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Development of novel molecules to study lipoxygenase activity in its cellular context

Guo, Hao

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Appendices

List of Publications

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Acknowledgements

List of Publications

1. Guo, H.; Eleftheriadis, N.; Rohr-udilova, N.; Alexander, D.; Dekker, F. J. Photoactivation Provides a Mechanistic Explanation for Pan-Assay Interference Behaviour of 2-Aminopyrroles in Lipoxygenase Inhibition. *Eur. J. Med. Chem.* **2017**, *139*, 633–643.
2. Wang, Y.; Zhi, Y.; Jin, Q.; Lu, S.; Lin, G.; Yuan, H.; Yang, T.; Wang, Z.; Yao, C.; Ling, J.; Guo, H.; Li, T.; Jin, J.; Li, B.; Zhang, L.; Chen, Y.; Lu, T. Discovery of 4-((7*H*-pyrrolo[2,3-*d*]pyrimidin-4-yl)amino)-*N*-(4-((4-methylpiperazin-1-yl) methyl) phenyl)-1*H*-pyrazole-3-carboxamide (FN-1501), an FLT3- and CDK-Kinase Inhibitor with Potentially High Efficiency against Acute Myelocytic Leukemia. *J. Med. Chem.* **2018**, *61* (4), 1499–1518.
3. Guo, H.; Verhoek, I. C.; Prins, G. G. H.; van der Vlag, R.; van der Wouden, P. E.; van Merkerk, R.; Quax, W. J.; Olinga, P.; Hirsch, A. K. H.; Dekker, F. J. Novel 15-Lipoxygenase-1 Inhibitor Protects Macrophages from Lipopolysaccharide-Induced Cytotoxicity. *J. Med. Chem.* **2019**.
4. van der Vlag, R.; Guo, H.; Hapko, U.; Eleftheriadis, N.; Monjas, L.; Dekker, F. J.; Hirsch, A. K. H. A Combinatorial Approach for the Discovery of Drug-like Inhibitors of 15-Lipoxygenase-1. *Eur. J. Med. Chem.* **2019**, *174*, 45–55.
5. Prismawan, D.; van der Vlag, R.; Guo, H.; Dekker, F. J.; Hirsch, A. K. H. Replacement of an Indole Scaffold Targeting Human 15-Lipoxygenase-1 Using Combinatorial Chemistry. *Helv. Chim. Acta* **2019**.

About author

Hao Guo was born on the 13th of August 1990 in Jinan, China. In 2008, he finished his secondary school study from Shandong Experimental High School. In July 2012, he graduated with BSc in the specialty of National Academic Base For Pharmaceutical Science from China Pharmaceutical University in Nanjing, China. In July 2015, he graduated with MSc in medicinal chemistry from China Pharmaceutical University in Nanjing, China. He did his MSc thesis entitled “Design, Synthesis and Biological Activity of 1*H*-3-Pyrazole Carboxamide Analogues as CDKs Inhibitors” under the supervision of Prof. dr. Tao Lu. In October 2015, he moved to University of Groningen and started his PhD study in division of Chemical and Pharmaceutical Biology under the supervision of Prof. dr. Frank J. Dekker. His research is mainly based on the inhibition and detection study of 15-lipoxygenase. His expertise consists of organic chemistry, enzymatic and cellular based studies. In his free time, he has a big love to food, animal, sport and travel.



About cover

This original photo was photographed by myself, and sharing the moments with my wife, at Aiguille du Midi, Chamonix, France. We got a very beautiful memory and were shocked by this backcountry skiing. After this, both my wife and I fall in love with this sport. Everyone knows PhD study is a long journey but passes quickly like this sport. Especially at the beginning, it can hurt. But, in retrospect, you will appreciate this most precious time. Now I grow in this process and use one of my most wonderful moments as the cover of this thesis.

The cover is drawn by my old friend, Tingting Sun. I have known her for more than fourteen years. Ten years ago, she was my deskmate. Later on, in July 2015 she became the bridesmaid of my wife. It is beautiful, right? And now, her work makes my thesis complete that is the last piece of the puzzle I am looking for. In the end, many thanks to this real artist.



Acknowledgements

Making a choice of coming to the Netherlands is not very difficult, but it turns to be the best gift for myself in the pursuit of knowledge! When I look back in the end of my PhD career, this decision is definitely made at the right time letting me work with the right people and benefit for a long lasting time in the future. In my opinion even though Groningen is so beautiful and a paradise for living as well as studying, the thing that makes all the difference is people, and not something else. They are so sweet and nice to work with, so I would like to refer to these people and sincerely thank them for all of their supports.

First of all, I do have to give my sincerest gratitude to **Prof. dr. Frank J. Dekker** for giving me this great opportunity to study here. Probably, for a lot of PhD candidates, doing a PhD study is not that enjoyable and easy that it can make their hair get thinner and thinner. But it is not a problem for me at all. You are the magical man guiding me to pull through all difficulties. I still remembered the first day I went into your office. You look like so friendly and Nick asked me: What would you like to drink? WOW! I was just thinking, it is quite different from China and maybe I will have a good time here. Later on, the fact proves, it is true! Many thanks to you, Frank. When I need support, I can just have them from you. You let me know the importance of detail and keep all the problems in the office. Apart from research, I really like the topic about culture difference and story of Europe history that you shared with me. Time flies, thank you again for everything and I wish you and your family a very happy life.

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Somehow, I did appreciate the help from fourth floor, the group of Drug Design. Firstly, I would like to thank **Prof. dr. Alexander Dömling** and their lab manager, **André**. I did receive a lot of generous “gifts” and kind help from you. For the people, many thanks to **Qian**, one of my best friends here. You always make me happy and feel at home on the fourth the floor. Without you, the life here will be so boring. And I also would to thank **Jingyao** and her family members, **Bingquan** and **Maodan** for having so much fun with you. Of course, there are many thanks to Greek and India community, especially **Dinos, Tryfonas, Markella** and **Santosh**. You are very good guys.

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只要有你们的陪伴，别的一切都不重要

我爱你们胜过一切