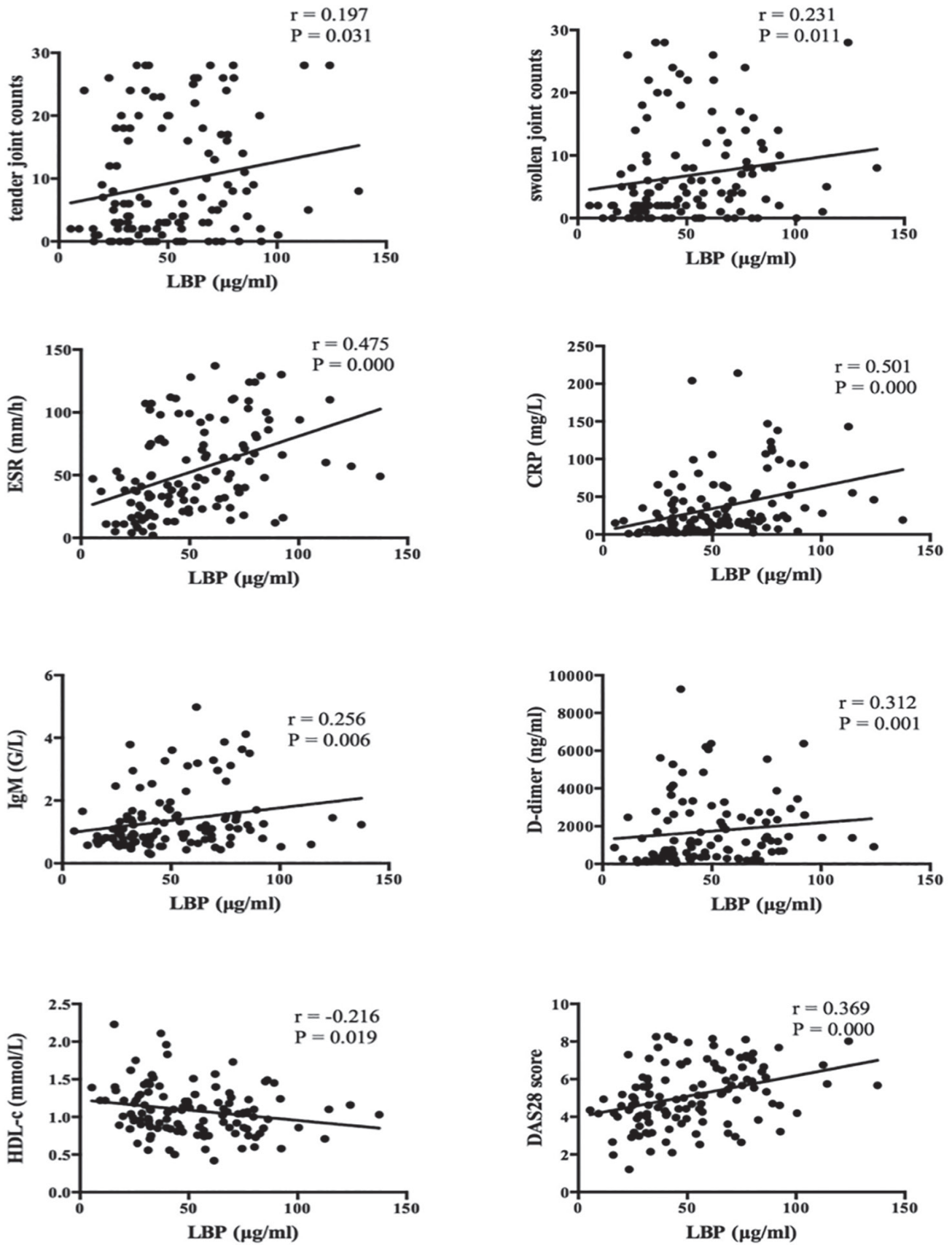
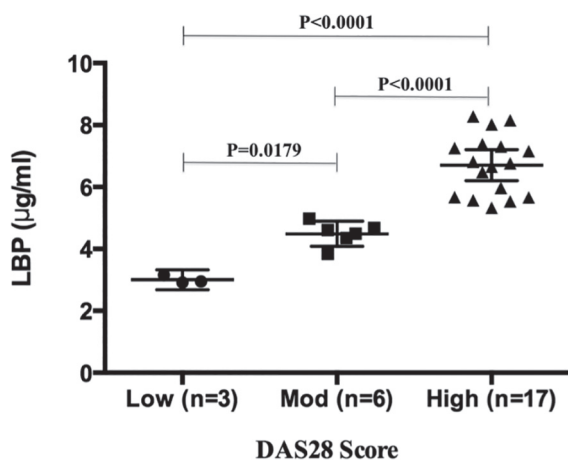


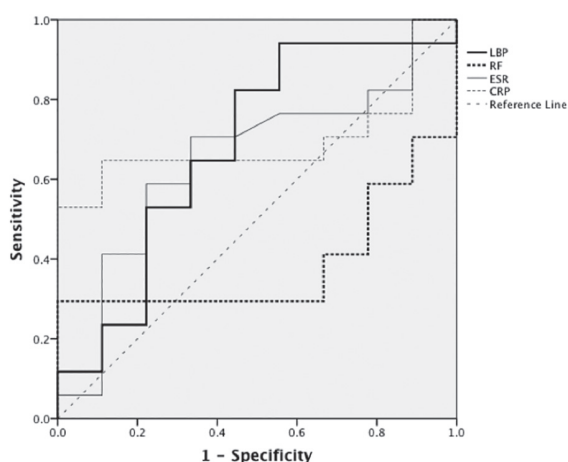
Supplementary material



Supplementary Fig. 1. The significant correlations between serum LBP and clinical features.



Supplementary Fig. 2. Serum LBP concentrations in different disease activity groups of RA patients with infection.



Supplementary Fig. 3. ROC curves of LBP, CRP, ESR and RF for identification of high disease activity in RA patients with infection.

Supplementary Table I, Part 1.

Correlation analysis of CRP levels serum with clinical data in patients negative in both CRP and ESR.

| Parameter | Spearman correlation coefficient | <i>p</i> -value |
|----------------------|----------------------------------|-----------------|
| D-dimer | 0.236 | 0.316 |
| IgA | 0.235 | 0.305 |
| IgG | 0.034 | 0.884 |
| IgM | -0.006 | 0.978 |
| C3 | 0.229 | 0.319 |
| C4 | -0.254 | 0.266 |
| Tender joint counts | 0.184 | 0.425 |
| Swollen joint counts | 0.082 | 0.725 |
| DAS28 | 0.118 | 0.610 |

Supplementary Table I, Part 2.

Correlation analysis of ESR levels serum with clinical data in patients negative in both CRP and ESR.

| Parameter | Spearman correlation coefficient | <i>p</i> -value |
|----------------------|----------------------------------|-----------------|
| D-dimer | -0.005 | 0.984 |
| IgA | 0.344 | 0.126 |
| IgG | 0.308 | 0.175 |
| IgM | 0.213 | 0.355 |
| C3 | 0.217 | 0.344 |
| C4 | 0.049 | 0.833 |
| Tender joint counts | -0.013 | 0.954 |
| Swollen joint counts | 0.249 | 0.264 |
| DAS28 | 0.238 | 0.287 |

Supplementary Table II.

Correlation analysis of LBP levels serum with clinical data in patients negative in both CRP and ESR.

| Parameter | Spearman correlation coefficient | <i>p</i> -value |
|----------------------|----------------------------------|-----------------|
| D-dimer | 0.267 | 0.255 |
| IgA | 0.290 | 0.203 |
| IgG | 0.070 | 0.763 |
| IgM | 0.297 | 0.190 |
| C3 | -0.091 | 0.695 |
| C4 | -0.113 | 0.625 |
| Tender joint counts | -0.027 | 0.904 |
| Swollen joint counts | 0.479 | 0.024* |
| DAS28 | 0.169 | 0.453 |

p*<0.05; *p*<0.01; ****p*<0.001**Supplementary Table III.**

Distribution of the infections in RA patients.

| Diagnosis | Case number | LBP levels | <i>p</i> -value |
|-----------------------------|-------------|---------------|-----------------|
| Upper respiratory infection | 7 | 56.32 ± 29.55 | 0.426 |
| Acute bronchitis | 4 | 54.98 ± 27.77 | 0.612 |
| Pulmonary infection | 12 | 62.04 ± 32.35 | 0.083 |
| Tuberculosis | 3 | 43.17 ± 32.55 | 0.684 |
| Other bacteria | 9 | 68.33 ± 31.56 | 0.023* |
| Urinary infection | 1 | 52.14 | 0.889 |
| Bacteremia | 2 | 99.29 ± 35.11 | 0.004** |
| Patients without infections | 94 | 48.84 ± 23.48 | - |

p*<0.05; *p*<0.01; ****p*<0.001. *p*-value indicates the significance of serum LBP level elevation compared with that of RA patients without infection.**Supplementary Table IV.**

Comparison of LBP, CRP and ESR in RA patients with and without infections.

| | Infection (26) | Non-infection (94) | <i>p</i> -value |
|-----|----------------|--------------------|-----------------|
| LBP | 61.90 ± 30.73 | 48.84 ± 23.48 | 0.052 |
| CRP | 48.70 ± 47.38 | 31.03 ± 38.88 | 0.053 |
| ESR | 63.27 ± 35.00 | 50.52 ± 39.20 | 0.108 |