



May, 30, 2015

Dear Editor,

Please find enclosed the edited manuscript in Word format (file name: 16649-review.doc).

Title: The impact of new technologies on diabetes care

Authors: Elisa Giani, Andrea Enzo Scaramuzza, Gian Vincenzo Zuccotti

Name of Journal: *World Journal of Diabetes*

ESPS Manuscript NO: 16649

The manuscript has been improved according to the suggestions of reviewers:

1 - Format has been updated

2 - Revision has been made according to the suggestions of the reviewer

_ First Reviewer (00503391): thank you for this positive comment and for your time in reviewing our manuscript

_ Second Reviewer (00227633):

1) **Comment:** "Abstract should be more quantitative as possible, in order to favor the interest of the paper and for rapid comparison with other papers".

Response: Thank you for this helpful comment. We have modified the abstract according to reviewer comments (see below)

Abstract:

"Technologies for diabetes management, such as continuous subcutaneous insulin infusion (CSII) and continuous glucose monitoring (CGM) systems, have improved remarkably over the last decades. These developments are impacting the capacity to achieve recommended hemoglobin A1c levels and assisting in preventing the development and progression of micro- and macro vascular complications. While improvements in metabolic control and decreases in risk of severe and moderate hypoglycemia have been described with use of these technologies, large epidemiological international studies show that many patients are still unable to meet their glycemic goals, even when these technologies are used.

This editorial will review the impact of technology on glycemic control, hypoglycemia and quality of life in children and youth with type 1 diabetes. Technologies reviewed include CSII, CGM systems and sensor-augmented insulin pumps. In addition, the usefulness of advanced functions such as bolus profiles, bolus calculators and threshold-suspend features will be also discussed. Moreover, the current editorial will explore the challenges of using these technologies. Indeed, despite the evidence currently available of the potential benefits of using advanced technologies in diabetes management, many patients still report barriers to using them. Finally this article will highlight the

importance of future studies tailored toward overcome these barriers to optimizing glycemic control and avoiding severe hypoglycemia”.

- 2) **Comment:** “In the last 5 years many studies have been performed with metabolic control and diabetes in many other processes and complications, such as in immunosuppressors or antidepressives drugs. The authors should also referred to these and others studies from the last 2 or 3 years, in order to improve the paper and present it properly with recent data (even from 2015 as well more from 2014), for instance from authors such as: Jan Erikson, Ulf Smith, etc, also showing a biochemical angle of the processes”.

Response: Thank you for this important comment. We have added a sentence in our paper high lightening the importance of these drugs (see pag 7 last sentence). However, while these topics are of great interest to the diabetes community at large, we did not find them a good fit for the subject of the current editorial, which is focused on the use of new technologies for diabetes care in children and youth with type 1. We will consider addressing these suggested topics in a future review, focusing all the paper on this matters, as due for the importance of these topics.

3 - References and typesetting were corrected

Thank you again for publishing our manuscript in the *World Journal of Diabetes*.

Sincerely yours,



Prof Gian Vincenzo Zuccotti, MD
Full Professor and Chairman
Department of Pediatrics, Ospedale dei Bambini -V. Buzzi
Director Center for Research in Nutrition (CURN)
Biomedical and Clinical Science Department
Università degli Studi di Milano
32, Via Castelvetro, 20154 Milan, Italy
Phone +39 02 57995322
Fax +39 02 57995132
E-mail: gianvincenzo.zuccotti@unimi.it
g.zuccotti@icp.mi.it