



RACP Foundation Research Awards

YEAR 1 PROGRESS REPORT

Project / Program Title	Reducing the burden of cancer in patients with chronic kidney disease	
Name	Dr Eric Au	
Award Received	2019 RACP Jacquot NHMRC Award for Excellence	
Report Date	17 April 2020	
Chief Investigator / Supervisor	Associate Professor Germaine Wong	
Administering Institution	University of Sydney	
Funding Period	Start Date:	1 Jan 2019
	Finish Date:	31 Dec 2021

PROJECT SUMMARY

Chronic kidney disease is a significant risk factor for cancer. This project aims to improve our understanding of the risk factors for cancer in people with kidney disease, including people who have received a kidney transplant, and the patterns of cancer and cancer-related mortality in these patients. We will also evaluate the role of cancer screening in people with chronic kidney disease.

PROJECT AIMS / OBJECTIVES

1. Understanding the pattern of cancer and cancer-related mortality in people with kidney disease
2. Evaluate the pattern of cancer risk across the patient journey for people with kidney disease, from dialysis to kidney transplantation to graft failure
3. Understanding the risk factors for cancer in people with chronic kidney disease
4. Evaluate the role of screening in reducing the burden of cancer in people with kidney disease

SIGNIFICANCE AND OUTCOMES

The findings so far from this project has demonstrated the greatly increased risk of cancer mortality in people on dialysis and after kidney transplantation. We demonstrated that this increased risk varied by age, sex and by cancer type. These findings improve our understanding of the epidemiology and risk factors for cancer in patients with kidney disease. This knowledge

help patients with kidney disease better understanding their risk of cancer and for clinicians to better identify at-risk patients.

Proposed future research in this project:

- Systematic review of the reporting of cancer outcomes in clinical trials of kidney transplant recipients
- Evaluation of the role of cancer screening in people with chronic kidney disease.

PUBLICATIONS / PRESENTATIONS

Conference abstracts:

Au EHK, et al. Risk factors for advanced colorectal neoplasia in chronic kidney disease. American Society of Nephrology Kidney Week – Washington 2019 (Poster Presentation).

Au EHK, et al. Risk factors for advanced colorectal neoplasia in kidney transplant recipients. TSANZ Annual Scientific Meeting – Sydney 2019 (President's Prize Symposium).

Au EHK, Phillips J, Opdam H, McDonald M, Chapman JR, McDonald S, Johnson D, Kanellis J, Wong G, Lim W. The importance of donor cancer history in determining use of kidneys from consented donors. TSANZ Annual Scientific Meeting – Sydney 2019 (Poster Presentation).

Publication:

Au, E. H., et al. (2019). "Overall and site-specific cancer mortality in patients on dialysis and after kidney transplant." *Journal of the American Society of Nephrology*, 30(3): 471-480.

Au E, Francis A, Bernier-Jean A, Teixeira-Pinto, A (2020). Prediction Modelling – Part 1 – Regression modelling. *Kidney International*. (Accepted for publication).

Invited Presentation: 2019 TSANZ Masterclass in Transplantation – Cancer and Transplantation

ACKNOWLEDGEMENTS

Au E, Francis A, Bernier-Jean A, Teixeira-Pinto, A (2020). Prediction Modelling – Part 1 – Regression modelling. *Kidney International*. (Accepted for publication).