

**Table 1. Types and basic data of the included papers in this systematic review**

| Serial | Authors         | Country | Year | Type of the study                  |
|--------|-----------------|---------|------|------------------------------------|
| 1      | Parsi et al     | USA     | 2008 | Original article                   |
| 2      | Khalifa et al   | Egypt   | 2013 | Original article                   |
| 3      | Feng et al      | Taiwan  | 2014 | Original article                   |
| 4      | Wu et al        | Taiwan  | 2015 | Original article                   |
| 5      | Abulseoud et al | Egypt   | 2016 | Original article                   |
| 6      | Lee et al       | Korea   | 2016 | Original article                   |
| 7      | Thanellas et al | Greece  | 2011 | Conference abstract                |
| 8      | Riggio et al    | Italy   | 2009 | Response to:<br>Parsi et al., 2008 |
| 9      | Kallwitz        | USA     | 2008 | Editorial to:<br>Parsi et al, 2008 |
| 10     | Deveret al      | USA     | 2015 | Review article                     |
| 11     | Shizuma         | Japan   | 2016 | Review article                     |
| 12     | Riggio et al    | Italy   | 2009 | Systematic review                  |

**Table 2. Original articles used in this systematic review**

| Serial | Authors               | Country            | No. of cases | No. of ascetic samples | Cut off value | Sensitivity | Specificity | Level of evidence |
|--------|-----------------------|--------------------|--------------|------------------------|---------------|-------------|-------------|-------------------|
| 1      | Parsi et al,2008      | USA                | 148          | 218                    | 242 ng/ml     | 95.5%       | 97%         | III               |
| 2      | Khalifa et al,2013    | Egypt              | 70           | 70                     | 270 ng/ml     | 96%         | 95%         | III               |
| 3      | Feng et al,2014       | Taiwan (and China) | 7            | 8                      | -             | -           | -           | IV                |
| 4      | Wu et al., 2015       | Taiwan             | 22           | 22                     | -             | -           | -           | III               |
| 5      | Abulseoud et al, 2016 | Egypt              | 60           | 60                     | 255 ng/ml     | 100%        | 88.9%       | III               |
| 6      | Lee et al,2016        | Korea              | 102          | 102                    | 63 ng/ml      | 91.7%       | 78.2%       | III               |

**Table 3. Meta-analysis of accuracy and cut-off level of AFLAC in the 4 papers with ROC curve analysis (No.1,2,5,6).**

| Article        | Parsi et al | Khalifa et al | Abulseoud et al | Lee et al | Meta-analysis |
|----------------|-------------|---------------|-----------------|-----------|---------------|
| No. of samples | 218         | 70            | 60              | 102       | 450           |

|                           |        |        |         |        |        |
|---------------------------|--------|--------|---------|--------|--------|
| Cut off value             | 242    | 270    | 255     | 63     | 207.52 |
| True positive             | 21     | 48     | 30      | 22     | 121    |
| True negative             | 187    | 19     | 26.67   | 61     | 293.67 |
| False positive            | 6      | 1      | 3.33    | 17     | 27.33  |
| False negative            | 1      | 2      | 0       | 2      | 5      |
| Sensitivity               | 95.45% | 96.00% | 100.00% | 91.67% | 96.03% |
| Specificity               | 96.89% | 95.00% | 88.90%  | 78.21% | 91.49% |
| Positive predictive value | 77.78% | 97.96% | 90.01%  | 56.41% | 81.57% |
| Negative predictive value | 99.47% | 90.48% | 100.00% | 96.83% | 98.33% |
| Accuracy                  | 96.17% | 95.50% | 94.45%  | 84.94% | 93.76% |
| AUC                       | 0.98   | 0.995  | 0.98    | 0.898  | 0.964  |