ADPHA CPD

Extension Seminar in Laboratory Tests

SEMINAR

Extension Seminar in Laboratory Tests

Program

Self-paced learning package: Available from Friday 17 January 2025

The self-paced learning package materials must be completed prior to attending the live virtual seminar. Knowledge gained from topics below within self-paced learning package will be directly used in case sessions on the day.

Topic and presenters		Learning objectives
Part 1	**Use of laboratory data in clinical practice** **Professor Jeff Hughes,** *Professor, School of Pharmacy, Curtin University of Technology, Perth, WA; Chief Scientific Officer, PainCheK Ltd, Sydney, NSW*	• Describe laboratory test data used to evaluate the appropriateness of drug therapy • Assess therapeutic outcomes and disease progression using laboratory test data • Describe laboratory test data used in the assessment and prevention of adverse drug reactions

	Sodium
	Karl Winckel, *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*
		• Understand the presentation, causes and risks associated with hypo/hypernatraemia
		• Understand management options for hyponatraemia in terms of:
		  ○ Appropriate treatments including cessation of causative drugs
		  ○ Benefits of treatment
		  ○ Risks of treatment or under-treatment

	Potassium
	Karl Winckel, *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*
		• Understand the presentation, causes and risks associated with common serum potassium disturbances
		• Understand management options for serum potassium in terms of:
		  ○ Appropriate treatments including cessation of causative drugs
		  ○ Benefits of treatment
		  ○ Risks of treatment or under-treatment

Advanced Pharmacy Australia
PO Box 1774 Collingwood Victoria 3066 Australia
(03) 9486 0177 • adpha.au • info@adpha.au

	Magnesium
	***Karl Winckel**, Clinical Educator, Princess Alexandra Hospital, Qld; Lecturer/Post-graduate Course Co-ordinator, the School of Pharmacy, University of Queensland*
		• Understand the presentation, causes and risks associated with hypomagnesemia
		• Understand management options for hypomagnesemia in terms of:
		  ○ Appropriate treatments including cessation of causative drugs
		  ○ Benefits of treatment
		  ○ Risks of treatment or under-treatment

Part 2	**Acid-base balance** **Professor Jeff Hughes,** *Professor, School of Pharmacy, Curtin University of Technology, Perth, WA; Chief Scientific Officer, PainCheK Ltd, Sydney, NSW*	• Describe laboratory test data used to evaluate the appropriateness of drug therapy • Assess therapeutic outcomes and disease progression using laboratory test data • Describe laboratory test data used in the assessment and prevention of adverse drug reactions
	Urea and creatinine **Bhavini Patel,** *Executive Director Medicines Management, Research, NT Executive COVID-19 Vaccine Lead, NT Health, Darwin, NT*	• Identify people at greatest risk of kidney disease • Explain the diagnosis and classification of acute and chronic kidney disease • Discuss the advantages and limitations of different markers of kidney function
	eGFR **Jess Lloyd,** *Team Leader Pharmacist, Renal and Transplantation, Princess*	• Describe laboratory tests relevant to kidney function • Explore the limitations of these methods
	Calcium, phosphate, and PTH **Jess Lloyd,** *Team Leader Pharmacist, Renal and Transplantation, Princess Alexandra Hospital, Brisbane, Qld*	• Evaluate the normal ranges for calcium and phosphate and their variation within the normal range • Describe the measurement and interpretation of these laboratory tests, and the influence of commonly used drug therapy on them • Describe the relevance of further laboratory test investigations • Describe monitoring requirements for a patient with kidney disease

	Liver function tests **Professor Jeff Hughes,** *Professor, School of Pharmacy, Curtin University of Technology, Perth, WA; Chief Scientific Officer, PainCheK Ltd, Sydney, NSW*	• Describe laboratory test data used to evaluate the appropriateness of drug therapy • Assess therapeutic outcomes and disease progression using laboratory test data • Describe laboratory test data used in the assessment and prevention of adverse drug reactions
Part 3	**Troponin and creatine kinase** **Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*	• Understand what troponin and creatinine kinase (CK) are • Understand the role and limitations of troponin and CK in the diagnosis and management of acute coronary syndrome (ACS)
	Coagulation lab tests **Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*	• Understand the simplified coagulation cascade • Why different coagulation test results are used for different anticoagulants • Discuss the limitations of coagulation tests in the clinical use of DOACs
	Anaemia, red cells, and iron studies **Bhavini Patel,** *Executive Director Medicines Management, Research, NT Executive COVID-19 Vaccine Lead, NT Health, Darwin, NT*	• Explain the relevance and significance of derangements of individual components of full blood count and iron study laboratory tests • Distinguish between a picture of iron deficiency anaemia and other types of common anaemia based on laboratory tests
	White cells and acute phase reactants **Professor Jeff Hughes,** *Professor, School of Pharmacy, Curtin University of Technology, Perth, WA; Chief Scientific Officer, PainCheK Ltd, Sydney, NSW*	• List multiple reasons for elevation and reduction of white cells and acute phase reactants • Apply this knowledge of the tests discussed to various clinical situations
	Natriuretic peptide **Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*	• Explain the role of natriuretic peptides in the diagnosis and management of heart failure

Extension Seminar in Laboratory Tests

Program

Live seminar: Saturday 1 March 2025

All times listed are in AEDT

Time (AEDT)	Session
0920-0930	**Online login available**
0930-0940	**Welcome, introduction, housekeeping** **Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*
0940-1030	**Introduction to laboratory tests and Perfect partners: why certain lab tests are partnered** **Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld* **Courtney Hill,** *Medical Team Leader Clinical Pharmacist, Princess Alexandra Hospital, Woolloongabba, Qld*
1030-1130	**Case session: Liver function tests** **Case lead: Courtney Hill,** *Medical Team Leader Clinical Pharmacist, Princess Alexandra Hospital, Woolloongabba, Qld*
1130-1150	**Break**
1150-1305	**Case session: Kidney disease** **Case lead: Jess Lloyd,** *Team Leader Pharmacist, Renal and Transplantation, Princess Alexandra Hospital, Brisbane, Qld*
1305-1335	**Case session: Interpreting microscopy culture and sensitivity results** **Case lead: Kathlin Tunnah,** *Advanced Training Resident, Infectious Diseases, Queensland Health, Qld*
1335-1345	**Break**
1345-1515	**Case session: Cardiac Disorders** **Case lead: Adam Livori,** *Lead Pharmacist – Medicine and Continuing Care, Grampians Health; PhD Candidate – Centre for Medicine Use, Monash University, Melbourne, Vic*
1515-1530	**Break**

Advanced Pharmacy Australia
PO Box 1774 Collingwood Victoria 3066 Australia
(03) 9486 0177 • adpha.au • info@adpha.au

1530–1600	**Case session: Coagulation and platelets** **Case lead: Karl Winckel,** *Education and Training Pharmacist, Princess Alexandra Hospital, Brisbane, Qld*
1600–1615	**Summary and close**
1615–1620	**Close of live virtual seminar**

Please note: presentation recordings from the live virtual seminar will not be available.

Advanced Pharmacy Australia
PO Box 1774 Collingwood Victoria 3066 Australia
(03) 9486 0177 • adpha.au • info@adpha.au