

Impact and Genetic Landscape of Endometriosis in Africa

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INTRODUCTION

- Endometriosis is a chronic, inflammatory condition with debilitating symptoms¹
- Data on prevalence & impact of endometriosis in Africa are limited^{2,3} (1A)
- Most publications are case reports; there are few cohort studies²
- Genetic data is limited² to single candidate genes rather than methodologically robust genome-wide data (1B)

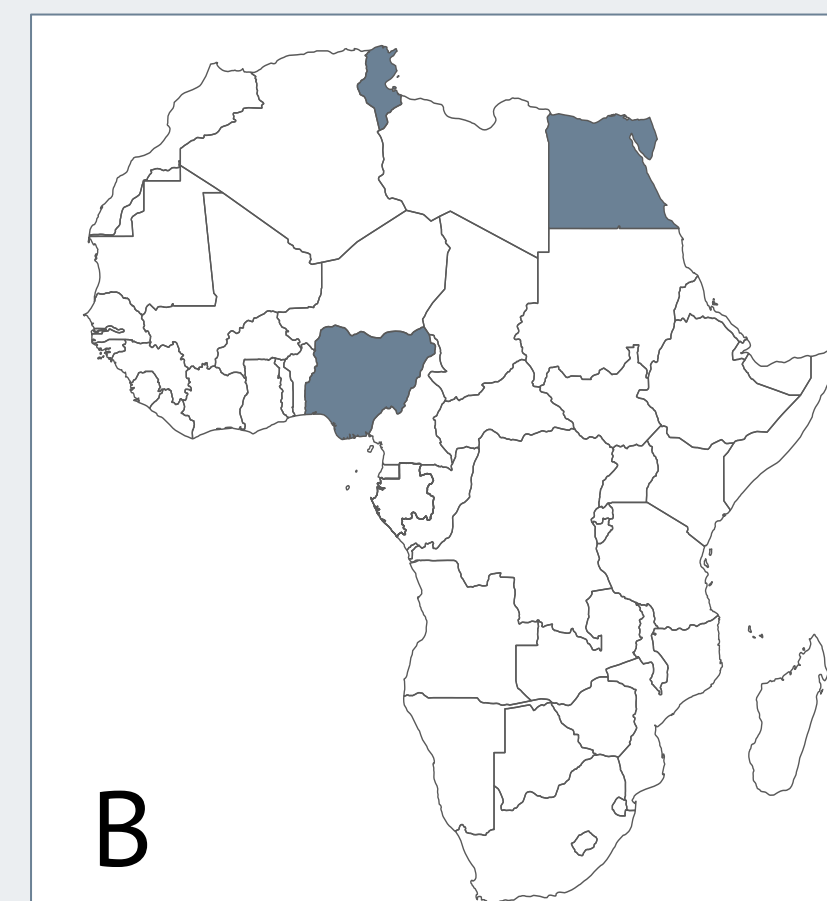


Figure 1: endometriosis data in Africa. A: countries with English publications. B: countries with published genetic data.

COLLABORATORS

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AIMS



Identify **genetic variants** associated with endometriosis

Improve **identification** of possible **causal genetic variants** through **multi-ancestry meta-analysis**



Characterise the **phenotypic presentation** of endometriosis in several African populations

Identify **factors associated with endometriosis**



Establish a **network of local and global research teams**

Raise **awareness of endometriosis** and how it **impacts diverse populations**

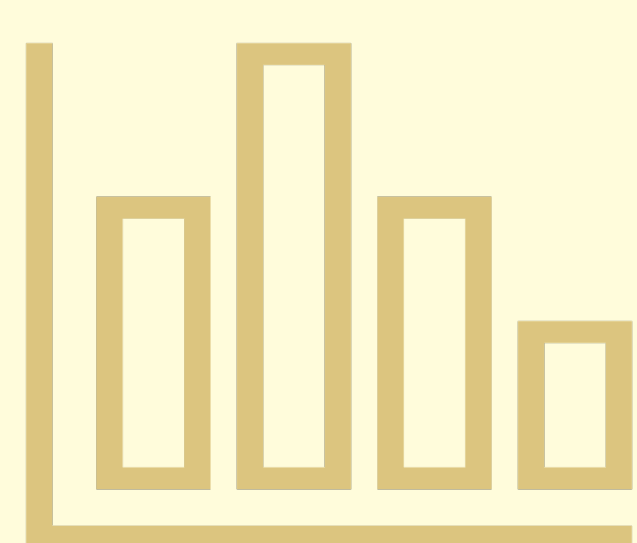
STUDY PLANS AND TIMELINE

APPROVALS: DEC 2024 - PRESENT

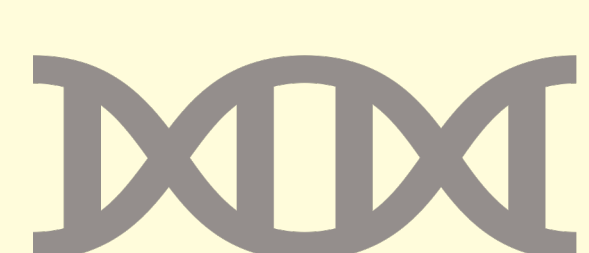


Ethics and approvals

ANALYSIS: JAN - APR 2027



Phenotypic: descriptive and associative statistics



Genetic: genome-wide association study

RECRUITMENT: DEC 2025/JAN 2026 – DEC 2026



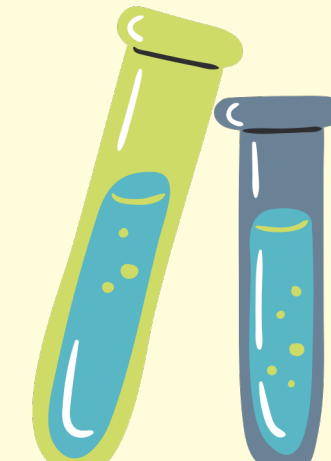
Participant approached in ward or waiting room



Informed consent and enrolment



WERF EPHeCT questionnaire



Saliva sample collection and DNA extraction

SAMPLE SIZE

500 participants per country

300-400 cases

100-200 controls

LANGUAGES

Study documents (information sheets, consent forms, questionnaires) will be available in local languages.

- Ghana: Akan, Twi
- Kenya: Kiswahili
- South Africa: isiZulu

REFERENCES

¹Zondervan KT, Becker CM and Missmer SA. "Endometriosis". *New England Journal of Medicine* 382.13 (2020): 1244-1256.

²Mecha, EO, et al. "Endometriosis among African women." *Reproduction and Fertility* 3.3 (2022): C40-C43.

³Ghiasi M., et al. "Is endometriosis more common and more severe than it was 30 years ago?" *The Journal of Minimally Invasive Gynaecology* 27.2 (2020): 452-461.

This study would not be possible without the leadership and input of collaborators from all participating sites.

