

PERIDOT: A Novel, Prototype, Web-based Toolbox to Conduct Comprehensive Drug Safety and Pharmacovigilance Activities

Rashedul Hasan, PhD¹, Alfred Sorbello, DO, MPH²

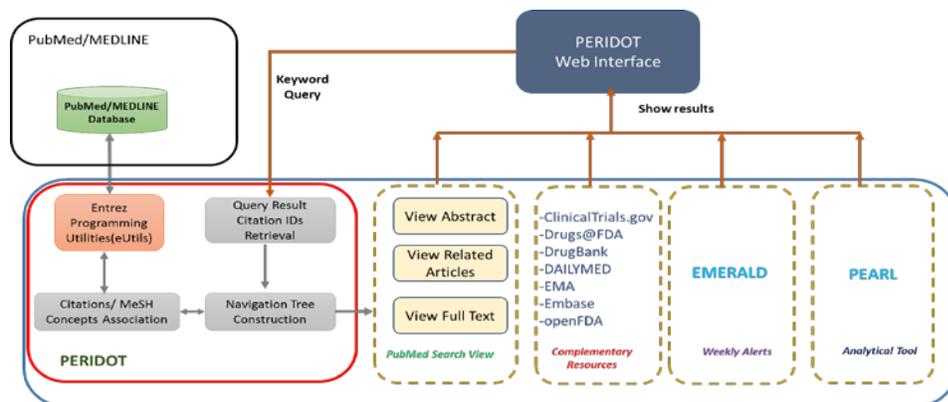
¹Office of Computational Science, ²Office of Translational Science, Center for Drug Evaluation and Research

Introduction

- **PERIDOT** is a **new knowledge discovery** platform that provides users with critical resources to detect, assess, refine, and monitor emerging **Adverse Events (ADE)** safety signals and efficacy issues throughout the life cycle of a marketed drug or therapeutic biologic product through a single multi-component user interface.
- **PERIDOT** encompasses a broad array of tools and resources to organize and simplify your research effort improving overall efficiency and productivity.
- **PERIDOT** (an acronym for 'Novel Prototype PubMed User Interface for Pharmacovigilance and Data Resource Toolbox') **supports** regulatory review, benefit-risk assessments and **regulatory decision** making, while reducing the **manual** burden of pharmacovigilance and biomedical research.

Materials & Methods

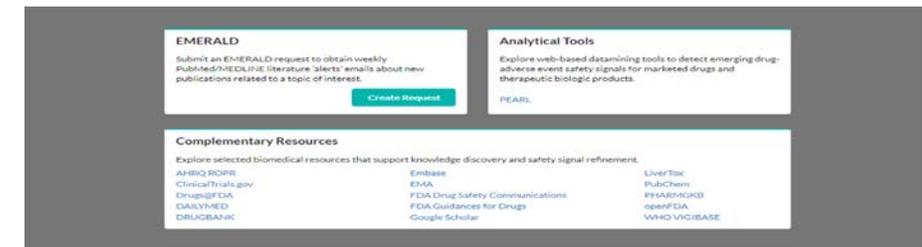
- ❑ PERIDOT incorporates a three-tiered architecture for **PubMed/MEDLINE**: (1) A User Interface was implemented using HTML, (2) Middleware processing for customized search queries was developed in Ruby to process user selected search filters that refine the query. (3) Open source **E-Utilities** tools **ESearch**, **EFetch** and **ELink** were used to communicate the requests to PubMed.
- ❑ PERIDOT includes components that use application programming interface (API) connections to multiple complementary biomedical resources, such as **ClinicalTrials.gov**, **DrugBank**, **DailyMed**, and others. These data pulls provide real-time outputs for review and analysis.
- ❑ **Data mining and visual analytical** tools can also be accessed through PERIDOT through established links.



PERIDOT
In drug safety and
regulatory research,
START with PERIDOT!

**Global, powerful, and
versatile!**
**Speed up the Review
Process!**

Results



Conclusions

- PERIDOT is a user-friendly, web-based toolbox that facilitates conducting comprehensive integrative pharmacovigilance activities.
- PERIDOT bundles a new interactive PubMed/MEDLINE literature search interface, web-based data mining and analytical tools, and links to complementary biomedical resources to streamline previously manual research tasks.

Disclaimer

The views and opinions expressed in the following PowerPoint slides and tool demonstration are those of the individual presenter and should not be attributed to the US FDA or the federal government.

References

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