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Technological Trends in Drug Development And Applications for R&D Process

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The main focus of this study was the examination of the potential of a presented scientometric approach to reveal technological trends in the drug development and was the confirmation of their impact on the R&D process in pharmaceutical companies. During the above search it was expected that several concept for R&D strategy of pharmaceutical companies was to be addressed. We extracted the technological trends from PubMed because it is the most popular and the most authoritative database of medical articles. In the search typical key words representing each R&D process were used and the time-dependent changes of the R&D activity were examined. The evidence presented in this study demonstrates the increases of the articles including the key words we choose. The increasing rates of each pharmaceutical R&D activity vary substantially across development steps. The following R&D activities were strengthened: simulation for prediction of the probability to complete remaining phases and evidence and/or outcome to be proved as a true endpoint in the actual therapy. The pharmaceutical R&D process is not a fixed, rigid one. It has been modified to improve the success probability of the project. Using the scientometric approach we assessed the important R&D capabilities in pharmaceutical companies that were suggested in previous reports.