas Möller, Nephi Stella, Michel Kliot
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Cannabis contains a number of compounds which may have therapeutic value in delaying the progression of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2004 Mar;5(1):33-9. PMID: 15204022
Article Published Date : Mar 01, 2004
Authors : Chandrasekaran Raman, Sean D McAllister, Gulrukh Rizvi, Sonal G Patel, Dan H Moore, Mary E Abood
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Cannabis may provide support as a novel disease-modifying therapy in ALS. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2014 Sep ;20(9):809-15. Epub 2014 Apr 7. PMID: 24703394
Article Published Date : Aug 31, 2014
Authors : Miguel Moreno-Martet, Francisco Espejo-Porras, Javier Fernández-Ruiz, Eva de Lago
Study Type : Transgenic Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

The CB2 cannabinoid agonist AM-1241 prolongs survival (56%) in a transgenic mouse model of amyotrophic lateral sclerosis when initiated at symptom onset. - GMI Summary

Pubmed Data : Curr Eye Res. 2005 Jul;30(7):583-91. PMID: 17241118
Article Published Date : Jul 01, 2005
Authors : Jennifer L Shoemaker, Kathryn A Seely, Ronald L Reed, John P Crow, Paul L Prather
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Cannabis has potential therapeutic value in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2010 Aug;27(5):347-56. Epub 2010 May 3. PMID: 20439484

Article Published Date : Aug 01, 2010

Authors : Gregory T Carter, Mary E Abood, Sunil K Aggarwal, Michael D Weiss

Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Anti-Inflammatory Agents : CK(1287) : AC(452), Antineoplastic Agents : CK(901) : AC(505), Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

The endocannabinoid system may play a valuable role in the development of treatment options for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Curr Pharm Des. 2008;14(23):2306-16. PMID: 18781981

Article Published Date : Jan 01, 2008

Authors : Lynsey G Bilsland, Linda Greensmith

Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Endocannabinoid Disorders : CK(15) : AC(9), Endocannabinoid System : CK(16) : AC(6)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Vitamin D

Suboptimal vitamin D levels are frequently found in ALS patients (81%). - GMI Summary

Pubmed Data : J Clin Neurosci. 2013 Nov ;20(11):1550-3. Epub 2013 Jun 29. PMID: 23815870

Article Published Date : Oct 31, 2013

Authors : Chafic Karam, Matthew J Barrett, Theresa Imperato, Daniel J L MacGowan, Stephen Scelsa

Study Type : Human Study
Additional Links
Substances : Vitamin D : CK(1742) : AC(247)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Vitamin D Deficiency : CK(505) : AC(49)

Extremely high dose vitamin D attenuates a feature of ALS, but not disease outcomes; also toxic to female mice. - GMI Summary

Pubmed Data : PLoS One. 2013 ;8(2):e30243. Epub 2013 Feb 6. PMID: 23405058

Article Published Date : Dec 31, 2012

Authors : Alexandro Gianforcaro, Jesse A Solomon, Mazen J Hamadeh

Study Type : Animal Study
Additional Links
Substances : Vitamin D : CK(1742) : AC(247)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Glutathione

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810

Article Published Date : Jan 01, 1995

Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson

Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) :

AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

A dietary reduction in glutathione precursors, e.g. glutamate, cysteine and sulfite, as well as glutathionine supplementation may benefit patients with ALS - GMI Summary

Pubmed Data : J Altern Complement Med. 2008 Nov;14(9):1159-64. PMID: 18973429
Article Published Date : Nov 01, 2008
Authors : Patricia B E Woolsey
Study Type : Commentary
Additional Links
Substances : Glutathione : CK(61) : AC(16)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: B-complex

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Copper

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810
Article Published Date : Jan 01, 1995
Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson
Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

Topic: Fruit: All

A higher intake of food rich in antioxidants such as fruit and vegetables confer protection against the development of ALS. - GMI Summary

Pubmed Data : Life Sci. 2003 Dec 19;74(5):663-73. PMID: 19209004
Article Published Date : Dec 19, 2003
Authors : K Okamoto, T Kihira, G Kobashi, M Washio, S Sasaki, T Yokoyama, Y Miyake, N Sakamoto, Y

Inaba, M Nagai
Study Type : Human Study
Additional Links
Substances : Fruit: All : CK(2019) : AC(488), Vegetables: All : CK(551) : AC(69)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Omega-3 Fatty Acids

"Consumption of foods high inω-3 PUFAs may help prevent or delay the onset of ALS." - GMI Summary

Pubmed Data : JAMA Neurol. 2014 Jul 14. Epub 2014 Jul 14. PMID: 25023276
Article Published Date : Jul 13, 2014
Authors : Kathryn C Fitzgerald, Eilis J O'Reilly, Guido J Falcone, Marjorie L McCullough, Yikyung Park, Laurence N Kolonel, Alberto Ascherio
Study Type : Human Study
Additional Links
Substances : Omega-3 Fatty Acids : CK(2769) : AC(328)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Topic: Polyunsaturated Fatty Acids (PUFAs)

A high intake of poluunsaturated fatty acids and vitamin E is associated with a 50-60% decreased risk of developing ALS. - GMI Summary

Pubmed Data : J Neurol Neurosurg Psychiatry. 2007 Apr;78(4):367-71. Epub 2006 Apr 28. PMID: 16648143
Article Published Date : Apr 01, 2007
Authors : J H Veldink, S Kalmijn, G-J Groeneveld, W Wunderink, A Koster, J H M de Vries, J van der Luyt, J H J Wokke, L H Van den Berg
Study Type : Human Study
Additional Links
Substances : Polyunsaturated Fatty Acids (PUFAs) : CK(98) : AC(14), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Selenium

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810
Article Published Date : Jan 01, 1995
Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson
Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

Topic: Superoxide dismutase

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810

Article Published Date : Jan 01, 1995

Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson

Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

Topic: Traditional Chinese Medicine: JWSJZ Decoction

JWSJZ decoction may be a safe treatment for ALS, and may have delayed the development of ALS. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2013 ;2013:347525. Epub 2013 Sep 5. PMID: 24093046

Article Published Date : Dec 31, 2012

Authors : Weidong Pan, Xiaojing Su, Jie Bao, Jun Wang, Jin Zhu, Dingfang Cai, Li Yu, Hua Zhou

Study Type : Human Study
Additional Links
Substances : Traditional Chinese Medicine: JWSJZ Decoction : CK(10) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Topic: Vegetables: All

A higher intake of food rich in antioxidants such as fruit and vegetables confer protection against the development of ALS. - GMI Summary

Pubmed Data : Life Sci. 2003 Dec 19;74(5):663-73. PMID: 19209004

Article Published Date : Dec 19, 2003

Authors : K Okamoto, T Kihira, G Kobashi, M Washio, S Sasaki, T Yokoyama, Y Miyake, N Sakamoto, Y Inaba, M Nagai

Study Type : Human Study
Additional Links
Substances : Fruit: All : CK(2019) : AC(488), Vegetables: All : CK(551) : AC(69)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Whey

Whey protein improves the condition of patients with amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Arq Neuropsiquiatr. 2010 Apr;68(2):263-8. PMID: 20464297

Article Published Date : Apr 01, 2010

Authors : Luciano Bruno de Carvalho Silva, Lucia Figueiredo Mourão, Ariovaldo Armando Silva, Núbia Maria Freire Vieira Lima, Sara Regina Almeida, Marcondes C Franca Jr, Anamarli Nucci, Jaime Amaya-Farfán

Study Type : Human Study
Additional Links
Substances : Whey : CK(343) : AC(72)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Zinc

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810
Article Published Date : Jan 01, 1995
Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson
Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

Topic: Cannabis

Cannabis use is not uncommon in ALS patients who reported significant benefits from its use. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2004 Mar-Apr;21(2):95-104. PMID: 15055508
Article Published Date : Mar 01, 2004
Authors : Dagmar Amtmann, Patrick Weydt, Kurt L Johnson, Mark P Jensen, Gregory T Carter
Study Type : Human: Case Report
Additional Links
Substances : Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Cannabinol may have therapeutic value in ameliorating symptoms in ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2005 Sep;6(3):182-4. PMID: 16183560
Article Published Date : Sep 01, 2005
Authors : Patrick Weydt, Soyon Hong, Anke Witting, Thomas Möller, Nephi Stella, Michel Kliot
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Cannabis contains a number of compounds which may have therapeutic value in delaying the progression of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2004 Mar;5(1):33-9. PMID: 15204022
Article Published Date : Mar 01, 2004
Authors : Chandrasekaran Raman, Sean D McAllister, Gulrukh Rizvi, Sonal G Patel, Dan H Moore, Mary E Abood
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Cannabis has potential therapeutic value in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2010 Aug;27(5):347-56. Epub 2010 May 3. PMID: 20439484
Article Published Date : Aug 01, 2010
Authors : Gregory T Carter, Mary E Abood, Sunil K Aggarwal, Michael D Weiss
Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Pharmacological Actions : Anti-Inflammatory Agents : CK(1287) : AC(452), Antineoplastic Agents : CK(901) : AC(505), Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

It has been suggested that where it is legal to do so, marijuana should be considered in the pharmacological management of ALS. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2001 Jul-Aug;18(4):264-70. PMID: 11467101
Article Published Date : Jul 01, 2001
Authors : G T Carter, B S Rosen
Study Type : Review
Additional Links
Substances : Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Resveratrol

Resveratrol Ameliorates Motor Neuron Degeneration and Improves Survival in SOD1(G93A) Mouse Model of Amyotrophic Lateral Sclerosis. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:483501. Epub 2014 Jun 26. PMID: 25057490
Article Published Date : Dec 31, 2013
Authors : Lin Song, Liang Chen, Xiaojie Zhang, Jia Li, Weidong Le
Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Resveratrol improves motoneuron function and extends survival in SOD1(G93A) ALS mice. - GMI Summary

Pubmed Data : Neurotherapeutics. 2014 Apr ;11(2):419-32. PMID: 24414863
Article Published Date : Mar 31, 2014
Authors : Renzo Mancuso, Jaume del Valle, Laura Modol, Anna Martinez, Ana B Granado-Serrano, Omar Ramirez-Núñez, Mercé Pallás, Manel Portero-Otin, Rosario Osta, Xavier Navarro
Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Resveratrol upregulated heat shock proteins and extended the survival of in a mouse model of ALS. - GMI Summary

Pubmed Data : Brain Res. 2012 Nov 5 ;1483:112-7. Epub 2012 Sep 19. PMID: 23000195
Article Published Date : Nov 04, 2012
Authors : Soyoung Han, Jong-Ryoul Choi, Ki Soon Shin, Shin Jung Kang
Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Heat Shock Protein Inducer : CK(51) : AC(17), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Resveratrol has a protective effect in a cell model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurosci Lett. 2011 Oct 10 ;503(3):250-5. Epub 2011 Aug 27. PMID: 21896316
Article Published Date : Oct 09, 2011
Authors : Jing Wang, Yun Zhang, Lu Tang, Nan Zhang, Dongsheng Fan
Study Type : In Vitro Study

Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235
Article Published Date : Dec 31, 2007
Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto
Study Type : Review
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Curcumin

Curcumin has anti-apoptotic properties in a transgenic amyotrophic lateral sclerosis mice. - GMI Summary

Pubmed Data : J Neurochem. 2005 Jun ;93(5):1087-98. PMID: 15934930
Article Published Date : May 31, 2005
Authors : Hoon Ryu, Karen Smith, Sandra I Camelo, Isabel Carreras, Junghee Lee, Antonio H Iglesias, Fernando Dangond, Kerry A Cormier, Merit E Cudkowicz, Robert H Brown, Robert J Ferrante
Study Type : Animal Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40), Bcl-2 protein down-regulation : CK(52) : AC(44), NF-kappaB Inhibitor : CK(616) : AC(417)

Curcumin abolishes mutant TDP-43 induced excitability in a motoneuron-like cellular model of ALS. - GMI Summary

Pubmed Data : Neuroscience. 2014 Jul 11 ;272:141-53. Epub 2014 Apr 29. PMID: 24785678
Article Published Date : Jul 10, 2014
Authors : H Dong, L Xu, L Wu, X Wang, W Duan, H Li, C Li
Study Type : In Vitro Study

Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Curcumin exhibits potential therapeutic properties in a cell model of ALS. - GMI Summary

Pubmed Data : Mol Neurobiol. 2014 Feb ;49(1):368-79. Epub 2013 Aug 10. PMID: 23934646
Article Published Date : Jan 31, 2014
Authors : Weisong Duan, Yansu Guo, Jian Xiao, Xiaoyu Chen, Zhongyao Li, Huihui Han, Chunyan Li
Study Type : In Vitro Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Curcumin shows therapeutic value in a cell model of ALS. - GMI Summary

Pubmed Data : Brain Res Bull. 2012 Dec 1 ;89(5-6):185-90. Epub 2012 Sep 15. PMID: 22986236
Article Published Date : Nov 30, 2012
Authors : Jinsheng Lu, Weisong Duan, Yansu Guo, Hong Jiang, Zhongyao Li, Jing Huang, Kun Hong, Chunyan Li
Study Type : In Vitro Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Curcumins promote monocytic gene expression related toβ-amyloid and superoxide dismutase clearance. - GMI Summary

Pubmed Data : Neurodegener Dis. 2012 ;10(1-4):274-6. Epub 2011 Dec 7. PMID: 22156608
Article Published Date : Dec 31, 2011
Authors : J R Cashman, S Gagliardi, M Lanier, S Ghirmai, K J Abel, M Fiala
Study Type : Review
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Topic: EGCG (Epigallocatechin gallate)

EGCG has multifunctional therapeutic effects in the mouse model of ALS - GMI Summary

Pubmed Data : Neurochem Res. 2006 Oct;31(10):1263-9. Epub 2006 Oct 5. PMID: 17021948
Article Published Date : Oct 01, 2006
Authors : Zhihao Xu, Sheng Chen, Xuping Li, Guangrui Luo, Liang Li, Weidong Le
Study Type : Animal Study
Additional Links
Substances : EGCG (Epigallocatechin gallate) : CK(211) : AC(120)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

EGCG may provide a potential therapeutic candidate for ALS as a disease-modifying agent. - GMI Summary

Pubmed Data : Biomed Res. 2007 Oct;28(5):261-6. PMID: 16356650
Article Published Date : Oct 01, 2007
Authors : Seong-Ho Koh, Sang Mok Lee, Hyun Young Kim, Kyu-Yong Lee, Young Joo Lee, Hee-Tae Kim, Juhan Kim, Myung-Ho Kim, Myung Sil Hwang, Chiwon Song, Ki-Wha Yang, Kwang Woo Lee, Seung Hyun

Kim, Ok-Hee Kim

Study Type : Animal Study
Additional Links
Substances : EGCG (Epigallocatechin gallate) : CK(211) : AC(120)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443

Article Published Date : Dec 01, 2009

Authors : Barkha P Patel, Mazen J Hamadeh

Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: 5-HTP (5-Hydroxytryptophan)

The serotonin precurser 5-HTP improves locomotor function and survival in a mouse model of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2003 Sep;4(3):171-6. PMID: 14527871

Article Published Date : Sep 01, 2003

Authors : B J Turner, E C Lopes, S S Cheema

Study Type : Animal Study
Additional Links
Substances : 5-HTP (5-Hydroxytryptophan) : CK(74) : AC(10)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lou Gehrig Disease : CK(337) : AC(69)

Topic: Bee Venom

Bee venom attenuates neuroinflammatory events and extends survival in amyotrophic lateral sclerosis models. - GMI Summary

Pubmed Data : J Neuroinflammation. 2010 ;7:69. Epub 2010 Oct 15. PMID: 20950451

Article Published Date : Dec 31, 2009

Authors : Eun Jin Yang, Jing Hua Jiang, Sang Min Lee, Sun Choel Yang, Hye Suk Hwang, Myeong Soo Lee, Sun-Mi Choi

Study Type : Animal Study
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Bee venom may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2012 ;2012:368196. Epub 2011 Aug 28. PMID: 21904562

Article Published Date : Dec 31, 2011

Authors : Sang Min Lee, Eun Jin Yang, Sun-Mi Choi, Seon Hwy Kim, Myung Gi Baek, Jing Hua Jiang

Study Type : Review
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Bee venom shows value in a cell model of ALS. - GMI Summary

Pubmed Data : BMC Complement Altern Med. 2013 ;13:179. Epub 2013 Jul 18. PMID: 23866691
Article Published Date : Dec 31, 2012
Authors : Seon Hwy Kim, So Young Jung, Kang-Woo Lee, Sun Hwa Lee, MuDan Cai, Sun-Mi Choi, Eun Jin Yang
Study Type : In Vitro Study
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Topic: Stilbenes

Resveratrol upregulated heat shock proteins and extended the survival of in a mouse model of ALS. - GMI Summary

Pubmed Data : Brain Res. 2012 Nov 5 ;1483:112-7. Epub 2012 Sep 19. PMID: 23000195
Article Published Date : Nov 04, 2012
Authors : Soyoung Han, Jong-Ryoul Choi, Ki Soon Shin, Shin Jung Kang
Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Heat Shock Protein Inducer : CK(51) : AC(17), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Resveratrol has a protective effect in a cell model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurosci Lett. 2011 Oct 10 ;503(3):250-5. Epub 2011 Aug 27. PMID: 21896316
Article Published Date : Oct 09, 2011
Authors : Jing Wang, Yun Zhang, Lu Tang, Nan Zhang, Dongsheng Fan
Study Type : In Vitro Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235
Article Published Date : Dec 31, 2007
Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto
Study Type : Review
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Alpha-Lipoic Acid

Lipoic acid significantly improves survival time in a transgenic mouse model of ALS - GMI Summary

Pubmed Data : Exp Neurol. 2001 Apr;168(2):419-24. PMID: 11259130
Article Published Date : Apr 01, 2001
Authors : O A Andreassen, A Dedeoglu, A Friedlich, K L Ferrante, D Hughes, C Szabo, M F Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Ginkgo biloba

Gingko biloba has a gender-specific neuroprotective effect in a transgenic mouse model of ALS. - GMI Summary

Pubmed Data : J Mol Neurosci. 2001 Aug;17(1):89-96. PMID: 11665866
Article Published Date : Aug 01, 2001
Authors : R J Ferrante, A M Klein, A Dedeoglu, M F Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Ginkgo biloba : CK(541) : AC(108)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Melatonin

Melatonin normalizes markers of oxidative stress to control values in a mouse model of ALS. - GMI Summary

Pubmed Data : J Pineal Res. 2006 Nov;41(4):313-23. PMID: 17014688
Article Published Date : Nov 01, 2006
Authors : Jochen H Weishaupt, Claudia Bartels, Esther Pölking, Jeannine Dietrich, Gundula Rohde, Burkhard Poeggeler, Nina Mertens, Swetlana Sperling, Matthias Bohn, Gerald Hüther, Armin Schneider,

Alfred Bach, Anna-Leena Sirén, Rüdiger Hardeland, Mathias Bähr, Klaus-Armin Nave, Hannelore Ehrenreich

Study Type : In Vitro Study
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Melatonin supplementation may have a therapeutic role in neurodegenerative disorders. - GMI Summary

Pubmed Data : Front Biosci (Landmark Ed). 2014 ;19:429-46. Epub 2014 Jan 1. PMID: 24389194

Article Published Date : Dec 31, 2013

Authors : Giovanni Polimeni, Emanuela Esposito, Valentina Bevelacqua, Claudio Guarneri, Salvatore Cuzzocrea

Study Type : Review
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443

Article Published Date : Dec 01, 2009

Authors : Barkha P Patel, Mazen J Hamadeh

Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Amino Acids: Branched Chain

Branched chain amino acids may have a therapeutic role in ALS. - GMI Summary

Pubmed Data : Mol Nutr Food Res. 2011 Apr ;55(4):541-52. Epub 2011 Jan 5. PMID: 21462321

Article Published Date : Mar 31, 2011

Authors : Aldina Venerosi, Alberto Martire, Angela Rungi, Massimo Pieri, Antonella Ferrante, Cristina Zona, Patrizia Popoli, Gemma Calamandrei

Study Type : Animal Study
Additional Links
Substances : Amino Acids: Branched Chain : CK(12) : AC(2)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Arginine

L-arginine has potent in vitro and in vivo neuroprotective properties and may be a candidate for therapeutic trials in ALS. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 2009 Jul 10;384(4):524-9. Epub 2009 May 8. PMID: 19427829

Article Published Date : Jul 10, 2009

Authors : Junghee Lee, Hoon Ryu, Neil W Kowall

Study Type : Animal Study
Additional Links
Substances : Arginine : CK(976) : AC(168)

Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Arginine-alpha-ketoglutarate (AAKG)

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944
Article Published Date : Dec 31, 2013
Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino
Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Caprylic Acid

Caprylic triglyceride as a novel therapeutic approach to effectively improve the performance and attenuate the symptoms due to the motor neuron loss in ALS disease. - GMI Summary

Pubmed Data : PLoS One. 2012 ;7(11):e49191. Epub 2012 Nov 7. PMID: 23145119
Article Published Date : Dec 31, 2011
Authors : Wei Zhao, Merina Varghese, Prashant Vempati, Anastasiya Dzhun, Alice Cheng, Jun Wang, Dale Lange, Amanda Bilski, Irene Faravelli, Giulio Maria Pasinetti
Study Type : Animal Study
Additional Links
Substances : Caprylic Acid : CK(6) : AC(4)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Creatine

Creatine in mouse models of neurodegeneration and aging. - GMI Summary

Pubmed Data : Amino Acids. 2011 May ;40(5):1297-303. Epub 2011 Mar 10. PMID: 21390530
Article Published Date : Apr 30, 2011
Authors : T Klopstock, M Elstner, A Bender
Study Type : Animal Study
Additional Links
Substances : Creatine : CK(133) : AC(23)
Diseases : Aging : CK(1399) : AC(392), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Topic: EPA (Eicosapentaenoic Acid)

The omega-3 fatty acid eicosapentaenoic acid accelerates disease progression in a model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : PLoS One. 2013 ;8(4):e61626. Epub 2013 Apr 19. PMID: 23620776
Article Published Date : Dec 31, 2012

Authors : Ping K Yip, Chiara Pizzasegola, Stacy Gladman, Maria Luigia Biggio, Marianna Marino, Maduka Jayasinghe, Farhan Ullah, Simon C Dyall, Andrea Malaspina, Caterina Bendotti, Adina Michael-Titus

Study Type : Animal Study
Additional Links
Substances : EPA (Eicosapentaenoic Acid) : CK(619) : AC(88)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: GABA (gamma-Aminobutyric Acid)

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944

Article Published Date : Dec 31, 2013

Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino

Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Galactooligosaccharides

"Galactooligosaccharide improves the animal survival and alleviates motor neuron death in SOD1G93A mouse model of amyotrophic lateral sclerosis." - GMI Summary

Pubmed Data : Neuroscience. 2013 Aug 29 ;246:281-90. Epub 2013 May 11. PMID: 23673277

Article Published Date : Aug 28, 2013

Authors : L Song, Y Gao, X Zhang, W Le

Study Type : Animal Study
Additional Links
Substances : Galactooligosaccharides : CK(2) : AC(1), Prebiotics : CK(114) : AC(15)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Genistein

Genistein is neuroprotective in murine models of familial amyotrophic lateral sclerosis and stroke. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 1999 May 19;258(3):685-8. PMID: 10329446

Article Published Date : May 19, 1999

Authors : V N Trieu, F M Uckun

Study Type : Animal Study
Additional Links
Substances : Genistein : CK(454) : AC(187), phytoestrogens : CK(714) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Stroke : CK(406) : AC(50), Stroke: Attenuation/Recovery : CK(105) : AC(21)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Medium Chain Triglycerides

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944

Article Published Date : Dec 31, 2013

Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino

Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Polyphenols

Effects of natural antioxidants in neurodegenerative disease. - GMI Summary

Pubmed Data : Nutr Neurosci. 2012 Jan ;15(1):1-9. PMID: 22305647

Article Published Date : Dec 31, 2011

Authors : Sonia Luz Albarracin, Ben Stab, Zulma Casas, Jhon Jairo Sutachan, Ismael Samudio, Janneth Gonzalez, Luis Gonzalo, Francisco Capani, Ludis Morales, George E Barreto

Study Type : Review
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Polyphenols : CK(484) : AC(182)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815

Article Published Date : Jun 01, 2008

Authors : Sylvain Doré

Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Topic: Prebiotics

"Galactooligosaccharide improves the animal survival and alleviates motor neuron death in SOD1G93A mouse model of amyotrophic lateral sclerosis." - GMI Summary

Pubmed Data : Neuroscience. 2013 Aug 29 ;246:281-90. Epub 2013 May 11. PMID: 23673277

Article Published Date : Aug 28, 2013

Authors : L Song, Y Gao, X Zhang, W Le

Study Type : Animal Study

Additional Links
Substances : Galactooligosaccharides : CK(2) : AC(1), Prebiotics : CK(114) : AC(15)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Pyruvate

Pyruvate slows disease progression in a transgenic mouse model of ALS. - GMI Summary

Pubmed Data : Neurosci Lett. 2007 Feb 21;413(3):265-9. Epub 2006 Dec 13. PMID: 17174029
Article Published Date : Feb 21, 2007
Authors : Jong-Ha Park, Yoon-Ho Hong, Hyun-Jung Kim, Sung-Min Kim, Min-Jeong Kim, Kyung-Seok Park, Jung-Joon Sung, Kwang-Woo Lee
Study Type : Transgenic Animal Study
Additional Links
Substances : Pyruvate : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Red Wine Extract

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Topic: Rosemaric Acid

Rosmarinic acid has therapeutic value in motor dysfunction and life span in a

mouse model of familial amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Neurosci Res. 2010 Mar ;88(4):896-904. PMID: 19798750
Article Published Date : Feb 28, 2010
Authors : Yosuke Shimojo, Kunio Kosaka, Yoshihiro Noda, Takahiko Shimizu, Takuji Shirasawa
Study Type : Animal Study
Additional Links
Substances : Rosemaric Acid : CK(1) : AC(1), Rosemary : CK(174) : AC(62)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Additional Keywords : Phytotherapy : CK(424) : AC(77)

Topic: Rosemary

Rosmarinic acid has therapeutic value in motor dysfunction and life span in a mouse model of familial amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Neurosci Res. 2010 Mar ;88(4):896-904. PMID: 19798750
Article Published Date : Feb 28, 2010
Authors : Yosuke Shimojo, Kunio Kosaka, Yoshihiro Noda, Takahiko Shimizu, Takuji Shirasawa
Study Type : Animal Study
Additional Links
Substances : Rosemaric Acid : CK(1) : AC(1), Rosemary : CK(174) : AC(62)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Additional Keywords : Phytotherapy : CK(424) : AC(77)

Topic: S-Adenosylmethionine (SAMe)

Dietary supplementation with S-adenosyl methionine delays the onset of motor neuron pathology in a murine model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neuromolecular Med. 2010 Mar ;12(1):86-97. Epub 2009 Sep 16. PMID: 19757209
Article Published Date : Feb 28, 2010
Authors : James Suchy, Sangmook Lee, Ambar Ahmed, Thomas B Shea
Study Type : Animal Study
Additional Links
Substances :
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Scolopendra subspinipes mutilans

Scolopendra subspinipes mutilans attenuates neuroinflammation in a mouse model of ALS. - GMI Summary

Pubmed Data : J Neuroinflammation. 2013 ;10:131. Epub 2013 Oct 29. PMID: 24168240
Article Published Date : Dec 31, 2012
Authors : MuDan Cai, Sun-Mi Choi, Bong Keun Song, Ilhong Son, Sungchul Kim, Eun Jin Yang
Study Type : Animal Study
Additional Links
Substances : Scolopendra subspinipes mutilans : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Wen Pi Tang

The Chinese Herbal Formula: Wen-Pi-Tang delays the onset and progression of ALS. - GMI Summary

Pubmed Data : Biol Pharm Bull. 2009 Mar;32(3):382-8. PMID: 19252282
Article Published Date : Mar 01, 2009
Authors : Michiko Sekiya, Takashi Ichiyanagi, Yasumasa Ikeshiro, Takako Yokozawa
Study Type : Animal Study
Additional Links
Substances : Wen Pi Tang : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: phytoestrogens

Genistein is neuroprotective in murine models of familial amyotrophic lateral sclerosis and stroke. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 1999 May 19;258(3):685-8. PMID: 10329446
Article Published Date : May 19, 1999
Authors : V N Trieu, F M Uckun
Study Type : Animal Study
Additional Links
Substances : Genistein : CK(454) : AC(187), phytoestrogens : CK(714) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Stroke : CK(406) : AC(50), Stroke: Attenuation/Recovery : CK(105) : AC(21)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Carnitine

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Flavonoids

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59)

: AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Topic: Folic Acid

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Topic: Herbal Therapies (Unspecified in Abstracts)

A review of experimental research on herbal compounds in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Phytother Res. 2014 Jan ;28(1):9-21. Epub 2013 Mar 21. PMID: 23519768
Article Published Date : Dec 31, 2013
Authors : Xue Zhang, Yan-Long Hong, De-Sheng Xu, Yi Feng, Li-Jie Zhao, Ke-Feng Ruan, Xiu-Juan Yang
Study Type : Review
Additional Links
Substances : Herbal Therapies (Unspecified in Abstracts) : CK(1) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Topic: Hesperidin

Hesperidin and THSG might be potential lead compound to design inhibitors of mutant SOD1 for ALS therapy. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2014 ;2014:156276. Epub 2014 May 18. PMID: 24963318
Article Published Date : Dec 31, 2013
Authors : Hung-Jin Huang, Tung-Ti Chang, Hsin-Yi Chen, Calvin Yu-Chian Chen
Study Type : Review
Additional Links
Substances : Hesperidin : CK(160) : AC(38)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Topic: Panax Ginseng

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136

Article Published Date : Sep 30, 2012

Authors : Ik-Hyun Cho

Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Topic: Tauroursodeoxycholic acid

Tauroursodeoxycholic acid (TUDCA) may have therapeutic value in neurodegenerative illnesses. - GMI Summary

Pubmed Data : Glob Adv Health Med. 2014 May ;3(3):58-69. PMID: 24891994

Article Published Date : Apr 30, 2014

Authors : Sheila Vang, Katie Longley, Clifford J Steer, Walter C Low

Study Type : Review
Additional Links
Substances : Tauroursodeoxycholic acid : CK(1) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40)

Topic: Tibetan Herbal Formula: Padma 28

The herbal preparation Padma® 28 protects against neurotoxicity in PC12 cells. - GMI Summary

Pubmed Data : Phytother Res. 2011 May ;25(5):740-3. Epub 2011 Mar 17. PMID: 21413090

Article Published Date : Apr 30, 2011

Authors : Isaac Ginsburg, Lea Rozenstein-Tsalkovich, Erez Koren, Hanna Rosenmann

Study Type : In Vitro Study
Additional Links
Substances : Tibetan Herbal Formula: Padma 28 : CK(22) : AC(5)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Topic: Wine

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815

Article Published Date : Jun 01, 2008

Authors : Sylvain Doré

Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) :

AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Category: Toxic Ingredients

Topic: Lead

Lead exposure is a risk factor for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurodegener Dis. 2005;2(3-4):195-201. PMID: 16909025
Article Published Date : Jan 01, 2005
Authors : F Kamel, D M Umbach, H Hu, T L Munsat, J M Shefner, J A Taylor, D P Sandler
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)

There is an association between blood lead and the risk of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Epidemiol. 2010 May 15;171(10):1126-33. Epub 2010 Apr 20. PMID: 20406759
Article Published Date : May 15, 2010
Authors : Fang Fang, Lydia C Kwee, Kelli D Allen, David M Umbach, Weimin Ye, Mary Watson, Jean Keller, Eugene Z Oddone, Dale P Sandler, Silke Schmidt, Freya Kamel
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40)
Problem Substances : Lead : CK(117) : AC(15)

Lead toxicitity may be associated with ALS. - GMI Summary

Pubmed Data : Rev Neurol (Paris). 1998 May;154(4):345-7. PMID: 9773065
Article Published Date : May 01, 1998
Authors : P Couratier, P Bernet-Bernady, T Truong, E Lagrange, P M Preux, G Lachatre, J M Vallat
Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Bulbar palsy : CK(13) : AC(2)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Lead may contribute to the pathogenesis of nervous system diseases by stimulating the production of autoantibodies against neural proteins including myelin basic protein. - GMI Summary

Pubmed Data : Environ Health Perspect. 1994 Dec;102(12):1052-6. PMID: 7536156
Article Published Date : Dec 01, 1994
Authors : S J Waterman, H A el-Fawal, C A Snyder
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40), Multiple Sclerosis : CK(746) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Immunotoxic : CK(254) : AC(48), Interleukin-6 up-regulation : CK(14) : AC(3)

Topic: Pesticides

Occupational exposures to agricultural chemicals is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 1997 Jun 15;145(12):1076-88. PMID: 9199537
Article Published Date : Jun 15, 1997
Authors : V McGuire, W T Longstreth, L M Nelson, T D Koepsell, H Checkoway, M S Morgan, G van Belle
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Agricultural Chemicals : CK(10) : AC(1), Pesticides : CK(712) : AC(74)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Pesticide exposure is associated with an increased risk of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Ann Ist Super Sanita. 2010;46(3):284-7. PMID: 20847462
Article Published Date : Jan 01, 2010
Authors : Francesca Bonvicini, Norina Marcello, Jessica Mandrioli, Vladimiro Pietrini, Marco Vinceti
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Pesticides : CK(712) : AC(74)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Pesticides and human chronic diseases: evidences, mechanisms, and perspectives. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2013 Apr 15 ;268(2):157-77. Epub 2013 Feb 9. PMID: 23402800
Article Published Date : Apr 14, 2013
Authors : Sara Mostafalou, Mohammad Abdollahi
Study Type : Review
Additional Links
Diseases : , Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Epigenetic Modification : CK(111) : AC(47)
Problem Substances : Pesticides : CK(712) : AC(74)

Topic: Statin Drugs

Statin drug use may be linked to neuromuscular diseases and an amyotrophic lateral sclerosis-like syndrome. - GMI Summary

Pubmed Data : Drug Saf. 2007;30(6):515-25. PMID: 17536877
Article Published Date : Jan 01, 2007
Authors : I Ralph Edwards, Kristina Star, Anne Kiuru
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neuromuscular Diseases : CK(16) : AC(4)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Statin drugs may cause ALS-like neurodegeneration in susceptible individuals. - GMI Summary

Pubmed Data : Drug Saf. 2009;32(8):649-61. PMID: 19591530
Article Published Date : Jan 01, 2009
Authors : Beatrice A Golomb, Edwin K Kwon, Sabrina Koperski, Marcella A Evans
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) :

AC(447), Oxidative Stress : CK(2004) : AC(750)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Topic: Tobacco

Cigarette smoking is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Neuroepidemiology. 1999;18(4):194-202. PMID: 10364720
Article Published Date : Jan 01, 1999
Authors : F Kamel, D M Umbach, T L Munsat, J M Shefner, D P Sandler
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Smoking : CK(597) : AC(87)
Problem Substances : Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Tobacco consumption is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 2000 Jan 15;151(2):156-63. PMID: 10645818
Article Published Date : Jan 15, 2000
Authors : L M Nelson, V McGuire, W T Longstreth, C Matkin
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Nicotine/Tobacco Toxicity : CK(90) : AC(28), Smoking : CK(597) : AC(87)
Problem Substances : Nicotine : CK(56) : AC(8), Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: Lyme's Disease (Borrelia burgdorferi)

[ALS-like sequelae in chronic neuroborreliosis]. - GMI Summary

Pubmed Data : Wien Med Wochenschr. 1995 ;145(7-8):186-8. PMID: 7610670
Article Published Date : Dec 31, 1994
Authors : Y Hänsel, M Ackerl, G Stanek
Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

ALS untangled No. 17:"when ALS is lyme". - GMI Summary

Pubmed Data : Amyotroph Lateral Scler. 2012 Sep ;13(5):487-91. Epub 2012 Aug 8. PMID: 22873562
Article Published Date : Aug 31, 2012
Authors :
Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Immunologic reactivity against Borrelia burgdorferi in patients with motor neuron disease. - GMI Summary

Pubmed Data : Arch Neurol. 1990 May ;47(5):586-94. PMID: 2334308
Article Published Date : Apr 30, 1990
Authors : J J Halperin, G P Kaplan, S Brazinsky, T F Tsai, T Cheng, A Ironside, P Wu, J Delfiner, M Golightly, R H Brown
Study Type : Human: Case Report

Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Lyme Disease -Induced Polyradiculopathy Mimicking Amyotrophic Lateral Sclerosis: Case Report. - GMI Summary

Pubmed Data : Int J Neurosci. 2014 Jan 7. Epub 2014 Jan 7. PMID: 24397499
Article Published Date : Jan 06, 2014
Authors : Ahmet Z Burakgazi
Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Guillain-Barre Syndrome : CK(84) : AC(14)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Topic: Agricultural Chemicals

Occupational exposures to agricultural chemicals is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 1997 Jun 15;145(12):1076-88. PMID: 9199537
Article Published Date : Jun 15, 1997
Authors : V McGuire, W T Longstreth, L M Nelson, T D Koepsell, H Checkoway, M S Morgan, G van Belle
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Agricultural Chemicals : CK(10) : AC(1), Pesticides : CK(712) : AC(74)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: L-glutamic Acid

Glutamate levels may contribute to the pathogenesis of ALS. - GMI Summary

Pubmed Data : Acta Neurol Scand. 2010 Feb;121(2):120-6. Epub 2009 Oct 5. PMID: 19804473
Article Published Date : Feb 01, 2010
Authors : M L Fiszman, K C Ricart, A Latini, G Rodríguez, R E P Sica
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : L-glutamic Acid : CK(11) : AC(2), Monosodium Glutamate (MSG) : CK(67) : AC(19)
Adverse Pharmacological Actions : Excitotoxic : CK(10) : AC(1)

Topic: Monosodium Glutamate (MSG)

Glutamate levels may contribute to the pathogenesis of ALS. - GMI Summary

Pubmed Data : Acta Neurol Scand. 2010 Feb;121(2):120-6. Epub 2009 Oct 5. PMID: 19804473
Article Published Date : Feb 01, 2010
Authors : M L Fiszman, K C Ricart, A Latini, G Rodríguez, R E P Sica
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : L-glutamic Acid : CK(11) : AC(2), Monosodium Glutamate (MSG) : CK(67) : AC(19)
Adverse Pharmacological Actions : Excitotoxic : CK(10) : AC(1)

Topic: Nicotine

Tobacco consumption is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 2000 Jan 15;151(2):156-63. PMID: 10645818
Article Published Date : Jan 15, 2000
Authors : L M Nelson, V McGuire, W T Longstreth, C Matkin
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Nicotine/Tobacco Toxicity : CK(90) : AC(28), Smoking : CK(597) : AC(87)
Problem Substances : Nicotine : CK(56) : AC(8), Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: Non-Steroidal Anti-Inflammatory Drugs (NSAIDs)

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481
Article Published Date : Sep 30, 2010
Authors : Xinxin Yang, Baohua Cheng
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Curcumins promote monocytic gene expression related toβ-amyloid and superoxide dismutase clearance. - GMI Summary

Pubmed Data : Neurodegener Dis. 2012 ;10(1-4):274-6. Epub 2011 Dec 7. PMID: 22156608
Article Published Date : Dec 31, 2011
Authors : J R Cashman, S Gagliardi, M Lanier, S Ghirmai, K J Abel, M Fiala
Study Type : Review
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Topic: Excitotoxins

Excitotoxins (e.g. aspartame, glutamate) may play a significant role in the degeneration in ALS. - GMI Summary

Pubmed Data : Acta Neuropathol. 2013 Jan ;125(1):95-109. Epub 2012 Nov 13. PMID: 23143228
Article Published Date : Dec 31, 2012
Authors : Alice Brockington, Ke Ning, Paul R Heath, Elizabeth Wood, Janine Kirby, Nicolò Fusi, Neil Lawrence, Stephen B Wharton, Paul G Ince, Pamela J Shaw
Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Excitotoxins : CK(1) : AC(1)

Category: Therapeutic Actions

Topic: Acupuncture

Acupuncture treatment appears to have value on respiratory physiology parameters in amyotrophic lateral sclerosis patients: a pilot study. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2013 ;2013:506317. Epub 2013 Sep 11. PMID: 24101939

Article Published Date : Dec 31, 2012

Authors : Sangmi Lee, Sungchul Kim

Study Type : Human Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Acupuncture : CK(1324) : AC(150)

Significant neurological improvement in two patients with amyotrophic lateral sclerosis after 4 weeks of treatment with acupuncture injection point therapy using enercel. - GMI Summary

Pubmed Data : J Acupunct Meridian Stud. 2011 Dec ;4(4):257-61. Epub 2011 Oct 19. PMID: 22196509

Article Published Date : Nov 30, 2011

Authors : Shan Liang, David Christner, Stephanie Du Laux, Dariel Laurent

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Acupuncture : CK(1324) : AC(150)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Topic: Stem Cell Related Therapy

Autologous bone marrow-derived stem cell therapy is safe and feasible in patients of ALS. - GMI Summary

Pubmed Data : Neurol India. 2012 Sep-Oct;60(5):465-9. PMID: 23135021

Article Published Date : Aug 31, 2012

Authors : Sudesh Prabhakar, Neelam Marwaha, Vivek Lal, Ratti R Sharma, Roopa Rajan, Niranjan Khandelwal

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Linking respiratory chain uncoupling to amyotrophic lateral sclerosis implies potential treatment with herbal extracts containing genipin. - GMI Summary

Pubmed Data : Med Hypotheses. 2013 Mar ;80(3):327. Epub 2012 Dec 21. PMID: 23265356

Article Published Date : Feb 28, 2013

Authors : M Hoffmann

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Intermittent Hypoxia (low oxygen) : CK(2) : AC(1), Stem Cell Related Therapy : CK(10) : AC(2)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Neural progenitors derived from human induced pluripotent stem cells survive and differentiate upon transplantation into a rat model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Stem Cells Transl Med. 2013 Mar ;2(3):167-74. Epub 2013 Feb 14. PMID: 23413376

Article Published Date : Feb 28, 2013

Authors : Iuliana Ristea Popescu, Charles Nicaise, Song Liu, Grégoire Bisch, Sarah Knippenberg, Valery Daubie, Delphine Bohl, Roland Pochet

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Stem cell factor-activated bone marrow ameliorates amyotrophic lateral sclerosis by promoting protective microglial migration. - GMI Summary

Pubmed Data : J Neurosci Res. 2014 Jul ;92(7):856-69. PMID: 24936617

Article Published Date : Jun 30, 2014

Authors : Tomoya Terashima, Hideto Kojima, Hiroshi Urabe, Isamu Yamakawa, Nobuhiro Ogawa, Hiromichi Kawai, Lawrence Chan, Hiroshi Maegawa

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Systemic treatment with adipose-derived mesenchymal stem cells ameliorates clinical and pathological features in the amyotrophic lateral sclerosis murine model. - GMI Summary

Pubmed Data : Neuroscience. 2013 May 28 ;248C:333-343. Epub 2013 May 28. PMID: 23727509

Article Published Date : May 27, 2013

Authors : S Marconi, M Bonaconsa, I Scambi, G M Squintani, W Rui, E Turano, D Ungaro, S D'Agostino, F Barbieri, S Angiari, A Farinazzo, G Constantin, U Del Carro, B Bonetti, R Mariotti

Study Type : Transgenic Animal Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Cultivating stem cells for treating amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : World J Stem Cells. 2012 Dec 26 ;4(12):117-9. PMID: 23516096

Article Published Date : Dec 25, 2012

Authors : Shengwen Calvin Li, Hong Zhen Yin, William G Loudon, John H Weiss

Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Intermittent hypoxia and stem cell implants preserve breathing capacity in a rodent model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Respir Crit Care Med. 2013 Mar 1 ;187(5):535-42. Epub 2012 Dec 6. PMID: 23220913

Article Published Date : Feb 28, 2013

Authors : Nicole L Nichols, Genevieve Gowing, Irawan Satriotomo, Lisa J Nashold, Erica A Dale, Masatoshi Suzuki, Pablo Avalos, Patrick L Mulcrone, Jacalyn McHugh, Clive N Svendsen, Gordon S Mitchell

Study Type : Review

Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Topic: Exercise

Treadmill ambulation is feasible, tolerated and safe for patients for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Arch Phys Med Rehabil. 2010 Dec;91(12):1920-9. PMID: 21112435
Article Published Date : Dec 01, 2010
Authors : Mohammed Sanjak, Elena Bravver, William L Bockenek, H James Norton, Benjamin R Brooks
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)

Female sex hormones such as estradiol and exercise have a possible neuroprotective role in female patients with ALS. - GMI Summary

Pubmed Data : Med Hypotheses. 2009 Apr;72(4):434-43. Epub 2009 Jan 19. PMID: 14561497
Article Published Date : Apr 01, 2009
Authors : J H Veldink, P R Bär, E A J Joosten, M Otten, J H J Wokke, L H van den Berg
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Gender Differences : CK(63) : AC(8)

Moderate exercise delays the motor performance decline in a transgenic model of ALS. - GMI Summary

Pubmed Data : Brain Res. 2010 Feb 8;1313:192-201. Epub 2009 Dec 5. PMID: 19968977
Article Published Date : Feb 08, 2010
Authors : Isabel Carreras, Sinan Yuruker, Nurgul Aytan, Lokman Hossain, Ji-Kyung Choi, Bruce G Jenkins, Neil W Kowall, Alpaslan Dedeoglu
Study Type : Transgenic Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Aquatherapy for neurodegenerative disorders. - GMI Summary

Pubmed Data : J Huntingtons Dis. 2014 ;3(1):5-11. PMID: 25062761
Article Published Date : Dec 31, 2013
Authors : Alyson R Plecash, Blair R Leavitt
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Aquatic therapy : CK(10) : AC(1), Exercise : CK(542) : AC(75)

Topic: Hypnosis

Efficacy of hypnosis-based treatment in amyotrophic lateral sclerosis: a pilot study. - GMI Summary

Pubmed Data : Front Psychol. 2012 ;3:465. Epub 2012 Nov 5. PMID: 23162510

Article Published Date : Dec 31, 2011

Authors : Arianna Palmieri, Johann Roland Kleinbub, Vincenzo Calvo, Gianni Sorarù, Irene Grasso, Irene Messina, Marco Sambin

Study Type : Human Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Hypnosis : CK(120) : AC(12)

Topic: Spiritual/Religious Practice

Existential well-being, as well as spirituality issues, perceived by SALS patients seems to be directly related with quality of life, severity of mood disturbance and burden experienced by their caregivers. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler. 2011 Mar ;12(2):105-8. Epub 2010 Jul 26. PMID: 20653520

Article Published Date : Feb 28, 2011

Authors : Francesco Pagnini, Christian Lunetta, Gabriella Rossi, Paolo Banfi, Ksenija Gorni, Nadia Cellotto, Gianluca Castelnuovo, Enrico Molinari, Massimo Corbo

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Spiritual/Religious Practice : CK(40) : AC(4)

Topic: Therapeutic Breathing

Diaphragm training has value in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Clin Neuromuscul Dis. 2008 Dec ;10(2):56-60. PMID: 19169091

Article Published Date : Nov 30, 2008

Authors : Rachel Nardin, Carl O'Donnell, Stephen H Loring, Rui Nie, Kristi Hembre, Joy Walsh, Barbara Wilson Arboleda, Alona Muzikansky, Dang Nguyen, Elizabeth Raynor

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Therapeutic Breathing : CK(172) : AC(18)

Topic: Dietary Modification: Low Carbohydrate/Ketogenic

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944

Article Published Date : Dec 31, 2013

Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino

Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-

neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481
Article Published Date : Sep 30, 2010
Authors : Xinxin Yang, Baohua Cheng
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

High-fat and ketogenic diets may have value in treating amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Child Neurol. 2013 Aug ;28(8):989-92. Epub 2013 May 10. PMID: 23666040
Article Published Date : Jul 31, 2013
Authors : Sabrina Paganoni, Anne-Marie Wills
Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Dietary Modification: High-Fat/Low-Carbohydrate : CK(1) : AC(1), Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284
Article Published Date : Dec 31, 2013
Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco
Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

The ketogenic diet may have value in ALS. - GMI Summary

Pubmed Data : Neurol Neurochir Pol. 2011 Jul-Aug;45(4):370-8. PMID: 22101998
Article Published Date : Jun 30, 2011
Authors : Sergiusz Jóźwiak, Eric H Kossoff, Katarzyna Kotulska-Jóźwiak
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Yoga

Iyengar yoga therapy has been found a usefl intervention for cramp management in individuals with amyotrophic lateral sclerosis: case study. - GMI Summary

Pubmed Data : J Altern Complement Med. 2014 Apr ;20(4):322-6. Epub 2013 Nov 28. PMID: 24286340
Article Published Date : Mar 31, 2014
Authors : Subbappa Ribeiro
Study Type : Human: Case Report
Additional Links

Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Yoga : CK(693) : AC(77)

Topic: Electroacupuncture

Electroacupuncture reduces neuroinflammatory responses in symptomatic amyotrophic lateral sclerosis model. - GMI Summary

Pubmed Data : J Neuroimmunol. 2010 Jun ;223(1-2):84-91. Epub 2010 May 10. PMID: 20460191
Article Published Date : May 31, 2010
Authors : Eun Jin Yang, Jing Hua Jiang, Sang Min Lee, Hye Suk Hwang, Myeong Soo Lee, Sun Mi Choi
Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Electroacupuncture : CK(264) : AC(35)

Topic: Intermittent Hypoxia (low oxygen)

Linking respiratory chain uncoupling to amyotrophic lateral sclerosis implies potential treatment with herbal extracts containing genipin. - GMI Summary

Pubmed Data : Med Hypotheses. 2013 Mar ;80(3):327. Epub 2012 Dec 21. PMID: 23265356
Article Published Date : Feb 28, 2013
Authors : M Hoffmann
Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Intermittent Hypoxia (low oxygen) : CK(2) : AC(1), Stem Cell Related Therapy : CK(10) : AC(2)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Topic: Aquatic therapy

Aquatherapy for neurodegenerative disorders. - GMI Summary

Pubmed Data : J Huntingtons Dis. 2014 ;3(1):5-11. PMID: 25062761
Article Published Date : Dec 31, 2013
Authors : Alyson R Plecash, Blair R Leavitt
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Aquatic therapy : CK(10) : AC(1), Exercise : CK(542) : AC(75)

Topic: Dietary Modification: High-Fat/Low-Carbohydrate

High-fat and ketogenic diets may have value in treating amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Child Neurol. 2013 Aug ;28(8):989-92. Epub 2013 May 10. PMID: 23666040
Article Published Date : Jul 31, 2013
Authors : Sabrina Paganoni, Anne-Marie Wills
Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Dietary Modification: High-Fat/Low-Carbohydrate : CK(1) : AC(1), Dietary

Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Mindfullness Training

Mindfulness training has been suggested to be of value to ALS patients and their caregivers. - GMI Summary

Pubmed Data : J Altern Complement Med. 2014 Apr ;20(4):272-5. Epub 2013 Dec 11. PMID: 24328393

Article Published Date : Mar 31, 2014

Authors : Francesco Pagnini, Chiara Di Credico, Ramona Gatto, Viviana Fabiani, Gabriella Rossi, Christian Lunetta, Anna Marconi, Federica Fossati, Gianluca Castelnuovo, Aurora Tagliaferri, Paolo Banfi, Massimo Corbo, Valeria Sansone, Enrico Molinari, Gherardo Amadei

Study Type : Commentary
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Mindfullness Training : CK(60) : AC(5)

Category: Anti-Therapeutic Actions

Topic: Electromagnetic Fields

There is an association between occupational exposure to power frequency electromagnetic fields and amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Ind Med. 2003 Feb;43(2):212-20. PMID: 12541277

Article Published Date : Feb 01, 2003

Authors : Chung-Yi Li, Fung-Chang Sung

Study Type : Meta Analysis
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Anti Therapeutic Actions : Electromagnetic Fields : CK(103) : AC(14)

Category: Diseases

Topic: Amyotrophic Lateral Sclerosis

There is an association between occupational exposure to power frequency electromagnetic fields and amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Ind Med. 2003 Feb;43(2):212-20. PMID: 12541277

Article Published Date : Feb 01, 2003

Authors : Chung-Yi Li, Fung-Chang Sung

Study Type : Meta Analysis
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Anti Therapeutic Actions : Electromagnetic Fields : CK(103) : AC(14)

A high intake of poluunsaturated fatty acids and vitamin E is associated with a 50-60% decreased risk of developing ALS. - GMI Summary

Pubmed Data : J Neurol Neurosurg Psychiatry. 2007 Apr;78(4):367-71. Epub 2006 Apr 28. PMID: 16648143

Article Published Date : Apr 01, 2007

Authors : J H Veldink, S Kalmijn, G-J Groeneveld, W Wunderink, A Koster, J H M de Vries, J van der Luyt, J H J Wokke, L H Van den Berg

Study Type : Human Study
Additional Links
Substances : Polyunsaturated Fatty Acids (PUFAs) : CK(98) : AC(14), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

A higher intake of food rich in antioxidants such as fruit and vegetables confer protection against the development of ALS. - GMI Summary

Pubmed Data : Life Sci. 2003 Dec 19;74(5):663-73. PMID: 19209004

Article Published Date : Dec 19, 2003

Authors : K Okamoto, T Kihira, G Kobashi, M Washio, S Sasaki, T Yokoyama, Y Miyake, N Sakamoto, Y Inaba, M Nagai

Study Type : Human Study
Additional Links
Substances : Fruit: All : CK(2019) : AC(488), Vegetables: All : CK(551) : AC(69)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Autologous bone marrow-derived stem cell therapy is safe and feasible in patients of ALS. - GMI Summary

Pubmed Data : Neurol India. 2012 Sep-Oct;60(5):465-9. PMID: 23135021

Article Published Date : Aug 31, 2012

Authors : Sudesh Prabhakar, Neelam Marwaha, Vivek Lal, Ratti R Sharma, Roopa Rajan, Niranjan Khandelwal

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Cigarette smoking is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Neuroepidemiology. 1999;18(4):194-202. PMID: 10364720

Article Published Date : Jan 01, 1999

Authors : F Kamel, D M Umbach, T L Munsat, J M Shefner, D P Sandler

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Smoking : CK(597) : AC(87)
Problem Substances : Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Coenzyme Q10 levels as high as 3,000 mg a day are safe and well-tolerated in ALS patients. - GMI Summary

Pubmed Data : Neurology. 2005 Dec 13;65(11):1834-6. PMID: 16344537

Article Published Date : Dec 13, 2005

Authors : K L Ferrante, J Shefner, H Zhang, R Betensky, M O'Brien, H Yu, M Fantasia, J Taft, M F Beal, B Traynor, K Newhall, P Donofrio, J Caress, C Ashburn, B Freiberg, C O'Neill, C Paladenech, T Walker, A Pestronk, B Abrams, J Florence, R Renna, J Schierbecker, B Malkus, M Cudkowicz

Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Diaphragm training has value in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Clin Neuromuscul Dis. 2008 Dec ;10(2):56-60. PMID: 19169091

Article Published Date : Nov 30, 2008

Authors : Rachel Nardin, Carl O'Donnell, Stephen H Loring, Rui Nie, Kristi Hembre, Joy Walsh, Barbara Wilson Arboleda, Alona Muzikansky, Dang Nguyen, Elizabeth Raynor

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Therapeutic Breathing : CK(172) : AC(18)

Existential well-being, as well as spirituality issues, perceived by SALS patients seems to be directly related with quality of life, severity of mood disturbance and burden experienced by their caregivers. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler. 2011 Mar ;12(2):105-8. Epub 2010 Jul 26. PMID: 20653520

Article Published Date : Feb 28, 2011

Authors : Francesco Pagnini, Christian Lunetta, Gabriella Rossi, Paolo Banfi, Ksenija Gorni, Nadia Cellotto, Gianluca Castelnuovo, Enrico Molinari, Massimo Corbo

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Spiritual/Religious Practice : CK(40) : AC(4)

Free testosterone is significantly decreased in ALS, indicating that supplementation with testosterone may have a therapeutic role in ALS treatment. - GMI Summary

Pubmed Data : J Neurol Sci. 2002 Mar 15;195(1):67-70. PMID: 11867076

Article Published Date : Mar 15, 2002

Authors : Alessandra Militello, Gaetano Vitello, Christian Lunetta, Antonio Toscano, Gianni Maiorana, Tommaso Piccoli, Vincenzo La Bella

Study Type : Human Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Glutamate levels may contribute to the pathogenesis of ALS. - GMI Summary

Pubmed Data : Acta Neurol Scand. 2010 Feb;121(2):120-6. Epub 2009 Oct 5. PMID: 19804473

Article Published Date : Feb 01, 2010

Authors : M L Fiszman, K C Ricart, A Latini, G Rodríguez, R E P Sica

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : L-glutamic Acid : CK(11) : AC(2), Monosodium Glutamate (MSG) : CK(67) : AC(19)
Adverse Pharmacological Actions : Excitotoxic : CK(10) : AC(1)

High homocysteine levels are associated with neurodegenerative conditions such as Parkinson's disease, ALS and progressive supranuclear palsy. - GMI Summary

Pubmed Data : Dement Geriatr Cogn Disord. 2010 Jul;29(6):553-9. Epub 2010 Jul 3. PMID: 20606437

Article Published Date : Jul 01, 2010

Authors : Johannes Levin, Kai Bötzel, Armin Giese, Michael Vogeser, Stefan Lorenzl

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Hyperhomocysteinemia : CK(387) : AC(58), Parkinson's Disease : CK(346) : AC(85), Supranuclear Palsy: Progressive : CK(10) : AC(1)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953

Article Published Date : Jan 01, 2010

Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani

Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

It is possible that lesions suggestive of Amyotrophic Lateral Sclerosis may be attributed to celiac disease. - GMI Summary

Pubmed Data : BJU Int. 2007 Mar;99(3):619-22. Epub 2006 Nov 28. PMID: 19910450

Article Published Date : Mar 01, 2007

Authors : K J Brown, V Jewells, H Herfarth, M Castillo

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Autoimmune Diseases : CK(5523) : AC(880), Celiac Disease : CK(1591) : AC(229)

Lead exposure is a risk factor for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurodegener Dis. 2005;2(3-4):195-201. PMID: 16909025

Article Published Date : Jan 01, 2005

Authors : F Kamel, D M Umbach, H Hu, T L Munsat, J M Shefner, J A Taylor, D P Sandler

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)

Methylcobalamin may prevent muscle wasting in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Muscle Nerve. 1998 Dec;21(12):1775-8. PMID: 9843082

Article Published Date : Dec 01, 1998

Authors : R Kaji, M Kodama, A Imamura, T Hashida, N Kohara, M Ishizu, K Inui, J Kimura

Study Type : Human Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Occupational exposures to agricultural chemicals is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 1997 Jun 15;145(12):1076-88. PMID: 9199537

Article Published Date : Jun 15, 1997

Authors : V McGuire, W T Longstreth, L M Nelson, T D Koepsell, H Checkoway, M S Morgan, G van Belle

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Agricultural Chemicals : CK(10) : AC(1), Pesticides : CK(712) : AC(74)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Pesticide exposure is associated with an increased risk of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Ann Ist Super Sanita. 2010;46(3):284-7. PMID: 20847462

Article Published Date : Jan 01, 2010

Authors : Francesca Bonvicini, Norina Marcello, Jessica Mandrioli, Vladimiro Pietrini, Marco Vinceti

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Pesticides : CK(712) : AC(74)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Progesterone levels correlate positively with survival and prognosis in ALS patients. - GMI Summary

Pubmed Data : Acta Neurol Scand. 2011 Jan;123(1):60-7. PMID: 20545634

Article Published Date : Jan 01, 2011

Authors : G Gargiulo Monachelli, M Meyer, G E Rodríguez, L I Garay, R E P Sica, A F De Nicola, M C González Deniselle

Study Type : Human Study
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Selenium, glutathione, copper/zinc and superoxide dismutase may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Scand J Rheumatol. 1995;24(2):85-93. PMID: 9726810

Article Published Date : Jan 01, 1995

Authors : S Apostolski, Z Marinković, A Nikolić, D Blagojević, M B Spasić, A M Michelson

Study Type : Human Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Copper : CK(82) : AC(16), Glutathione : CK(61) : AC(16), Selenium : CK(564) : AC(93), Superoxide dismutase : CK(16) : AC(5), Zinc : CK(880) : AC(128)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Calcium Channel Blockers : CK(86) : AC(22)

Serum vitamin E levels have a protective effect on ALS risk. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Frontotemporal Degener. 2013 May ;14(4):246-51. Epub 2013 Jan 4. PMID: 23286756

Article Published Date : Apr 30, 2013

Authors : D Michal Freedman, Ralph W Kuncl, Stephanie J Weinstein, Nea Malila, Jarmo Virtamo, Demetrius Albanes

Study Type : Human Study
Additional Links
Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Significant neurological improvement in two patients with amyotrophic lateral sclerosis after 4 weeks of treatment with acupuncture injection point therapy using enercel. - GMI Summary

Pubmed Data : J Acupunct Meridian Stud. 2011 Dec ;4(4):257-61. Epub 2011 Oct 19. PMID: 22196509

Article Published Date : Nov 30, 2011

Authors : Shan Liang, David Christner, Stephanie Du Laux, Dariel Laurent

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Acupuncture : CK(1324) : AC(150)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Statin drug use may be linked to neuromuscular diseases and an amyotrophic lateral sclerosis-like syndrome. - GMI Summary

Pubmed Data : Drug Saf. 2007;30(6):515-25. PMID: 17536877
Article Published Date : Jan 01, 2007
Authors : I Ralph Edwards, Kristina Star, Anne Kiuru
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neuromuscular Diseases : CK(16) : AC(4)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Statin drugs may cause ALS-like neurodegeneration in susceptible individuals. - GMI Summary

Pubmed Data : Drug Saf. 2009;32(8):649-61. PMID: 19591530
Article Published Date : Jan 01, 2009
Authors : Beatrice A Golomb, Edwin K Kwon, Sabrina Koperski, Marcella A Evans
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Suboptimal vitamin D levels are frequently found in ALS patients (81%). - GMI Summary

Pubmed Data : J Clin Neurosci. 2013 Nov ;20(11):1550-3. Epub 2013 Jun 29. PMID: 23815870
Article Published Date : Oct 31, 2013
Authors : Chafic Karam, Matthew J Barrett, Theresa Imperato, Daniel J L MacGowan, Stephen Scelsa
Study Type : Human Study
Additional Links
Substances : Vitamin D : CK(1742) : AC(247)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Vitamin D Deficiency : CK(505) : AC(49)

There is an association between blood lead and the risk of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Epidemiol. 2010 May 15;171(10):1126-33. Epub 2010 Apr 20. PMID: 20406759
Article Published Date : May 15, 2010
Authors : Fang Fang, Lydia C Kwee, Kelli D Allen, David M Umbach, Weimin Ye, Mary Watson, Jean Keller, Eugene Z Oddone, Dale P Sandler, Silke Schmidt, Freya Kamel
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40)
Problem Substances : Lead : CK(117) : AC(15)

There is increased mitochondrial oxidative damage in patients with sporadic amyotrophic lateral sclerosis - GMI Summary

Pubmed Data : J Neurol Sci. 2008 Apr 15;267(1-2):66-9. Epub 2007 Oct 24. PMID: 17961597
Article Published Date : Apr 15, 2008
Authors : Takahiko Murata, Chigumi Ohtsuka, Yasuo Terayama
Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Mitochondrial Diseases : CK(157) : AC(57), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Tobacco consumption is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 2000 Jan 15;151(2):156-63. PMID: 10645818

Article Published Date : Jan 15, 2000

Authors : L M Nelson, V McGuire, W T Longstreth, C Matkin

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Nicotine/Tobacco Toxicity : CK(90) : AC(28), Smoking : CK(597) : AC(87)
Problem Substances : Nicotine : CK(56) : AC(8), Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Treadmill ambulation is feasible, tolerated and safe for patients for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Arch Phys Med Rehabil. 2010 Dec;91(12):1920-9. PMID: 21112435

Article Published Date : Dec 01, 2010

Authors : Mohammed Sanjak, Elena Bravver, William L Bockenek, H James Norton, Benjamin R Brooks

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)

Vitamin B12 as methylcobalamin significantly prolongs survival time in Amyotrophic Lateral Sclerosis. - GMI Summary

Pubmed Data : Brain Nerve. 2007 Oct;59(10):1141-7. PMID: 17969354

Article Published Date : Oct 01, 2007

Authors : Yuishin Izumi, Ryuji Kaji

Study Type : Human Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Vitamin E intake decreases the risk of amyotrophic lateral sclerosis: a pooled analysis of data from 5 prospective cohort studies.. - GMI Summary

Pubmed Data : Am J Epidemiol. 2011 Mar 15 ;173(6):595-602. Epub 2011 Feb 18. PMID: 21335424

Article Published Date : Mar 14, 2011

Authors : Hao Wang, Éilis J O'Reilly, Marc G Weisskopf, Giancarlo Logroscino, Marjorie L McCullough, Arthur Schatzkin, Laurence N Kolonel, Alberto Ascherio

Study Type : Human Study
Additional Links
Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Vitamin E supplementation may contribute to preventing amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Ann Neurol. 2005 Jan;57(1):104-10. PMID: 15529299

Article Published Date : Jan 01, 2005

Authors : Alberto Ascherio, Marc G Weisskopf, Eilis J O'reilly, Eric J Jacobs, Marjorie L McCullough, Eugenia E Calle, Merit Cudkowicz, Michael J Thun

Study Type : Human Study
Additional Links
Substances : Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Whey protein improves the condition of patients with amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Arq Neuropsiquiatr. 2010 Apr;68(2):263-8. PMID: 20464297

Article Published Date : Apr 01, 2010

Authors : Luciano Bruno de Carvalho Silva, Lucia Figueiredo Mourão, Ariovaldo Armando Silva, Núbia Maria Freire Vieira Lima, Sara Regina Almeida, Marcondes C Franca Jr, Anamarli Nucci, Jaime Amaya-Farfán

Study Type : Human Study
Additional Links
Substances : Whey : CK(343) : AC(72)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

[ALS-like sequelae in chronic neuroborreliosis]. - GMI Summary

Pubmed Data : Wien Med Wochenschr. 1995 ;145(7-8):186-8. PMID: 7610670

Article Published Date : Dec 31, 1994

Authors : Y Hänsel, M Ackerl, G Stanek

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

ALS untangled No. 17:"when ALS is lyme". - GMI Summary

Pubmed Data : Amyotroph Lateral Scler. 2012 Sep ;13(5):487-91. Epub 2012 Aug 8. PMID: 22873562

Article Published Date : Aug 31, 2012

Authors :

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Cannabis use is not uncommon in ALS patients who reported significant benefits from its use. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2004 Mar-Apr;21(2):95-104. PMID: 15055508

Article Published Date : Mar 01, 2004

Authors : Dagmar Amtmann, Patrick Weydt, Kurt L Johnson, Mark P Jensen, Gregory T Carter

Study Type : Human: Case Report
Additional Links
Substances : Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Immunologic reactivity against Borrelia burgdorferi in patients with motor neuron disease. - GMI Summary

Pubmed Data : Arch Neurol. 1990 May ;47(5):586-94. PMID: 2334308

Article Published Date : Apr 30, 1990

Authors : J J Halperin, G P Kaplan, S Brazinsky, T F Tsai, T Cheng, A Ironside, P Wu, J Delfiner, M Golightly, R H Brown

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Lead toxicitity may be associated with ALS. - GMI Summary

Pubmed Data : Rev Neurol (Paris). 1998 May;154(4):345-7. PMID: 9773065

Article Published Date : May 01, 1998

Authors : P Couratier, P Bernet-Bernady, T Truong, E Lagrange, P M Preux, G Lachatre, J M Vallat

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Bulbar palsy : CK(13) : AC(2)

Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

"Galactooligosaccharide improves the animal survival and alleviates motor neuron death in SOD1G93A mouse model of amyotrophic lateral sclerosis." - GMI Summary

Pubmed Data : Neuroscience. 2013 Aug 29 ;246:281-90. Epub 2013 May 11. PMID: 23673277
Article Published Date : Aug 28, 2013
Authors : L Song, Y Gao, X Zhang, W Le
Study Type : Animal Study
Additional Links
Substances : Galactooligosaccharides : CK(2) : AC(1), Prebiotics : CK(114) : AC(15)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

A cannabinoid CB2 receptor selective compound, delays disease progression in a mouse model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Eur J Pharmacol. 2006 Aug 7;542(1-3):100-5. Epub 2006 May 20. PMID: 16781706
Article Published Date : Aug 07, 2006
Authors : Kathline Kim, Dan H Moore, Alexandros Makriyannis, Mary E Abood
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Bee venom attenuates neuroinflammatory events and extends survival in amyotrophic lateral sclerosis models. - GMI Summary

Pubmed Data : J Neuroinflammation. 2010 ;7:69. Epub 2010 Oct 15. PMID: 20950451
Article Published Date : Dec 31, 2009
Authors : Eun Jin Yang, Jing Hua Jiang, Sang Min Lee, Sun Choel Yang, Hye Suk Hwang, Myeong Soo Lee, Sun-Mi Choi
Study Type : Animal Study
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Branched chain amino acids may have a therapeutic role in ALS. - GMI Summary

Pubmed Data : Mol Nutr Food Res. 2011 Apr ;55(4):541-52. Epub 2011 Jan 5. PMID: 21462321
Article Published Date : Mar 31, 2011
Authors : Aldina Venerosi, Alberto Martire, Angela Rungi, Massimo Pieri, Antonella Ferrante, Cristina Zona, Patrizia Popoli, Gemma Calamandrei
Study Type : Animal Study
Additional Links
Substances : Amino Acids: Branched Chain : CK(12) : AC(2)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Cannabinol may have therapeutic value in ameliorating symptoms in ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2005 Sep;6(3):182-4. PMID: 16183560
Article Published Date : Sep 01, 2005
Authors : Patrick Weydt, Soyon Hong, Anke Witting, Thomas Möller, Nephi Stella, Michel Kliot
Study Type : Animal Study

Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Cannabis contains a number of compounds which may have therapeutic value in delaying the progression of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2004 Mar;5(1):33-9. PMID: 15204022

Article Published Date : Mar 01, 2004

Authors : Chandrasekaran Raman, Sean D McAllister, Gulrukh Rizvi, Sonal G Patel, Dan H Moore, Mary E Abood

Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Caprylic triglyceride as a novel therapeutic approach to effectively improve the performance and attenuate the symptoms due to the motor neuron loss in ALS disease. - GMI Summary

Pubmed Data : PLoS One. 2012 ;7(11):e49191. Epub 2012 Nov 7. PMID: 23145119

Article Published Date : Dec 31, 2011

Authors : Wei Zhao, Merina Varghese, Prashant Vempati, Anastasiya Dzhun, Alice Cheng, Jun Wang, Dale Lange, Amanda Bilski, Irene Faravelli, Giulio Maria Pasinetti

Study Type : Animal Study
Additional Links
Substances : Caprylic Acid : CK(6) : AC(4)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Co-administration of IGF-I and glycosaminoglycans greatly delays motor neuron disease in the mouse model. - GMI Summary

Pubmed Data : J Neurochem. 2002 Apr;81(1):194-202. PMID: 12067233

Article Published Date : Apr 01, 2002

Authors : Alfredo Gorio, Elena Lesma, Laura Madaschi, Anna Maria Di Giulio

Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Coenzyme Q10 demonstrated significant therapeutic effects in transgenic mouse model of ALS and Huntington's disease. - GMI Summary

Pubmed Data : Free Radic Res. 2002 Apr;36(4):455-60. PMID: 12069110

Article Published Date : Apr 01, 2002

Authors : M Flint Beal

Study Type : Transgenic Animal Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)

Curcumin has anti-apoptotic properties in a transgenic amyotrophic lateral sclerosis mice. - GMI Summary

Pubmed Data : J Neurochem. 2005 Jun ;93(5):1087-98. PMID: 15934930

Article Published Date : May 31, 2005

Authors : Hoon Ryu, Karen Smith, Sandra I Camelo, Isabel Carreras, Junghee Lee, Antonio H Iglesias, Fernando Dangond, Kerry A Cormier, Merit E Cudkowicz, Robert H Brown, Robert J Ferrante

Study Type : Animal Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40), Bcl-2 protein down-regulation : CK(52) : AC(44), NF-kappaB Inhibitor : CK(616) : AC(417)

Dietary supplementation with S-adenosyl methionine delays the onset of motor neuron pathology in a murine model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neuromolecular Med. 2010 Mar ;12(1):86-97. Epub 2009 Sep 16. PMID: 19757209

Article Published Date : Feb 28, 2010

Authors : James Suchy, Sangmook Lee, Ambar Ahmed, Thomas B Shea

Study Type : Animal Study
Additional Links
Substances :
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

EGCG has multifunctional therapeutic effects in the mouse model of ALS - GMI Summary

Pubmed Data : Neurochem Res. 2006 Oct;31(10):1263-9. Epub 2006 Oct 5. PMID: 17021948

Article Published Date : Oct 01, 2006

Authors : Zhihao Xu, Sheng Chen, Xuping Li, Guangrui Luo, Liang Li, Weidong Le

Study Type : Animal Study
Additional Links
Substances : EGCG (Epigallocatechin gallate) : CK(211) : AC(120)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

EGCG may provide a potential therapeutic candidate for ALS as a disease-modifying agent. - GMI Summary

Pubmed Data : Biomed Res. 2007 Oct;28(5):261-6. PMID: 16356650

Article Published Date : Oct 01, 2007

Authors : Seong-Ho Koh, Sang Mok Lee, Hyun Young Kim, Kyu-Yong Lee, Young Joo Lee, Hee-Tae Kim, Juhan Kim, Myung-Ho Kim, Myung Sil Hwang, Chiwon Song, Ki-Wha Yang, Kwang Woo Lee, Seung Hyun Kim, Ok-Hee Kim

Study Type : Animal Study
Additional Links
Substances : EGCG (Epigallocatechin gallate) : CK(211) : AC(120)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Electroacupuncture reduces neuroinflammatory responses in symptomatic amyotrophic lateral sclerosis model. - GMI Summary

Pubmed Data : J Neuroimmunol. 2010 Jun ;223(1-2):84-91. Epub 2010 May 10. PMID: 20460191

Article Published Date : May 31, 2010

Authors : Eun Jin Yang, Jing Hua Jiang, Sang Min Lee, Hye Suk Hwang, Myeong Soo Lee, Sun Mi Choi

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Electroacupuncture : CK(264) : AC(35)

Estradiol slows neurodegeneration in a female mouse experimental model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Neurol Sci. 2008 May 15;268(1-2):40-7. Epub 2007 Dec 4. PMID: 18054961

Article Published Date : May 15, 2008
Authors : Chan-Il Choi, Young-Don Lee, Byoung Joo Gwag, Sung Ig Cho, Sung-Soo Kim, Haeyoung Suh-Kim
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Extremely high dose vitamin D attenuates a feature of ALS, but not disease outcomes; also toxic to female mice. - GMI Summary

Pubmed Data : PLoS One. 2013 ;8(2):e30243. Epub 2013 Feb 6. PMID: 23405058
Article Published Date : Dec 31, 2012
Authors : Alexandro Gianforcaro, Jesse A Solomon, Mazen J Hamadeh
Study Type : Animal Study
Additional Links
Substances : Vitamin D : CK(1742) : AC(247)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Female sex hormones such as estradiol and exercise have a possible neuroprotective role in female patients with ALS. - GMI Summary

Pubmed Data : Med Hypotheses. 2009 Apr;72(4):434-43. Epub 2009 Jan 19. PMID: 14561497
Article Published Date : Apr 01, 2009
Authors : J H Veldink, P R Bär, E A J Joosten, M Otten, J H J Wokke, L H van den Berg
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Gender Differences : CK(63) : AC(8)

Genistein is neuroprotective in murine models of familial amyotrophic lateral sclerosis and stroke. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 1999 May 19;258(3):685-8. PMID: 10329446
Article Published Date : May 19, 1999
Authors : V N Trieu, F M Uckun
Study Type : Animal Study
Additional Links
Substances : Genistein : CK(454) : AC(187), phytoestrogens : CK(714) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Stroke : CK(406) : AC(50), Stroke: Attenuation/Recovery : CK(105) : AC(21)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Gingko biloba has a gender-specific neuroprotective effect in a transgenic mouse model of ALS. - GMI Summary

Pubmed Data : J Mol Neurosci. 2001 Aug;17(1):89-96. PMID: 11665866
Article Published Date : Aug 01, 2001
Authors : R J Ferrante, A M Klein, A Dedeoglu, M F Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Ginkgo biloba : CK(541) : AC(108)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Glycoaminoglycans have neurotrophic and neuroregenerative effects in a mouse model of motor neuron disease. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Mar 1;51(5):559-62. PMID: 9511999
Article Published Date : Mar 01, 1998
Authors : A Gorio, L Vergani, E Lesma, A M Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuritogenic : CK(112) : AC(51), Neuroprotective Agents : CK(990) : AC(508)

Glycosaminoglycans boost insulin-like growth factor-I-promoted neuroprotection, indicating their potential value in motor neuron disease and peripheral neuropathies. - GMI Summary

Pubmed Data : Neuroscience. 1999;93(2):565-72. PMID: 10465440
Article Published Date : Jan 01, 1999
Authors : L Vergani, M Losa, E Lesma, A M Di Giulio, A Torsello, E E Müller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Peripheral Neuropathies : CK(191) : AC(31)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Drug Synergy : CK(341) : AC(151)

Glycosaminoglycans co-administration enhance insulin-like growth factor-I neuroprotective and neuroregenerative activity in traumatic and genetic models of motor neuron disease. - GMI Summary

Pubmed Data : Int J Dev Neurosci. 2000 Jul-Aug;18(4-5):339-46. PMID: 10817918
Article Published Date : Jul 01, 2000
Authors : A M Di Giulio, E Germani, E Lesma, E Muller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Neurorestorative : CK(50) : AC(14)
Additional Keywords : Natural Substance Synergy : CK(155) : AC(86)

L-arginine has potent in vitro and in vivo neuroprotective properties and may be a candidate for therapeutic trials in ALS. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 2009 Jul 10;384(4):524-9. Epub 2009 May 8. PMID: 19427829
Article Published Date : Jul 10, 2009
Authors : Junghee Lee, Hoon Ryu, Neil W Kowall
Study Type : Animal Study
Additional Links
Substances : Arginine : CK(976) : AC(168)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Lead may contribute to the pathogenesis of nervous system diseases by stimulating the production of autoantibodies against neural proteins including myelin basic protein. - GMI Summary

Pubmed Data : Environ Health Perspect. 1994 Dec;102(12):1052-6. PMID: 7536156
Article Published Date : Dec 01, 1994
Authors : S J Waterman, H A el-Fawal, C A Snyder
Study Type : Animal Study

Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40), Multiple Sclerosis : CK(746) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Immunotoxic : CK(254) : AC(48), Interleukin-6 up-regulation : CK(14) : AC(3)

Linking respiratory chain uncoupling to amyotrophic lateral sclerosis implies potential treatment with herbal extracts containing genipin. - GMI Summary

Pubmed Data : Med Hypotheses. 2013 Mar ;80(3):327. Epub 2012 Dec 21. PMID: 23265356
Article Published Date : Feb 28, 2013
Authors : M Hoffmann
Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Intermittent Hypoxia (low oxygen) : CK(2) : AC(1), Stem Cell Related Therapy : CK(10) : AC(2)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Lipoic acid significantly improves survival time in a transgenic mouse model of ALS - GMI Summary

Pubmed Data : Exp Neurol. 2001 Apr;168(2):419-24. PMID: 11259130
Article Published Date : Apr 01, 2001
Authors : O A Andreassen, A Dedeoglu, A Friedlich, K L Ferrante, D Hughes, C Szabo, M F Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Moderate exercise delays the motor performance decline in a transgenic model of ALS. - GMI Summary

Pubmed Data : Brain Res. 2010 Feb 8;1313:192-201. Epub 2009 Dec 5. PMID: 19968977
Article Published Date : Feb 08, 2010
Authors : Isabel Carreras, Sinan Yuruker, Nurgul Aytan, Lokman Hossain, Ji-Kyung Choi, Bruce G Jenkins, Neil W Kowall, Alpaslan Dedeoglu
Study Type : Transgenic Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Exercise : CK(542) : AC(75)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Neural progenitors derived from human induced pluripotent stem cells survive and differentiate upon transplantation into a rat model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Stem Cells Transl Med. 2013 Mar ;2(3):167-74. Epub 2013 Feb 14. PMID: 23413376
Article Published Date : Feb 28, 2013
Authors : Iuliana Ristea Popescu, Charles Nicaise, Song Liu, Grégoire Bisch, Sarah Knippenberg, Valery Daubie, Delphine Bohl, Roland Pochet
Study Type : Animal Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Progesterone has neuroprotective properties in a mouse model of spinal cord motor neuron degeneration disease. - GMI Summary

Pubmed Data : Neurobiol Dis. 2002 Dec;11(3):457-68. PMID: 12586554

Article Published Date : Dec 01, 2002

Authors : María Claudia Gonzalez Deniselle, Juan José López-Costa, Jorge Pecci Saavedra, Luciana Pietranera, Susana L Gonzalez, Laura Garay, Rachida Guennoun, Michael Schumacher, Alejandro F De Nicola

Study Type : Animal Study
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Pyruvate slows disease progression in a transgenic mouse model of ALS. - GMI Summary

Pubmed Data : Neurosci Lett. 2007 Feb 21;413(3):265-9. Epub 2006 Dec 13. PMID: 17174029

Article Published Date : Feb 21, 2007

Authors : Jong-Ha Park, Yoon-Ho Hong, Hyun-Jung Kim, Sung-Min Kim, Min-Jeong Kim, Kyung-Seok Park, Jung-Joon Sung, Kwang-Woo Lee

Study Type : Transgenic Animal Study
Additional Links
Substances : Pyruvate : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Resveratrol upregulated heat shock proteins and extended the survival of in a mouse model of ALS. - GMI Summary

Pubmed Data : Brain Res. 2012 Nov 5 ;1483:112-7. Epub 2012 Sep 19. PMID: 23000195

Article Published Date : Nov 04, 2012

Authors : Soyoung Han, Jong-Ryoul Choi, Ki Soon Shin, Shin Jung Kang

Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Heat Shock Protein Inducer : CK(51) : AC(17), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Rosmarinic acid has therapeutic value in motor dysfunction and life span in a mouse model of familial amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Neurosci Res. 2010 Mar ;88(4):896-904. PMID: 19798750

Article Published Date : Feb 28, 2010

Authors : Yosuke Shimojo, Kunio Kosaka, Yoshihiro Noda, Takahiko Shimizu, Takuji Shirasawa

Study Type : Animal Study
Additional Links
Substances : Rosemaric Acid : CK(1) : AC(1), Rosemary : CK(174) : AC(62)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Additional Keywords : Phytotherapy : CK(424) : AC(77)

Scolopendra subspinipes mutilans attenuates neuroinflammation in a mouse model of ALS. - GMI Summary

Pubmed Data : J Neuroinflammation. 2013 ;10:131. Epub 2013 Oct 29. PMID: 24168240

Article Published Date : Dec 31, 2012

Authors : MuDan Cai, Sun-Mi Choi, Bong Keun Song, Ilhong Son, Sungchul Kim, Eun Jin Yang

Study Type : Animal Study
Additional Links
Substances : Scolopendra subspinipes mutilans : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Steroid hormones may have neuroprotective properties in ALS. - GMI Summary

Pubmed Data : Cell Mol Neurobiol. 2001 Jun;21(3):237-54. PMID: 11569536
Article Published Date : Jun 01, 2001
Authors : M C González Deniselle, S L González, A F De Nicola
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14), Progesterone : CK(70) : AC(26), Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Testosterone may have neuroprotective properties. - GMI Summary

Pubmed Data : Neurosci Lett. 2009 Nov 13;465(2):123-7. Epub 2009 Sep 6. PMID: 19735695
Article Published Date : Nov 13, 2009
Authors : Randall E Wilson, Kellie D Coons, Dale R Sengelaub
Study Type : Animal Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Damage : CK(85) : AC(39), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

The CB2 cannabinoid agonist AM-1241 prolongs survival (56%) in a transgenic mouse model of amyotrophic lateral sclerosis when initiated at symptom onset. - GMI Summary

Pubmed Data : Curr Eye Res. 2005 Jul;30(7):583-91. PMID: 17241118
Article Published Date : Jul 01, 2005
Authors : Jennifer L Shoemaker, Kathryn A Seely, Ronald L Reed, John P Crow, Paul L Prather
Study Type : Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

The Chinese Herbal Formula: Wen-Pi-Tang delays the onset and progression of ALS. - GMI Summary

Pubmed Data : Biol Pharm Bull. 2009 Mar;32(3):382-8. PMID: 19252282
Article Published Date : Mar 01, 2009
Authors : Michiko Sekiya, Takashi Ichiyanagi, Yasumasa Ikeshiro, Takako Yokozawa
Study Type : Animal Study
Additional Links
Substances : Wen Pi Tang : CK(2) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

The omega-3 fatty acid eicosapentaenoic acid accelerates disease progression in a model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : PLoS One. 2013 ;8(4):e61626. Epub 2013 Apr 19. PMID: 23620776
Article Published Date : Dec 31, 2012
Authors : Ping K Yip, Chiara Pizzasegola, Stacy Gladman, Maria Luigia Biggio, Marianna Marino, Maduka Jayasinghe, Farhan Ullah, Simon C Dyall, Andrea Malaspina, Caterina Bendotti, Adina Michael-Titus
Study Type : Animal Study
Additional Links
Substances : EPA (Eicosapentaenoic Acid) : CK(619) : AC(88)

Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

The progression of ALS is associated with oxygen radical-induced lipid peroxidative damage, indicating that antioxidant therapy may be useful. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Jul 1;53(1):66-77. PMID: 9670993
Article Published Date : Jul 01, 1998
Authors : E D Hall, P K Andrus, J A Oostveen, T J Fleck, M E Gurney
Study Type : Animal Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

The serotonin precurser 5-HTP improves locomotor function and survival in a mouse model of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2003 Sep;4(3):171-6. PMID: 14527871
Article Published Date : Sep 01, 2003
Authors : B J Turner, E C Lopes, S S Cheema
Study Type : Animal Study
Additional Links
Substances : 5-HTP (5-Hydroxytryptophan) : CK(74) : AC(10)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lou Gehrig Disease : CK(337) : AC(69)

Treatment with estradiol (E2) may also delay disease progression of post-menopausal women with ALS. - GMI Summary

Pubmed Data : Brain Res. 2004 Sep 17;1021(1):128-31. PMID: 15328040
Article Published Date : Sep 17, 2004
Authors : G J Groeneveld, F L Van Muiswinkel, J M Sturkenboom, J H J Wokke, P R Bär, L H Van den Berg
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

A dietary reduction in glutathione precursors, e.g. glutamate, cysteine and sulfite, as well as glutathionine supplementation may benefit patients with ALS - GMI Summary

Pubmed Data : J Altern Complement Med. 2008 Nov;14(9):1159-64. PMID: 18973429
Article Published Date : Nov 01, 2008
Authors : Patricia B E Woolsey
Study Type : Commentary
Additional Links
Substances : Glutathione : CK(61) : AC(16)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

A review of experimental research on herbal compounds in amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Phytother Res. 2014 Jan ;28(1):9-21. Epub 2013 Mar 21. PMID: 23519768
Article Published Date : Dec 31, 2013
Authors : Xue Zhang, Yan-Long Hong, De-Sheng Xu, Yi Feng, Li-Jie Zhao, Ke-Feng Ruan, Xiu-Juan Yang
Study Type : Review

Additional Links
Substances : Herbal Therapies (Unspecified in Abstracts) : CK(1) : AC(1)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Cannabis has potential therapeutic value in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2010 Aug;27(5):347-56. Epub 2010 May 3. PMID: 20439484
Article Published Date : Aug 01, 2010
Authors : Gregory T Carter, Mary E Abood, Sunil K Aggarwal, Michael D Weiss
Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60), Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Anti-Inflammatory Agents : CK(1287) : AC(452), Antineoplastic Agents : CK(901) : AC(505), Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Curcumins promote monocytic gene expression related toβ-amyloid and superoxide dismutase clearance. - GMI Summary

Pubmed Data : Neurodegener Dis. 2012 ;10(1-4):274-6. Epub 2011 Dec 7. PMID: 22156608
Article Published Date : Dec 31, 2011
Authors : J R Cashman, S Gagliardi, M Lanier, S Ghirmai, K J Abel, M Fiala
Study Type : Review
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Effects of natural antioxidants in neurodegenerative disease. - GMI Summary

Pubmed Data : Nutr Neurosci. 2012 Jan ;15(1):1-9. PMID: 22305647
Article Published Date : Dec 31, 2011
Authors : Sonia Luz Albarracin, Ben Stab, Zulma Casas, Jhon Jairo Sutachan, Ismael Samudio, Janneth Gonzalez, Luis Gonzalo, Francisco Capani, Ludis Morales, George E Barreto
Study Type : Review
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Polyphenols : CK(484) : AC(182)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Estradiol may play a role in the neuroprotection of spinal astrocytes in amyotrophic lateral sclerosis patients. - GMI Summary

Pubmed Data : Neurobiol Dis. 2005 Nov;20(2):461-70. PMID: 15893467
Article Published Date : Nov 01, 2005
Authors : Paola Platania, Giovanna Seminara, Eleonora Aronica, Dirk Troost, Maria Vincenza Catania, Maria Angela Sortino
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Estrogen Receptor Modulators : CK(32) : AC(25), Neuroprotective Agents : CK(990) : AC(508)

Estradiol protects spinal motor neurons from excitotoxic insults in vitro, and may have application as a treatment for ALS. - GMI Summary

Pubmed Data : Neuroreport. 2000 Nov 9;11(16):3493-7. PMID: 11095506
Article Published Date : Nov 09, 2000
Authors : T Nakamizo, M Urushitani, R Inoue, A Shinohara, H Sawada, K Honda, T Kihara, A Akaike, S Shimohama
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Estrogen may have therapeutic value in the treatment of amyotrophic lateral sclerosis and spinal cord injury. - GMI Summary

Pubmed Data : J Endocrinol. 2011 Feb;208(2):171-82. Epub 2010 Nov 10. PMID: 21068071
Article Published Date : Feb 01, 2011
Authors : Arabinda Das, Joshua A Smith, Cameron Gibson, Abhay K Varma, Swapan K Ray, Naren L Banik
Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Tumor Necrosis Factor (TNF) Alpha Inhibitor : CK(1002) : AC(357)

Excitotoxins (e.g. aspartame, glutamate) may play a significant role in the degeneration in ALS. - GMI Summary

Pubmed Data : Acta Neuropathol. 2013 Jan ;125(1):95-109. Epub 2012 Nov 13. PMID: 23143228
Article Published Date : Dec 31, 2012
Authors : Alice Brockington, Ke Ning, Paul R Heath, Elizabeth Wood, Janine Kirby, Nicolò Fusi, Neil Lawrence, Stephen B Wharton, Paul G Ince, Pamela J Shaw
Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Problem Substances : Excitotoxins : CK(1) : AC(1)

Folic acid protects motor neurons against the increased homocysteine, inflammation and programmed cell death. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 18436268
Article Published Date : Jun 01, 2008
Authors : Xiaojie Zhang, Sheng Chen, Liang Li, Qian Wang, Weidong Le
Study Type : In Vitro Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Inflammation : CK(1125) : AC(377)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40), Bcl-2 protein down-regulation : CK(52) : AC(44), Neuroprotective Agents : CK(990) : AC(508), Nitric Oxide Inhibitor : CK(107) : AC(57), Superoxide Dismutase Up-regulation : CK(159) : AC(53), Tumor Necrosis Factor (TNF) Alpha Inhibitor : CK(1002) : AC(357)

High-fat and ketogenic diets may have value in treating amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : J Child Neurol. 2013 Aug ;28(8):989-92. Epub 2013 May 10. PMID: 23666040
Article Published Date : Jul 31, 2013
Authors : Sabrina Paganoni, Anne-Marie Wills
Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Dietary Modification: High-Fat/Low-Carbohydrate : CK(1) : AC(1), Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

IGF-I prevents glutamate-induced motor neuron programmed cell death. - GMI Summary

Pubmed Data : Food Chem Toxicol. 2009 Jan 15. PMID: 15193297

Article Published Date : Jan 15, 2009

Authors : Andrea M Vincent, Bret C Mobley, Andrew Hiller, Eva L Feldman

Study Type : In Vitro Study
Additional Links
Substances : Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Excitotoxicity : CK(57) : AC(34)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)

Intermittent hypoxia and stem cell implants preserve breathing capacity in a rodent model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Respir Crit Care Med. 2013 Mar 1 ;187(5):535-42. Epub 2012 Dec 6. PMID: 23220913

Article Published Date : Feb 28, 2013

Authors : Nicole L Nichols, Genevieve Gowing, Irawan Satriotomo, Lisa J Nashold, Erica A Dale, Masatoshi Suzuki, Pablo Avalos, Patrick L Mulcrone, Jacalyn McHugh, Clive N Svendsen, Gordon S Mitchell

Study Type : Review
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

It has been suggested that where it is legal to do so, marijuana should be considered in the pharmacological management of ALS. - GMI Summary

Pubmed Data : Am J Hosp Palliat Care. 2001 Jul-Aug;18(4):264-70. PMID: 11467101

Article Published Date : Jul 01, 2001

Authors : G T Carter, B S Rosen

Study Type : Review
Additional Links
Substances : Cannabis : CK(740) : AC(142)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Melatonin normalizes markers of oxidative stress to control values in a mouse model of ALS. - GMI Summary

Pubmed Data : J Pineal Res. 2006 Nov;41(4):313-23. PMID: 17014688

Article Published Date : Nov 01, 2006

Authors : Jochen H Weishaupt, Claudia Bartels, Esther Pölking, Jeannine Dietrich, Gundula Rohde, Burkhard Poeggeler, Nina Mertens, Swetlana Sperling, Matthias Bohn, Gerald Hüther, Armin Schneider, Alfred Bach, Anna-Leena Sirén, Rüdiger Hardeland, Mathias Bähr, Klaus-Armin Nave, Hannelore Ehrenreich

Study Type : In Vitro Study
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Methyl Vitamin B12 rescues a motor neuron-like cell line from homocysteine-mediated cell death. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2011 Mar 15;251(3):217-25. Epub 2011 Jan 13. PMID: 21237187

Article Published Date : Mar 15, 2011

Authors : Richelle A Hemendinger, Edward J Armstrong, Benjamin Rix Brooks

Study Type : In Vitro Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)

Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), High Homocysteine : CK(387) : AC(58), Neuroblastoma : CK(51) : AC(31)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Nutritional interventions may be therapeutic in the treatment of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Clin Nutr. 2009 Dec;28(6):604-17. Epub 2009 Sep 25. PMID: 19782443
Article Published Date : Dec 01, 2009
Authors : Barkha P Patel, Mazen J Hamadeh
Study Type : Commentary
Additional Links
Substances : Alpha-Lipoic Acid : CK(388) : AC(84), Carnitine : CK(423) : AC(64), Coenzyme Q10 : CK(741) : AC(112), EGCG (Epigallocatechin gallate) : CK(211) : AC(120), Folic Acid : CK(552) : AC(75), Ginkgo biloba : CK(541) : AC(108), Melatonin : CK(480) : AC(132), Red Wine Extract : CK(59) : AC(25), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)

Pesticides and human chronic diseases: evidences, mechanisms, and perspectives. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2013 Apr 15 ;268(2):157-77. Epub 2013 Feb 9. PMID: 23402800
Article Published Date : Apr 14, 2013
Authors : Sara Mostafalou, Mohammad Abdollahi
Study Type : Review
Additional Links
Diseases : , Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Epigenetic Modification : CK(111) : AC(47)
Problem Substances : Pesticides : CK(712) : AC(74)

Progesterone has neuroprotective properties in traumatic central nervous system and motor neuron degeneration. - GMI Summary

Pubmed Data : Front Neuroendocrinol. 2009 Jul;30(2):173-87. Epub 2009 Mar 24. PMID: 19318112
Article Published Date : Jul 01, 2009
Authors : Alejandro F De Nicola, Florencia Labombarda, Maria Claudia Gonzalez Deniselle, Susana L Gonzalez, Laura Garay, Maria Meyer, Gisella Gargiulo, Rachida Guennoun, Michael Schumacher
Study Type : Review
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Motor Neuron Disease: Amyotrophic Lateral Sclerosis : CK(336) : AC(69), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Resveratrol has a protective effect in a cell model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurosci Lett. 2011 Oct 10 ;503(3):250-5. Epub 2011 Aug 27. PMID: 21896316
Article Published Date : Oct 09, 2011
Authors : Jing Wang, Yun Zhang, Lu Tang, Nan Zhang, Dongsheng Fan
Study Type : In Vitro Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508), Superoxide Dismutase Up-regulation : CK(159) : AC(53)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. -

GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

The endocannabinoid system may play a valuable role in the development of treatment options for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Curr Pharm Des. 2008;14(23):2306-16. PMID: 18781981
Article Published Date : Jan 01, 2008
Authors : Lynsey G Bilsland, Linda Greensmith
Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Endocannabinoid Disorders : CK(15) : AC(9), Endocannabinoid System : CK(16) : AC(6)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Amyotrophic lateral sclerosis (ALS)

"Consumption of foods high inω-3 PUFAs may help prevent or delay the onset of ALS." - GMI Summary

Pubmed Data : JAMA Neurol. 2014 Jul 14. Epub 2014 Jul 14. PMID: 25023276
Article Published Date : Jul 13, 2014
Authors : Kathryn C Fitzgerald, Eilis J O'Reilly, Guido J Falcone, Marjorie L McCullough, Yikyung Park, Laurence N Kolonel, Alberto Ascherio
Study Type : Human Study
Additional Links
Substances : Omega-3 Fatty Acids : CK(2769) : AC(328)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Acupuncture treatment appears to have value on respiratory physiology parameters in amyotrophic lateral sclerosis patients: a pilot study. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2013 ;2013:506317. Epub 2013 Sep 11. PMID: 24101939
Article Published Date : Dec 31, 2012
Authors : Sangmi Lee, Sungchul Kim
Study Type : Human Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Acupuncture : CK(1324) : AC(150)

Efficacy of hypnosis-based treatment in amyotrophic lateral sclerosis: a pilot study. - GMI Summary

Pubmed Data : Front Psychol. 2012 ;3:465. Epub 2012 Nov 5. PMID: 23162510

Article Published Date : Dec 31, 2011

Authors : Arianna Palmieri, Johann Roland Kleinbub, Vincenzo Calvo, Gianni Sorarù, Irene Grasso, Irene Messina, Marco Sambin

Study Type : Human Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Hypnosis : CK(120) : AC(12)

JWSJZ decoction may be a safe treatment for ALS, and may have delayed the development of ALS. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2013 ;2013:347525. Epub 2013 Sep 5. PMID: 24093046

Article Published Date : Dec 31, 2012

Authors : Weidong Pan, Xiaojing Su, Jie Bao, Jun Wang, Jin Zhu, Dingfang Cai, Li Yu, Hua Zhou

Study Type : Human Study
Additional Links
Substances : Traditional Chinese Medicine: JWSJZ Decoction : CK(10) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Iyengar yoga therapy has been found a usefl intervention for cramp management in individuals with amyotrophic lateral sclerosis: case study. - GMI Summary

Pubmed Data : J Altern Complement Med. 2014 Apr ;20(4):322-6. Epub 2013 Nov 28. PMID: 24286340

Article Published Date : Mar 31, 2014

Authors : Subbappa Ribeiro

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Yoga : CK(693) : AC(77)

Lyme Disease -Induced Polyradiculopathy Mimicking Amyotrophic Lateral Sclerosis: Case Report. - GMI Summary

Pubmed Data : Int J Neurosci. 2014 Jan 7. Epub 2014 Jan 7. PMID: 24397499

Article Published Date : Jan 06, 2014

Authors : Ahmet Z Burakgazi

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Guillain-Barre Syndrome : CK(84) : AC(14)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

7,8-Dihydroxyflavone improves motor performance and enhances lower motor neuronal survival in a mouse model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Neurosci Lett. 2014 Apr 30 ;566:286-91. Epub 2014 Mar 15. PMID: 24637017

Article Published Date : Apr 29, 2014

Authors : Orhan Tansel Korkmaz, Nurgul Aytan, Isabel Carreras, Ji-Kyung Choi, Neil W Kowall, Bruce G Jenkins, Alpaslan Dedeoglu

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

A ketogenic diet in combination with nutritrional supplementation has remarkable therapeutic properties in a rodent model of ALS. - GMI Summary

Pubmed Data : PLoS One. 2014 ;9(7):e103526. Epub 2014 Jul 25. PMID: 25061944

Article Published Date : Dec 31, 2013

Authors : Csilla Ari, Angela M Poff, Heather E Held, Carol S Landon, Craig R Goldhagen, Nicholas Mavromates, Dominic P D'Agostino

Study Type : Animal Study
Additional Links
Substances : Arginine-alpha-ketoglutarate (AAKG) : CK(2) : AC(0), Coenzyme Q10 : CK(741) : AC(112), GABA (gamma-Aminobutyric Acid) : CK(37) : AC(8), Medium Chain Triglycerides : CK(53) : AC(15)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Cannabis may provide support as a novel disease-modifying therapy in ALS. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2014 Sep ;20(9):809-15. Epub 2014 Apr 7. PMID: 24703394

Article Published Date : Aug 31, 2014

Authors : Miguel Moreno-Martet, Francisco Espejo-Porras, Javier Fernández-Ruiz, Eva de Lago

Study Type : Transgenic Animal Study
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Creatine in mouse models of neurodegeneration and aging. - GMI Summary

Pubmed Data : Amino Acids. 2011 May ;40(5):1297-303. Epub 2011 Mar 10. PMID: 21390530

Article Published Date : Apr 30, 2011

Authors : T Klopstock, M Elstner, A Bender

Study Type : Animal Study
Additional Links
Substances : Creatine : CK(133) : AC(23)
Diseases : Aging : CK(1399) : AC(392), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Resveratrol Ameliorates Motor Neuron Degeneration and Improves Survival in SOD1(G93A) Mouse Model of Amyotrophic Lateral Sclerosis. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:483501. Epub 2014 Jun 26. PMID: 25057490

Article Published Date : Dec 31, 2013

Authors : Lin Song, Liang Chen, Xiaojie Zhang, Jia Li, Weidong Le

Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Resveratrol improves motoneuron function and extends survival in SOD1(G93A) ALS mice. - GMI Summary

Pubmed Data : Neurotherapeutics. 2014 Apr ;11(2):419-32. PMID: 24414863

Article Published Date : Mar 31, 2014

Authors : Renzo Mancuso, Jaume del Valle, Laura Modol, Anna Martinez, Ana B Granado-Serrano, Omar Ramirez-Núñez, Mercé Pallás, Manel Portero-Otin, Rosario Osta, Xavier Navarro

Study Type : Animal Study
Additional Links
Substances : Resveratrol : CK(981) : AC(603)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Stem cell factor-activated bone marrow ameliorates amyotrophic lateral sclerosis by promoting protective microglial migration. - GMI Summary

Pubmed Data : J Neurosci Res. 2014 Jul ;92(7):856-69. PMID: 24936617

Article Published Date : Jun 30, 2014

Authors : Tomoya Terashima, Hideto Kojima, Hiroshi Urabe, Isamu Yamakawa, Nobuhiro Ogawa, Hiromichi Kawai, Lawrence Chan, Hiroshi Maegawa

Study Type : Animal Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Systemic treatment with adipose-derived mesenchymal stem cells ameliorates clinical and pathological features in the amyotrophic lateral sclerosis murine model. - GMI Summary

Pubmed Data : Neuroscience. 2013 May 28 ;248C:333-343. Epub 2013 May 28. PMID: 23727509

Article Published Date : May 27, 2013

Authors : S Marconi, M Bonaconsa, I Scambi, G M Squintani, W Rui, E Turano, D Ungaro, S D'Agostino, F Barbieri, S Angiari, A Farinazzo, G Constantin, U Del Carro, B Bonetti, R Mariotti

Study Type : Transgenic Animal Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481

Article Published Date : Sep 30, 2010

Authors : Xinxin Yang, Baohua Cheng

Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

7,8-Dihydroxyflavone may have value in ALS. - GMI Summary

Pubmed Data : Mol Cell Neurosci. 2013 Sep ;56:18-28. Epub 2013 Mar 14. PMID: 23500004

Article Published Date : Aug 31, 2013

Authors : Teresa Tsai, Alice Klausmeyer, Rebecca Conrad, Christine Gottschling, Markus Leo, Andreas Faissner, Stefan Wiese

Study Type : In Vitro Study
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Aquatherapy for neurodegenerative disorders. - GMI Summary

Pubmed Data : J Huntingtons Dis. 2014 ;3(1):5-11. PMID: 25062761

Article Published Date : Dec 31, 2013

Authors : Alyson R Plecash, Blair R Leavitt

Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Aquatic therapy : CK(10) : AC(1), Exercise : CK(542) : AC(75)

Bee venom may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2012 ;2012:368196. Epub 2011 Aug 28. PMID: 21904562

Article Published Date : Dec 31, 2011

Authors : Sang Min Lee, Eun Jin Yang, Sun-Mi Choi, Seon Hwy Kim, Myung Gi Baek, Jing Hua Jiang

Study Type : Review
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Bee venom shows value in a cell model of ALS. - GMI Summary

Pubmed Data : BMC Complement Altern Med. 2013 ;13:179. Epub 2013 Jul 18. PMID: 23866691

Article Published Date : Dec 31, 2012

Authors : Seon Hwy Kim, So Young Jung, Kang-Woo Lee, Sun Hwa Lee, MuDan Cai, Sun-Mi Choi, Eun Jin Yang

Study Type : In Vitro Study
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Cultivating stem cells for treating amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : World J Stem Cells. 2012 Dec 26 ;4(12):117-9. PMID: 23516096

Article Published Date : Dec 25, 2012

Authors : Shengwen Calvin Li, Hong Zhen Yin, William G Loudon, John H Weiss

Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Stem Cell Related Therapy : CK(10) : AC(2)

Curcumin abolishes mutant TDP-43 induced excitability in a motoneuron-like cellular model of ALS. - GMI Summary

Pubmed Data : Neuroscience. 2014 Jul 11 ;272:141-53. Epub 2014 Apr 29. PMID: 24785678

Article Published Date : Jul 10, 2014

Authors : H Dong, L Xu, L Wu, X Wang, W Duan, H Li, C Li

Study Type : In Vitro Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Curcumin exhibits potential therapeutic properties in a cell model of ALS. - GMI Summary

Pubmed Data : Mol Neurobiol. 2014 Feb ;49(1):368-79. Epub 2013 Aug 10. PMID: 23934646

Article Published Date : Jan 31, 2014

Authors : Weisong Duan, Yansu Guo, Jian Xiao, Xiaoyu Chen, Zhongyao Li, Huihui Han, Chunyan Li

Study Type : In Vitro Study
Additional Links
Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Curcumin shows therapeutic value in a cell model of ALS. - GMI Summary

Pubmed Data : Brain Res Bull. 2012 Dec 1 ;89(5-6):185-90. Epub 2012 Sep 15. PMID: 22986236

Article Published Date : Nov 30, 2012

Authors : Jinsheng Lu, Weisong Duan, Yansu Guo, Hong Jiang, Zhongyao Li, Jing Huang, Kun Hong, Chunyan Li

Study Type : In Vitro Study
Additional Links

Substances : Curcumin : CK(2762) : AC(1541)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136
Article Published Date : Sep 30, 2012
Authors : Ik-Hyun Cho
Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Hesperidin and THSG might be potential lead compound to design inhibitors of mutant SOD1 for ALS therapy. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2014 ;2014:156276. Epub 2014 May 18. PMID: 24963318
Article Published Date : Dec 31, 2013
Authors : Hung-Jin Huang, Tung-Ti Chang, Hsin-Yi Chen, Calvin Yu-Chian Chen
Study Type : Review
Additional Links
Substances : Hesperidin : CK(160) : AC(38)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)

Melatonin supplementation may have a therapeutic role in neurodegenerative disorders. - GMI Summary

Pubmed Data : Front Biosci (Landmark Ed). 2014 ;19:429-46. Epub 2014 Jan 1. PMID: 24389194
Article Published Date : Dec 31, 2013
Authors : Giovanni Polimeni, Emanuela Esposito, Valentina Bevelacqua, Claudio Guarneri, Salvatore Cuzzocrea
Study Type : Review
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)

Mindfulness training has been suggested to be of value to ALS patients and their caregivers. - GMI Summary

Pubmed Data : J Altern Complement Med. 2014 Apr ;20(4):272-5. Epub 2013 Dec 11. PMID: 24328393
Article Published Date : Mar 31, 2014
Authors : Francesco Pagnini, Chiara Di Credico, Ramona Gatto, Viviana Fabiani, Gabriella Rossi, Christian Lunetta, Anna Marconi, Federica Fossati, Gianluca Castelnuovo, Aurora Tagliaferri, Paolo Banfi, Massimo Corbo, Valeria Sansone, Enrico Molinari, Gherardo Amadei
Study Type : Commentary
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132)
Therapeutic Actions : Mindfullness Training : CK(60) : AC(5)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235
Article Published Date : Dec 31, 2007
Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto
Study Type : Review
Additional Links

Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Tauroursodeoxycholic acid (TUDCA) may have therapeutic value in neurodegenerative illnesses. - GMI Summary

Pubmed Data : Glob Adv Health Med. 2014 May ;3(3):58-69. PMID: 24891994
Article Published Date : Apr 30, 2014
Authors : Sheila Vang, Katie Longley, Clifford J Steer, Walter C Low
Study Type : Review
Additional Links
Substances : Tauroursodeoxycholic acid : CK(1) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40)

The herbal preparation Padma® 28 protects against neurotoxicity in PC12 cells. - GMI Summary

Pubmed Data : Phytother Res. 2011 May ;25(5):740-3. Epub 2011 Mar 17. PMID: 21413090
Article Published Date : Apr 30, 2011
Authors : Isaac Ginsburg, Lea Rozenstein-Tsalkovich, Erez Koren, Hanna Rosenmann
Study Type : In Vitro Study
Additional Links
Substances : Tibetan Herbal Formula: Padma 28 : CK(22) : AC(5)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284
Article Published Date : Dec 31, 2013
Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco
Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

The ketogenic diet may have value in ALS. - GMI Summary

Pubmed Data : Neurol Neurochir Pol. 2011 Jul-Aug;45(4):370-8. PMID: 22101998
Article Published Date : Jun 30, 2011
Authors : Sergiusz Jóźwiak, Eric H Kossoff, Katarzyna Kotulska-Jóźwiak
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Motor Neuron Disease

Co-administration of IGF-I and glycosaminoglycans greatly delays motor neuron

disease in the mouse model. - GMI Summary

Pubmed Data : J Neurochem. 2002 Apr;81(1):194-202. PMID: 12067233
Article Published Date : Apr 01, 2002
Authors : Alfredo Gorio, Elena Lesma, Laura Madaschi, Anna Maria Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Glycoaminoglycans have neurotrophic and neuroregenerative effects in a mouse model of motor neuron disease. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Mar 1;51(5):559-62. PMID: 9511999
Article Published Date : Mar 01, 1998
Authors : A Gorio, L Vergani, E Lesma, A M Di Giulio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuritogenic : CK(112) : AC(51), Neuroprotective Agents : CK(990) : AC(508)

Glycosaminoglycans boost insulin-like growth factor-I-promoted neuroprotection, indicating their potential value in motor neuron disease and peripheral neuropathies. - GMI Summary

Pubmed Data : Neuroscience. 1999;93(2):565-72. PMID: 10465440
Article Published Date : Jan 01, 1999
Authors : L Vergani, M Losa, E Lesma, A M Di Giulio, A Torsello, E E Müller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Peripheral Neuropathies : CK(191) : AC(31)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Drug Synergy : CK(341) : AC(151)

Glycosaminoglycans co-administration enhance insulin-like growth factor-I neuroprotective and neuroregenerative activity in traumatic and genetic models of motor neuron disease. - GMI Summary

Pubmed Data : Int J Dev Neurosci. 2000 Jul-Aug;18(4-5):339-46. PMID: 10817918
Article Published Date : Jul 01, 2000
Authors : A M Di Giulio, E Germani, E Lesma, E Muller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Neurorestorative : CK(50) : AC(14)
Additional Keywords : Natural Substance Synergy : CK(155) : AC(86)

Steroid hormones may have neuroprotective properties in ALS. - GMI Summary

Pubmed Data : Cell Mol Neurobiol. 2001 Jun;21(3):237-54. PMID: 11569536
Article Published Date : Jun 01, 2001
Authors : M C González Deniselle, S L González, A F De Nicola
Study Type : Animal Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14), Progesterone : CK(70) : AC(26), Testosterone : CK(164) :

AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Testosterone may have neuroprotective properties. - GMI Summary

Pubmed Data : Neurosci Lett. 2009 Nov 13;465(2):123-7. Epub 2009 Sep 6. PMID: 19735695
Article Published Date : Nov 13, 2009
Authors : Randall E Wilson, Kellie D Coons, Dale R Sengelaub
Study Type : Animal Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Damage : CK(85) : AC(39), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Progesterone has neuroprotective properties in traumatic central nervous system and motor neuron degeneration. - GMI Summary

Pubmed Data : Front Neuroendocrinol. 2009 Jul;30(2):173-87. Epub 2009 Mar 24. PMID: 19318112
Article Published Date : Jul 01, 2009
Authors : Alejandro F De Nicola, Florencia Labombarda, Maria Claudia Gonzalez Deniselle, Susana L Gonzalez, Laura Garay, Maria Meyer, Gisella Gargiulo, Rachida Guennoun, Michael Schumacher
Study Type : Review
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Motor Neuron Disease: Amyotrophic Lateral Sclerosis : CK(336) : AC(69), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Oxidative Stress

Statin drugs may cause ALS-like neurodegeneration in susceptible individuals. - GMI Summary

Pubmed Data : Drug Saf. 2009;32(8):649-61. PMID: 19591530
Article Published Date : Jan 01, 2009
Authors : Beatrice A Golomb, Edwin K Kwon, Sabrina Koperski, Marcella A Evans
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

There is increased mitochondrial oxidative damage in patients with sporadic amyotrophic lateral sclerosis - GMI Summary

Pubmed Data : J Neurol Sci. 2008 Apr 15;267(1-2):66-9. Epub 2007 Oct 24. PMID: 17961597
Article Published Date : Apr 15, 2008
Authors : Takahiko Murata, Chigumi Ohtsuka, Yasuo Terayama
Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Mitochondrial Diseases : CK(157) : AC(57), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

The progression of ALS is associated with oxygen radical-induced lipid peroxidative damage, indicating that antioxidant therapy may be useful. - GMI

Summary

Pubmed Data : J Neurosci Res. 1998 Jul 1;53(1):66-77. PMID: 9670993
Article Published Date : Jul 01, 1998
Authors : E D Hall, P K Andrus, J A Oostveen, T J Fleck, M E Gurney
Study Type : Animal Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Effects of natural antioxidants in neurodegenerative disease. - GMI Summary

Pubmed Data : Nutr Neurosci. 2012 Jan ;15(1):1-9. PMID: 22305647
Article Published Date : Dec 31, 2011
Authors : Sonia Luz Albarracin, Ben Stab, Zulma Casas, Jhon Jairo Sutachan, Ismael Samudio, Janneth Gonzalez, Luis Gonzalo, Francisco Capani, Ludis Morales, George E Barreto
Study Type : Review
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Polyphenols : CK(484) : AC(182)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Pesticides and human chronic diseases: evidences, mechanisms, and perspectives. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2013 Apr 15 ;268(2):157-77. Epub 2013 Feb 9. PMID: 23402800
Article Published Date : Apr 14, 2013
Authors : Sara Mostafalou, Mohammad Abdollahi
Study Type : Review
Additional Links
Diseases : , Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Epigenetic Modification : CK(111) : AC(47)
Problem Substances : Pesticides : CK(712) : AC(74)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

The herbal preparation Padma® 28 protects against neurotoxicity in PC12 cells. - GMI Summary

Pubmed Data : Phytother Res. 2011 May ;25(5):740-3. Epub 2011 Mar 17. PMID: 21413090
Article Published Date : Apr 30, 2011

Authors : Isaac Ginsburg, Lea Rozenstein-Tsalkovich, Erez Koren, Hanna Rosenmann
Study Type : In Vitro Study
Additional Links
Substances : Tibetan Herbal Formula: Padma 28 : CK(22) : AC(5)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

Topic: Neurodegenerative Diseases

Statin drugs may cause ALS-like neurodegeneration in susceptible individuals. - GMI Summary

Pubmed Data : Drug Saf. 2009;32(8):649-61. PMID: 19591530
Article Published Date : Jan 01, 2009
Authors : Beatrice A Golomb, Edwin K Kwon, Sabrina Koperski, Marcella A Evans
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Coenzyme Q10 demonstrated significant therapeutic effects in transgenic mouse model of ALS and Huntington's disease. - GMI Summary

Pubmed Data : Free Radic Res. 2002 Apr;36(4):455-60. PMID: 12069110
Article Published Date : Apr 01, 2002
Authors : M Flint Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)

Creatine in mouse models of neurodegeneration and aging. - GMI Summary

Pubmed Data : Amino Acids. 2011 May ;40(5):1297-303. Epub 2011 Mar 10. PMID: 21390530
Article Published Date : Apr 30, 2011
Authors : T Klopstock, M Elstner, A Bender
Study Type : Animal Study
Additional Links
Substances : Creatine : CK(133) : AC(23)
Diseases : Aging : CK(1399) : AC(392), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Aquatherapy for neurodegenerative disorders. - GMI Summary

Pubmed Data : J Huntingtons Dis. 2014 ;3(1):5-11. PMID: 25062761
Article Published Date : Dec 31, 2013
Authors : Alyson R Plecash, Blair R Leavitt
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Aquatic therapy : CK(10) : AC(1), Exercise : CK(542) : AC(75)

Bee venom may have therapeutic value in ALS. - GMI Summary

Pubmed Data : Evid Based Complement Alternat Med. 2012 ;2012:368196. Epub 2011 Aug 28. PMID: 21904562

Article Published Date : Dec 31, 2011

Authors : Sang Min Lee, Eun Jin Yang, Sun-Mi Choi, Seon Hwy Kim, Myung Gi Baek, Jing Hua Jiang

Study Type : Review
Additional Links
Substances : Bee Venom : CK(20) : AC(8)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Effects of natural antioxidants in neurodegenerative disease. - GMI Summary

Pubmed Data : Nutr Neurosci. 2012 Jan ;15(1):1-9. PMID: 22305647

Article Published Date : Dec 31, 2011

Authors : Sonia Luz Albarracin, Ben Stab, Zulma Casas, Jhon Jairo Sutachan, Ismael Samudio, Janneth Gonzalez, Luis Gonzalo, Francisco Capani, Ludis Morales, George E Barreto

Study Type : Review
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Polyphenols : CK(484) : AC(182)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136

Article Published Date : Sep 30, 2012

Authors : Ik-Hyun Cho

Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Melatonin supplementation may have a therapeutic role in neurodegenerative disorders. - GMI Summary

Pubmed Data : Front Biosci (Landmark Ed). 2014 ;19:429-46. Epub 2014 Jan 1. PMID: 24389194

Article Published Date : Dec 31, 2013

Authors : Giovanni Polimeni, Emanuela Esposito, Valentina Bevelacqua, Claudio Guarneri, Salvatore Cuzzocrea

Study Type : Review
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815

Article Published Date : Jun 01, 2008

Authors : Sylvain Doré

Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133),

Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235
Article Published Date : Dec 31, 2007
Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto
Study Type : Review
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Tauroursodeoxycholic acid (TUDCA) may have therapeutic value in neurodegenerative illnesses. - GMI Summary

Pubmed Data : Glob Adv Health Med. 2014 May ;3(3):58-69. PMID: 24891994
Article Published Date : Apr 30, 2014
Authors : Sheila Vang, Katie Longley, Clifford J Steer, Walter C Low
Study Type : Review
Additional Links
Substances : Tauroursodeoxycholic acid : CK(1) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40)

The herbal preparation Padma® 28 protects against neurotoxicity in PC12 cells. - GMI Summary

Pubmed Data : Phytother Res. 2011 May ;25(5):740-3. Epub 2011 Mar 17. PMID: 21413090
Article Published Date : Apr 30, 2011
Authors : Isaac Ginsburg, Lea Rozenstein-Tsalkovich, Erez Koren, Hanna Rosenmann
Study Type : In Vitro Study
Additional Links
Substances : Tibetan Herbal Formula: Padma 28 : CK(22) : AC(5)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Plant Extracts : CK(3839) : AC(1258)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284
Article Published Date : Dec 31, 2013
Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco
Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

The ketogenic diet may have value in ALS. - GMI Summary

Pubmed Data : Neurol Neurochir Pol. 2011 Jul-Aug;45(4):370-8. PMID: 22101998
Article Published Date : Jun 30, 2011
Authors : Sergiusz Jóźwiak, Eric H Kossoff, Katarzyna Kotulska-Jóźwiak
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Parkinson's Disease

High homocysteine levels are associated with neurodegenerative conditions such as Parkinson's disease, ALS and progressive supranuclear palsy. - GMI Summary

Pubmed Data : Dement Geriatr Cogn Disord. 2010 Jul;29(6):553-9. Epub 2010 Jul 3. PMID: 20606437
Article Published Date : Jul 01, 2010
Authors : Johannes Levin, Kai Bötzel, Armin Giese, Michael Vogeser, Stefan Lorenzl
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Hyperhomocysteinemia : CK(387) : AC(58), Parkinson's Disease : CK(346) : AC(85), Supranuclear Palsy: Progressive : CK(10) : AC(1)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481
Article Published Date : Sep 30, 2010
Authors : Xinxin Yang, Baohua Cheng
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Melatonin supplementation may have a therapeutic role in neurodegenerative disorders. - GMI Summary

Pubmed Data : Front Biosci (Landmark Ed). 2014 ;19:429-46. Epub 2014 Jan 1. PMID: 24389194
Article Published Date : Dec 31, 2013

Authors : Giovanni Polimeni, Emanuela Esposito, Valentina Bevelacqua, Claudio Guarneri, Salvatore Cuzzocrea

Study Type : Review
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815

Article Published Date : Jun 01, 2008

Authors : Sylvain Doré

Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284

Article Published Date : Dec 31, 2013

Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco

Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Hyperhomocysteinemia

High homocysteine levels are associated with neurodegenerative conditions such as Parkinson's disease, ALS and progressive supranuclear palsy. - GMI Summary

Pubmed Data : Dement Geriatr Cogn Disord. 2010 Jul;29(6):553-9. Epub 2010 Jul 3. PMID: 20606437

Article Published Date : Jul 01, 2010

Authors : Johannes Levin, Kai Bötzel, Armin Giese, Michael Vogeser, Stefan Lorenzl

Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Hyperhomocysteinemia : CK(387) : AC(58), Parkinson's Disease : CK(346) : AC(85), Supranuclear Palsy: Progressive : CK(10) : AC(1)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953

Article Published Date : Jan 01, 2010

Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo,

Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Smoking

Cigarette smoking is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Neuroepidemiology. 1999;18(4):194-202. PMID: 10364720
Article Published Date : Jan 01, 1999
Authors : F Kamel, D M Umbach, T L Munsat, J M Shefner, D P Sandler
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Smoking : CK(597) : AC(87)
Problem Substances : Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Tobacco consumption is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 2000 Jan 15;151(2):156-63. PMID: 10645818
Article Published Date : Jan 15, 2000
Authors : L M Nelson, V McGuire, W T Longstreth, C Matkin
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Nicotine/Tobacco Toxicity : CK(90) : AC(28), Smoking : CK(597) : AC(87)
Problem Substances : Nicotine : CK(56) : AC(8), Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: Alzheimer's Disease

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Lead may contribute to the pathogenesis of nervous system diseases by stimulating the production of autoantibodies against neural proteins including myelin basic protein. - GMI Summary

Pubmed Data : Environ Health Perspect. 1994 Dec;102(12):1052-6. PMID: 7536156
Article Published Date : Dec 01, 1994

Authors : S J Waterman, H A el-Fawal, C A Snyder

Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40), Multiple Sclerosis : CK(746) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Immunotoxic : CK(254) : AC(48), Interleukin-6 up-regulation : CK(14) : AC(3)

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481

Article Published Date : Sep 30, 2010

Authors : Xinxin Yang, Baohua Cheng

Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136

Article Published Date : Sep 30, 2012

Authors : Ik-Hyun Cho

Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Melatonin supplementation may have a therapeutic role in neurodegenerative disorders. - GMI Summary

Pubmed Data : Front Biosci (Landmark Ed). 2014 ;19:429-46. Epub 2014 Jan 1. PMID: 24389194

Article Published Date : Dec 31, 2013

Authors : Giovanni Polimeni, Emanuela Esposito, Valentina Bevelacqua, Claudio Guarneri, Salvatore Cuzzocrea

Study Type : Review
Additional Links
Substances : Melatonin : CK(480) : AC(132)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815

Article Published Date : Jun 01, 2008

Authors : Sylvain Doré

Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)

Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235
Article Published Date : Dec 31, 2007
Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto
Study Type : Review
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284
Article Published Date : Dec 31, 2013
Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco
Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Multiple Sclerosis

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Lead may contribute to the pathogenesis of nervous system diseases by stimulating the production of autoantibodies against neural proteins including myelin basic protein. - GMI Summary

Pubmed Data : Environ Health Perspect. 1994 Dec;102(12):1052-6. PMID: 7536156
Article Published Date : Dec 01, 1994
Authors : S J Waterman, H A el-Fawal, C A Snyder
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40), Multiple Sclerosis : CK(746) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)

Adverse Pharmacological Actions : Immunotoxic : CK(254) : AC(48), Interleukin-6 up-regulation : CK(14) : AC(3)

Aquatherapy for neurodegenerative disorders. - GMI Summary

Pubmed Data : J Huntingtons Dis. 2014 ;3(1):5-11. PMID: 25062761
Article Published Date : Dec 31, 2013
Authors : Alyson R Plecash, Blair R Leavitt
Study Type : Review
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Therapeutic Actions : Aquatic therapy : CK(10) : AC(1), Exercise : CK(542) : AC(75)

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136
Article Published Date : Sep 30, 2012
Authors : Ik-Hyun Cho
Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Tauroursodeoxycholic acid (TUDCA) may have therapeutic value in neurodegenerative illnesses. - GMI Summary

Pubmed Data : Glob Adv Health Med. 2014 May ;3(3):58-69. PMID: 24891994
Article Published Date : Apr 30, 2014
Authors : Sheila Vang, Katie Longley, Clifford J Steer, Walter C Low
Study Type : Review
Additional Links
Substances : Tauroursodeoxycholic acid : CK(1) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40)

Topic: Lead Poisoning

There is an association between blood lead and the risk of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Am J Epidemiol. 2010 May 15;171(10):1126-33. Epub 2010 Apr 20. PMID: 20406759
Article Published Date : May 15, 2010
Authors : Fang Fang, Lydia C Kwee, Kelli D Allen, David M Umbach, Weimin Ye, Mary Watson, Jean Keller, Eugene Z Oddone, Dale P Sandler, Silke Schmidt, Freya Kamel
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40)
Problem Substances : Lead : CK(117) : AC(15)

Lead may contribute to the pathogenesis of nervous system diseases by stimulating the production of autoantibodies against neural proteins including myelin basic protein. - GMI Summary

Pubmed Data : Environ Health Perspect. 1994 Dec;102(12):1052-6. PMID: 7536156
Article Published Date : Dec 01, 1994

Authors : S J Waterman, H A el-Fawal, C A Snyder
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lead Poisoning : CK(168) : AC(40), Multiple Sclerosis : CK(746) : AC(133)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Immunotoxic : CK(254) : AC(48), Interleukin-6 up-regulation : CK(14) : AC(3)

Topic: Stroke

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Genistein is neuroprotective in murine models of familial amyotrophic lateral sclerosis and stroke. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 1999 May 19;258(3):685-8. PMID: 10329446
Article Published Date : May 19, 1999
Authors : V N Trieu, F M Uckun
Study Type : Animal Study
Additional Links
Substances : Genistein : CK(454) : AC(187), phytoestrogens : CK(714) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Stroke : CK(406) : AC(50), Stroke: Attenuation/Recovery : CK(105) : AC(21)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: High Homocysteine

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Methyl Vitamin B12 rescues a motor neuron-like cell line from homocysteine-

mediated cell death. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2011 Mar 15;251(3):217-25. Epub 2011 Jan 13. PMID: 21237187
Article Published Date : Mar 15, 2011
Authors : Richelle A Hemendinger, Edward J Armstrong, Benjamin Rix Brooks
Study Type : In Vitro Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), High Homocysteine : CK(387) : AC(58), Neuroblastoma : CK(51) : AC(31)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Mitochondrial Diseases

There is increased mitochondrial oxidative damage in patients with sporadic amyotrophic lateral sclerosis - GMI Summary

Pubmed Data : J Neurol Sci. 2008 Apr 15;267(1-2):66-9. Epub 2007 Oct 24. PMID: 17961597
Article Published Date : Apr 15, 2008
Authors : Takahiko Murata, Chigumi Ohtsuka, Yasuo Terayama
Study Type : Human Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Mitochondrial Diseases : CK(157) : AC(57), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

The ketogenic diet may have therapeutic value in neuromuscular and neurodegenerative Diseases. - GMI Summary

Pubmed Data : Biomed Res Int. 2014 ;2014:474296. Epub 2014 Jul 3. PMID: 25101284
Article Published Date : Dec 31, 2013
Authors : Antonio Paoli, Antonino Bianco, Ernesto Damiani, Gerardo Bosco
Study Type : Review
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Mitochondrial Diseases : CK(157) : AC(57), Neurodegenerative Diseases : CK(1920) : AC(447), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)

Topic: Autoimmune Diseases

It is possible that lesions suggestive of Amyotrophic Lateral Sclerosis may be attributed to celiac disease. - GMI Summary

Pubmed Data : BJU Int. 2007 Mar;99(3):619-22. Epub 2006 Nov 28. PMID: 19910450
Article Published Date : Mar 01, 2007
Authors : K J Brown, V Jewells, H Herfarth, M Castillo
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Autoimmune Diseases : CK(5523) : AC(880), Celiac Disease : CK(1591) : AC(229)

Topic: Celiac Disease

It is possible that lesions suggestive of Amyotrophic Lateral Sclerosis may be attributed to celiac disease. - GMI Summary

Pubmed Data : BJU Int. 2007 Mar;99(3):619-22. Epub 2006 Nov 28. PMID: 19910450
Article Published Date : Mar 01, 2007
Authors : K J Brown, V Jewells, H Herfarth, M Castillo
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Autoimmune Diseases : CK(5523) : AC(880), Celiac Disease : CK(1591) : AC(229)

Topic: Epilepsy

High homocysteine levels may be associated with the pathogenesis of neurological disorders. - GMI Summary

Pubmed Data : Front Biosci (Schol Ed). 2010;2:359-72. Epub 2010 Jan 1. PMID: 20036953
Article Published Date : Jan 01, 2010
Authors : Riccardo Ientile, Monica Curro', Nadia Ferlazzo, Salvatore Condello, Daniela Caccamo, Francesco Pisani
Study Type : Human Study
Additional Links
Substances : B-complex : CK(248) : AC(29)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Epilepsy : CK(128) : AC(29), High Homocysteine : CK(387) : AC(58), Hyperhomocysteinemia : CK(387) : AC(58), Multiple Sclerosis : CK(746) : AC(133), Parkinson's Disease : CK(346) : AC(85), Stroke : CK(406) : AC(50)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Neuromuscular Diseases

Statin drug use may be linked to neuromuscular diseases and an amyotrophic lateral sclerosis-like syndrome. - GMI Summary

Pubmed Data : Drug Saf. 2007;30(6):515-25. PMID: 17536877
Article Published Date : Jan 01, 2007
Authors : I Ralph Edwards, Kristina Star, Anne Kiuru
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Neuromuscular Diseases : CK(16) : AC(4)
Problem Substances : Statin Drugs : CK(3971) : AC(475)

Topic: Nicotine/Tobacco Toxicity

Tobacco consumption is associated with increased risk for ALS. - GMI Summary

Pubmed Data : Am J Epidemiol. 2000 Jan 15;151(2):156-63. PMID: 10645818
Article Published Date : Jan 15, 2000
Authors : L M Nelson, V McGuire, W T Longstreth, C Matkin
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Nicotine/Tobacco Toxicity : CK(90) : AC(28), Smoking : CK(597) : AC(87)
Problem Substances : Nicotine : CK(56) : AC(8), Tobacco : CK(74) : AC(7)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: Supranuclear Palsy: Progressive

High homocysteine levels are associated with neurodegenerative conditions such as Parkinson's disease, ALS and progressive supranuclear palsy. - GMI Summary

Pubmed Data : Dement Geriatr Cogn Disord. 2010 Jul;29(6):553-9. Epub 2010 Jul 3. PMID: 20606437
Article Published Date : Jul 01, 2010
Authors : Johannes Levin, Kai Bötzel, Armin Giese, Michael Vogeser, Stefan Lorenzl
Study Type : Human Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Hyperhomocysteinemia : CK(387) : AC(58), Parkinson's Disease : CK(346) : AC(85), Supranuclear Palsy: Progressive : CK(10) : AC(1)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Vitamin D Deficiency

Suboptimal vitamin D levels are frequently found in ALS patients (81%). - GMI Summary

Pubmed Data : J Clin Neurosci. 2013 Nov ;20(11):1550-3. Epub 2013 Jun 29. PMID: 23815870
Article Published Date : Oct 31, 2013
Authors : Chafic Karam, Matthew J Barrett, Theresa Imperato, Daniel J L MacGowan, Stephen Scelsa
Study Type : Human Study
Additional Links
Substances : Vitamin D : CK(1742) : AC(247)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Vitamin D Deficiency : CK(505) : AC(49)

Topic: Guillain-Barre Syndrome

Lyme Disease -Induced Polyradiculopathy Mimicking Amyotrophic Lateral Sclerosis: Case Report. - GMI Summary

Pubmed Data : Int J Neurosci. 2014 Jan 7. Epub 2014 Jan 7. PMID: 24397499
Article Published Date : Jan 06, 2014
Authors : Ahmet Z Burakgazi
Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Guillain-Barre Syndrome : CK(84) : AC(14)
Problem Substances : Lyme's Disease (Borrelia burgdorferi) : CK(6) : AC(2)

Topic: Huntington Disease

Coenzyme Q10 demonstrated significant therapeutic effects in transgenic mouse model of ALS and Huntington's disease. - GMI Summary

Pubmed Data : Free Radic Res. 2002 Apr;36(4):455-60. PMID: 12069110
Article Published Date : Apr 01, 2002
Authors : M Flint Beal
Study Type : Transgenic Animal Study
Additional Links
Substances : Coenzyme Q10 : CK(741) : AC(112)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)

Effects of Panax ginseng in Neurodegenerative Diseases. - GMI Summary

Pubmed Data : J Ginseng Res. 2012 Oct ;36(4):342-53. PMID: 23717136

Article Published Date : Sep 30, 2012

Authors : Ik-Hyun Cho

Study Type : Review
Additional Links
Substances : Panax Ginseng : CK(49) : AC(21)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)

Resveratrol: a natural compound with pharmacological potential in neurodegenerative diseases. - GMI Summary

Pubmed Data : CNS Neurosci Ther. 2008 ;14(3):234-47. Epub 2008 Jul 29. PMID: 18684235

Article Published Date : Dec 31, 2007

Authors : Héctor I Rocha-González, Mónica Ambriz-Tututi, Vinicio Granados-Soto

Study Type : Review
Additional Links
Substances : Resveratrol : CK(981) : AC(603), Stilbenes : CK(130) : AC(96)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Tauroursodeoxycholic acid (TUDCA) may have therapeutic value in neurodegenerative illnesses. - GMI Summary

Pubmed Data : Glob Adv Health Med. 2014 May ;3(3):58-69. PMID: 24891994

Article Published Date : Apr 30, 2014

Authors : Sheila Vang, Katie Longley, Clifford J Steer, Walter C Low

Study Type : Review
Additional Links
Substances : Tauroursodeoxycholic acid : CK(1) : AC(1)
Diseases : Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Huntington Disease : CK(45) : AC(17), Multiple Sclerosis : CK(746) : AC(133), Neurodegenerative Diseases : CK(1920) : AC(447)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40)

Topic: Brain Damage

Testosterone may have neuroprotective properties. - GMI Summary

Pubmed Data : Neurosci Lett. 2009 Nov 13;465(2):123-7. Epub 2009 Sep 6. PMID: 19735695

Article Published Date : Nov 13, 2009

Authors : Randall E Wilson, Kellie D Coons, Dale R Sengelaub

Study Type : Animal Study
Additional Links
Substances : Testosterone : CK(164) : AC(29)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Damage : CK(85) : AC(39), Motor Neuron Disease : CK(348) : AC(69)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Lipid Peroxidation

The omega-3 fatty acid eicosapentaenoic acid accelerates disease progression in a model of amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : PLoS One. 2013 ;8(4):e61626. Epub 2013 Apr 19. PMID: 23620776

Article Published Date : Dec 31, 2012

Authors : Ping K Yip, Chiara Pizzasegola, Stacy Gladman, Maria Luigia Biggio, Marianna Marino, Maduka Jayasinghe, Farhan Ullah, Simon C Dyall, Andrea Malaspina, Caterina Bendotti, Adina Michael-Titus

Study Type : Animal Study
Additional Links
Substances : EPA (Eicosapentaenoic Acid) : CK(619) : AC(88)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144)
Pharmacological Actions : Superoxide Dismutase Up-regulation : CK(159) : AC(53)

The progression of ALS is associated with oxygen radical-induced lipid peroxidative damage, indicating that antioxidant therapy may be useful. - GMI Summary

Pubmed Data : J Neurosci Res. 1998 Jul 1;53(1):66-77. PMID: 9670993
Article Published Date : Jul 01, 1998
Authors : E D Hall, P K Andrus, J A Oostveen, T J Fleck, M E Gurney
Study Type : Animal Study
Additional Links
Substances : Antioxidant formulas : CK(487) : AC(73), Vitamin E : CK(1285) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lipid Peroxidation : CK(404) : AC(144), Oxidative Stress : CK(2004) : AC(750)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373)

Topic: Lou Gehrig Disease

The serotonin precurser 5-HTP improves locomotor function and survival in a mouse model of ALS. - GMI Summary

Pubmed Data : Amyotroph Lateral Scler Other Motor Neuron Disord. 2003 Sep;4(3):171-6. PMID: 14527871
Article Published Date : Sep 01, 2003
Authors : B J Turner, E C Lopes, S S Cheema
Study Type : Animal Study
Additional Links
Substances : 5-HTP (5-Hydroxytryptophan) : CK(74) : AC(10)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Lou Gehrig Disease : CK(337) : AC(69)

Topic: Peripheral Neuropathies

Glycosaminoglycans boost insulin-like growth factor-I-promoted neuroprotection, indicating their potential value in motor neuron disease and peripheral neuropathies. - GMI Summary

Pubmed Data : Neuroscience. 1999;93(2):565-72. PMID: 10465440
Article Published Date : Jan 01, 1999
Authors : L Vergani, M Losa, E Lesma, A M Di Giulio, A Torsello, E E Müller, A Gorio
Study Type : Animal Study
Additional Links
Substances : Glycoaminoglycans : CK(8) : AC(4), Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Peripheral Neuropathies : CK(191) : AC(31)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Drug Synergy : CK(341) : AC(151)

Topic: Spinal Cord Injuries

Estrogen may have therapeutic value in the treatment of amyotrophic lateral sclerosis and spinal cord injury. - GMI Summary

Pubmed Data : J Endocrinol. 2011 Feb;208(2):171-82. Epub 2010 Nov 10. PMID: 21068071

Article Published Date : Feb 01, 2011

Authors : Arabinda Das, Joshua A Smith, Cameron Gibson, Abhay K Varma, Swapan K Ray, Naren L Banik

Study Type : In Vitro Study
Additional Links
Substances : Estradiol (E(2)) : CK(21) : AC(14)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508), Tumor Necrosis Factor (TNF) Alpha Inhibitor : CK(1002) : AC(357)

Progesterone has neuroprotective properties in traumatic central nervous system and motor neuron degeneration. - GMI Summary

Pubmed Data : Front Neuroendocrinol. 2009 Jul;30(2):173-87. Epub 2009 Mar 24. PMID: 19318112

Article Published Date : Jul 01, 2009

Authors : Alejandro F De Nicola, Florencia Labombarda, Maria Claudia Gonzalez Deniselle, Susana L Gonzalez, Laura Garay, Maria Meyer, Gisella Gargiulo, Rachida Guennoun, Michael Schumacher

Study Type : Review
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Motor Neuron Disease: Amyotrophic Lateral Sclerosis : CK(336) : AC(69), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Bulbar palsy

Lead toxicitity may be associated with ALS. - GMI Summary

Pubmed Data : Rev Neurol (Paris). 1998 May;154(4):345-7. PMID: 9773065

Article Published Date : May 01, 1998

Authors : P Couratier, P Bernet-Bernady, T Truong, E Lagrange, P M Preux, G Lachatre, J M Vallat

Study Type : Human: Case Report
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Bulbar palsy : CK(13) : AC(2)
Problem Substances : Lead : CK(117) : AC(15)
Adverse Pharmacological Actions : Neurotoxic : CK(1116) : AC(188)

Topic: Motor Neuron Disease: Amyotrophic Lateral Sclerosis

Progesterone has neuroprotective properties in traumatic central nervous system and motor neuron degeneration. - GMI Summary

Pubmed Data : Front Neuroendocrinol. 2009 Jul;30(2):173-87. Epub 2009 Mar 24. PMID: 19318112

Article Published Date : Jul 01, 2009

Authors : Alejandro F De Nicola, Florencia Labombarda, Maria Claudia Gonzalez Deniselle, Susana L Gonzalez, Laura Garay, Maria Meyer, Gisella Gargiulo, Rachida Guennoun, Michael Schumacher

Study Type : Review
Additional Links
Substances : Progesterone : CK(70) : AC(26)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Motor Neuron Disease : CK(348) : AC(69), Motor Neuron Disease: Amyotrophic Lateral Sclerosis : CK(336) : AC(69), Spinal Cord Injuries : CK(100) : AC(29)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Aging

Creatine in mouse models of neurodegeneration and aging. - GMI Summary

Pubmed Data : Amino Acids. 2011 May ;40(5):1297-303. Epub 2011 Mar 10. PMID: 21390530
Article Published Date : Apr 30, 2011
Authors : T Klopstock, M Elstner, A Bender
Study Type : Animal Study
Additional Links
Substances : Creatine : CK(133) : AC(23)
Diseases : Aging : CK(1399) : AC(392), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Neurodegenerative Diseases : CK(1920) : AC(447)

Topic: Brain: Microglial Activation

The ketogenic diet was neuroprotective and anti-inflammatory against MPTP-neurotoxicity. - GMI Summary

Pubmed Data : J Mol Neurosci. 2010 Oct ;42(2):145-53. Epub 2010 Mar 24. PMID: 20333481
Article Published Date : Sep 30, 2010
Authors : Xinxin Yang, Baohua Cheng
Study Type : Animal Study
Additional Links
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic lateral sclerosis (ALS) : CK(547) : AC(132), Brain: Microglial Activation : CK(74) : AC(47), Parkinson's Disease : CK(346) : AC(85)
Therapeutic Actions : Dietary Modification: Low Carbohydrate/Ketogenic : CK(159) : AC(25)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Problem Substances : Non-Steroidal Anti-Inflammatory Drugs (NSAIDs) : CK(1510) : AC(134)

Topic: Stroke: Attenuation/Recovery

Genistein is neuroprotective in murine models of familial amyotrophic lateral sclerosis and stroke. - GMI Summary

Pubmed Data : Biochem Biophys Res Commun. 1999 May 19;258(3):685-8. PMID: 10329446
Article Published Date : May 19, 1999
Authors : V N Trieu, F M Uckun
Study Type : Animal Study
Additional Links
Substances : Genistein : CK(454) : AC(187), phytoestrogens : CK(714) : AC(221)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Stroke : CK(406) : AC(50), Stroke: Attenuation/Recovery : CK(105) : AC(21)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)

Topic: Abnormalities

Pesticides and human chronic diseases: evidences, mechanisms, and perspectives. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2013 Apr 15 ;268(2):157-77. Epub 2013 Feb 9. PMID: 23402800
Article Published Date : Apr 14, 2013
Authors : Sara Mostafalou, Mohammad Abdollahi
Study Type : Review
Additional Links
Diseases : , Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Epigenetic Modification : CK(111) : AC(47)
Problem Substances : Pesticides : CK(712) : AC(74)

Topic: Brain Inflammation

Resveratrol's therapeutic properties in neurodegenerative conditions may be due to its gene protective and regulatory as well as antioxidant properties. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 15956815
Article Published Date : Jun 01, 2008
Authors : Sylvain Doré
Study Type : Review
Additional Links
Substances : Flavonoids : CK(960) : AC(301), Polyphenols : CK(484) : AC(182), Red Wine Extract : CK(59) : AC(25), Resveratrol : CK(981) : AC(603), Wine : CK(142) : AC(37)
Diseases : Alzheimer's Disease : CK(669) : AC(168), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Brain Inflammation : CK(86) : AC(45), Neurodegenerative Diseases : CK(1920) : AC(447), Oxidative Stress : CK(2004) : AC(750), Parkinson's Disease : CK(346) : AC(85)
Pharmacological Actions : Antioxidants : CK(3767) : AC(1373), Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Stilbenes : CK(402) : AC(242)

Topic: Drug-Induced

Pesticides and human chronic diseases: evidences, mechanisms, and perspectives. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2013 Apr 15 ;268(2):157-77. Epub 2013 Feb 9. PMID: 23402800
Article Published Date : Apr 14, 2013
Authors : Sara Mostafalou, Mohammad Abdollahi
Study Type : Review
Additional Links
Diseases : , Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Oxidative Stress : CK(2004) : AC(750)
Additional Keywords : Epigenetic Modification : CK(111) : AC(47)
Problem Substances : Pesticides : CK(712) : AC(74)

Topic: Endocannabinoid Disorders

The endocannabinoid system may play a valuable role in the development of treatment options for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Curr Pharm Des. 2008;14(23):2306-16. PMID: 18781981
Article Published Date : Jan 01, 2008
Authors : Lynsey G Bilsland, Linda Greensmith
Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Endocannabinoid Disorders : CK(15) : AC(9), Endocannabinoid System : CK(16) : AC(6)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Endocannabinoid System

The endocannabinoid system may play a valuable role in the development of treatment options for amyotrophic lateral sclerosis. - GMI Summary

Pubmed Data : Curr Pharm Des. 2008;14(23):2306-16. PMID: 18781981
Article Published Date : Jan 01, 2008
Authors : Lynsey G Bilsland, Linda Greensmith

Study Type : Review
Additional Links
Substances : Cannabinoids : CK(195) : AC(60)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Endocannabinoid Disorders : CK(15) : AC(9), Endocannabinoid System : CK(16) : AC(6)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)
Additional Keywords : Diseases that are Linked : CK(2142) : AC(272)

Topic: Excitotoxicity

IGF-I prevents glutamate-induced motor neuron programmed cell death. - GMI Summary

Pubmed Data : Food Chem Toxicol. 2009 Jan 15. PMID: 15193297
Article Published Date : Jan 15, 2009
Authors : Andrea M Vincent, Bret C Mobley, Andrew Hiller, Eva L Feldman
Study Type : In Vitro Study
Additional Links
Substances : Insulin-like Growth Factor (IGF-1) : CK(9) : AC(5)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Excitotoxicity : CK(57) : AC(34)
Pharmacological Actions : Apoptotic : CK(1562) : AC(1168), Neuroprotective Agents : CK(990) : AC(508)

Topic: Inflammation

Folic acid protects motor neurons against the increased homocysteine, inflammation and programmed cell death. - GMI Summary

Pubmed Data : Neuropharmacology. 2008 Jun;54(7):1112-9. Epub 2008 Mar 16. PMID: 18436268
Article Published Date : Jun 01, 2008
Authors : Xiaojie Zhang, Sheng Chen, Liang Li, Qian Wang, Weidong Le
Study Type : In Vitro Study
Additional Links
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), Inflammation : CK(1125) : AC(377)
Pharmacological Actions : Anti-Apoptotic : CK(61) : AC(40), Bcl-2 protein down-regulation : CK(52) : AC(44), Neuroprotective Agents : CK(990) : AC(508), Nitric Oxide Inhibitor : CK(107) : AC(57), Superoxide Dismutase Up-regulation : CK(159) : AC(53), Tumor Necrosis Factor (TNF) Alpha Inhibitor : CK(1002) : AC(357)

Topic: Neuroblastoma

Methyl Vitamin B12 rescues a motor neuron-like cell line from homocysteine-mediated cell death. - GMI Summary

Pubmed Data : Toxicol Appl Pharmacol. 2011 Mar 15;251(3):217-25. Epub 2011 Jan 13. PMID: 21237187
Article Published Date : Mar 15, 2011
Authors : Richelle A Hemendinger, Edward J Armstrong, Benjamin Rix Brooks
Study Type : In Vitro Study
Additional Links
Substances : Vitamin B12: methylcobalamin : CK(55) : AC(9), Vitamin B-12 : CK(702) : AC(93)
Diseases : Amyotrophic Lateral Sclerosis : CK(549) : AC(133), High Homocysteine : CK(387) : AC(58), Neuroblastoma : CK(51) : AC(31)
Pharmacological Actions : Neuroprotective Agents : CK(990) : AC(508)