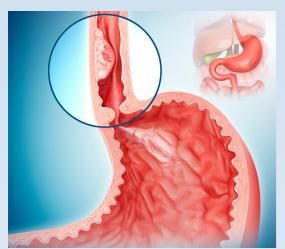




### Window on the science



### **Oesophageal adenocarcinoma**

Oesophageal adenocarcinoma is the most common type of oesophageal cancer in Australia. Early phases of the disease may not have symptoms, and the cancer is usually not detected until the advanced stages. The overall five-year survival for oesophageal cancer is less than 20 per cent.<sup>1</sup>

### 7th

most common cancer worldwide in 2018 was oesophageal cancer<sup>1</sup>

# 1 in 20

cancer deaths worldwide in 2018 attributed to oesophageal cancer<sup>1</sup>

### 1 in 125

men in the United States will be diagnosed with oesophageal cancer in their lifetime<sup>2</sup>

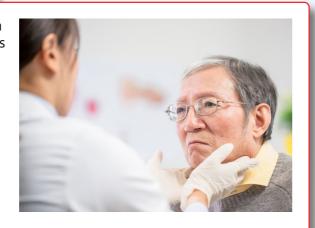
### 1 in 417

women in the United States will be diagnosed with oesophageal cancer in their lifetime<sup>2</sup>

### Barrett's oesophagus

**Barrett's oesophagus** is a pre-malignant condition in which the normal tissue lining of the oesophagus changes to resemble the lining of the intestine. An estimated 10–15% of patients with chronic **acid reflux** develop Barrett's oesophagus.<sup>1</sup>

People with Barrett's oesophagus are much more likely to get oesophageal adenocarcinoma, and are advised to get regular endoscopies to screen for oesophageal cancer. In studies of Western populations, about 1–2 per cent of adults were estimated to have Barrett's oesophagus.<sup>3</sup>



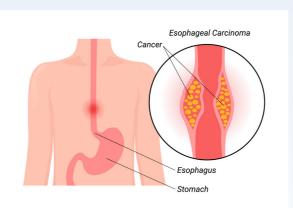
# **Current diagnosis**

The most common investigation for oesophageal cancer currently is an endoscopy<sup>1</sup>. This expensive and invasive test sees a doctor use a thin, flexible tube with a camera at the end to look at a patient's digestive tract. A small amount of tissue may also be removed and examined by a pathologist to check for signs of disease. The test is usually performed as day surgery.



#### **Impact**

A simple blood test would help doctors diagnose people with oesophageal adenocarcinoma earlier. It would allow patients to get treatment earlier than they otherwise would, improving survival outcomes. The test would also help doctors decide treatment plans based on the assessment of the cancer's progression.



#### ESOPHAGEAL CANCER

- 1 Nature Reviews Gastroenterology & Hepatology, doi.org/10.1038/s41575-021-00419-3
- 2 American Cancer Society
- 3 American Society for Gastrointestinal Endoscopy, www.asge.org

# The Promarker™ pipeline

Proteomics International is developing a simple blood test for oesophageal adenocarcinoma using diagnostic biomarkers that can distinguish between different stages of progression to the disease. Proteomics International has secured an exclusive worldwide license to commercialise the technology that was first discovered by researchers from QIMR Berghofer Medical Research Institute.

If successful, the test will target patients with Barrett's oesophagus to diagnose oesophageal adenocarcinoma without the need for an endoscope.

4