

ENDOSEARCH

A European and North American International Clinical Trial testing a cluster of biomarkers for the diagnosis and prognosis of endometriosis

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INTRODUCTION

Laparoscopy is the gold standard to diagnose endometriosis with a specificity of 0.8. But it is a surgical procedure with potential risks, including both vascular and intestinal injuries. Combinations of various biomarker-based tests and imaging techniques have been evaluated for their ability to detect endometriosis. Despite these efforts, none of them has been successful for a routine clinical practice implementation.

Several research teams have studied the role of circulating genetic material in the development of the disease, described as intervening in cellular functions, related to endometriosis (embryology, cell cycle, intracellular signaling) or differentially expressed targets in eutopic vs ectopic endometrium. The aim of our study is to test a combination of biological markers differentially expressed in samples from women with or without endometriosis..

MATERIAL AND METHODS

ENDOSEARCH is a prospective multicentric international clinical trial including 20 renowned specialized centers in Europe, US and Canada, granted by the European Union (H2020) aiming to validate a cluster of biomarkers by recruiting 1000 patients, ethical committees having approved the study.

The Patient Group includes women of reproductive age between 18 and 45 with suspected endometriosis undergoing laparoscopy. Patients with predominant adenomyosis and/or fibroids diagnosed by imaging, chronic, malignant, infectious, metabolic or endocrine diseases are excluded.

The Control Group includes patients of reproductive age between 18 and 45 without any endometriosis-related clinical sign, with planned laparoscopic surgery for other indications.

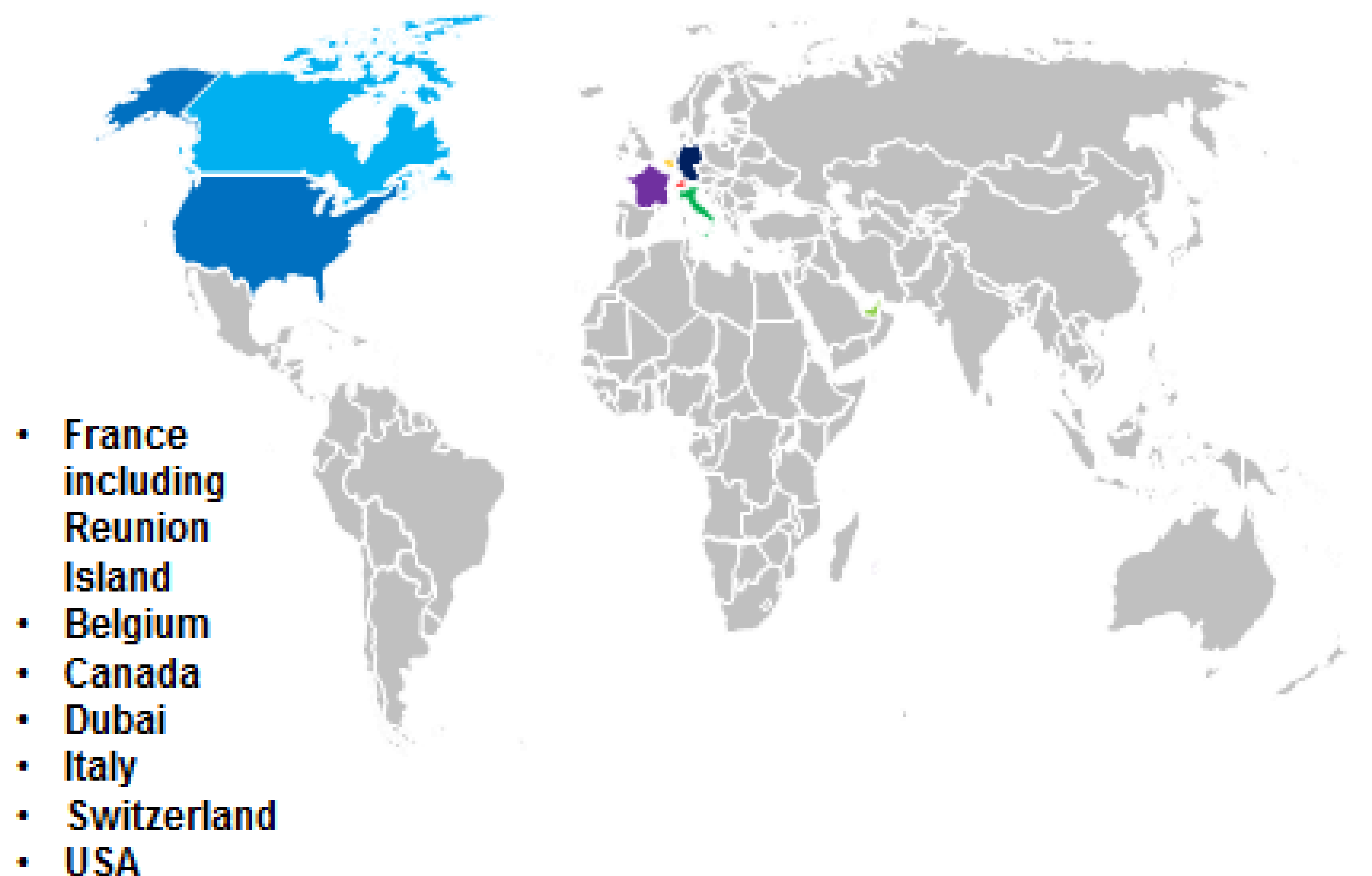


Samples of endometriosis lesions for the Patient Group, endometrial biopsy and blood samples for both groups are sent with a tool kit to a unique center (Endodiag, Paris, France) to be tested with the cluster of biomarkers.

Endosearch Clinical trial: 20 leading centers including 1000 patients in 8 countries.

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CONCLUSION

We present the first large prospective multicentric international clinical trial aiming to test a cluster of biomarkers in endometriosis lesions, eutopic endometrium and circulating blood, by recruiting over 1000 patients all around Europe, the US and Canada.

ENDOSEARCH is the first step of a set of ongoing clinical trials to set up a tool kit for the diagnosis and prognosis of endometriosis, with promising results to develop new molecular strategies of treatment.