

## Review of: "NER Sequence Embedding of Unified Medical Corpora to Incorporate Semantic Intelligence in Big Data Healthcare Diagnostics"

Wei-Chih Lien

Potential competing interests: No potential competing interests to declare.

The study found that the diagnostic accuracy of the sequential DNN NER model increased as the size of the corpus increased from 100 to 14407 DM patients with comorbidities. The importance of clinical notes and physician comments available as free text is clearly seen in the diagnostic accuracy.

However, several shortcomings need to be improved:

- 1. I suggest the author compare the method used in this study with other machine learning (ML) methods such as MobileNet V2, NASNetMobile, VGG16, Inception V3 or ResNet and cite the references as follows:
- (1) Kanna GP, Kumar SJ, Parthasarathi P, Kumar Y. A review on prediction and prognosis of the prostate cancer and Gleason grading of prostatic carcinoma using deep transfer learning based approaches. Arch. Comput. Methods Eng. 2023;1-20.
- (2) Lien WC, Yeh CH, Chang CY, Chang CH, Wang WM, Chen CH, Lin YC. Convolutional neural networks to classify Alzheimer's disease severity based on SPECT images: A comparative study. J Clin Med. 2023;12(6):2218. for the comparison of different ML methods in clinical application.
- 2. I suggest the author list all ICD-10 codes used in this study, such as Postural Drop and Parkinson's Disease Plus.