Machine learning plays a key role in FDA drug approvals

Yoshiyasu Takefuji

Charles Piller et al. wrote an article entitled "Is FDA's revolving door open too wide?" (1). Some of government approvals including FDA drug approvals and patent approvals must be hidden. Manufacturer, competitors, and FDA advisers conflict with each other. It is impossible to cut the relationship between manufacturer/competitors and FDA advisers because researchers (FDA advisers) may work with them or for them. It is feasible to build AI FDA advisers using machine learning. All we need to do is to analyze all processes in FDA drug approvals and to transform them into data for machine learning. We must know that Alphago zero in Go games (2), Elmo in Shogi games (3), and Ousia in Quiz bowl (4) have defeated human champions respectively. Note that Alphago zero is stronger than Alphago and Elmo is stronger than Ponanza.

References:

- Charles Piller et al., "Is FDA's revolving door open too wide?" Science 06 Jul 2018: Vol. 361, Issue 6397, pp. 21
- https://www.nytimes.com/2017/05/23/business/google-deepmind-alphago-go-champi on-defeat.html
- 3. https://mainichi.jp/articles/20170521/k00/00m/040/024000c
- 4. https://arxiv.org/pdf/1803.08652.pdf