



## DPP-4 inhibitors: meeting the needs of the very old population

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Dear Editor,

We read with great interest the article by Sesti and collaborators [1] providing a complete overview of the use of DPP-4 inhibitors in Italy, 10 years long. We would like to congratulate the authors for their interesting and complete review, and we would like to add some important points. In an aging world, the prevalence of a complex disease such as type II diabetes mellitus inevitably increases. Its management is complicated and requires heterogeneous therapeutic choices with a multitude of drugs combinations. With this overview of the use of DPP-4 inhibitors in clinical practice, along with clinical trials results and post-marketing surveillance, authors [1] show that this class of drug, due to the favourable safety and tolerability, is indicated in older patients (over 65 years old) including subjects with renal impairment [2].

Nevertheless, among old-age subjects, the oldest population (over 85 years old) is growing at an impressive rate, especially in Italy. The “oldest old” is a very heterogeneous group in which therapeutic options, as well as glycemic targets, must be really “patient-centered.” Oldest old with diabetes often represent a “frail” population with a higher risk of common geriatric syndromes including polypharmacy and disability and hospitalization [3]. These are the main factors responsible for deviation from guideline of therapy, which may prove the high use of sulfonylurea or insulin in the very old diabetic persons. Thus, as reported by authors, evidence suggests that DPP-4 inhibitors are still little used in Italy and in particular in the oldest old, mainly due to prescribing limitations. However, it is precisely in this group of subjects that the primary aim of diabetes management must

be centred on the person and not on the disease alone or the simple glycemic control. To keep up the quality of life, together with avoiding hypoglycemia and reducing hyperglycemia, represent the main goals in clinical practice in this kind of population. These are exactly the properties linked to the use of DPP-4 inhibitors. We are conducting an epidemiological study on the use of DPP-4 inhibitors (i.e. sitagliptin and linagliptin) in the oldest old person. So far, as part of a significant improvement in metabolic controls, in 4 years we did not report any adverse event, but the only increase in the quality of life as reported by patients or family members (unpublished). More research from the real world and clinical setting is needed to prove further that DPP-4 inhibitors meets the primary needs of frail, very old persons.

### Compliance with ethical standards

**Conflict of interest** No potential conflict of interest relevant to this letter was reported.

**Ethical standard statement** This letter does not contain any studies with human participants or animals.

**Informed consent** For this type of article, formal consent is not required.

### References

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