SCIENTIFIC ARTICLES/ CLINICAL STUDIES

Sodium Phenylbutyrate & Sodium Phenylacetate

4-Phenylbutyric Acid, Sodium Salt - Phenylacetic Acid, Sodium Salt

CANCER


Murahari, S; Jalkanen, AL; Kulp, SK; Chen, C-S; Jubala, CM; Fosmire, SP; Modiano, JF; Fossey, SL; London, CA, Kisseberth, WC.OSU-HDAC42, a novel histone deacetylase inhibitor with potent antitumor effects on human and canine osteosarcoma cells. Proceedings of the American Association for Cancer Research Annual Meeting 2008;49:578.


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Vila-Carriles, WH; Kovacs, GG; Bubien, JK; Gillespie GY; Fuller, CM; Benos, DJ. Cellular localization of acid sensing ion channels in human astrocytes and gliomas. FASEB Journal 2006; 20(4, Part1):A325.

Christov, K; Grubbs, C; Lubet, R; Altered cell proliferation and apoptosis as biomarkers for identifying preventive/therapeutic agents against chemically induced mammary cancers. Breast Cancer Research and Treatment 2006; 100(Suppl. 1):S58.

Gore, SD; Jiemjit, A; Silverman, LB; Aucott, T; Baylin, S; Carraway, H; Douses, T; Fandy, T; Herman, J; Karp, JE; Licht, JD; Murgo, AJ; Odchimar-Reissig, R; Smith, BD; Zwiebel, JA; Sugar, E. Cimbridine methyltransferase/histone deacetylase inhibition with 5Azacitidine and MS-275 in patients with MDS, CMMoL and AML: Clinical response, Histone Acetylation and DNA damage. Blood 2006; 108(11, part 1):156A-157A.

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**BLOOD**


**SICKLE CELL ANEMIA, THALASSEMA & COOLEY’S ANEMIA**


UREA CYCLE DISORDER/ ORNITHINE TRANSCARBAMYLASE DEFICIENCY


Lee B, Garovoy MR, Gargosky SE, Berry SA. Preliminary data on adult patients with urea cycle disorder (UCD) in an open-label, switch-over, does-escalation study comparing a new ammonia scavenger glyceryl tri (4-phenylbutyrate) (HPN-100), to buphenyl (sodium phenylbutyrate – PBA). *Journal of Inherited Metabolic Disease* 2008; 31 (Suppl. 1): 91.


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**LEUCINE METABOLISM**


**LIPOPROTEIN RECEPTOR**


BENIGN PROSTATE HYPERPLASIA (BPH)


CYSTIC FIBROSIS


**FAMILIAL HYPERCHOLESTEROLEMIA**


**PHENYLKETONURIA**


**LUNG/ABCA3 DEFECTS**

ADRENOLEUCODYSTROPHY (ALD)


KIDNEY


Liu Xiao Li, Nephrin cellular trafficking and intracellular interactions, Division of Matrix Biology Dept. of Medical Biochemistry and Biophysics, Karolinska Institutet, Stockholm, Sweden, May 2004.


BLADDER DYSFUNCTION


AMYOTROPHIC LATERAL SCLEROSIS (ALS)


**BRAIN DISORDERS**


**CEREBRAL ISCHEMIC INJURY**


**EPILEPSY**

CARDIAC INJURY


HUNTINGTON’S DISEASE


Tolchin, E. Biomarkers of Huntington’s Disease Found in Blood 7/26/05. *Bioscience Technology,* http://www.biomedicalproducts.com


MULTIPLE SCLEROSIS (MS)


PARKINSON’S DISEASE

Kubota, Kyoko, Niinuma, Yoshifumi, Kaneko, Masayuki, Okuma, Yasunobu, Sugai, Mami, Omura, Tomohiro, Uesugi, Mai, Uehara, Takashi, Hoso, Toru, Nomura, Yasuyuki. Suppressive d effects of
4-Phenylbutyrate on the aggregation of Pael receptors and endoplasmic reticulum stress. *Journal of Neurochemistry*, 2006, 97, 1259-1268


**SPINAL MUSCULAR ATROPHY**


Wirth, B, Brichta, L, Schrank, B, Lochmouller, H, Blick, S, Baasner, A, Heller, R. Mildly affected patients with spinal muscular atrophy are partially protected by an increased SMN2 copy number. *Hum Genet* 2006; 119 (4): 422-428


**ALZHEIMER’S DISEASE**


**AGING**


**EYE**

Gong Bo, Zhang Li-Yun, Lam Dennis Shun-Chiu, Pang Chi-Pui, Yam Gary Hin-Fai. Sodium 4-phenylbutyrate ameliorates the effects of cataract-causing mutant gammaD-crystallin in cultured cells. *Molecular Vision* 2010 Kune 4, 2010


**RHEUMATOID ARTHRITIS**


**DIABETES**


**A-1 ANTITRYPSIN**


**LIVER**


**ADDITION**


**ENDOPLASMIC RETICULUM STRESS**


**OBESITY**

Basseri Sana, Lhotak Sarka, Sharma Arya M, Austin Richard C. The chemical chaperone 4-phenylbutyrate inhibits adipogenesis by modulating the unfolded protein response. *Journal of Lipid Research* May 2009

**MISCELLANEOUS RESEARCH & ARTICLES**


G.A. Ballou, P.D. Boyer, J.M. Luck, F.G.Lum, Chemical, Clinical, and Immunological Studies on the Products of Human Plasma Fractionation. V. The Influence of non-polar anions on the thermal stability of serum albumin. *Biochemical Laboratory, Department of Chemistry, Stanford University, California* Feb. 17, 1944

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