Small molecule inhibitors of Nicotinamide N-Methyltransferase (NNMT)

Gao, Y.

Curriculum vitae

Yongzhi Gao was born on October 14th, 1995, in Xishui, a tiny town in central China. He studied pharmaceutic science at Wuhan University and graduated with a bachelor's degree in 2009. After spending three years in a pharma company as a progress chemist, he returned to Wuhan University to chase his master's degree, where he conducted his research under Prof. Haibing Zhou and Prof. Chune Dong. In 2015, he was granted a fellowship from China Scholar Council (CSC) to perform his PhD research in the Netherlands under the supervision of Prof. dr. Nathaniel I. Martin and Dr. Matthijs J. van Haren. In the Martin lab, his research has been focused on the development of inhibitors of NNMT. As a PhD candidate, he was trained to be an organic/ medicinal chemist in the Netherlands. He is married and has a daughter.

List of publications

Publications from doctoroal research period

(1) **Gao, Y.**; Martin, N.I., van Haren, M.J. (2021). Nicotinamide *N*-methyl transferase (NNMT): an emerging therapeutic target. *Drug Discov Today*. In press. DOI: 10.1016/j.drudis.2021.05.011

(2) **Gao, Y.**; van Haren, M. J.; Moret, E. E.; Rood, J. J. M.; Sartini, D.; Salvucci, A.; Emanuelli, M.; Craveur, P.; Babault, N.; Jin, J.; Martin, N. I . (2019): Bisubstrate Inhibitors of Nicotinamide *N*-Methyltransferase (NNMT) with Enhanced Activity. *J. Med. Chem*. 62, 6597−6614.

(3) **Gao, Y.**; van Haren, M.J.; Buijs, N.; Innocenti, P.; Zhang, Y.; Sartini, D. Campagna, R.; Emanuelli, M.; Parsons, R.B.; Jespers, W.; Gutiérrez-de-Terán, H.; van Westen, G.; Martin, N.I.; (2021) Potent Inhibition of Nicotinamide *N*-Methyltransferase by Alkene-Linked Bisubstrate Mimics Bearing Electron Deficient Aromatics. *J. Med. Chem*. In press. DOI:10.1021/acs.jmedchem.1c01094

(4) van Haren, M. J.; **Gao, Y.** (co-first author); Buijs, N.; Campagna, R.; Sartini, D.; Emanuelli, M.; Mateuszuk, L.; Kij, A.; Chlopicki, S.; Escudé, P.; Castilla, M. De; Schiffelers, R. Esterase-Sensitive Prodrugs of a Potent Bisubstrate NNMT Inhibitor Display Cellular Activity. *Manuscript under review*.

Patent from doctoral research period

Netherlands Priority Patent Application No. N2027866; Title: Inhibitors of Nicotinamide NMethyl Transferase (NNMT) Inventors: Martin, N.I., **Gao, Y.**, van Haren, M.J., Buijs, N., Parsons, R.B., Emanuelli, M., Sartini, D. Priority date: March 30, 2021.