A NOVEL BLOOD TEST FOR THE EARLY DIAGNOSIS OF ENDOMETRIOSIS

# Promarker<sup>®</sup>Endo

powered by **Proteomics International** 



Identifies endometriosis at all stages with high accuracy

Over 1,000 patients studied

Early screening could rule in or out the need for invasive surgery

## **Endometriosis**



- Common and often painful disease where endometrial-like tissue grows into other organs
- · Affects 1 in 9 women and girls



- Diagnosis takes an average of 7 years
- Major cause of female infertility, and individuals can suffer from intense and chronic pain which substantially impacts quality of life<sup>1</sup>



 Annual costs estimated at up to \$9.7B in Australia<sup>2</sup>, £8.2B in the UK<sup>3</sup> and USD \$119B in the USA<sup>4</sup> in loss of work and healthcare costs

### **Current Diagnosis**

- Gold-standard is laparoscopy with histological verification by a pathologist invasive and costly
- 50% of stage 1 endometriosis cases are missed in surgical diagnosis most prevalent stage<sup>5</sup>



Significant time and cost to patients with repeated doctor consults and many patients paying out of pocket for laparoscopy



A non-invasive blood test is in high demand

A NOVEL BLOOD **ENDOMETRIOSIS** 

The PromarkerEndo test shows excellent diagnostic performance across all stages of disease6

The test combines the concentration of blood-based protein biomarkers with age and BMI using a bi-model algorithm

Results from a study of 805 participants have been published in the prestigious medical journal Human Reproduction<sup>6</sup>

## Clinical Studies and Collaborations

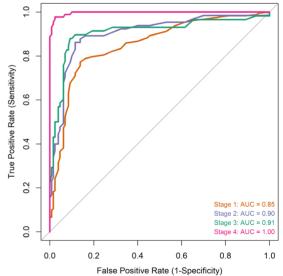
- **Discovery** Wesley Medical Research Biobank (n=56 samples)
- Analytical validation Royal Women's Hospital and University of Melbourne (n=596 patients; incl. endometriosis confirmed by laparoscopy and symptomatic controls)
- **Validation** Healthy volunteers (n=153 participants)
- Clinical validation St John of God Subiaco Hospital Gynecological Cancer Research Group (n=241 patients)
- Clinical validation University of Oxford, Nuffield Dept. of Women's and Reproductive Health (n=620 patients)

The Promarker Endo test can distinguish healthy individuals and symptomatic cases from early stages of disease<sup>6</sup>

A prototype PromarkerEndo model achieved excellent diagnostic performance across earlier disease stages and achieved high accuracy in distinguishing severe endometriosis from symptomatic controls. See the prototype test performance across the different stages in the figure.

Please note: The test shown is under development and not yet clinically or commercially available

PromarkerEndo



#### REVOLUTIONISING THE DIAGNOSIS OF ENDOMETRIOSIS

**Esophageal Cancer** PromarkerEso Diabetic Kidney Disease **PromarkerD** [1] Endometriosis, World Health Organization (WHO.org) [2] Endometriosis Is Undervalued: A Call to Action, DOI: 10.3389/fgwh.2022.902371 [3] Endometriosis UK, Facts and Figures (Endometriosis-UK.org)

[4] Endometriosis, Economic burden - Australian Institute of Health and Welfare (aihw.gov.au) [5] Reliability of visual diagnosis of Endometriosis, DOI: 10.1016/j.jmig.2013.04.017

**Endometriosis** 

[6] Identification of plasma protein biomarkers for endometrios models for disease diagnosis, DOI: 10.1093/humrep/deae278





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