Development of a Psychosocial Risk Screening Tool for Genetic Testing

**Objectives:** To develop a reliable and valid psychological risk factor screening tool to help health care providers determine which of their patients undergoing genetic testing for adult-onset disease (AOHD) is at increased psychological risk or who will need added psychosocial support.

Dr. Mary Jane Esplen  
Principal Investigator  
Director, de Souza Institute  
Professor and Scientist, Department of Psychiatry, University of Toronto/University Health Network

Dr. Mario Cappelli  
Co-Principal Investigator  
Director of Mental Health Research  
Children’s Hospital of Eastern Ontario, Canada

Funded by a grant from the Canadian Institute of Health Research

Disclosure of Interest: None Declared
Genetic Testing: Psychosocial Response

Why

- Majority adjust well to test results by 3-6 mo & 1 year
- Subset are psychologically distressed
  - Anxiety Disorder/ Depression post test results 10-25%
  - Sub-clinical Distress post test results 30-50%

*Varies over course of 1 year post testing

Screening tool Instrument Development

- **Phase I**: Item Generation and Refinement - literature review and patient/clinician input to identify psychological, social, illness experience/ genetic texting contextual risk factors
- **Phase II**: Validation – 620 individuals undergoing genetic testing in 5 Canadian Centres participated baseline assessments. 463 completed follow up clinical interviews for Anxiety/ Depressive symptoms

Disclosure of Interest: None Declared
Results

GPRI - A short, easy to score, self-report screening instrument

**Phase I**: high reliability with Cronbach’s alpha = 0.81

**Phase II**: correlated with standardized measures for depression / anxiety

- A acceptable ROC curve 0.78, high in true positive (sensitivity) and low in false positive (1-specificity)
- A cut off score of 50: administered at baseline, this tool identified 84% of participants who displayed distress post genetic testing results