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| Title        | Immunoreactivity of TTF-1, GATA-3, CEA, and p16/Ki67 cocktail in Cellprep®-processed control samples: Comparison of long-term storage in vials and slides |
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**TABLE 1** The scoring of immunoreactivity for TTF-1, GATA3, CEA, and p16/Ki67 cocktail markers

| Primary antibody  |                        | Criteria            |           |                 |  |  |       |
|-------------------|------------------------|---------------------|-----------|-----------------|--|--|-------|
| TTF-1             | PS                     | 0; no cells stained | 1; 1/100* | 2; 1/10*        | 3; 1/3*  | 4; 2/3*  | 5; 1* |
| GATA-3            | total score<br>(PS+IS) |                     |           |                 |  |  |       |
| CEA               | IS                     | 0; no cells stained | 1; weak   | 2; intermediate | 3; strong  |  |       |
| p16/Ki67 cocktail |                        | (-)**               | weak***   | (+)*            | weakly stainability of p16 or/and Ki67 within the same cell; | clear stainability of p16 and Ki67 within the same cell. |       |

PS, Proportion Score; IS, Intensity Score; \*ratio to all cells in the slide glass; \*\*not expressing p16 and/or Ki67 within the same cell; \*\*\*weakly stainability of p16 or/and Ki67 within the same cell; \*\*\*\*clear stainability of p16 and Ki67 within the same cell.

**TABLE 2** The concordance of immunoreactivity in the second and third ICC scores compared with the first ICC score by weighted kappa statistics

| Primary antibody | n  | first score vs second score |              | first score vs third score |          |
|------------------|----|-----------------------------|--------------|----------------------------|----------|
|                  |    | CP vial                     | CP slide     | CP vial                    | CP slide |
| TTF-1            | 20 | <b>0.95*</b>                | 0.77         | <b>0.98*</b>               | 0.58     |
| GATA-3           | 13 | <b>1.00*</b>                | 0.33         | 0.78                       | 0.09     |
| CEA              | 23 | <b>0.98*</b>                | 0.42         | <b>0.95*</b>               | 0.19     |
| p16/Ki67         | 20 | <b>1.00*</b>                | <b>0.95*</b> | <b>0.90*</b>               | 0.71     |

ICC, immunocytochemistry; CP, Cellprep®; \* $>0.8$ , means almost perfect agreement.