

Curriculum Vitae of Vassilis J. Demopoulos

Dr. Vassilis J. Demopoulos is full Professor of Medicinal Chemistry (School of Pharmacy, Aristotle University of Thessaloniki) where he teaches Organic Pharmaceutical Chemistry to undergraduate and graduate students. He has nearly 30 years of research experience in bioactive new chemical entities aimed to treat long term diabetic complications or CNS disorders. Dr. Demopoulos holds a Ph.D. in Medicinal Chemistry and Natural Products from College of Pharmacy (University of Iowa), and he has post-doctoral experience in organic synthesis (Memorial University of Newfoundland) as well as experimental pharmacology (Slovak Academy of Sciences). Dr. Demopoulos has authored more than 70 manuscripts, 1 patent and supervised 11 post-graduate theses. Dr. Demopoulos was a coordinator of 4 funded projects.

Recent Publications

- 1) K. Pegklidou, C. Koukoulitsa, I. Nicolaou, V. J. Demopoulos, "Design and synthesis of novel series of pyrrole based chemotypes and their evaluation as selective aldose reductase inhibitors. A case of biososterism between a carboxylic acid moiety and that of a tetrazole", *Bioorg. Med. Chem.*, **18**, 2107-2114 (2010).
- 2) P. Alexiou, M. Chatzopoulou, K. Pegklidou, V. J. Demopoulos, "RAGE: A multi-ligand receptor unveiling novel insights in health and disease", *Curr. Med. Chem.*, **17**, 2232-2252 (2010).
- 3) P. Alexiou, V. J. Demopoulos, "A diverse series of substituted benzenesulfonamides as aldose reductase inhibitors with antioxidant activity: Design, synthesis, and in vitro activity", *J. Med. Chem.*, **53**, 7756-7766 (2010).
- 4) M. Chatzopoulou, E. Mamadou a, M. Juskova, C. Koukoulitsa, I. Nicolaou, M. Stefek, V. J. Demopoulos, "Structure-activity relations on [1-(3,5-difluoro-4-hydroxyphenyl)-1H-pyrrol-3-yl]phenylmethanone. The effect of methoxy substitution on aldose reductase inhibitory activity and selectivity", *Bioorg. Med. Chem.*, **19**, 1426-1433 (2011).
- 5) M. Chatzopoulou, P. Alexiou, E. Kotsampasakou, V. J. Demopoulos, "Novel aldose reductase inhibitors: A patent survey (2006 present)", *Expert Opin. Ther. Pat.*, **22**, 1303-1323 (2012).
- 6) E. Kotsampasakou, V. J. Demopoulos, "Synthesis of derivatives of the keto-pyrrolyl-difluorophenol scaffold: Some structural aspects for aldose reductase inhibitory activity and selectivity" *Bioorg. Med. Chem.*, **21**, 869-873 (2013).
- 7) M. Chatzopoulou, E. Kotsampasakou, V. J. Demopoulos, "A Clauson-Kaas type synthesis of pyrrolyl-phenols, from the hydrochlorides of aminophenols, in the presence of nicotinamide", *Synth. Commun.*, **43**, 2949-2954 (2013).
- 8) M. Chatzopoulou, K. Pegklidou, N. Papastavrou, V. J. Demopoulos, "Development of aldose reductase inhibitors for the treatment of inflammatory disorders", *Expert Opin. Drug Dis.*, **8**, 1365-1380 (2013).
- 9) M. Chatzopoulou, A. Patsilinos, T. Vallianatou, M.-S. Prnova, S. Zakej, R. Ragno, M. Stefek, A. Kristl, A. Tsantili-Kakoulidou, V. J. Demopoulos, "Decreasing acidity in a series of aldose reductase inhibitors: 2-Fluoro-4-(1H-pyrrol-1-yl)phenol as a scaffold for improved membrane permeation", *Bioorg. Med. Chem.*, **22**, 2194-2207 (2014).
- 10) N. Kontonikas, P. Kotsampasakou, N. Sakalis, V. J. Demopoulos, "A study of the electrophilic arylation of 1-aryl-1H-pyrroles: An improved preparation of an active and selective aldose reductase inhibitor", *Org. Prep. Proced. Int.*, (2018, *accepted publication*).
- 11) M. Chatzopoulou, V. J. Demopoulos, A. Tsantili-Kakoulidou, "Fraction lipophilicity index (FLI): A metric for assessing oral drug-likeness of ionizable chemical entities" *IJGSPR*, (2018, *accepted publication*).