

292 **Table 1 Comparison of 2D measurements for previous studies and 3D measurements for this study**

| Measurement method      |                         | Length (mm) |          |          | Width (mm)                                                                       |                                                                                |                    | Height (mm)                                                       |                                                                 |          |
|-------------------------|-------------------------|-------------|----------|----------|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------|--------------------|-------------------------------------------------------------------|-----------------------------------------------------------------|----------|
|                         |                         | M           | F        | <i>p</i> | M                                                                                | F                                                                              | <i>p</i>           | M                                                                 | F                                                               | <i>p</i> |
| Ameye SA's study[9]     | 2D CT                   | 41.5±3.8    | 41.2±4.6 | NA       | Anterior:<br>11.6±1.4<br>Posterior:<br>16.4±3.9                                  | Anterior:<br>11.2±2.0<br>Posterior:<br>17.3±3.5                                | NA                 | 30.2±6.0                                                          | 29.7±5.2                                                        | NA       |
| Chan MA's study[13]     | 2D CT                   | 37.6±3.4    | 37.0±4.1 | 0.445    | 11.4±1.9                                                                         | 10.1±1.9                                                                       | 0.003              | NA                                                                | NA                                                              | NA       |
| ABDALLA MA's study [14] | 2D CT                   | 21.3±5.0    | 23.5±5.1 | NA       | 10.3±3.0                                                                         | 8.6±3.0                                                                        | NA                 | 21.3±3.6                                                          | 20.3±3.6                                                        | NA       |
| Current study           | 3D and section analysis | 40.1±5.0    | 41.3±5.0 | 0.140    | Anterior:<br>9.9±2.4<br>Posterior:<br>11.6±2.4<br>W <sub>80</sub> :*<br>11.8±2.7 | Anterior:<br>8.7±1.9<br>Posterior:<br>9.7±2.0<br>W <sub>80</sub> :<br>10.0±2.1 | 0.000<br><br>0.000 | H <sub>40</sub> :**<br>18.4±3.5<br>H <sub>avg</sub> :<br>16.2±4.2 | H <sub>40</sub> :<br>18.2±3.4<br>H <sub>avg</sub> :<br>15.4±3.9 | 0.364    |

293 \* The ES width for Chan MA's study is defined as the largest width of the ethmoid sinus in the axial CT image. This position is about W<sub>80</sub> for  
 294 this study.

295 \*\* The largest ES height is about H<sub>40</sub> for this study.

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