Supporting Information

Scope of 3D shape-based approaches in predicting the macromolecular targets of structurally complex small molecules including natural products and macrocyclic ligands

Ya Chen,¹ Neann Mathai² and Johannes Kirchmair^{1,2,3*}

¹Center for Bioinformatics (ZBH), Department of Computer Science, Faculty of Mathematics, Informatics and Natural Sciences, Universität Hamburg, 20146 Hamburg, Germany

² Department of Chemistry and Computational Biology Unit (CBU), University of Bergen, N-5020 Bergen, Norway

³ Department of Pharmaceutical Chemistry, Faculty of Life Sciences, University of Vienna, 1090 Vienna, Austria



Figure S1. Density distribution of the (a) molecular weight and (b) the number of heavy atoms of all 481 194 compounds in the processed data set (blue; these are all valid compounds with at least one annotated bioactivity). The gray lines show the respective property distributions for the "Approved Drugs" subset of DrugBank¹ for reference.

REFERENCES

Wishart, D. S.; Feunang, Y. D.; Guo, A. C.; Lo, E. J.; Marcu, A.; Grant, J. R.; Sajed, T.; Johnson, D.; Li, C.; Sayeeda, Z.; et al. DrugBank 5.0: A Major Update to the DrugBank Database for 2018. *Nucleic Acids Res.* 2018, *46*, D1074–D1082.