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## Reply: Treatment with intravenous iron in postpartum anaemia

We thank Dr. Lim and colleagues for their thoughtful letter. We agree postpartum mental health is an extremely important topic that needs attention. Optimal diagnosis and treatment of iron deficiency after childbirth is certainly a significant aspect of women's overall health and wellbeing.

Low hemoglobin level was chosen as the inclusion criterion in the present study, since diagnosis of postpartum anemia still primarily depends on this parameter worldwide [1]. We agree information on other laboratory values, such as ferritin levels at inclusion, would be important to better interpret the results of our study. We are currently analyzing these data. In terms of proportions of women with baseline ferritin levels < 15 ng/mL, these did not differ significantly between groups: 28% in the ferric carboxymaltose, 33% in the ferric derisomaltose, and 33% in ferrous sulphate group (p = 0.66). Analyzing participants with low baseline ferritin levels separately is certainly a valid idea for future research, but would decrease our sample size even further. As Lim et al. rightfully pointed out, our study may have already been underpowered to detect small differences in EPDS associated with different iron treatments. However, given the very small differences in EPDS scores between groups, it is unlikely that these differences would be statistically significant even with a larger sample size.

The EPDS may certainly not be the best tool to assess all potential consequences of iron deficiency in the postnatal period. Despite this, we chose to use this questionnaire as it is currently the most widely employed method for postpartum depression screening in the clinics [2]. Although other scales and indexes may yield better information on symptoms such as mental or physical fatigue associated with iron deficiency, none of them has been adequately studied in postpartum women yet [3]. We do not currently have a tool specifically designed and validated for assessing women's overall health in the postpartum period. Such tool would certainly be very valuable also for comparing different iron treatments for postpartum anemia.

Six weeks period after childbirth was chosen because postpartum visits are routinely scheduled at this time in most healthcare settings. Any subsequent visits would fall out of scope of regular postpartum care. We agree with Lim et al. that this may not be the best time for diagnosing iron deficiency symptoms and that longer follow-ups could be helpful [3]. Current content and structure of routine postpartum healthcare could be improved in several ways. Improvements should also include changes in number and schedule of postpartum visits. This is especially important in view of increasing rates of severe postpartum maternal morbidity in some high-income countries [4].

We are grateful to Dr. Lim and colleagues for their interest in our study. We acknowledge we only analyzed data from routine postpartum depression screening performed at the most frequent timing of postpartum healthcare visit. We absolutely agree we need much more research in the field of women's mental health after childbirth.

However, until more data are available, we do not believe claims on superiority of parenteral iron treatments for postpartum depression prevention can be made.

### CRediT authorship contribution statement

**Lucovnik Miha:** Conceptualization, Data curation, Supervision, Writing – review & editing. **Bombac Tavcar Lea:** Conceptualization, Funding acquisition, Writing – original draft.

#### **Declaration of Competing Interest**

The study received no specific funding. Pharmaceutical companies manufacturing or marketing iron preparations used in the study had no role in study design, data collection, data analysis, data interpretation or writing of the report.

LBT and ML received fees from Ewopharma for leading an anemia in pregnancy and postpartum workshop after study completion (Anaemia Talks 2022, June 8th, local meeting, Ljubljana, Slovenia). Other authors declare no potentially competing interests.

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