

## SUPPLEMENTARY MATERIAL

### **The effect of azelastine on basal forced expiratory volume in one second in asthmatics: a systematic review and meta-analysis**

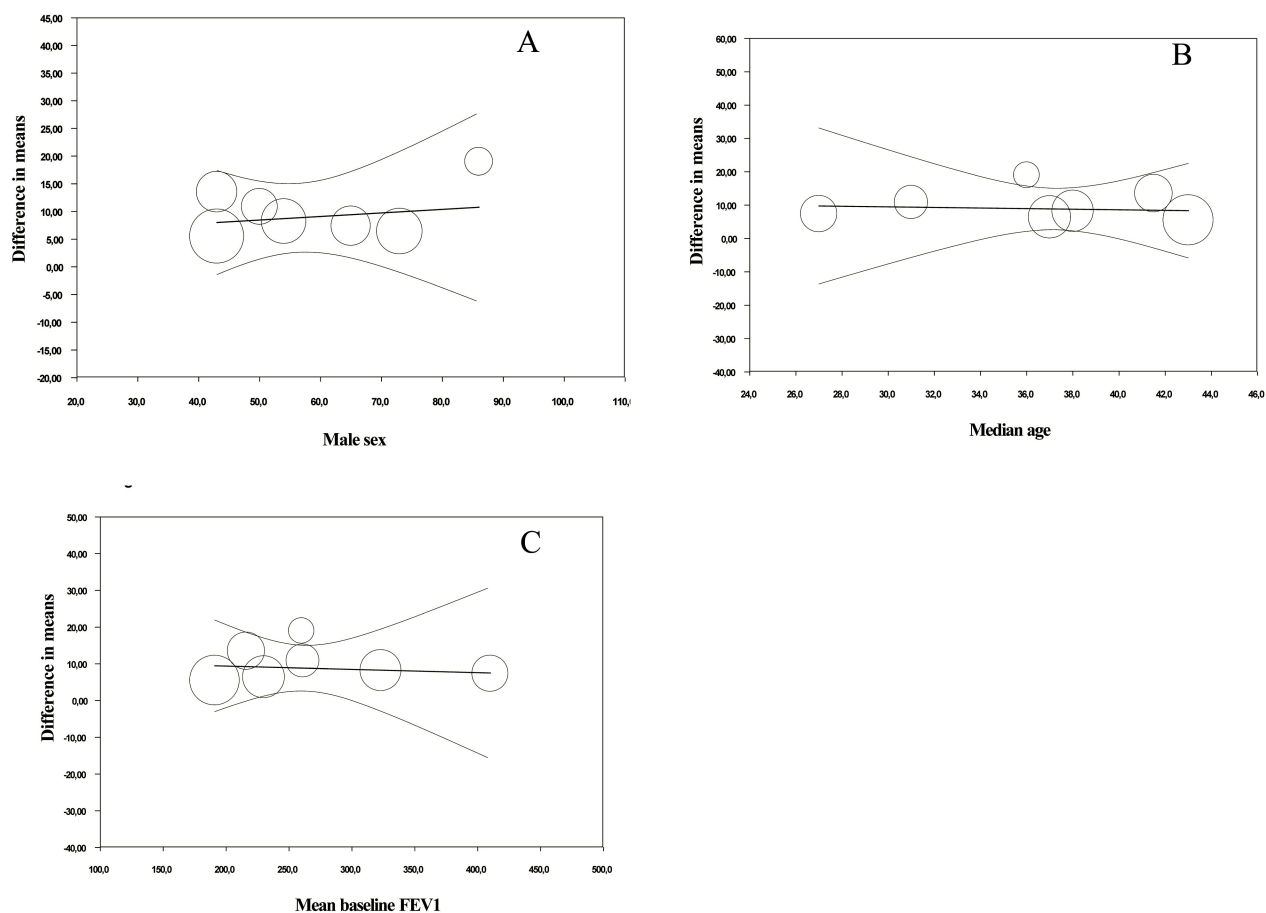
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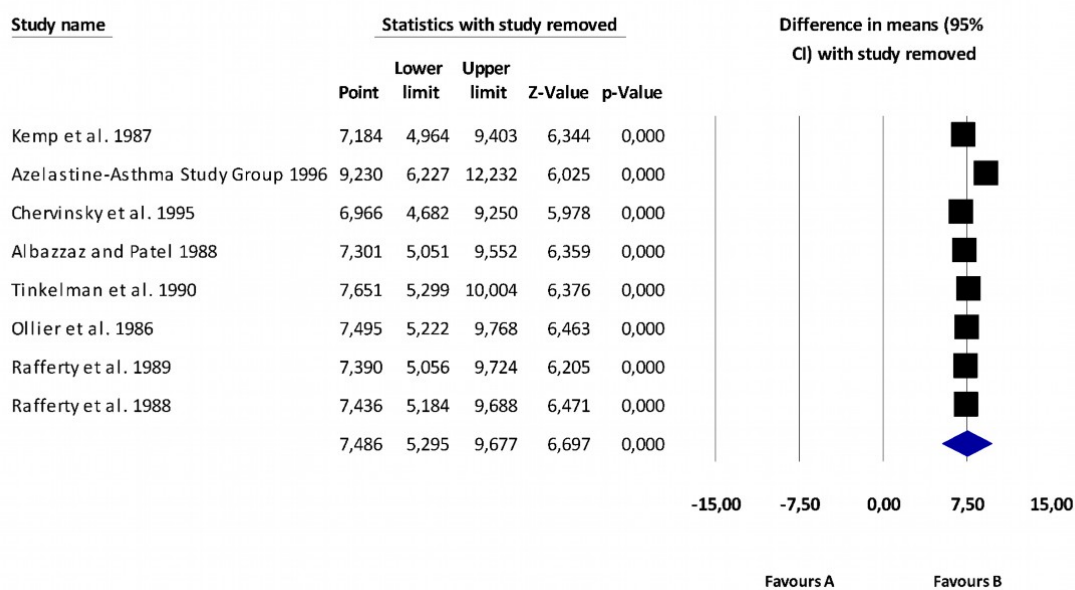
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**Key words:** TAS2R, azelastine, asthma, FEV1, bronchodilation.



**Supplementary Figure 1. Meta-regression analysis of the mean difference in FEV1 by (A) sex, (B) median age, and (C) baseline FEV1.**



**Supplementary Figure 2. Leave-one-out sensitivity analysis.**

**Supplementary Table 1. Summary of the sensitivity analysis.**

| Criteria          | Subgroups          | Number of studies | Results         |             |             |       |
|-------------------|--------------------|-------------------|-----------------|-------------|-------------|-------|
|                   |                    |                   | Mean difference | Lower limit | Upper limit | p     |
| Model             | Fixed              | 8                 | 7.486           | 5.295       | 9.677       | 0.000 |
|                   | Random             | 8                 | 7.571           | 5.315       | 9.827       | 0.000 |
| RoB assessment    | Low RoB            | 4                 | 8.533           | 4.924       | 12.142      | 0.000 |
|                   | High RoB           | 4                 | 7.458           | 3.494       | 11.421      | 0.000 |
| Azelastine dosage | 4 mg               | 5                 | 7.090           | 4.602       | 9.578       | 0.000 |
|                   | 8.8 mg             | 2                 | 9.007           | 3.705       | 14.309      | 0.001 |
|                   | 17.6 mg            | 1                 | 8.370           | -1.090      | 17.830      | 0.083 |
| Asthma stage      | Mild               | 3                 | 8.730           | 2.977       | 14.484      | 0.003 |
|                   | Moderate to severe | 2                 | 9.014           | 2.491       | 15.536      | 0.007 |
|                   | Not clear          | 3                 | 7.756           | 3.874       | 11.638      | 0.000 |