

A Centralized Safety Repository



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Drug Safety Repository (DSR)



Aims

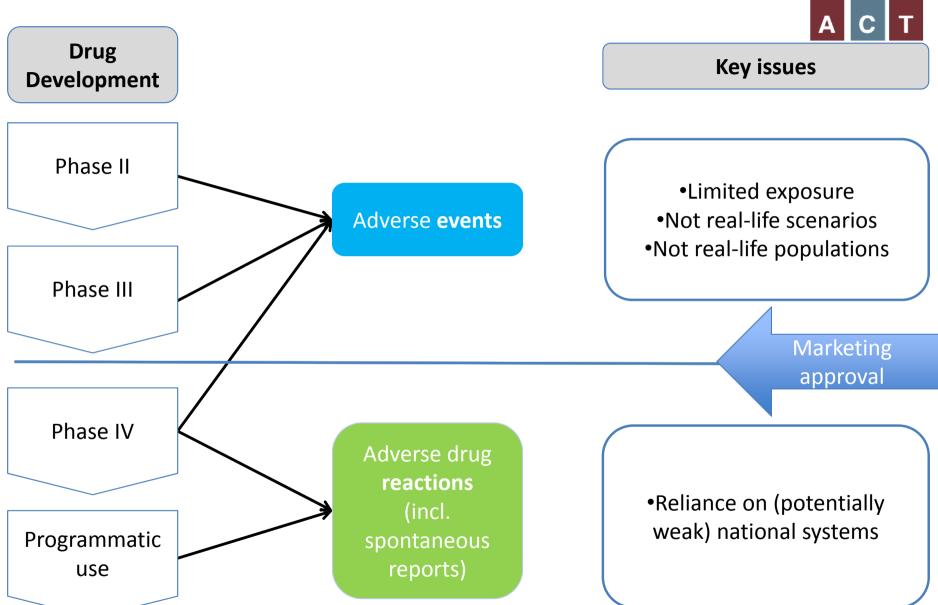
- To collect and collate safety data from a variety of sources to identify the incidence of adverse reactions and look for new signals of potential harms.
- To develop a framework to allow this surveillance to extend to other drugs & diseases.





Pharmacovigilance systems





Pharmacovigilance systems A C T Drug **Key issues Development** Phase II Limited exposure Adverse **events** Not real-life scenarios Not real-life populations Phase III **DRUG SAFETY REPOSITORY** Aggregated data Phase IV Adverse drug reactions •Reliance on (potentially (incl. weak) national systems Programmatic spontaneous reports) use



Drug Safety Repository





Key features

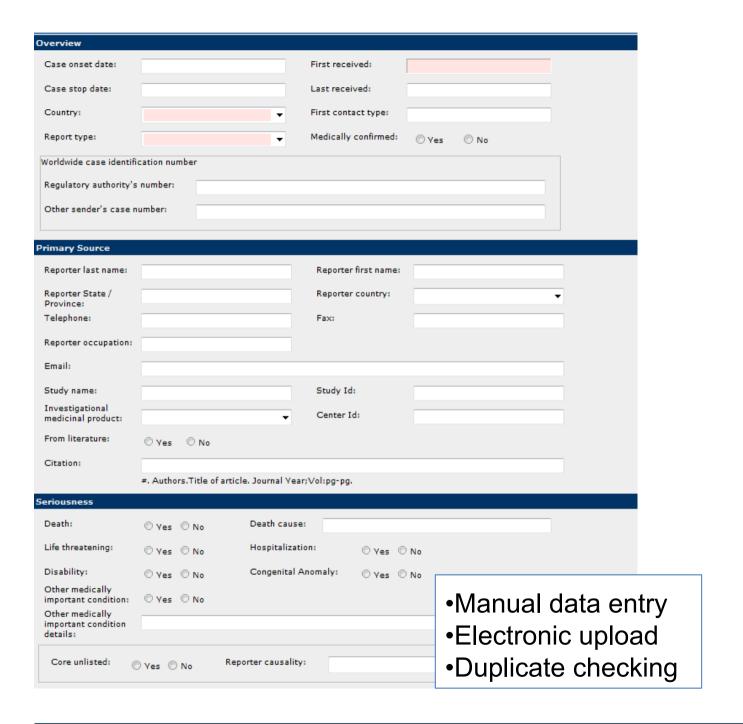
- Industry-standard web-based database for collating, recording and reporting events
- Restricted and secure access
- Integrated standardized dictionaries
- Flexible reporting tool



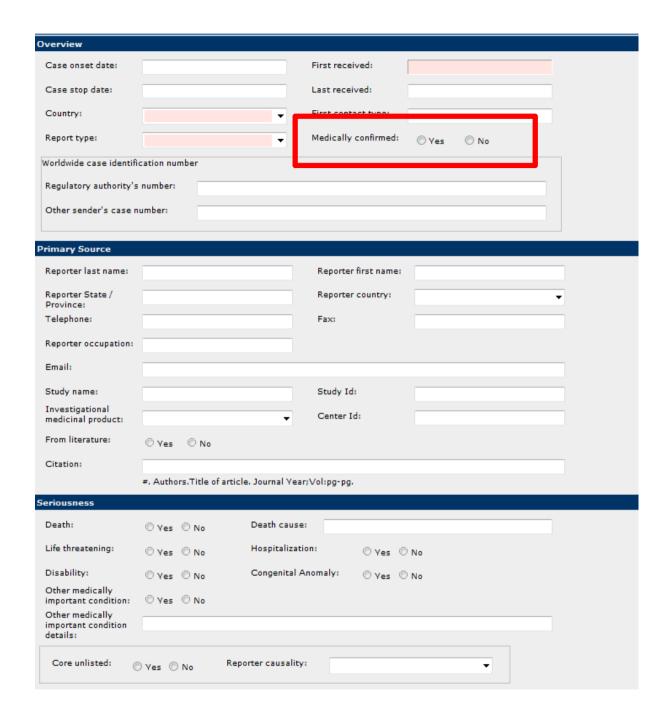




Data entry Coding Review/
Approval Reporting









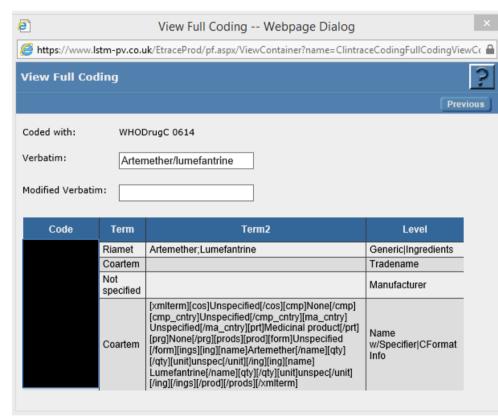


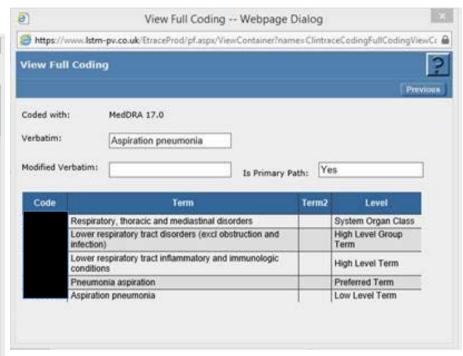
Data antry Coding Review/

WHO Drug Dictionary

MedDRA - the Medical Dictionary for Regulatory Affairs







- Integrated into database
- Automated & manual coding
- Drugs
- Diseases
- Events
- Investigations



Data entry Coding Review/
Approval

- Data entry checks
- Coding checks
- Missing data



Data entry Coding Reporting

Approval

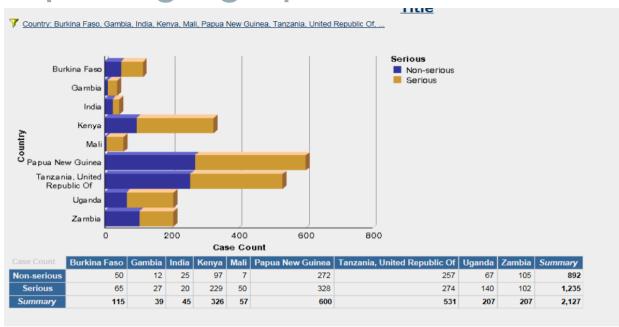
- Regulatory & ad hoc reports
- Status reports
- Case lists
- Automated & manual reports

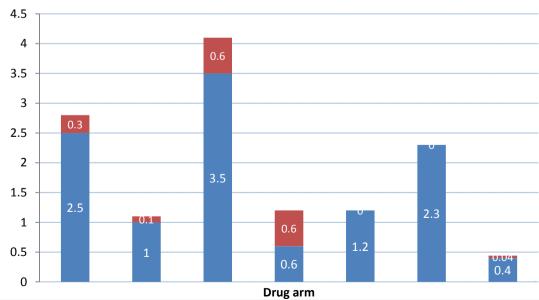
Reporting – summary tabulations

	Drug 1	Drug 2	Drug 3	Summary
System Organ Class (MedDRA)				-
n	3446	2931	1288	10792
Blood and lymphatic system disorders	30 (0.9%)	0 (0.0%)	0 (0.0%)	30 (0.4%)
Cardiac disorders	1 (0.0%)	2 (0.1%)	0 (0.0%)	3 (0.0%)
Eye disorders	0 (0.0%)	3 (0.1%)	3 (0.2%)	6 (0.1%)
Gastrointestinal disorders	12 (0.3%)	155 (5.3%)	32 (2.5%)	199 (2.6%)
General disorders and administration site				
conditions	7 (0.2%)	61 (2.1%)	3 (0.2%)	71 (0.9%)
Hepatobiliary disorders	0 (0.0%)	3 (0.1%)	0 (0.0%)	3 (0.0%)
Infections and infestations	227 (6.6%)	24 (0.8%)	10 (0.8%)	261 (3.4%)
Injury, poisoning and procedural complications				
	5 (0.1%)	0 (0.0%)	1 (0.1%)	6 (0.1%)
Metabolism and nutrition disorders	6 (0.2%)	3 (0.1%)	2 (0.2%)	11 (0.1%)
Musculoskeletal and connective tissue disorders	0 (0.0%)	1 (0.0%)	2 (0.2%)	3 (0.0%)
Nervous system disorders	39 (1.1%)	54 (1.8%)	15 (1.2%)	108 (1.4%)
Psychiatric disorders	0 (0.0%)	5 (0.2%)	1 (0.1%)	6 (0.1%)
Renal and urinary disorders	0 (0.0%)	2 (0.1%)	0 (0.0%)	2 (0.0%)
Reproductive system and breast disorders	0 (0.0%)	0 (0.0%)	2 (0.2%)	2 (0.0%)
Respiratory, thoracic and mediastinal disorders				
•	4 (0.1%)	16 (0.5%)	0 (0.0%)	20 (0.3%)
Skin and subcutaneous tissue disorders	1 (0.0%)	18 (0.6%)	2 (0.2%)	21 (0.3%)
Vascular disorders	0 (0.0%)	0 (0.0%)	2 (0.2%)	2 (0.0%)
Summary	333 (9.7%)	352 (12.0%)	80 (6.2%)	765 (10.0%)

Reporting - graphs







Reporting - line listings

Serious events

System Organ Class (MedDRA)	Sex	Age Group	Event as reported	Preferred term (MedDRA)	Intensity	First dose to onset	Outcome
Blood and lymphatic system disorders	FEMALE	Adult	Anaemia	Anaemia	Life threatening	12 weeks 1 day	Recovered
Congenital, familial and genetic disorders	MALE		Cleft palate and lip	Cleft lip and palate	Moderate	NA	Not Recovered
disorders	FEMALE	Infant	Acute renal failure	Renal failure acute	NA	18 weeks 5 days	Fatal
	FEMALE	Adult	Unable to pass urine	Dysuria	SEVERE	5 days	Recovered

Non-serious events

System Organ Class (MedDRA)	Sex	Pt Id	Event as reported	Preferred term (MedDRA)	Intensity	Onset	Outcome
Gastrointestinal disorders	MALE	Child	Diarrhoea	Diarrhoea	Moderate	1 day	Recovering
	FEMALE	Adult	Vomiting	Vomiting	Mild	30 minutes	Recovered
Nervous system disorders	FEMALE	Adult	Headache	Headache	Moderate	1 day	Recovered
	FEMALE	Adult	Dizziness	Dizziness	Mild	60 minutes	Recovered
Musculoskeletal and CT disorders	MALE	Adult	Muscle pains	Myalgia	MILD	2 days	Recovered
Renal and urinary disorders	FEMALE	Child	Dark urine	Chromaturia	MILD	4 days	Recovering

Current status



- Validated
- Contains >3000 case reports predominantly from ACTc and MiPc
- Reporting to DSMBs, ethics committees, manufacturers tried and tested
- Providing PV services to other malaria studies
- Standardization and pooled analysis remains a challenge
- Potential future collaborations other investigators & Consortia,
 other pooled data initiatives (e.g. WWARN).....



Thank you for joining us!

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For any questions or comments, contact debora.miranda@lshtm.ac.uk

