



HSRAANZ Webinar Series

Cost-effectiveness analysis of germ-line BRCA testing in women with breast cancer and cascade testing in family members of mutation carriers

Presented by Dr Haitham Tuffaha, NHMRC and Senior Research Fellow in Health Economics at Griffith University, Australia

Thursday 21 March at 11.30am Canberra, Melbourne, Sydney

(The Webinar will be about 45 minutes, followed by 15 minutes for Q and A.)

There is no cost to attend the Webinar, but registration is essential. Please register at:

https://zoom.us/webinar/register/WN_1yFB5xj9SyibgKVMegRiMg

ABSTRACT

Purpose: To evaluate the cost-effectiveness of BRCA testing in women with breast cancer, and cascade testing in family members of BRCA mutation carriers.

Methods: A cost-effectiveness analysis was conducted using a cohort Markov model from a health-payer perspective. The model estimated the long-term benefits and costs of testing women with breast cancer who had at least a 10% pretest BRCA mutation probability, and the cascade testing of first- and second-degree relatives of women who test positive.

Results: Compared with no testing, BRCA testing of affected women resulted in an incremental cost per quality-adjusted life-year (QALY) gained of AU\$18,900 (incremental cost AU\$1,880; incremental QALY gain 0.10) with reductions of 0.04 breast and 0.01 ovarian cancer events. Testing affected women and cascade testing of family members resulted in an incremental cost per QALY gained of AU\$9,500 compared with testing affected women only (incremental cost AU\$665; incremental QALY gain 0.07) with additional reductions of 0.06 breast and 0.01 ovarian cancer events.

Conclusion: BRCA testing in women with breast cancer is cost-effective and is associated with reduced risk of cancer and improved survival. Extending testing to cover family members of affected women who test positive improves cost-effectiveness beyond restricting testing to affected women only.



BIOGRAPHY

Dr Haitham Tuffaha is NHMRC and Senior Research Fellow in Health Economics at Griffith University, Australia. Haitham holds an MSc degree in Clinical Pharmacy (with Distinction) from Strathclyde University in Glasgow, an MBA degree from Wollongong University in NSW and a PhD in Health Economics from Griffith University. His research encompasses the economic evaluation of health care technologies with an interest in Value of Information analysis as a systematic approach to inform reimbursement decisions, optimise trial design and prioritise research funding.

After completing his PhD in 2016, Haitham has rapidly established a high-quality track record and built a reputation as a promising leader in his field of research. He has over 50 peer-reviewed journal articles, book chapters and technical reports. He has published in leading journals including The Lancet, Nature Genetics in Medicine, Value in Health, PharmacoEconomics and the Medical Journal of Australia. His research has influenced health policy and clinical practice nationally and internationally.

Haitham is the Chair of the Clinical Oncology Society of Australia's (COSA)-Epidemiology Group, the Co-Chair of Australian Clinical Trials Alliance (ACTA)-Research Prioritisation Group and Secretary of the International Society for Pharmacoeconomics and Outcomes Research (ISPOR)-Australian Chapter. He is an Editorial Board Member of PharmacoEconomics-Open and a regular reviewer for leading journals.