INTRODUCTION

Upon regulatory approval of a new medicinal product, a marketing authorization holder may propose post-approval changes to this product, which must be communicated to or even approved by the respective Health Authorities. However, managing the regulatory approval process on a global level is complicated, unpredictable, and time-consuming. Furthermore, the current European Union (EU) Variations Regulation (which is the most representative of the guidelines used by Health Authorities worldwide with respect to documentation requirements) provides a comprehensive guideline for specific minor change requirements affecting the Quality section of the regulatory dossier, but none for major changes. Therefore, an understanding of requirements in different countries is important for document standardization and improved efficiency.

This project served as an analysis of documentation that had been submitted to Health Authorities worldwide by F. Hoffmann-La Roche (Roche), in support of post-approval changes concerning the Quality section of the dossier (technical changes). The post-approval changes used for this project spanned various change types commonly used within the organization, for a variety of biotechnology products. The aim of the analysis was to subsequently generate a proposal of the documentation required for the submission of selected change types. The primary goal was to harmonize, shorten, and ultimately simplify the Roche process (Figure 1) of gaining global approval for and implementing post-change submissions.

RESULTS

For the eight selected change types, lists of submitted documentation proved to be less abundant than expected, mostly due to the complexities of internal database organization. As a result of insufficient documentation, one of the eight change types had to be excluded from the final proposal. On the other hand, for those change types that did have an adequate amount of data for analysis, most was not relevant to the technical change in question (e.g., editorial changes). Guidance in distinguishing the appropriate information was sought from the Rationale document frequently included in submitted dossiers.

In general, examination of varying change requirements and their associated timelines across different countries and regions revealed that convergence of the regulatory requirements for Quality-related changes worldwide would facilitate the life cycle management of medicinal products. More specifically, a number of suggestions can be made for future project improvement, including better standardized document templates and use of additional software for data collection.

CONCLUSION

For the seven analyzed change types, a large impact is expected to be made in terms of shortening the time required for post-approval change submissions at Roche. Such a standardized documentation package will ultimately help in the organization’s collaboration between its technical regulatory headquarters, its local regulatory contacts in specific countries, and the respective Health Authorities (Figure 1). By reducing the uncertainty of the documentation required for submission, the overall process will be made more efficient.

In general, examination of varying change requirements and their associated timelines across different countries and regions revealed that convergence of the regulatory requirements for Quality-related changes worldwide would facilitate the life cycle management of medicinal products. More specifically, a number of suggestions can be made for future project improvement, including better standardized document templates and use of additional software for data collection.

Despite the encountered challenges, such a detailed evaluation is extremely valuable to an organization: not only does it result in the development of company-internal processes and standards.

REFERENCES

