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# Correction: Shared diagnostic genes and potential mechanism between PCOS and recurrent implantation failure revealed by integrated transcriptomic analysis and machine learning

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### KEYWORDS

PCOS (polycystic ovarian syndrome), RIF (Recurrent Implantation Failure), integrated transcriptome analysis, machine learning, TCA cycle

# A Correction on

Shared diagnostic genes and potential mechanism between PCOS and recurrent implantation failure revealed by integrated transcriptomic analysis and machine learning

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There was an error in **Table 1** as published. The GSE103465 dataset includes a total of 6 samples, consisting of 3 controls and 3 patients. We inadvertently wrote "6 patients," which was a typographical error. We sincerely apologize for this oversight. Our subsequent analyses were performed using the correct data from GSE103465 (3controls and 3 patients). This correction does not affect any part of the analysis or the conclusions drawn from the data. The corrected **Table 1** appears below.

Also, there was an error in **Figure 4C** as published. We apologize for the typographical error in **Figure 4C** — the gene symbol was mistakenly written as "LCXD3" instead of the correct "PLCXD3". The corrected **Figure 4C** appear below.

Lastly, there was an error in the legend for **Table 1** as published. The corrected legend appears below.

"TABLE 1 Details of GEO datasets used in the study. PCOS: Polycystic Ovarian Syndrome, RIF: Recurrent Implantation Failure, GEO: Gene Expression Omnibus. Regarding GSE10946, we used both lean and obese non-PCOS samples as controls to avoid bias and reflect real-world metabolic diversity."

The original version of this article has been updated.

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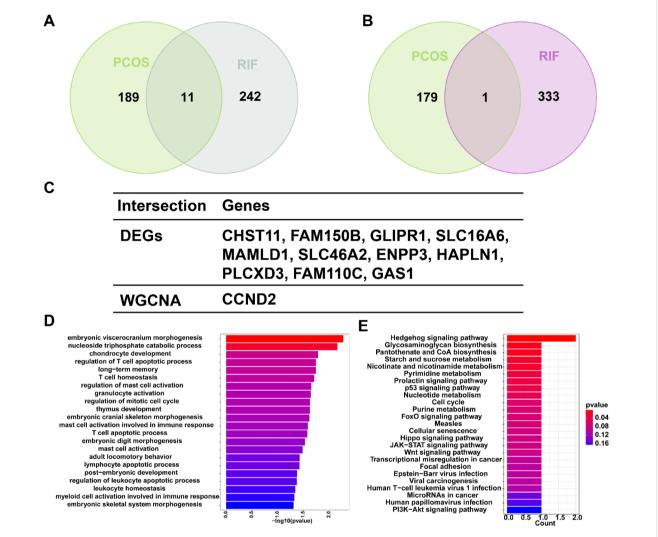
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TABLE 1 Details of GEO datasets used in the study.

Diseases	GEO Series	GPL Platform	Sample Size		Group
			Control	Case	
PCOS	GSE10946	GPL570	11	12	Discovery cohort
	GSE34526	GPL570	3	7	Discovery cohort
	GSE80432	GPL6244	4	4	Validation cohort
RIF	GSE103465	GPL16043	3	3	Discovery cohort
	GSE111974	GPL17077	24	24	Discovery cohort
	GSE26787	GPL570	5	5	Validation cohort

PCOS, Polycystic Ovarian Syndrome; RIF, Recurrent Implantation Failure; GEO, Gene Expression Omnibus. Regarding GSE10946, we used both lean and obese non-PCOS samples as controls to avoid bias and reflect real-world metabolic diversity.

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## FIGURE 4

Shared gene signatures and functional enrichment between PCOS and RIF. (A) The shared DEGs between PCOS and RIF by overlapping the DEGs of them. (B) The shared genes between the WGCNA modules of PCOS and RIF by overlapping them. (C) Table showed details of the shared genes. (D, E) Shared genes were represented by bar plots displaying GO and KEGG enrichment. CTRL, Control; RIF, Recurrent Implantation Failure; GO, Gene Ontology; KEGG, Kyoto Encyclopedia of Genes and Genomes.