**Table S1. Excluded studies with reasons**

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| --- | --- |
| **Study, Year** | **Reasons for excluding** |
| Aggarwal et al. 2009 | supplemental buccal-plus-lingual infiltration after IANB |
| Aggarwal et al. 2010 | compare the efficacy of IANB with buccal-plus-lingual infiltration |
| Arali et al. 2015 | compare the efficacy of IANB with BI |
| Chompu-Inwai et al. 2018 | supplemental intraligamentary anesthesia after IANB |
| Crump et al. 2022 | supplemental intraligamentary anesthesia for palatal infiltration |
| Dianat et al. 2020 | compare the efficacy of IANB with IANB plus BI |
| Dou et al. 2013 | supplemental BI and buccal-plus-lingual infiltration after IANB |
| Dumbrigue et al. 1997 | compare the efficacy of IANB with intraligamentary anesthesia |
| Fan et al. 2009 | compare the efficacy of IANB plus BI with IANB plus intraligamentary anesthesia |
| Helmy et al. 2022 | compare the efficacy of IANB with CC-ILA |
| Kämmerer et al. 2018 | compare the efficacy of IANB with intraligamentary anesthesia |
| Kanaa et al. 2009 | compare the efficacy of IANB with IANB plus BI |
| Matthews et al. 2009 | supplemental infiltration anesthesia after IANB |
| Oulis 1996 | compare the efficacy of IANB with infiltration anesthesia |
| Parirokh et al. 2014 | compare the efficacy of IANB with IANB + BI + intraligamentary anesthesia |
| Runnacles et al. 2015 | no crucial data |
| Saber et al. 2022 | compare the efficacy among IANB, IANB plus BI and IANB plus infiltration anesthesia |
| Singhal et al. 2022 | supplemental BI and intraligamentary anesthesia after IANB |
| Tekin et al. 2012 | compare the efficacy of IANB with intraligamentary anesthesia |
| Thiem et al. 2018 | compare the efficacy of IANB with infiltration anesthesia |
| Yilmaz et al. 2018 | compare the efficacy of IANB with BI |
| Yılmaz et al. 2023 | compare the efficacy of IANB with intraligamentary anesthesia |
| Youssef et al. 2021 | compare the efficacy of IANB with intraligamentary anesthesia |
| Zargar et al. 2022 | supplemental BI and intraligamentary anesthesia after IANB |

IANB: inferior alveolar nerve block; BI: buccal infiltration; CC-ILA: Computer-controlled Intraligamentary anesthesia (CC-ILA)

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