



Correction to: Paediatric Recurrent Ear, Nose and Throat Infections and Complications: Can We Do More?

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In the original publication, there was a minor mistake in one of the figures and a number of reference citation numbers were incorrectly published. The figure and citations are corrected here:
Page 5/16—Fig. 4

The reference of Fig. 4 is Dang et al. [20] instead Parola et al. [19].

Page 5/16—Downregulation in chronic inflammatory state

The sentence “*by decreasing the levels of proinflammatory cytokines (e.g. interleukin [IL]-1b)*

in a dose-dependent manner [24]” should be referenced by Dang et al. [20] instead of [24].

Page 6/16—Fig. 5

The x axis title on the right side bar in the Fig. 5 should correspond to 10 day post infection and not 5.

Page 6/16—Downregulation in Chronic Inflammatory State

1. The sentence “and increasing the levels of anti-inflammatory cytokines (e.g. IL-10) [20], thus reducing tissue damage” should be referenced by Parola et al. [19] instead of Dang et al. [20].

The original article can be found online at <https://doi.org/10.1007/s40121-020-00289-3>.

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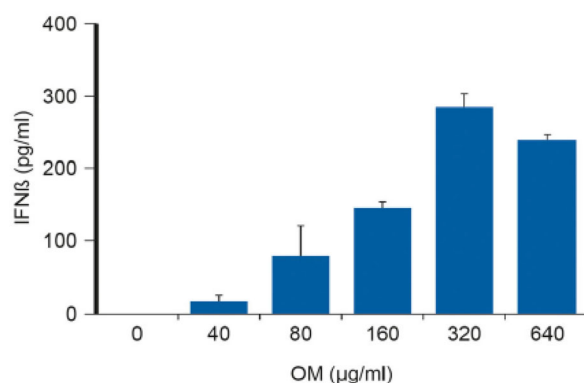


Fig. 4 Effect of OM-85 on IFN- β production at different concentrations (40 to 640 mcg/ml). The increase on IFN-beta production correspond with the increasing concentration of OM-85. *** $p \leq 0.001$. These in vitro results represent mean \pm SD ($n = 3$ technical replicates). Reference: Dang et al. [20]

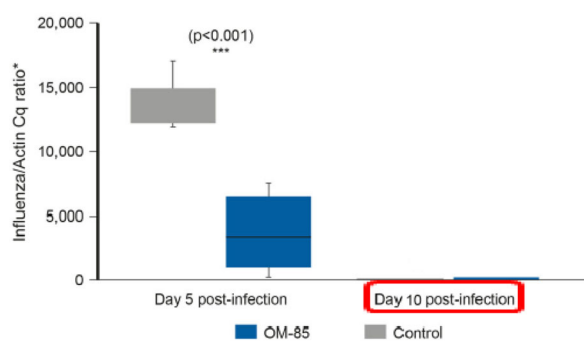


Fig. 5 Effect of OM-85 against viral infections in an in vivo infection model. The viral load in lung tissue was determined on day 5 and 10 post-influenza virus infection. Data are representative of 2–5 experiments with 5–10 mice per time point. Error bars represent minimum to maximum value range. Statistical analysis was performed by Student's t test. *** $p < 0.001$. Reference: Pasquali et al. [21]

2. In the sentence, “OM-85 may also aid maturation of the immune system in children by correcting Th1/Th2 imbalance through increasing Th1 cytokines (IFN- γ) increasing Treg cytokines (IL-10) and decreasing Th2 cytokines (IL-4, IL-5, IL-13) [18, 24].”, reference Esposito et al. 2018 [16] should be added.

Page 7/16—Efficacy of OM-85 in Children

1. The sentence, “In children affected by rRTIs in a randomised, double-blind, placebo-controlled study, the proportion of RTI-free patients (the primary endpoint) was significantly higher in the OM-85-treated group compared with the placebo group (see Fig. 7) with total infections 35% lower with OM-85 versus placebo in all children in the study and 28% lower in children aged ≤ 6 years [33].” should be referenced by Paupe. Respiration 1991.[29] instead of [33].
2. The sentence “OM-85 has also been associated with fewer RTIs than placebo (143 versus 299; difference of 52%; $p < 0.001$; primary endpoint) at 6 months in a randomised, double-blind, placebo-controlled study in girls aged 6–13 years [35]. OM-85 also reduced the number of infections in each patient from 494 to 143, with placebo reducing the number of infections from 509 to 299 ($p < 0.001$, for both comparisons) [35]. There were fewer infections at each month with OM-85 compared with placebo ($p < 0.05$, at months 2, 3, 4 and 6) [35]. OM-85 has also been reported to reduce antibiotic use, time to cure and school absenteeism; see Fig. 8 [35].” Should be referenced by Jara-Perez et al. [31] instead of [35].
3. The sentences “OM-85 was also shown to significantly reduce the number and duration of acute RTIs (primary endpoint), with 131 acute RTIs in paediatric patients who received OM-85 compared with 224 in those who received placebo in a randomised, double-blind, placebo-controlled study [36]”. And “The mean RTIs per patient were significantly lower with OM-85 at 12 months: 5.0 vs. 8.0 ($p < 0.001$), 38% lower (all patients) and 4.9 vs. 8.3 ($p < 0.01$), 41% lower (patients aged under 6 years). The total duration of acute RTIs was significantly lower with OM-85 compared with placebo: median 30.5 vs. 55.0 days ($p < 0.001$), 45% lower (all patients). A higher proportion of children (57% higher;

$p < 0.001$) without recurrences (fewer than six acute RTIs) and less antibiotic consumption (44% less; $p < 0.001$) was also reported with OM-85 [36]". Should be referenced by Gutierrez-Tarango et al. [32] instead of [36].

Page 8/16—Efficacy of OM-85 in Children

1. The sentence, "In the meta-analysis published by Schaad, a 35.5% decrease in the overall mean number of paediatric acute RTIs was demonstrated with OM-85 compared with placebo [37]." Should be referenced by Schaad et al. 2010 [33] instead of [37].
2. The sentence "This was confirmed in 2012 in an updated meta-analysis in 852 children performed by the Cochrane collaboration group in which the immunomodulatory OM-85 was shown to significantly reduce total acute RTIs by 35.9% [38]." should be referenced by De-Rio-Navarro et al. 2012 [34] instead of [38].

Page 9/16—Concomitant Use of OM-85 and Inactivated Influenza Vaccine /OM-85 and Virus-Induced Wheezing

3. "Follow-up for 14 days after vaccination with IIV given with or without OM-85 showed that OM-85 administered with IIV was well tolerated in the short term [39]." Should be referenced by Esposito et al. 2015 [35] instead of [39].
4. "The impact of treatment observed after 3 months was maintained for 12 months after the prescription, which shows OM-85 prevents wheezing attacks in young children [40]." should be referenced by Razi et al. 2010 [36] instead of [40].

Page 10/16—Recurrent Acute Otitis Media

1. "Although only a small number of cases of otitis media were reported in the children in two randomised, placebo-controlled studies (8/99 and 25/100 [35] and 3/26 and 14/28 [36] in the OM-85 and placebo groups, respectively),..." should be referenced by Jara-Perez et al. 2000 [31] and Gutierrez-Tarango et al. 2001 [32] respectively, instead of [35] and [36]

Page 11/16—Chronic Rhinosinusitis / Acute Tonsillitis

1. "In a randomised, double-blind, placebo-controlled trial including 55 children aged 4–12 years with acute exacerbation of CRS, OM-85 significantly decreased the number (by 65%) and the total duration (by 64%) of acute episodes after 6 months compared with placebo [27]." Should be referenced by Zagar 1988 [25] instead of [27].
2. "After a median of 9 months' follow-up, no tonsillectomy was required in [50% of treated patients [47]." Should be referenced by Bitar 2013 [44] instead of [47].
3. "A total of 75.6% patients treated and followed up responded to treatment [total response (no new episodes or recurrent tonsillitis), 51.2%; partial response (reduced re-exacerbation), 24.4%]" the "]" at the end of the sentence should be removed.

Page 12/16—Safety and Tolerability of OM-85 / Discussions and conclusions

1. "OM-85 was also well tolerated when administered in combination with IIV, did not interfere with antibody titres of vaccine and had no observed effect on humoral immunity [39]." Should be referenced by references [35, 38, 39] instead of [39] only.
2. "Meta-analysis of studies with available databases indicate that immunomodulators are not very effective in the prevention of an occasional acute RTI but are in the prevention of recurrent infection [37, 38, 46]." References should be [33, 34, 46] instead of [37, 38, 46].

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