CONTRIBUTIONS OF THE THESIS

PhD student: **Lê Viết Nguyên Sa**

Thesis title: ***"Phenotype, reproductive endocrinology, metabolic profile, effects of metformin and inositol on infertility women with polycystic ovarian syndrome"***

Specialization: Obstetrics and Gynecology Code: 9 72 01 05

Scientific Supervisors: Assoc. Prof. Le Minh Tam

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Contributions of the thesis

Polycystic ovarian syndrome is a common endocrine disorder in women of reproductive age and is associated with numerous long-term health consequences. Research on polycystic ovary syndrome is crucial in Vietnam because of the variety of clinical manifestations, the complexity of the pathogenesis, and the impact of race on the phenotype. This research is necessary to identify the main phenotypes, identify risk groups for long-term treatment, and develop management strategies. The findings of this study can be used in clinical practice to manage polycystic ovarian syndrome and to provide evidence for infertility treatments with the insulin-sensitive medications such as metformin and inositol as well as regimens for ovulation induction.

Scientific value: The research has revealed distinctive phenotypes and endocrine metabolism, emphasizing the elevated risk of glucose uptake disorders, metabolic disorders and dyslipidimia in women with polycystic ovarian syndrome. The study also makes conclusions about a number of infertility treatments for women with polycystic ovarian syndrome, including insulin-sensitive medicines such as Metformin and Inositol, and ovulation induction letrozole, giving scientific support for the use of these treatments in infertile women with polycystic ovary syndrome.

Practical value: There is evidence to support the need for endocrine and metabolic disorders screening and preventive treatment options in women with polycystic ovary syndrome who are of reproductive age in order to avoid pregnancy compilcations and long-term issues thereafter. Provide evidence for using metformin and inositol to improve weight, waist circumference and menstrual cycle in obese infertile women with polycystic ovary syndrome. Provide support for the use of letrozole as a first-line protocol for ovulation induction in infertile women with polycystic ovary syndrome.

Hue, June 26th, 2023

Scientific Supervisors **PhD Student**

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