

Project title	Seeing if bone cancer cells that have had the gene AFAP1L1 delted have a reduced capacity to spread
Recipient	Ms Samantha Thilini Gunasekera
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Research description	<p>Death from cancer occurs mainly when it spreads to different parts of the body. Bone cancer (sarcoma), is more common in adolescents and young adults, with 1200 new cases/year in Australia. Patients with bone cancers that are found to be spreading have a bad diagnosis, with only ~20% surviving more than 5 years.</p> <p>The team has identified the gene AFAP1L1 as being strongly associated with bone cancer cell migration and invasion. Genomic engineering has been used to delete this gene from bone cancer cells. The bone cancer cells with the gene AFAP1L1 deleted will be tested for their ability to proliferate, migrate and invade in the laboratory using an instrument called the IncuCyte ZOOM. If the cells lacking AFAP1L1 are less proliferative/migratory/invasive, we will then check if this is true in pre-clinical models of bone cancer and also screen for drugs that can mimic the effect of AFAP1L1 gene deletion which might be used to stop the bone cancer cells from spreading.</p>
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