Ovarian cancer exosomal proteins are associated with disease progression
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Ovarian Cancer:
- Ovarian cancer has the highest mortality rate amongst gynaecological tumours, with the 5-year survival rate at an advanced stage being approximately 20% [1].

Exosomes:
- Small extracellular vesicles, specifically, exosomes, have gained significant attention due to their ability to transport vital information, in the form of proteins [2].

Aims:
- To identify and characterize exosomal proteins associated with ovarian cancer progression.
- To validate the expression of these proteins using Multiple Reaction Monitoring (MRM).

Method:

Results

A) Scratch wound assay of SKOB-3 and OVCAR-3 cell lines to determine cell migration.
B) Migration of SKOV-3 and OVCAR-3 cells 0, 16, 32 and 48 hours after the wound was made.
C) Cell proliferation of SKOV-3 and OVCAR-3 cell lines measured using real time imaging system.
D) Peptide concentration in exosomes and cells.

We propose that small extracellular vesicles like exosomes carry a specific set of proteins which are delivered to target cells to influence ovarian cancer progression. Therefore, these exosomes can provide an insight into disease progression as well as an understanding of the mechanisms underlying it. Future directions of this project involve validating the expression of all selected proteins using multiple reaction monitoring (MRM).