

✓ **PCOS, What is it ?**

Polycystic Ovary Syndrome (PCOS) is a complex disorder with important effects of woman's fertility, psychological health and metabolism.

 **8%-13%**
of women

 **70%**
of cases remains **undiagnosed**

Signs and symptoms of PCOS

- Psychological disorders (anxiety disorders, depression)
- Infertility (irregular menstrual cycles)
- Signs of hyperandrogenism (alopecia, hirsutism, visceral fat)
- metabolic disorders (insulin resistance, metabolic syndrome, prediabetes, type 2 diabetes, and cardiovascular risk)
- Among PCOS women, about 30% ~ 40% of normal-weight women and about 80% of obese women have insulin resistance

PCOS diagnosis according to Rotterdam criteria

2 symptoms out of 3



Polycystic Ovary

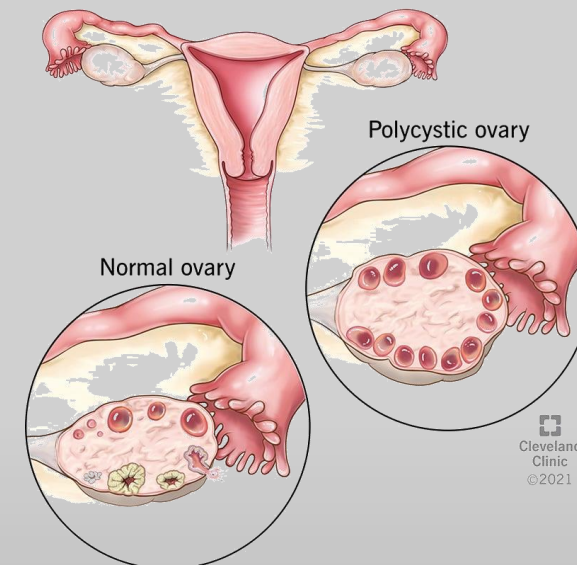


Menstrual irregularities



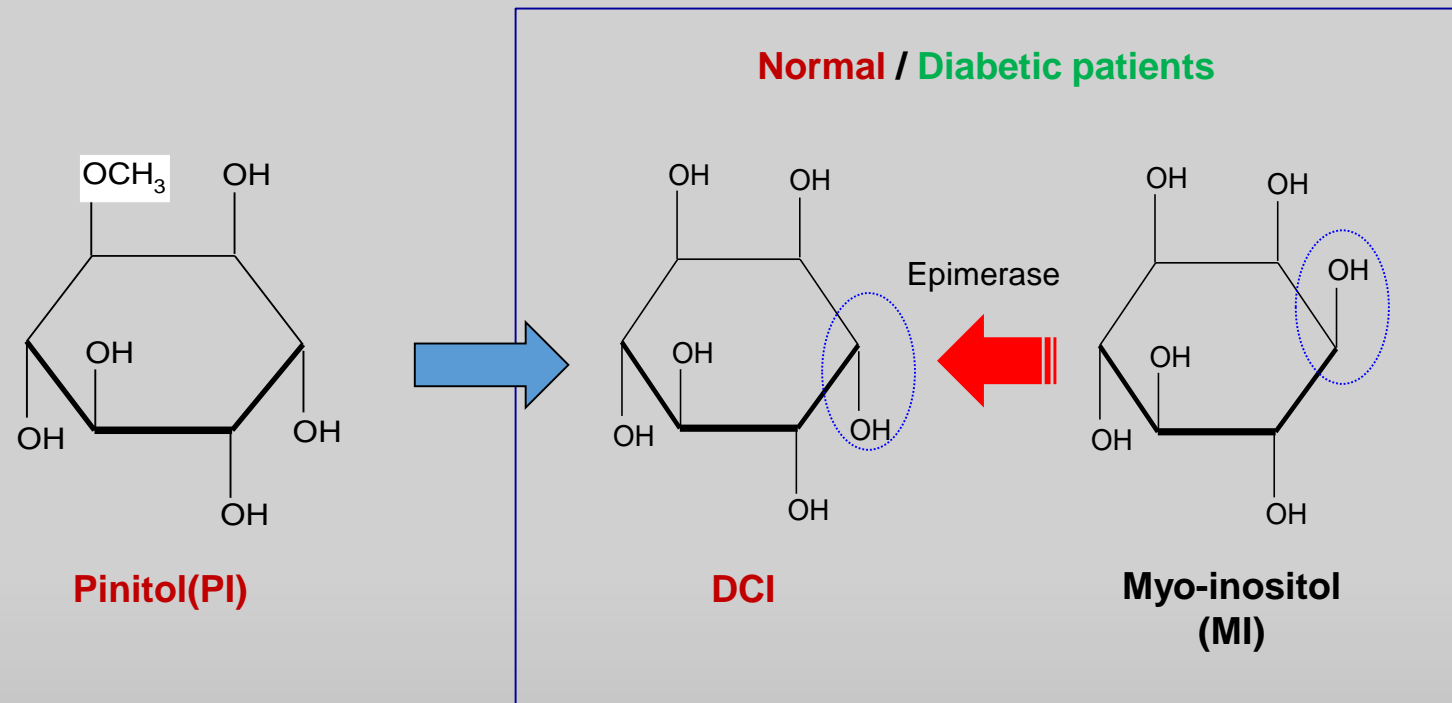
Hyperandrogenism

+ insulin resistance

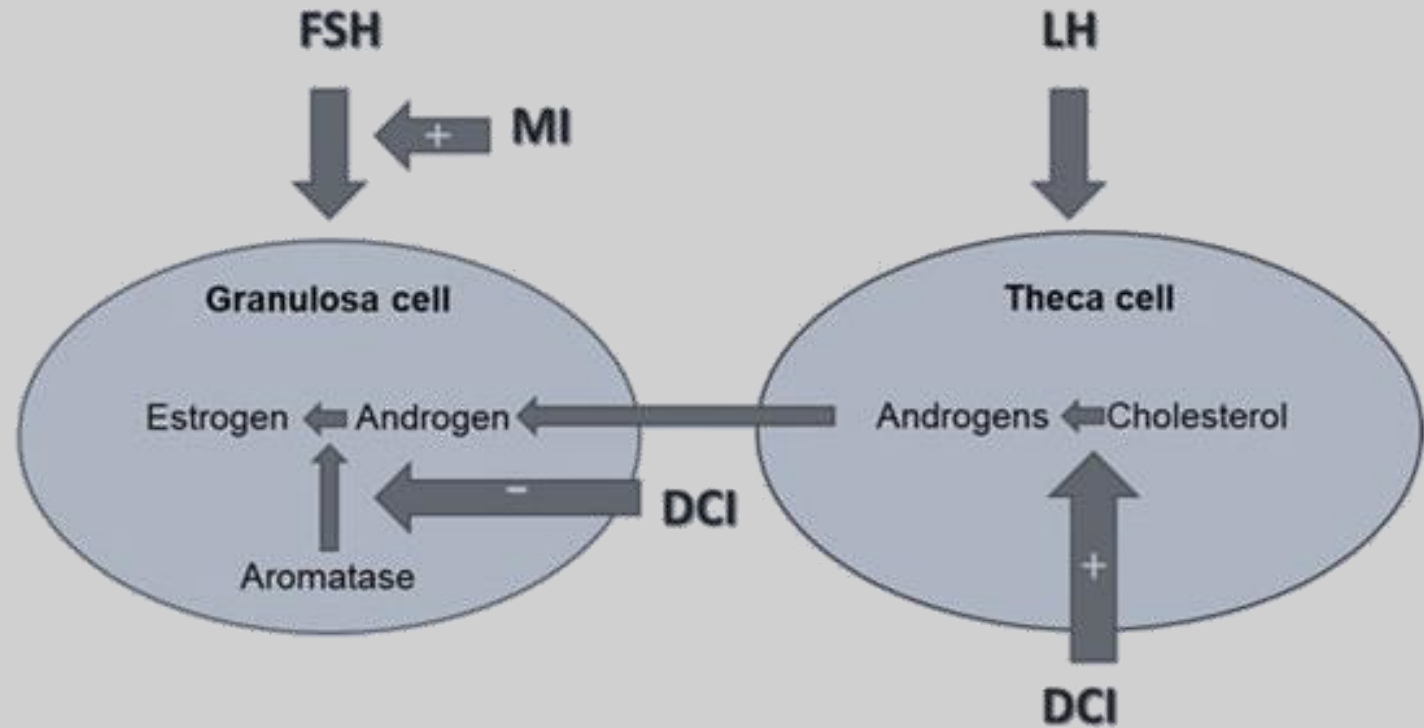
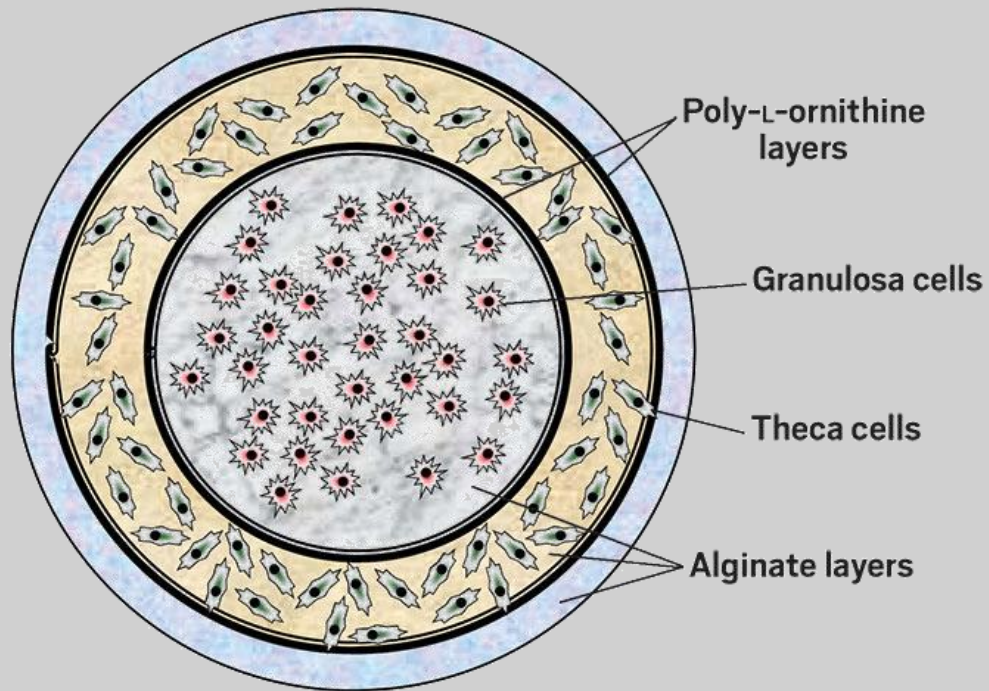


✓ **DCI Functionality**

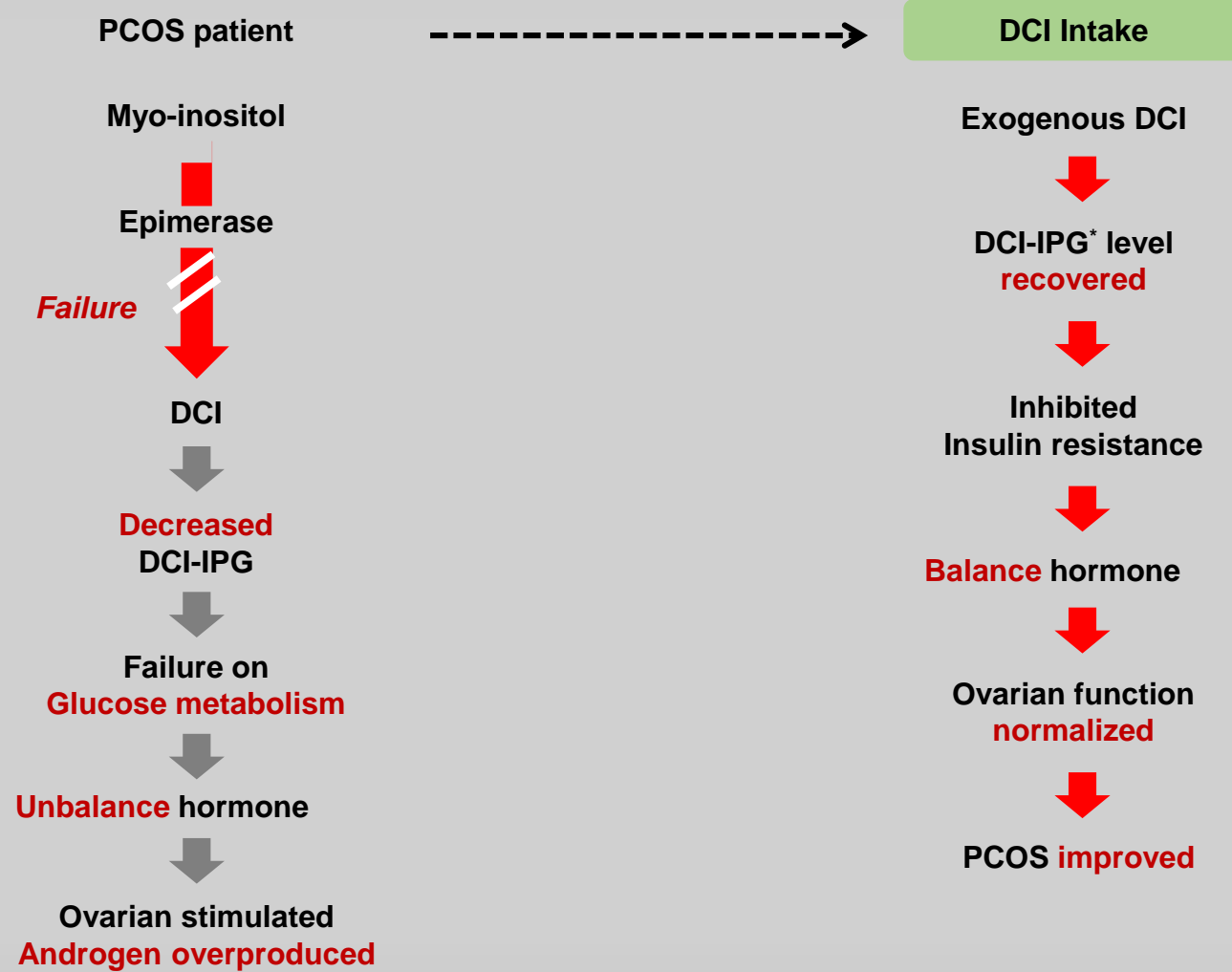
- Mediates the action of insulin
- It is involved in the synthesis of insulin-dependent androgens
- Promotes glucose storage
- Acts as an aromatase modulator



✓ DCI MECHANISM

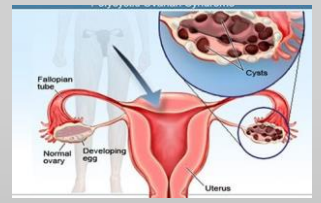
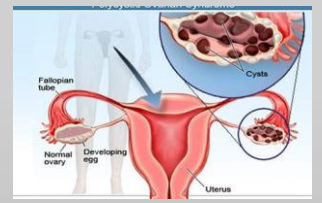
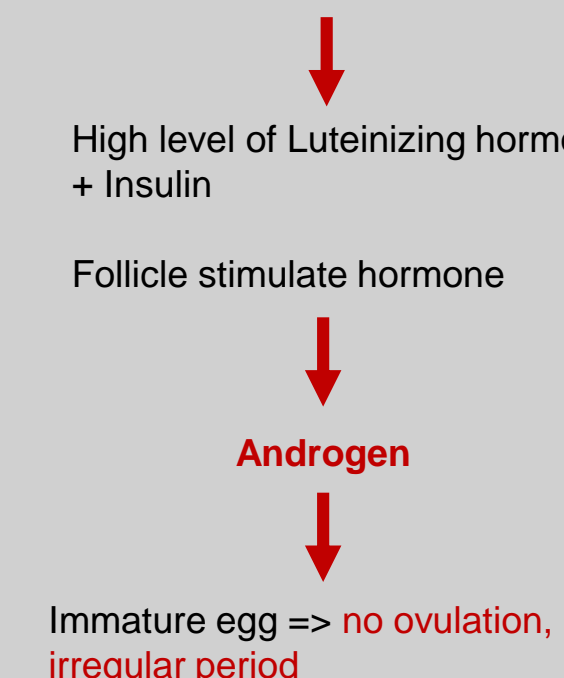
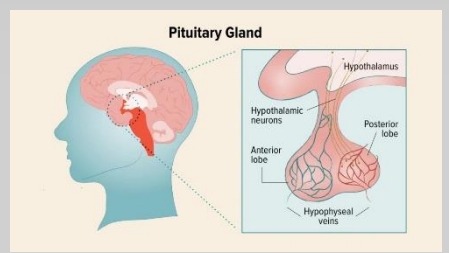
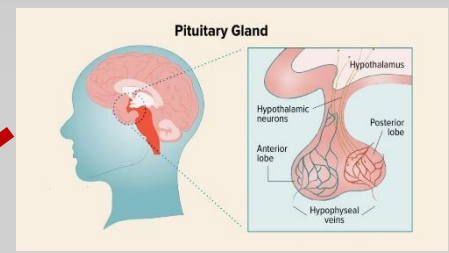


✓ **DCI Benefits**



*IPG : Inositol phosphoglycan

✓ **DCI Benefits**



High level of Luteinizing hormone



Ovulation, Normal period

Luteinizing hormone(LH)
Follicle stimulate hormone(FSH)

Immature egg => mature egg

Glucose => cell malfunction
High level of Insulin



High level of Luteinizing hormone + Insulin

Follicle stimulate hormone



Androgen



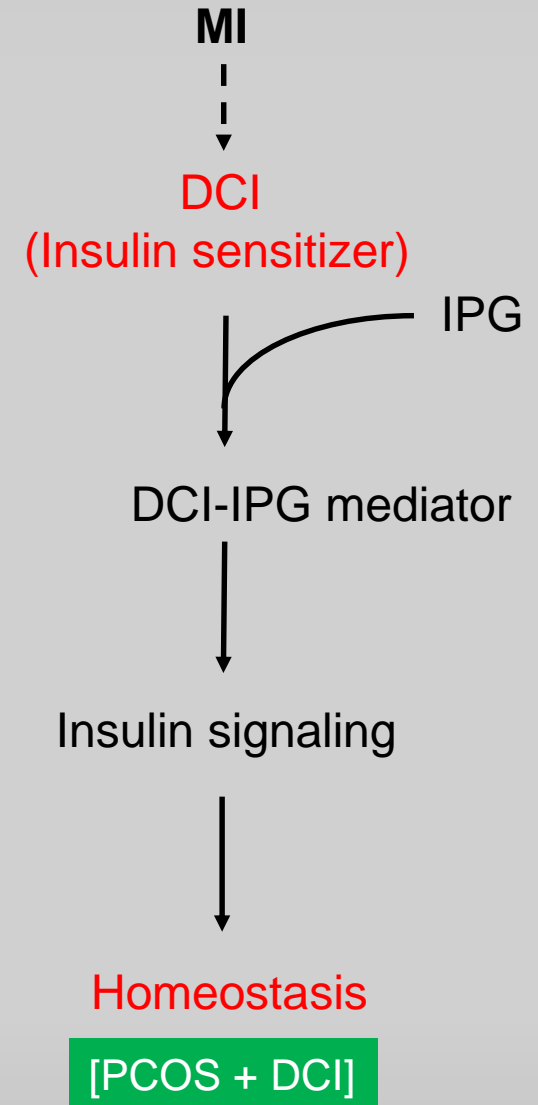
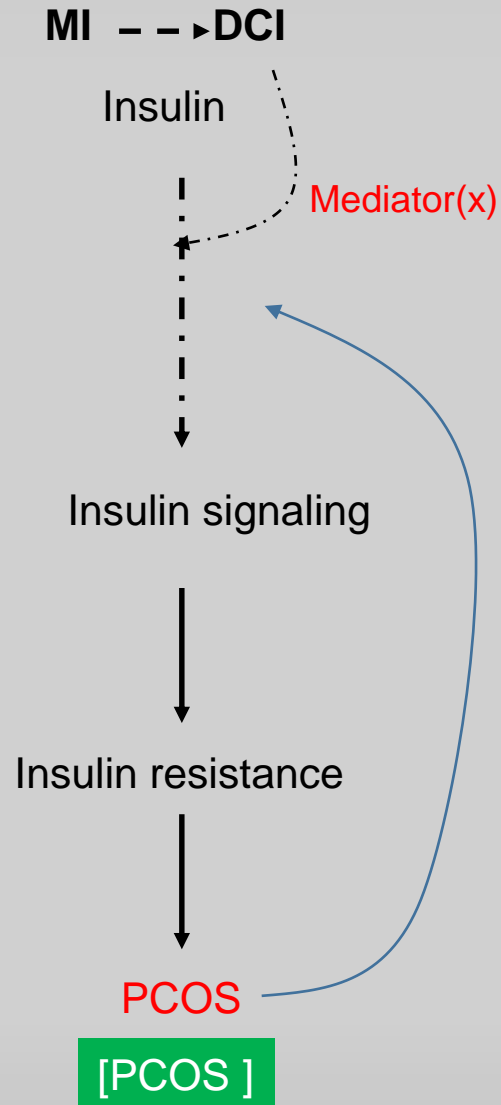
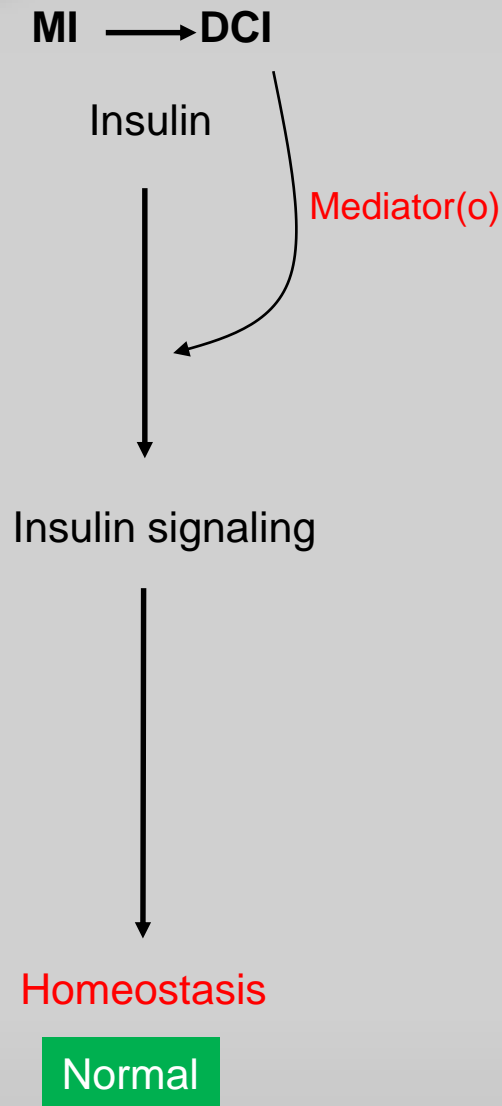
Immature egg => no ovulation, irregular period

Estrogen



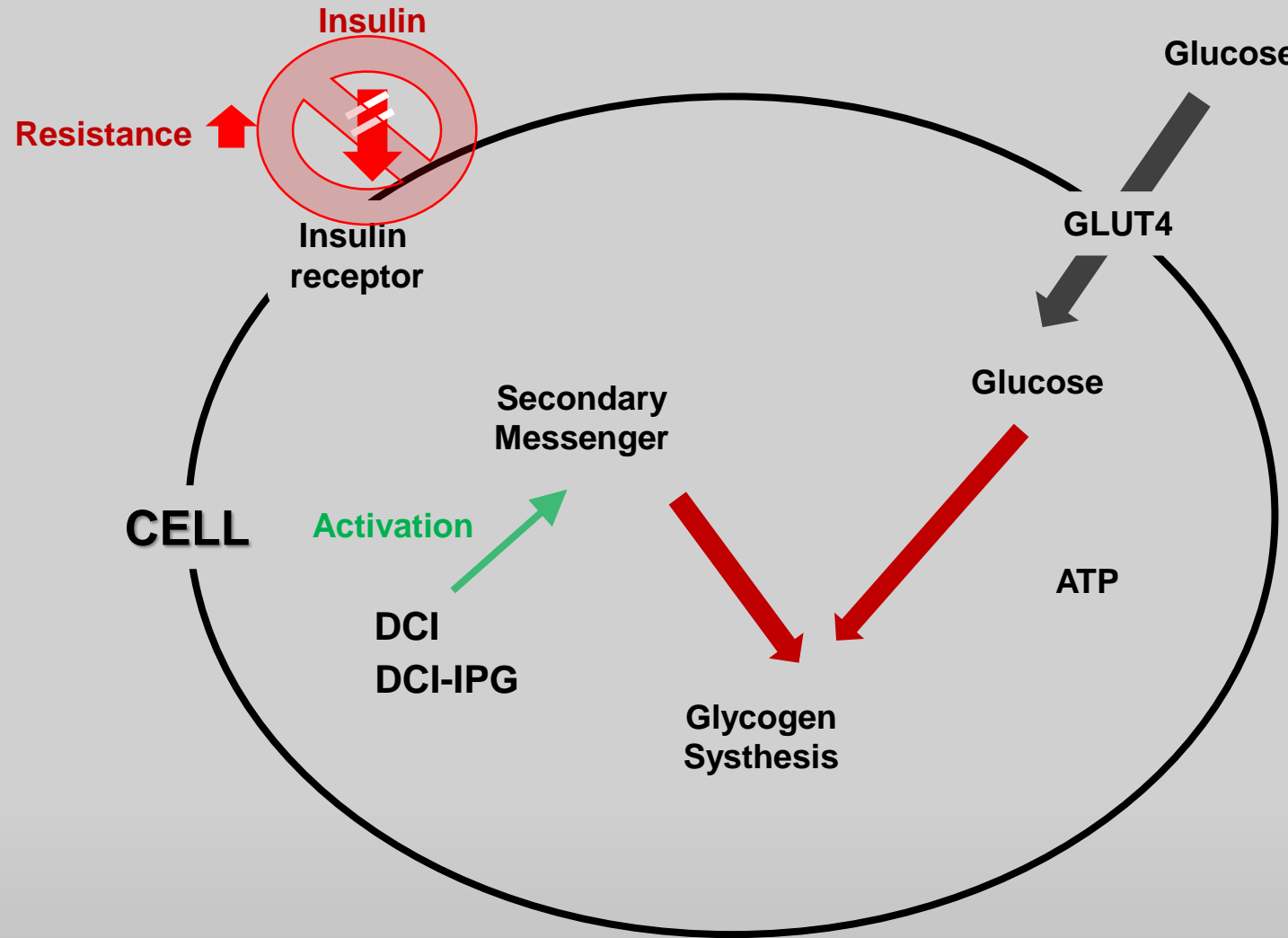
PCOS

✓ **DCI Benefits**

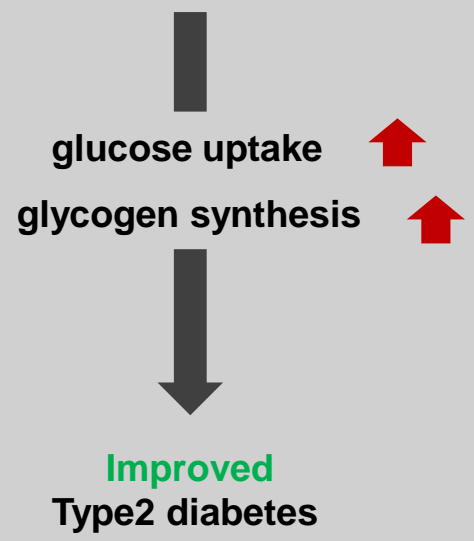


✓ **DCI Benefits**

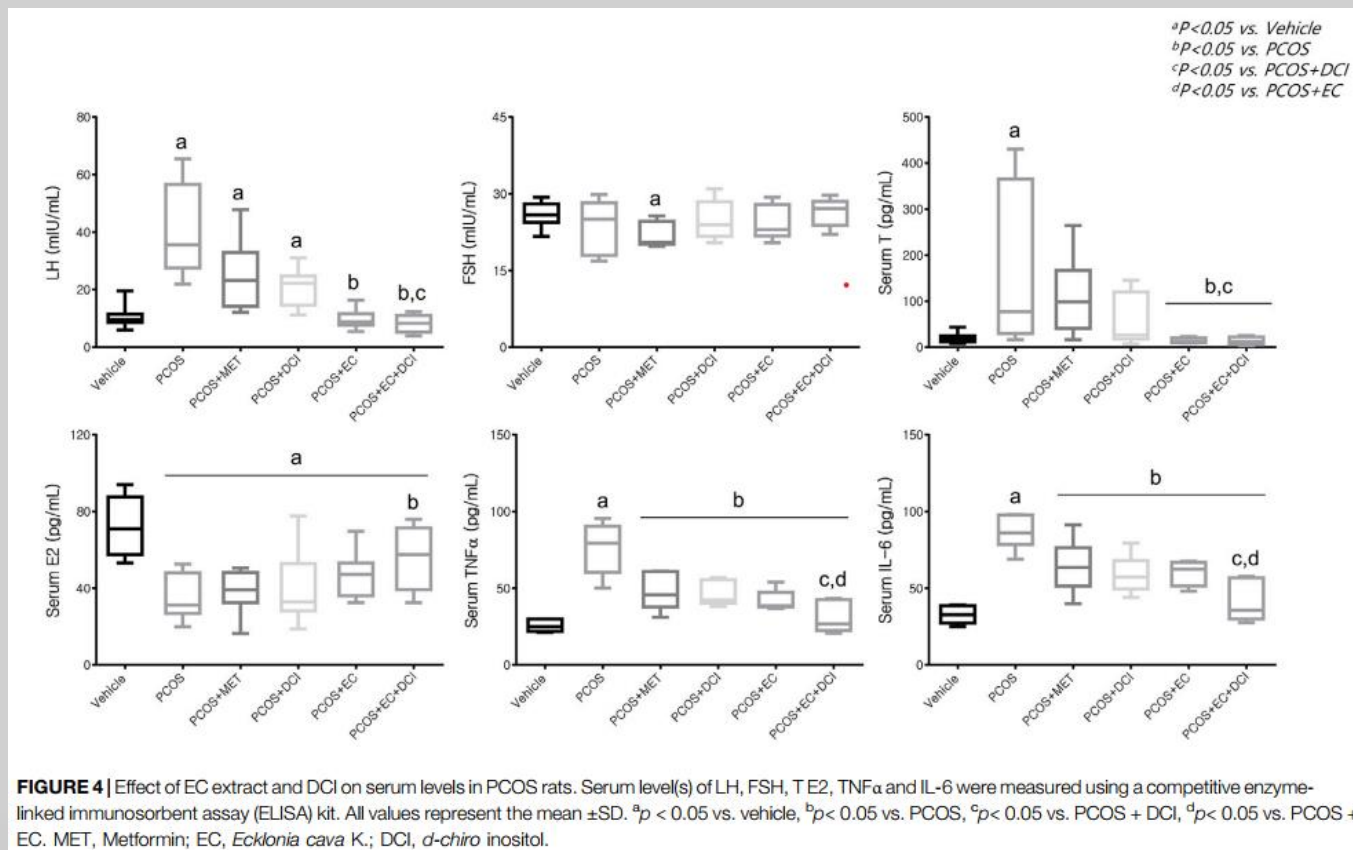
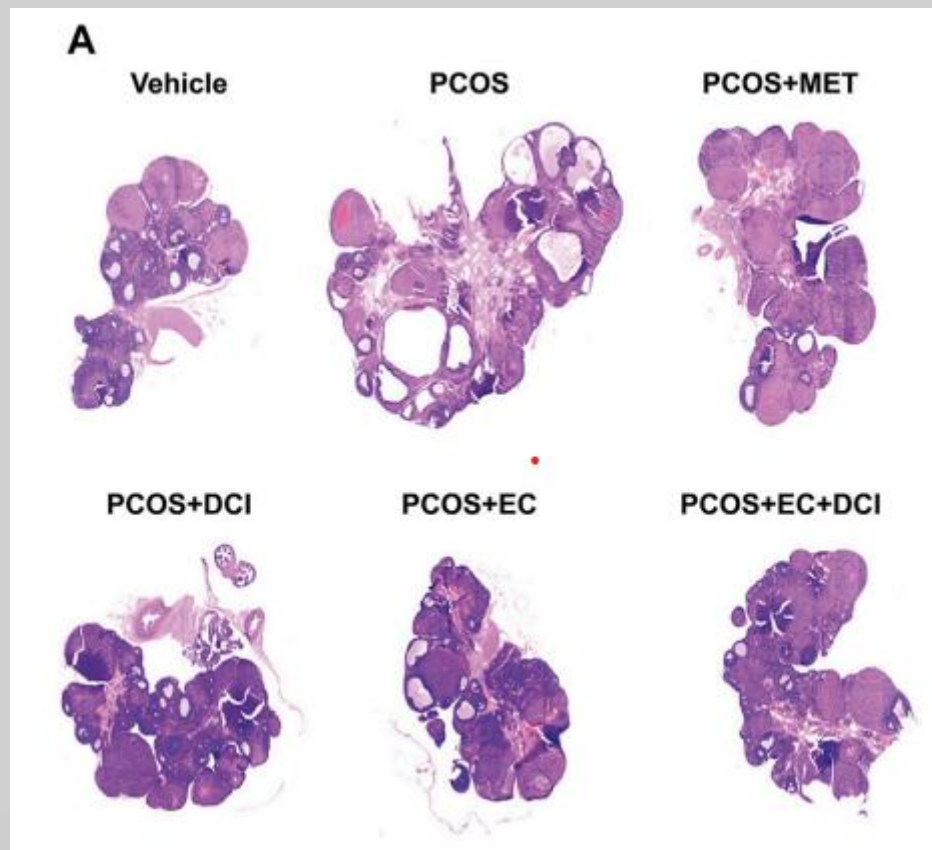
Type2 Diabetes patient



DCI activate Secondary Messenger In cell



✓ DCI Benefits



✓ DCI Benefits

Menstrual cycles after treatment with D-Chiro-Inositol.

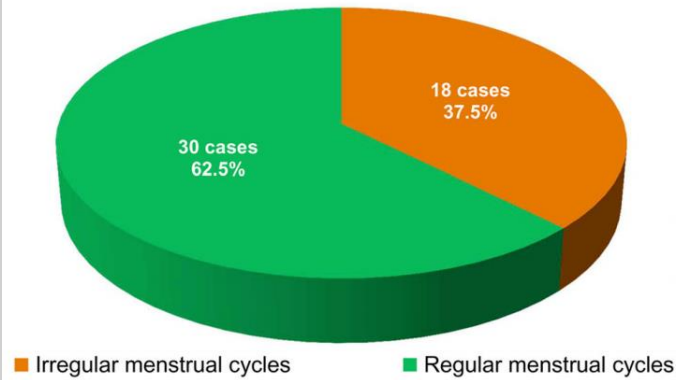


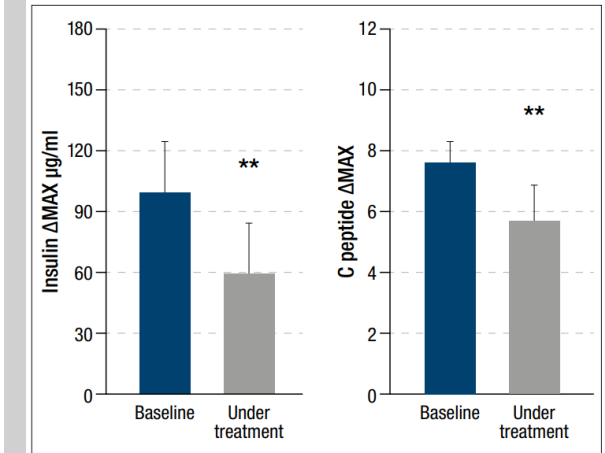
Fig. 2 Menstrual cycles after treatment with D-Chiro-Inositol

Table 1: features of 50 females

Charac	Group i		Group ii	
	Baseline	After	Baseline	After
Age	29±9		30±9	
Bmi	26.6±3.7		25.8±4.2	
Obs	12 (43%)		10 (40%)	
Dm	6 (21%)		4 (16%)	
Lh	19.6±4.8	14.74±4.52*	17.72±3.31	17.22±3.99
Fsh	13.59±3.2	10.19±3.03**	13.6±2.96	13.03±3.02
Testosterone levels	91.7±13.80	79.47±24.4****	90.04±14.75	86.08±8.23

0.05. (P value less than 0.05).

Figure 1 Maximal insulin (left) and c-peptide responses (right) (Δ_{max}) to OGTT in all PCOS patients under study. ** $p < 0.005$.



1. Improvement on **Menstrual Irregularity** by DCI Intake
2. **Lowering Androgen Levels** by DCI Intake
3. Improvement on **overweight & Hormone** regulation by DCI Intake
4. Improvement on **Hormone regulation & Glycemia**, Insulinemia by DCI Intake

