

28AB-ISMS07 Big Data Visualization and Analysis of HTS and Broad Kinase Panel Profiling Using “Elpis Map” as a Novel User-friendly Application

○Hiromu EGASHIRA¹, Masakuni KURONO¹, Hiroshi KOHNO¹, Katsura YAMATSUTA¹,

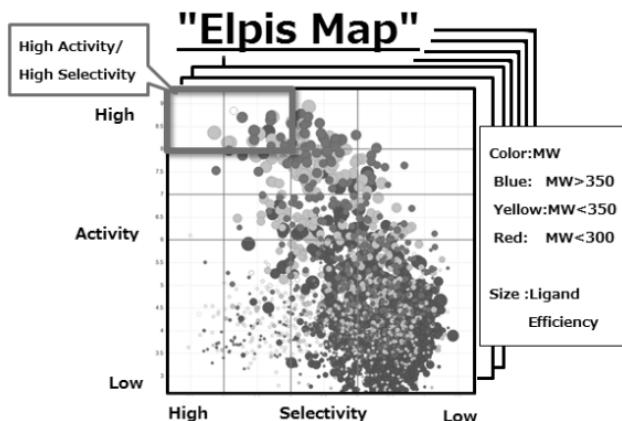
Jun TAKEUCHI¹, Minoru NISHIZAKI¹

¹Medicinal Chemistry Research Laboratories, Ono Pharmaceutical Co., Ltd.

The exponential increasing of private and public data in drug discovery needs user-friendly visualization tools. HTS (High-Throughput Screening) and broad kinase panel profiling are examples of big data in drug discovery. Many research institutions have been reported about the kinase profiling [1], but there were no report that referred to visualization methods to capture the big-data comprehensively.

We will show "Elpis Map" as a novel user-friendly visualization and analysis application. "Elpis Map" could find meaning, clue and trend in big data. Furthermore it might find unexpected patterns and inspire us. "Elpis Map" could be prioritization the drug targets among many HTS campaigns based on hit compound quality. It can estimate the possibility of Success (POS) for hit-expansion, optimization and quickly assess the necessity of follow-up HTS campaign.

"Elpis Map" could be useful not only the analysis of kinase broad panel profiling, but also another drug targets and huge clinical data.



[1] Jacoby, E. *et al. Drug. Discov. Today*, **2015**, 20, 652.

Note: Elpis is the personification and spirit of hope in Greek mythology.