## Supplementary information for "Improving Chemical Autoencoder Latent Space and Molecular *De-novo* Generation Diversity with Heteroencoders"

Esben Jannik Bjerrum<sup>1,\*</sup> and Boris Sattarov<sup>2</sup>

2018-October-17

 $^{1} {\rm Wildcard\ Pharmaceutical\ Consulting,\ Zeaborg\ Science\ Center,\ Frødings\ Allé\ 41,\ 2860\ Søborg,\ Denmark.}$ 

<sup>2</sup>Science Data Software LLC, 14914 Bradwill Court, Rockville, Maryland 20850, United States.

\*Corresponding Author: esben@wildcardconsulting.dk

Figure S1: Plot of layers used in the LSTM based auto- and heteroencoder for the GDB-8 Datasets.



Figure S2: Plot of the layer architecture used for the image to SMILES based model for the GDB-8 dataset. The plot is vector graphics and can be zoomed lossless.





Figure S3: Layer architecture for the auto- and heteroencoders used for the ChEMBL and QSAR datasets