

## Supplementary File

**Table S1.** Search queries.

| Databases and registries | Search algorithm   | Results |
|--------------------------|--|---------|
| PubMed                   | ("surgery, computer-assisted"[MeSH Terms]) OR ("guided surgery") OR ("navigation surgery") OR ("navigation system") OR ("navigation systems") OR ("real-time system") OR ("real-time navigation") OR ("dynamic guided surgery") OR ("dynamic computer aided") OR ("dynamic computer assisted") OR ("computer-aided surgery") OR ("freehand") AND ("zygomatic implant") OR ("zygomatic implants") OR ("zygoma implant") OR ("zygoma implants") OR ("zygomatic fixture") AND ("accuracy")  | 33      |
| Scopus                   | ( TITLE-ABS-KEY ( "computer-assisted surgery" ) OR TITLE-ABS-KEY ( "guided surgery" ) OR TITLE-ABS-KEY ( "navigation surgery" ) OR TITLE-ABS-KEY ( "navigation system" ) OR TITLE-ABS-KEY ( "navigation systems" ) OR TITLE-ABS-KEY ( "real-time system" ) OR TITLE-ABS-KEY ( "real-time navigation" ) OR TITLE-ABS-KEY ( "dynamic guided surgery" ) OR TITLE-ABS-KEY ( "dynamic computer aided" ) OR TITLE-ABS-KEY ( "dynamic computer assisted" ) OR TITLE-ABS-KEY ( "computer-aided surgery" ) OR TITLE-ABS-KEY ( "freehand" ) ) AND ( TITLE-ABS-KEY ( "zygomatic implant" ) OR TITLE-ABS-KEY ( "zygomatic implants" ) OR TITLE-ABS-KEY ( "zygoma implant" ) OR TITLE-ABS-KEY ( "zygoma implants" ) OR TITLE-ABS-KEY ( "zygomatic fixture" ) ) AND ( TITLE-ABS-KEY ( "accuracy" ) ) | 25      |
| Web of Science           | (((((ALL=("computer-assisted surgery")) OR ALL=("guided surgery")) OR ALL=("navigation surgery")) OR ALL=("navigation system")) OR ALL=("navigation systems")) OR ALL=("real-time system")) OR ALL=("real-time navigation")) OR ALL=("dynamic guided surgery")) OR ALL=("dynamic computer aided")) OR ALL=("dynamic computer assisted")) OR ALL=("computer-aided surgery")) OR ALL=("freehand")) AND ALL=("zygomatic implant")) OR ALL=("zygomatic implants")) OR ALL=("zygoma implant")) OR ALL=("zygoma implants")) AND ALL=("accuracy")   | 42      |
| Cochranre Library        | ("computer-assisted surgery" OR "guided surgery" OR "navigation surgery" OR "navigation system" OR "navigation systems" OR "real-time system" OR "real-time navigation" OR "dynamic guided surgery" OR "dynamic computer aided" OR "dynamic computer assisted" OR "computer-aided surgery" OR "freehand") AND ("zygomatic implant" OR "zygomatic implants" OR "zygoma implant" OR "zygoma implants" OR "zygomatic fixture") AND ("accuracy")   | 5       |

**Table S2.** Characteristics of the excluded studies

| Reference | Excluded by wrong |
|-----------|-------------------|
|-----------|-------------------|

|                                   | <b>P</b> | <b>I</b> | <b>C</b> | <b>O</b> | <b>T</b> |
|-----------------------------------|----------|----------|----------|----------|----------|
| Cao et al. 2019 [1]               | ●        | ○        | ○        | ○        | ●        |
| Rigo et al. 2021 [2]              | ●        | ○        | ○        | ○        | ●        |
| Stefanelli et al. 2020 [3]        | ●        | ●        | ○        | ○        | ○        |
| Stefanelli et al. 2020 [4]        | ●        | ●        | ○        | ○        | ○        |
| Qin et al. 2019 [5]               | ○        | ●        | ○        | ●        | ○        |
| Yildirim et al. 2017 [6]          | ●        | ○        | ●        | ○        | ○        |
| Li et al. 2020 [7]                | ○        | ●        | ○        | ●        | ○        |
| Pena 2008 [8]                     | ○        | ●        | ○        | ●        | ○        |
| Fitzwater et al. 2011 [9]         | ●        | ○        | ●        | ○        | ○        |
| Hung et al. 2018 [10]             | ○        | ●        | ○        | ●        | ○        |
| Stefanelli 2020 [11]              | ●        | ●        | ○        | ○        | ○        |
| Sverzut et al. 2022 [12]          | ○        | ●        | ○        | ○        | ○        |
| Rubio 2008 [13]                   | ●        | ●        | ●        | ●        | ○        |
| Qin et al. 2019 [14]              | ○        | ●        | ○        | ○        | ○        |
| Fernández-Olarte et al. 2021 [15] | ○        | ●        | ○        | ○        | ○        |
| Clinical protocol 1 [16]          | ●        | ○        | ○        | ●        | ○        |
| Clinical protocol 2 [17]          | ●        | ○        | ○        | ●        | ○        |
| Clinical protocol 3 [18]          | ●        | ○        | ○        | ●        | ○        |
| Pellegrino et al. 2020 [19]       | ○        | ○        | ○        | ●        | ○        |
| Chow et al. 2006 [20]             | ○        | ○        | ○        | ●        | ○        |

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|---|---|---|---|---|---|
| Schirotli et al. 2011 [21]  | ○ | ○ | ○ | ● | ○ |
| Zhou et al. 2020 [22]*  | ○ | ○ | ○ | ● | ○ |
| Hung et al. 2017 [23]*  | ○ | ○ | ○ | ● | ○ |
| Tao et al. 2020 [24]*   | ○ | ○ | ○ | ● | ○ |
| Wang et. al 2022 [25]*  | ○ | ○ | ○ | ● | ○ |
| Shen et al. 2021[26] *  | ○ | ○ | ○ | ● | ○ |
| * Fives studies from the same team (Shanghai Jiaotong University) were excluded due to the date were collected in Wu's publication. |   |   |   |   |   |

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