Figure 1. TNF-α production by pathological B cells in women with PCOS.

A, Serum TNF-α concentration

|       | Control | PCOS  | PCOS  |
|-------|---------|-------|-------|
|       | 23.59   | 45.23 | 47.87 |
|       | 28.76   | 53.24 | 39.66 |
|       | 34.3    | 45.93 | 29.92 |
|       | 25.61   | 26.8  | 35.61 |
|       | 38.01   | 42.19 | 54.44 |
|       | 15.98   | 15.76 | 52.73 |
|       | 33.36   | 42.19 | 27.59 |
|       | 37.83   | 57.33 | 17.08 |
|       | 35.05   | 46.29 | 47.87 |
|       | 41.65   | 23.18 | 48.04 |
|       | 20.29   | 59.51 | 38.93 |
|       | 49.61   | 41.83 | 43.45 |
|       | 21.54   | 26.00 | /     |

B, TNF-α expression in CD19+ B cells was determined by western blot

C, Percentage of TNF-α+ cells in CD19+ B cells

|       | Control | PCOS  | PCOS  |
|-------|---------|-------|-------|
|       | 4.9     | 13.6  | 14.6  |
|       | 7.3     | 9.5   | 16    |
|       | 10.5    | 8.8   | 13    |
|       | 6.1     | 15.8  | 12    |
|       | 5.6     | 11.9  | 8.7   |
|       | 5.2     | 18.8  | 14.3  |
D, TNF-α in the culture supernatants (sup.)

|       | Control | PCOS  |
|-------|---------|-------|
| 105.16| 206.77  |
| 171.16| 297.72  |
| 163.26| 292.73  |
| 152.41| /       |

E, the correlation between the percentage of TNF-α⁺ cells in CD19⁺ B cells and serum AMH levels by Pearson’s correlation analyses.

| TNF-α⁺ cells in CD19⁺ B cells (%) | 4.9 | 7.3 | 10.5 | 6.1 | 5.6 | 5.2 | 7.5 | 13.6 | 9.5 | / |
|-----------------------------------|-----|-----|------|-----|-----|-----|-----|------|-----|---|
| AMH                               | 1.99| 10.51| 3.34 | 4.16| 10.8| 1.74| 1.78| 6.56 | 22.73| / |
| TNF-α⁺ cells in CD19⁺ B cells (%) | 8.8 | 15.8| 11.9 | 18.8| 11.7| 16  | 13  | 8.7  | 17.2 | 7.9 |
| AMH                               | 8.03| 15.61| 7.77 | 15.49| 10.46| 9.94| 9.71| 5.67 | 12.82| 7.41 |

F, IL-6, IL-8, IFN-γ, TNF-α, CCL2 and CCL20 mRNAs expression levels in granulosa cells were measured by qPCR.

|       | IL-6 | IL-8 | IFN-γ | TNF-α | CCL2 | CCL20 |
|-------|------|------|-------|-------|------|-------|
| Control TNF-α Control TNF-α Control TNF-α Control TNF-α Control TNF-α Control TNF-α Control TNF-α | 1    | 12.87| 1     | 43.28 | 1    | 0.45  | 1    | 1.31  | 1    | 23.35 | 1 | 13.13 |
| 2.23  | 9.35 | 1.53 | 35.26 | 1.05  | 3.46 | 0.61  | 3.57 | 0.55  | 6.06 | 0.69  | 6.66 |
| 1     | 3.46 | 1    | 23.02 | 1     | 1.38 | 1     | 1.43 | 1     | 3.69 | 1     | 2.81 |
| 3.81  | 5.11 | 1.46 | 26.72 | 1.43  | 1    | 1.08  | 0.42 | 1.58  | 1.34 | 1.56  | 1.59 |
| 1     | 6.66 | 1    | 35.63 | 1     | 0.46 | 1     | 1.24 | 1     | 6.59 | 1     | 6.54 |
| 1     | 5.56 | 1    | 16.51 | 1     | 0.18 | 1     | 1.9  | 1     | 3.96 | 1     | 4.36 |
| 1.75  | 28.44| 0.71 | 36.38 | 2.23  | 1.32 | 1.78  | 1.28 | 1.11  | 5.66 | 1.08  | 5.74 |