Screening for Circulating Tumour Cells (CTC): Early detection of cancer and monitoring of treatment effectiveness - an observational study of 600 patients

A/Prof Karin Ried, Dr Peter Eng, Prof Avni Sali
PhD, MSc, GDPH, Cert Integrative Medicine
National Institute of Integrative Medicine, Melbourne, Vic, Australia
Contact: karinried@niim.com.au

Background
Circulating Tumour Cells (CTC) are biomarkers for
  - early carcinogenesis / malignant potential
  - cancer prognosis and treatment effectiveness
  - CTC increase is associated with cancer progression and survival
  - CTC decrease is associated with cancer containment or remission
  - CTC clusters are associated with metastatic potential
  - Early detection CTC screening is suggested for patients with higher risk of malignancy, e.g. smoking, family history, HRT, >50 years
  - Several technologies have been developed to identify CTC, including Isolation by Size of Epithelial Tumour (ISET) using filtration and analysis by microscopy using standard histo-pathological criteria, validated in several studies, and provides high sensitivity (1 CTC/ml) and high specificity (0 CTC/ml in 600 healthy donors)

Methods
Isolation of CTC & analysis


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