Comparison of open-access[ϟ] web-resources that mine FDA Adverse Events data

	FDAble	DrugCite	OpenVigil	AERS Spider	AERS*Mine*
Basic drug-ADRs risk detection (Single drug --> multiple ADRs, use of RR,PRR or ROR)	x	x	x	x	x
Drug entries normalized to generic names (includes brands, spelling variants, foreign names, typos etc.)					x
Ontological aggregation of Drugs - over 15 million entries unified to approx. 4500 generic concepts, and 1200 parent concepts					x
Ontological aggregation of Clinical Indications - over 10 million entries unified to approx. 2000 hierarchical MedDRA concepts					x
Ontological aggregation of Adverse Events - over 15 million entries unified to approx. 2000 hierarchical MedDRA concepts		x*			x
Integration of known on-label Adverse Events with observed reported events					x
Simultaneous investigation of multiple drugs, indications and adverse events					x

	FDAble	DrugCite	OpenVigil	AERS Spider	AERS*Mine*
Create focused and or mutually exclusive study sets - e.g. to remove confounder effects, exclude known interactions, exclude high impact/risk clinical indications such as cancer				x***	x
Analyse multiple cohorts (drug effects across multiple population subgroups refined by clinical conditions)					x
Quantitative Safety Signal Detection (Any metric - Information Component (IC), Ω, Empirical Bayesian Geometric Mean (EBGM))				x	x
Visualize large-scale analyses (via clustering and heatmaps of drug-AE, drug-drug-AE relationships)					x
Free for academic use	x**	x	x	x	x

[1] - the comparison includes open access (free-to-use) applications only

* - only Adverse Events aggregated by broad classes (not ontology-specific)

** - free to browse, downloading reports requires purchase

*** - allows exclusion of a maximumum of 3 drugs and/or indications, does not allow multiple sets,aggregation of concepts or mutual exclusivity