

29 of January, 2019

Dear Dr. XXX,

Your patient Mrs. XXXX shared with us the following data:

- He takes metformin against his type 2 diabetes and Simvastatin against other co-morbidities
- He has renal impairment (eGFR < 30)
- He is Obese (BMI > 30)

According to our experts, this therapy is **dangerous** for the patient because metformin is contraindicated for such characteristics. The patient is exposed to significantly higher risks of deadly side effects.

Metformin is contraindicated for patients with renal impairment because there are lethal risks to develop a lactic acidosis. Metformin is contraindicated for such patients according to the German, French, European and US regulations.

There are safe alternatives for the patient:

Non-drug therapies (lifestyle intervention as sports and diets), and drugs belonging to the drug families DPP-4 inhibitors, GLP-1 agonists or insulin.

In case of an obesity of your patient, GLP-1 agonists such as Liraglutide and Dulaglutide seem optimal because they lower the body weight. According to our data, Liraglutide has higher efficacy towards weight reducing, but has higher frequency of severe side effects compared to Dulaglutide. Lifestyle intervention might also be considered, in combination with the new treatment.

Active substance	Dulaglutide	Liraglutide
Mean HbA _{1c} change in monotherapy	-1.35	-1.32
Off-label efficacy	Mean body weight change (kg): -1.11 Mean systolic pressure change (mmHg): -1.97	Mean body weight change (kg): -3.08 Mean systolic pressure change (mmHg): -3.45

Side Effects	Frequency of severe side effects: 2.04% for 24 weeks. Frequency of mild / moderate side effects: 62.23% for 24 weeks.	Frequency of severe side effects: 3.75% for 24 weeks. Frequency of mild / moderate side effects: 45.83% for 24 weeks.
Fatalities due to side effects	None according to the European Medical Agency	None according to the European Medical Agency
Average monthly price	116.46€	114.13€

Please feel free to register to a trial access of our software.

Best regards,

The experts of RAMPmedical.