## **Real-World Evidence in Pharmacoepidemiology**

17-21 October 2022





## **Course Timetable**

All course content can be found on the course page on Moodle. Please see your welcome email for details on how to access Moodle. Pre-recorded videos will be made available on Moodle before each session. You may watch these pre-recorded videos either during the allotted time or when it suits your schedule. Note that all live sessions will be conducted using Zoom, and all practicals will be small group exercises in Zoom breakout rooms. All times reported in British Summer Time (BST) are tentative and may change.

Day	Topic	Time	Туре	Title
Mon	Study design	930-945	Live	<b>0.1</b> Welcome to the course
		945-1045	Pre-recorded lecture	<b>1.1</b> Impactful pharmacoepidemiology studies from history
			Pre-recorded lecture	<b>1.2</b> Overview of study designs
			Pre-recorded lecture	<b>1.3</b> Measurements in pharmacoepidemiology
		1045-1115	Live	Welcome / Introduce <b>P1</b> Planning a study
		1115-1130	Break	
		1130-1215	Computer practical	CP1 Reproducible codelist building
		1215-1245	Break	
	Real-world data sources	1245-1345	Pre-recorded lecture	2.1 Overview of large healthcare databases
			Pre-recorded lecture	2.2 A global tour of RWD sources
		1345-1415	Pre-recorded lecture	2.3 Self-controlled designs
		1415-1500	Live Q&A	Q&A on pre-recorded lectures (on AM and PM lectures)
		1500-1515	Break	
		1515-1630	Computer practical	CP2 Self-controlled case series
Tues	Confounding	930-1100	Pre-recorded lecture	<b>3.1</b> Sources of error in pharmacoepidemiological studies
			Pre-recorded lecture	3.2 Methods of dealing with confounding
			Pre-recorded lecture	<b>3.3</b> Introduction to causal language and directed acyclic graphs
		1100-1130	Live Q&A	Q&A on pre-recorded lectures
		1130-1145	Break	
		1145-1300	Practical	P2 Thinking through causal relationships
		1300-1330	Break	
	Propensity scores	1330-1430	Pre-recorded lecture	<b>4.1</b> Propensity scores
	scores		Pre-recorded lecture	4.2 High-dimensional propensity scores
			Pre-recorded lecture	<b>4.3</b> Propensity score example in COVID-19
		1430-1500	Live Q&A	Q&A on pre-recorded lectures
		1500-1515	Break	
		1515-1630	Computer practical	CP3 Accounting for confounding
Wed	Bias	930-1015	Pre-recorded lecture	<b>5.1</b> Biases in pharmacoepidemiology
		1015-1045	Live Q&A	Q&A on pre-recorded lectures
		1045-1100	Break	
		1100-1245	Computer practical	CP4 Misclassification and selection bias
		1245-1315	Break	
	Missing data	1315-1415	Pre-recorded lecture	<b>6.1</b> Dealing with missing data
		1415-1445	Live Q&A	Q&A on pre-recorded lectures
		1445-1500	Break	
		1500-1630	Computer practical	CP5 Dealing with missing data

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1530-1600

Wrap-up

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17	7-21 Oct Thurs	tober 2022 QBA and Data-enabled trials	930-1045	Pre-recorded lecture	<b>7.1</b> Quantitative bias analysis
				Pre-recorded lecture	<b>7.2</b> Data-enabled trials
			1045-1115	Live Q&A	Q&A on pre-recorded lectures
			1115-1130	Break	
			1130-1245	Computer practical	CP6 Quantitative bias analysis
			1245-1315	Break	
		Open science and TREs	1315-1445	Pre-recorded lecture	8.1 Open science and reproducibility
		aa 20		Pre-recorded lecture	8.2 Trusted research environments (TREs)
				Pre-recorded lecture	<b>8.3</b> Tools for distributed network pharmacoepi studies
			1445-1515	Live Q&A	Q&A on pre-recorded lectures
			1515-1530	Break	
			1530-1630	Group work	P1 (cont'd) Planning a study (small group preparation)
	Fri	Hot topics	1530-1630 930-1045	Group work  Pre-recorded lecture	P1 (cont'd) Planning a study (small group preparation)  9.1 Vaccines and confounding
	Fri	Hot topics		•	
	Fri	Hot topics		Pre-recorded lecture	<b>9.1</b> Vaccines and confounding
	Fri	Hot topics		Pre-recorded lecture Pre-recorded lecture	<ul><li>9.1 Vaccines and confounding</li><li>9.2 Target/replicate trials</li></ul>
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	Fri	Presentation s and wrap-	930-1045 1045-1115 1115-1130 1130-1300	Pre-recorded lecture Pre-recorded lecture Pre-recorded lecture Pre-recorded lecture Live Q&A Break Practical	<ul> <li>9.1 Vaccines and confounding</li> <li>9.2 Target/replicate trials</li> <li>9.3 Pharmacoepidemiology in the digital era</li> <li>9.4 Pharmacoequity</li> <li>Q&amp;A on pre-recorded lectures</li> </ul>
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A feedback form will be circulated following the conclusion of the course; this needs to be completed before we can issue a certificate of attendance.

Open Q&A and discussion with course organisers