

Topic 5 – Early detection of coeliac disease using saliva

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Background:

Celiac disease (CD) is a gluten-sensitive autoimmune disorder affecting the small intestine that develops in genetically susceptible individuals. CD has a worldwide prevalence (1% of world population) with more than 80% cases remaining undiagnosed. Symptoms of CD are very similar to other disorders, and it is hard to recognise.

Our proposed solution:

We have developed a screening diagnostic tool capable of detecting CD from saliva. Our patented technology offers a cheap, accurate, pain-free and quick point-of-care test for patients and clinicians. It will reduce pathology costs and give sufferers an option to screen themselves in the privacy of clinician's suites or their home.

Things to consider for your assessment task:

1. *What IP already exists in this space?*

Our invention is protected by patent (protection in Australia, USA and Europe) that secures our unique approach to detect celiac disease using saliva. Our technology will be the first test on the market that offers non-invasive celiac disease detection, especially suitable for children. Our test can be used as a screening test as well as monitoring test for efficiency of gluten-free diet in CD patients. Our approach offers one-step technology that can be used as platform technology to develop further saliva-based tests. We have a unique collaboration with the Head of Coeliac Australia, Prof Tye-Din, who assists on clinical approach. Human ethics approval to perform first clinical evaluation in the Campbelltown Hospital, NSW (Dr Vincent Ho).

2. *How can we develop this idea to commercialisation?*

How developed is the research using saliva for CD detection? What can be done in this landscape to make this the current standard or testing? What limitations exist with the testing that need to be address before this is a reality?

3. *Who could we partner with to commercialise this product?*

What industries would be interested in funding this research? What industries are already involved in this space (based on patents and products you have already identified)?