# Deviating time-to-onset in predictive models
- detecting new adverse effects from medicines

## Abstract
Identifying previously unknown adverse drug reactions becomes more important as the number of drugs and the extent of their use increases. The aim of this Master’s thesis project was to evaluate the performance of a novel approach for highlighting potential adverse drug reactions, also known as signal detection. The approach was based on deviating time-to-onset patterns and was implemented as a two-sample Kolmogorov-Smirnov test for non-vaccine data in the safety report database, VigiBase. The method was outperformed by both disproportionality analysis and the multivariate predictive model vigiRank. Performance estimates indicate that deviating time-to-onset patterns is not a suitable approach for signal detection for non-vaccine data in VigiBase.

## Keywords
Data mining, Kolmogorov-Smirnov test, predictive model, signal detection, time-to-onset

## Supervisors
**Ola Caster**  
Uppsala Monitoring Centre

## Scientific reviewer
**Mats Gustafsson**  
Uppsala University

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