



December 2013

Curriculum Vitae

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EDUCATION:

University School of Pharmacy, University of Patras, Patras, Greece; 1985-1989. Degree: B. Pharm

Graduate: Department of Pharmacology and Toxicology, Medical College of Georgia, USA; 1990-1994; Degree: Ph.D. in Pharmacology

Postdoctoral: Vascular Biology Center, Medical College of Georgia, USA; 1994-1995
Boyer Center for Molecular Medicine, Yale University School of Medicine; 1995-1998

ACADEMIC APPOINTMENTS:

1999-2003: Assistant Professor of Pharmacology, School of Nursing, University of Athens, Greece
2003-2009 Associate Professor of Molecular Pharmacology, Department of Pharmacy, University of Patras, Greece
2009-2013 Professor of Pharmacology, Department of Pharmacy, University of Patras, Greece
2013-present Professor of Pharmacology, Department of Pharmacy, University of Athens, Greece

ADJUNCT APPOINTMENTS & VISITING PROFESSORSHIPS:

1999-2001: Visiting Professor, Department of Pharmacology, Yale University School of Medicine, USA
2000-2008: Group Leader, "G. P. Livanos" Laboratory, Dept of Critical Care and Pulmonary Services, University of Athens School of Medicine, Greece
2003-present: Adjunct faculty, Hellenic Open University, Greece
7-8/2007: Visiting Professor, University of Dentistry and Medicine New Jersey, USA
2008-present: Adjunct Professor, Department of Medicine, McGill University, Canada

- 2-6/2011: Visiting Professor, Biomedical Research Foundation of the Academy of Athens, Greece
- 2011-2013: Honorary Professor, Department of Pharmacology, University of Maastricht, The Netherlands
- 2011-present Adjunct Professor, Department of Anesthesiology University of Texas Medical Branch, Galveston, USA
- 2012-present: Affiliated Investigator, Biomedical Research Foundation of the Academy of Athens, Greece

Administrative appointments and other activities:

- 2003-2007 Elected Member of the Board, Greek Society for Pharmacology 2013-2015 Greek Society for Pharmacology, President
- 2006-present Director, Lab for Molecular Pharmacology, University of Patras 2005-2009 and
- 2011-2013 Vice Chairman, Department of Pharmacy, University of Patras
- 2007 National Delegate, European Medicines Agency, Pediatric Committee 2007-present European Medicines Agency expert
- 2009-present Pharmacopoeia Committee, National Drug Agency (Greece)
- 2010-2013 Graduate Program Director, Department of Pharmacy, University of Patras 2011-2015 European Network on Gasotransmitters, Chair

EDITORIAL BOARD MEMBER: Vascular Pharmacology (1998-2010)
British Journal of Pharmacology (2009-present)
Arteriosclerosis, Thrombosis and Vascular Biology (2010-present)
Journal of Pharmacology & Experimental Therapeutics (2012-present)

AWARDS & HONORS

- 1988 Award from the Greek National Scholarship Foundation
- 1992-94 Scholarships from the American Hellenic Education Progressive Association 1994 Ph.D. in Pharmacology with Distinction, Medical College of Georgia
- 1996-98 Fellow of the Patrick and Catherine Weldon Donaghue Medical Foundation 2011 Fellow of the American Heart Association
- 2012 Fellow of the British Pharmacological Society

MEMBERSHIP IN SOCIETIES:

- American Association for the Advancement of Science (1999)
- American Heart Association (2007)
- American Society for Biochemistry and Molecular Biology (2004)
- American Society for Pharmacology and Experimental Therapeutics (1993)
- American Physiological Society (2010)
- British Society for Pharmacology (2003)
- European Vascular Biology Organization (2011)
- North American Vascular Biology Organization (1996)
- Southeastern Pharmacology Society (1991)
- Greek Pharmacological Society (1998)
- Greek Union of Pharmacists (1998)

PUBLICATIONS

Review articles & commentaries

1. **Papapetropoulos, A.**, R. D. Rudik and W.C. Sessa. Molecular and cellular control of nitric oxide synthases in the cardiovascular system. *Cardiovasc. Res.* 43:509-520, 1999
2. Andreopoulos, S and **A. Papapetropoulos**. Molecular aspects of soluble guanylyl cyclase regulation. *Gen. Pharmacol.* 34: 147-157, 2000.
3. S. Tsigkos, M. Koutsilieris and **A. Papapetropoulos**. Angiopoietins in angiogenesis and beyond. *Expert Opin. Investig. Drugs* 12:933-941, 2003.
4. **A. Papapetropoulos** A ginseng-derived ER β agonist (Rb1 ginsenoside) attenuates capillary morphogenesis. *Br. J. Pharmacol* 152:172-174, 2007 (commentary)
5. C. Szabo and **A. Papapetropoulos**. Hydrogen sulfide and angiogenesis: mechanisms and applications *Br. J. Pharmacol.* 164:853-65, 2011.
6. K. Módis, E. Bos, E. Calzia, H. van Goor, Harry; C. Coletta, **A. Papapetropoulos**, M. Hellmich, P. Radermacher; F. Bouillaud, C. Szabo. Regulation of Mitochondrial Function by Hydrogen Sulfide. Part II. Pathophysiological and Therapeutic Aspects *Br. J. Pharmacol In press*

Research Papers

1. **Papapetropoulos A**, Burch SE, Topouzis S, Catravas JD Radiation induced alterations in angiotensin converting enzyme activity in cultured bovine pulmonary arterial endothelial cells. *Toxicol. Appl. Pharmacol.* 120: 96-105, 1993.
2. Marczin N, **Papapetropoulos A**, Catravas JD Prevention of nitric oxide synthase induction in vascular smooth muscle cells by microtubule depolymerizing agents. *Br. J. Pharmacol.* 109: 603-605, 1993.
3. Marzcin N, **Papapetropoulos A**, Catravas JD Tyrosine kinase inhibitors suppress endotoxin and IL-1 β -induced NO synthesis in aortic smooth muscle cells. *Am. J. Physiol. (Heart Circ. Physiol.* 34) 265:H1014-H1018, 1993.
4. **Papapetropoulos A**, Marczin N, Snead MD, Cheng C, Milici A, JD Catravas Smooth muscle cell responsiveness to nitrovasodilators in hypertensive and normotensive animals. *Hypertension* 23: 476-484, 1994.
5. Snead MD, **Papapetropoulos A**, Carrier GO, Catravas JD Isolation and culture of endothelial cells from mesenteric vascular bed. *Meth. Cell Sci.* 17: 257-262, 1995.
6. **Papapetropoulos A**, Marczin N, Mora G, Milici A, Murad F, Catravas JD Regulation of vascular smooth muscle soluble guanylate cyclase activity, mRNA and protein levels by cAMP-elevating agents. *Hypertension* 26: 696-704, 1995.

7. Ramamoorthy JD, Ramamoorthy S, **Papapetropoulos A**, Catravas JD, Leibach FH, Ganapathy V Cyclic AMP-independent upregulation of the human serotonin transporter by staurosporine in choriocarcinoma cells. *J. Biol. Chem.* 270: 17189-17195, 1995.
8. Mohamed G, **Papapetropoulos A**, Caldwell RW, Ulrich D, Catravas JD, Tuttle RR HP-228, a novel synthetic peptide inhibits the induction of nitric synthase. *J. Pharm. Exp. Ther.* 275: 584-591, 1995.
9. Ryan JW, **Papapetropoulos A**, Ju H, Denslow ND, Antonov A, Vrmani R, Kolodgie FD, Gerrity RG, Catravas JD. Aminopeptidase P is disposed on human endothelial cells. *Immunopharmacology.* 32: 149-152, 1996.
10. **Papapetropoulos A**, G Y Go, Murad F, Catravas JD Mechanisms of tolerance to sodium nitroprusside in rat cultured aortic smooth muscle cells. *Br. J. Pharmacol.* 117: 147-155, 1996.
11. **Papapetropoulos A**, Cziraki A, Rubin JW, Stone CD, Catravas JD cGMP accumulation and gene expression of soluble guanylate cyclase in human vascular tissue. *J. Cell Physiol.* 167: 213-221, 1996.
12. **Papapetropoulos A**, Ryan JW, Antonov A, Virmani R, Kolodgie FD, Gerrity RG, Catravas JD Human aortic endothelial cell aminopeptidase N. *Immunopharmacology* 32: 153-156, 1996.
13. **Papapetropoulos A**, Abou-Mohamed G, Marczin N, Murad F, Caldwell RW, Catravas JD Downregulation of nitrovasodilator-induced cGMP accumulation in smooth muscle cells exposed to endotoxin or interleukin-1 β . *Br. J. Pharmacol.* 118:1359-1366, 1996.
14. **Papapetropoulos A**, Antonov A, Virmani R, Kolodgie FD, Munn DH, Marczin N, Ryan JW, Gerrity RG, Catravas JD Monocyte and cytokine-induced downregulation of angiotensin converting enzyme activity in cultured human and porcine endothelial cells. *Circ. Res.* 79: 512-523, 1996.
15. Marczin N, Jilling T, **Papapetropoulos A**, Go C, Catravas JD Cytoskeleton-dependent activation of the inducible nitric oxide synthase in cultured rat aortic smooth muscle cells. *Br. J. Pharmacol.* 118: 185-194, 1996.
16. Marczin N, Antonov, **Papapetropoulos A**, Munn DH, Virmani R, Kolodgie FD, Gerrity RG, Catravas JD Monocyte-induced downregulation of nitric oxide synthase in cultured aortic endothelial cells. *Arterioscler. Thromb. Vasc. Biol.* 16: 1095-1103, 1996.
17. **Papapetropoulos A**, Elmore LA, Catravas JD Relationship between volume of bathing medium and ectoenzyme activity in monolayers of cultured bovine pulmonary arterial endothelial cells. *Am. J. Physiol.* 271: L464-L469, 1996.
18. **Papapetropoulos A**, Desai KM, Rudic RD, Mayer B, Zhang R, Ruiz-Torres MP, Garcia-Cardena G, Madri JA, Sessa WC . Nitric oxide synthase inhibitors attenuate transforming growth factor β 1-stimulated capillary organization in vitro. *Am. J. Pathol.*,150:1835-1844, 1997
19. **Papapetropoulos, A.,** G. García-Cardena, J.A. Madri and W. C. Sessa. Nitric oxide production contributes to the angiogenic properties of vascular endothelial growth factor in human endothelial cells. *J. Clin. Invest.* 100:3131-3139, 1997.
20. **Papapetropoulos, A.,** N. Marczin and J.D. Catravas. Cross-tolerance between endogenous nitric oxide and exogenous nitrovasodilators. *Eur. J. Pharmacol.* 344:313-321, 1998

21. Marczin, N, C.Y. Go, **A. Papapetropoulos** and J.D. Catravas. Induction of nitric oxide synthase by protein synthesis inhibition in aortic smooth muscle cells. *Br. J. Pharmacol.* 123:1000-1008, 1998.
22. Abou-Mohamed, G., **A. Papapetropoulos**, J.D. Catravas and R.W. Caldwell. Zinc inhibits nitric oxide formation in response to lipopolysaccharides: implication in its anti-inflammatory activity. *Eur. J. Pharmacol.* 341: 265-272, 1998.
23. **Papapetropoulos, A.**, P. Piccardoni, G. Cirino, M. Bucci, R. Sorrentino, C. Cicala, K. Johnson, V. Zachariou, W. C. Sessa and D.C. Altieri. Hypotension and inflammatory gene expression triggered by factor Xa-nitric oxide signalling. *Proc. Natl. Acad. Sci USA* 95:4738-4742, 1998
24. García-Cardena, G., R. Fan, V. Shah, R. Sorrentino, G. Cirino, **A. Papapetropoulos** and W. C. Sessa. Dynamic activation of nitric oxide synthase by Hsp90. *Nature* 392:821- 824, 1998
25. Hoque, A.M., **A. Papapetropoulos**, R.C. Venema, J.D. Catravas and L.C. Fucks. Effects of antisense oligonucleotide to iNOS on hemodynamic and vascular changes induced by LPS. *Am. J. Physiol.* 275: H1078-1083, 1998
26. Sierra-Honigmann M.R., A. K. Nath, C. Murakami, G. Garcia-Cardena, **A.Papapetropoulos** W. C. Sessa, L.A. Madge, J. S. Schechner, M.B. Schwabb, P.J. Polverini and J. Flores-Riveros. Biological action of leptin as an angiogenic factor. *Science* 281: 1683-1686, 1998.
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28. **Papapetropoulos, A.**, G. García-Cardena, T. J. Dengler, P.C. Maisonpierre, G. D. Yancopoulos and W. C. Sessa. Direct actions of angiopoietin-1 on vascular endothelium: evidence for modulation of angiogenesis. *Lab. Invest.* 79:213-223, 1999
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32. Fulton, D., **A. Papapetropoulos**, X. Zhang. J.D. Catravas, T. H. Hinze and W.C. Sessa. Quantification of eNOS mRNA levels in the canine cardiac vasculature by competitive PCR. *Am. J. Physiol.* 278: H658-665, 2000
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34. **A. Papapetropoulos**, D. Fulton, K. Mahboubi, D. O' Connor, F. Li, D.C. Altieri and W.C. Sessa. Angiopoietin-1 inhibits endothelial cell apoptosis via Akt/survivin expression. *J. Biol. Chem.* 275:9102-9105, 2000
35. A. Xagorari, **A. Papapetropoulos**, A. Mavromatis, M. Economou, T. Fotsis and Ch. Roussos. Luteolol Inhibits an Endotoxin-Stimulated Phosphorylation Cascade and Proinflammatory Cytokine Production in Macrophages. *J. Pharmacol. Exp. Ther.* 296:181-187, 2001.
36. I. Kosmidou, A. Xagorari, Ch. Roussos, **A. Papapetropoulos**. Reactive oxygen species stimulate VEGF production from C2C12 skeletal myotubes through a PI3K/Akt pathway. *Am J Physiol Lung Cell Mol Physiol* 280:L585-L592, 2001.
37. **A. Papapetropoulos**, S. Andreopoulos, C.Y. Go, A. Hoque, L.C.Fuchs, J.D. Catravas. Regulation of the nitric oxide synthase-nitric oxide-cGMP pathway in rat mesenteric endothelial cells. *J Appl Physiol* 91:2553-2560, 2001.
38. A. Kotanidou, A. Xagorari, E. Bagli, P. Kitsanta, T. Fotsis, **A. Papapetropoulos**, Ch. Roussos. Luteolin reduces lipopolysaccharide-induced lethal toxicity and expression of proinflammatory molecules in mice. *Am J Respir Crit Care Med* 165:818-823, 2002
39. I. Kosmidou, T. Vassilakopoulos, A. Xagorari, S. Zakyntinos, **A. Papapetropoulos**, Ch. Roussos. Production of interleukin -6 by skeletal myotubes:role of reactive oxygen species *Am. J. Resp. Cell Mol. Biol.* 26:587-593, 2002
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41. L. Pizurki, Z. Zhou, K. Glynos, C. Roussos and **A. Papapetropoulos**. Angiopoietin-1 inhibits endothelial permeability, neutrophil adherence and IL-8 production. *Br. J. Pharmacol.* 139:329-336, 2003.
42. **A. Papapetropoulos**, D. Fulton, J. Fontana, T. J. McCabe, S. Joellner, G. G. Cardena, Z. Zhou, J-P Gratton and W. C. Sessa. Vanadate is a potent activator of endothelial nitric oxide synthase: evidence for the role of the serine/threonine kinase Akt and hsp90. *Mol. Pharmacol.* 65: 407-415, 2004
43. Z. Zhou, S. Gross, C. Roussos, S Meurer, W. Müller-Esterl and **A. Papapetropoulos**. Structural and functional characterization of the dimerization region of soluble guanylyl cyclase. *J. Biol. Chem.* 279:24935-24943, 2004
44. N. Papapetropoulos, Z. Zhou, C. Roussos, P. Goumas and **A. Papapetropoulos**. Effects of modulation of the NO/cGMP pathway in tumor cell lines derived from the upper airway tract. *Pharmacology* 72: 167-176, 2004
45. H. Loutrari, M. Hatziapostolou, V. Skouridou, E. Papadimitriou., C. Roussos, F.N. Kolis and **A. Papapetropoulos**. Perillyl alcohol inhibits angiogenesis *in vitro* and *in vivo*. *J. Pharmacol. Exp. Ther.* 311: 568-575, 2004

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47. Roviezzo F, Tsigkos S, Kotanidou A, Bucci M, Brancaleone V, Cirino G, and **A. Papapetropoulos**. Angiopoietin-2 causes inflammation in vivo by promoting vascular leakage. *J Pharmacol Exp Ther*. 314: 738-744, 2005
48. **Papapetropoulos A**, Zhou Z, Gerassimou C, Yetik G, Venema RC, Roussos C, Sessa WC, and Catravas JD. Interaction between hsp90 and soluble guanylyl cyclase: physiological significance and mapping of the domains mediating binding. *Mol Pharmacol*. 68:1133-41, 2005.
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50. Kalomenidis I, Kollintza A, Sigala I, **Papapetropoulos A**, Papiris S, Light RW, and Roussos CR. Angiopoietin-2 levels are elevated in exudative pleural effusions. *Chest*. 129:1259-66, 2006.
51. Tsigkos S, Zhu Z, Kotanidou A, Fulton D, Zakyntinos S, Roussos C and **A. Papapetropoulos A**. Regulation of Ang2 release by PTEN/PI3-kinase/Akt in lung microvascular endothelial cells. *J Cell Physiol* 207:506-11, 2006
52. Psarras S, Volonaki E, Skevaki CL, Xatzipsalti M, Bossios A, Pratsinis H, Tsigkos S, Gourgiotis D, Constantopoulos AG, **Papapetropoulos A**, Saxoni-Papageorgiou P, Papadopoulos NG. Vascular endothelial growth factor-mediated induction of angiogenesis by human rhinoviruses. *J Allergy Clin Immunol*. 117:291-7, 2006
53. A. Kotanidou, H. Loutrari, E. Papadomichelakis, K Glynos, A. Armaganidis, **A. Papapetropoulos**, Ch. Roussos and S. E. Orfanos. Inhaled activated protein C attenuates lung injury induced by (aerosolised) endotoxin in mice. *Vasc. Pharmacol*. 45:134-40, 2006
54. H. Loutrari, S. Magkouta, A. Pyriochou, V. Koika, F. N. Kollisis, **A. Papapetropoulos** and Ch. Roussos. Mastic oil from *Pistacia lentiscus var. chia* inhibits growth and survival of human K562 leukemia cells and attenuates angiogenesis *Nutr Cancer* 55:86-93, 2006
55. A Pyriochou, D. Beis, V. Koika, C. Potytarchou, E. Papadimitriou, Z. Zhou, **A. Papapetropoulos**. Soluble guanylyl cyclase activation promotes angiogenesis. *J. Pharmacol. Exp. Ther* 319:663-71, 2006
56. C.N. Doukas, I. Maglogiannis, A. Chatziioannou, **A. Papapetropoulos**. Automated angiogenesis quantification through advanced image processing techniques. Conf Proc IEEE Eng Med Biol Soc. 1:2345-8, 2006.
57. S. E. Orfanos, A. Kotanidou, C. Glynos, C. Athanasiou, S. Tsigkos, I. Dimopoulou, C. Sotiropoulou, S. Zakyntinos, A. Armaganidis, **A. Papapetropoulos**, Ch. Roussos. Angiopoietin-2 is increased in severe sepsis: correlation with inflammatory mediators. *Crit. Care Med*. 35:199-206, 2007

58. A Pyriochou, Z. Zhou, V. Koika, C. Petrou, P. Cordopatis, W. C. Sessa, **A. Papapetropoulos**. The phosphodiesterase 5 inhibitor sildenafil stimulates angiogenesis through a protein kinase G/MAPK pathway *J Cell. Physiol* 211:197-204, 2007.
59. C. Glynos, A. Kotanidou, S.E. Orfanos, Z. Zhou, D.C. Simoes, C. Magkou, Ch. Roussos, **A. Papapetropoulos**, Soluble Guanylyl Cyclase Expression is Reduced in LPS-induced Lung Injury. *Am J Physiol Regul Integr Comp Physiol*. 292: R1448-55, 2007.
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61. A. Pyriochou , S. Tsigkos , T. Vassilakopoulos , T. Cottin , Z. Zhou, E. Gourzoulidou, C. Roussos, H. Waldmann, A. Giannis and **A. Papapetropoulos** Anti-angiogenic properties of a sulindac analogue *Br. J. Pharmacol* 152:1207-1214, 2007
62. A. Pyriochou, T. Vassilakopoulos, Z Zhou and **A. Papapetropoulos**. cGMP-dependent and -independent angiogenesis-related properties of nitric oxide. *Life Sci* 81: 1549-1554, 2007
63. C. Li, L. Ruan, S. G. Sood, **A. Papapetropoulos**, D. Fulton and R. C. Venema. Role of eNOS phosphorylation at Ser-116 in regulation of eNOS activity in endothelial cells. *Vasc Pharmacol* 47:257-264, 2007
64. T. Xia, C. Dimitropoulou, G. Antonova, C Snead, R.C. Venema, D. Fulton, S. Qian, C. Patterson, **A. Papapetropoulos** and J.D. Catravas. The chaperone-dependent E3 ligase, chip, ubiquitinates and mediates proteasomal degradation of soluble guanylyl cyclase. *Am. J. Physiol. Heart Circ Physiol*. 293: H300-3087, 2007
65. N. Rovina, **A. Papapetropoulos**, A. Kollintza, M. Michailidou, D. C. M. Simoes, C. Roussos, C. Gratziou. Vascular endothelial growth factor: an angiogenic factor reflecting airway inflammation in healthy smokers and in patients with bronchitis type of chronic obstructive pulmonary disease? *Resp. Res*. 8:53, 2007
66. D.C. Simoes, T. Vassilakopoulos, D. Toumpanakis, K. Petrochilou, C. Roussos, **A. Papapetropoulos**. Angiopoietin-1 Protects Against Airway Inflammation and Hyperreactivity in Asthma. *Am J Respir Crit Care Med*. 177:1314-21, 2008
- 67 . T. Fotopoulou, E.K. Iliodromitis, M. Koufaki, A. Tsotinis, A. Zoga, V. Gizas, A. Pyriochou, **A. Papapetropoulos**, I. Andreadou, D.T. Kremastinos. Design and synthesis of nitrate esters of aromatic heterocyclic compounds as pharmacological preconditioning agents. *Bioorg Med Chem*. 16:4523-31, 2008
68. A. Pyriochou, G. Olah, EA Deitch, C Szabó C, **A. Papapetropoulos**. Inhibition of angiogenesis by the poly(ADP-ribose) polymerase inhibitor PJ-34. *Int J Mol Med*. 22:113-8, 2008.
69. Z. Zhou, A. Pyriochou, A. Kotanidou, G. Dalkas, M.V. Eickels, G. Spyroulias, C. Roussos C, **A. Papapetropoulos**. Soluble guanylyl cyclase (sGC) activation by HMR-1766 (ataciguat) in cells exposed to oxidative stress. *Am J Physiol Heart Circ Physiol*. 295:H1763-71, 2008

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75. M. Sharma, Z. Zhou, H. Miura, **A. Papapetropoulos**, E. T. McCarthy, R. Sharma, V. J. Savin, E. A. Lianos. ADMA Injures Glomerular Filtration Barrier: Role of Nitric Oxide and Superoxide. *Am J Physiol Renal Physiol*. 296:F1386-95, 2009
76. D. Toumpanakis, M.H. Karatza, P. Katsaounou, C. Roussos, S. Zakyntinos, **A. Papapetropoulos**, T. Vassilakopoulos. Antioxidant Supplementation Alters Cytokine Production From Monocytes. *J Interferon Cytokine Res*. 29:741-8, 2009.
77. K. Spyridonidou, M. Fousteris, A Marazioti, A. Chatzianastasiou, **A. Papapetropoulos**, S. Nikolaropoulos. Tricyclic indole and dihydroindole derivatives as new inhibitors of soluble guanylate cyclase. *Bioorg Med Chem Lett*. 19:4810-3, 2009
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79. Magkouta S, G.T. Stathopoulos I. Psallidas, **A. Papapetropoulos**, F.N. Kollisis, C. Roussos, H. Loutrari. Protective effects of mastic oil from Pistacia lentiscus variation chia against experimental growth of lewis lung carcinoma. *Nutr Cancer*. 61:640-8; 2009.
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