**ADDITIONAL MATERIAL**

**Table S1.** Characteristics of rupatadine clinical studies included in the pooled analysis.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Study** | **Design** | **Comparator** | **No. patients** | **Primary****endpoint** | **Symptoms** | **Duration** |
| Saint-Martin *et al.* [24] | Multicentre, randomized, double-blind | RUP 10, 20mgLOR 10mgPL | 339 | mTDSS | Running noseItchy noseNasal congestionSneezingItchy eyesTearingItchy throat | 2 weeks |
| Guadaño *et al.* [26] | Multicentre, randomized, double-blind | RUP 10mgEBA 10mgPL | 250 | mTDSS | Running noseItchy noseNasal congestionSneezingItchy eyesTearingItchy throat | 2 weeks |
| Martínez-Cócera *et al*. [25] | Multicentre, randomized, double-blind | RUP 10mgCET 10mgPL | 249 | mTDSS | Running noseItchy noseNasal congestionSneezingItchy eyesTearingItchy throat | 2 weeks |
| Lukat *et al*. [23] | Multicentre, randomized, double-blind  | RUP 10mgDES 5mgPL | 356 | T7SS | Running noseItchy noseNasal congestion SneezingItchy eyesTearing Redness | 4 weeks\* |
| RD477\_21212(data on file) | Multicentre, randomizedDouble blindDose finding | RUP 10mg, 20mgPL | 60 | mTDSS | Running noseItchy noseNasal congestion SneezingItchy eyesTearingItchy throat | 2 weeks |
| RD477\_22115(data on file) | Multicentre, randomizedDouble blindDose finding | RUP 10mg, 20mgPL | 430 | mTDSS | Running noseItchy noseNasal congestionSneezingItchy eyesTearingItchy throat | 2 weeks |
| URFC98III04(data on file) | Multicentre, randomized double-blind | RUP 10mg, 20mgLOR 10mgPL | 324 | mTDSS | Running noseItchy noseNasal congestion SneezingItchy eyesTearingItchy throat | 2 weeks |

RUP, rupatadine; DES, desloratadine; PL, placebo; LOR, loratadine; EBA, ebastine; CET, cetirizine; mDTSS, mean daily total symptom score.

\* only data from the first 14 days was evaluated.

**Table S2.** Effects of rupatadine treatment on total nasal symptom (T4NSS), ocular symptom (T2OSS), and total symptom (T6SS) scores.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Placebo****(N = 332)** | **Rup 10mg****(N = 662)** | **Rup 20mg****(N = 476)** | **p-valuea** |
| **T4NSS (0-12)** |  |  |  |  |
| Day 7 |  |  |  |  |
| Mean score (SD) | 4.9 (2.9) | 3.8 (2.7)\* | 3.3 (2.5)\*‡ | <0.001 |
| % changeb (SD) | - 39.9 (57.9) | - 51.6 (48.6) | - 58.6 (30.2) |  |
| Day 14 |  |  |  |  |
| Mean score (SD) | 4.3 (3.1) | 3.3 (2.8)\* | 2.6 (2.5)\*‡ | <0.001 |
| % change (SD) | - 46.3 (70.5) | - 57.9 (51.9) | - 66.5 (30.2) |  |
| **T2OSS (0-6)** |  |  |  |  |
| Day 7 |  |  |  |  |
| Mean score (SD) | 1.8 (1.6) | 1.2 (1.4)\* | 0.95 (1.3)\* | 0.031 |
| % change (SD) | - 43.7 (8.6) | - 59.2 (14.5) | - 65.5 (29.1) |  |
| Day 14 |  |  |  |  |
| Mean score (SD) | 1.6 (1.6) | 1.0 (1.4) | 0.79 (1.2) | NS |
| % change (SD) | - 50.9 (7.9) | - 64.0 (16.4) | - 71.3 (31.8) |  |
| **T6SS (0-18)** |  |  |  |  |
| Day 7 |  |  |  |  |
| Mean score (SD) | 6.6 (4.2) | 5.0 (3.8)\* | 5.0 (3.8)\*‡ | <0.001 |
| % change (SD) | - 41.1 (50.4) | - 53.6 (30.5) | - 52.6 (2.6) |  |
| Day 14 |  |  |  |  |
| Mean score (SD) | 5.9 (4.4) | 4.4 (3.9)\* | 3.4 (3.4)\*‡ | <0.001 |
| % change (SD) | - 47.8 (60.9) | - 59.5 (31.8) | - 67.7 (2.0) |  |

NS, not significant; Rup, Rupatadine; T4NSS = Total 4 Nasal Symptom Score; T2OSS = Total 2 Ocular Symptom Score; T6SS = Total 6 Symptom Score; SD = standard deviation.

a Statistical significance was determined using the non-parametric Kruskal-Wallis test.

b% change from baseline

\* indicates *p* < 0.05 (rupatadine groups vs placebo) calculated with the Mann-Whitney test.

‡ indicates *p* < 0.05 (rupatadine 10 mg vs rupatadine 20 mg) calculated with the Mann-Whitney test.