

B-01-18

Abstract citation ID: qdae041.021

(330) COMPARING PDE5IS EFFICACY FOR ERECTILE DYSFUNCTION TREATMENT USING A NOVEL TRIFECTA OUTCOME

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Objectives: Current data suggest that all available PDE5-inhibitors (PDE5is) appear equivalent for treating erectile dysfunction (ED). We aimed to compare the effectiveness of PDE5is in terms of a novel TRIFECTA outcome, including erectile function (EF), orgasmic function (OF), and psychological well-being.

Methods: We analysed 328 ED patients assessed at a single centre in 2010-2023. Patients were prescribed with either sildenafil, tadalafil, vardenafil or avanafil on-demand at the maximum effective dose for at least 1 month and with a minimum of 6 sexual attempts. The choice of PDE5i was based on clinical judgment and patient preference. All patients completed International Index of Erectile Function (IIEF) and Becks Inventory for Depression (BDI) at baseline and follow-up. The TRIFECTA outcome was defined as achieving an IIEF-EF ≥ 26 + IIEF-OF ≥ 8 + BDI score <11 (indicating good psychological well-being). Kaplan-Meier estimated the probability of achieving TRIFECTA over time according to

different PDE5is and Cox-regression analysis tested predictors of treatment efficacy.

Results: Median (IQR) age was 55(43-62) years. Median IIEF-EF, IIEF-OF and BDI score were 16(8-23), 8(5-10) and 6(2-11), with 53%(174) patients reporting moderate-severe ED and 28%(91) having depressive symptoms (BDI >11). Overall, 16%(52), 39%(127), 28%(91) and 18%(58) received sildenafil, tadalafil, vardenafil and avanafil. The median treatment duration was 8(3-15) months. Overall, TRIFECTA was achieved in only 15%(48) of cases. Kaplan-Meier (figure) showed estimated TRIFECTA rates at 6 months of 20%(95%CI:8-45), 4%(95%CI:1-13), 12%(95%CI:5-28) and 18%(95%CI:6-46) for sildenafil, tadalafil, vardenafil and avanafil (p <0.0001). At Cox-regression tadalafil was associated with a lower probability of achieving TRIFECTA over time (HR: 0.31, p=0.009) after adjusting for baseline characteristics.

Conclusions: PDE5is on-demand for ED are associated with a low overall probability of treatment success in terms of EF, OF and psychological well-being (TRIFECTA). According to our data sildenafil, vardenafil and avanafil should be preferred over tadalafil in order to achieve a TRIFECTA in the short term.

Conflicts of Interest: None.

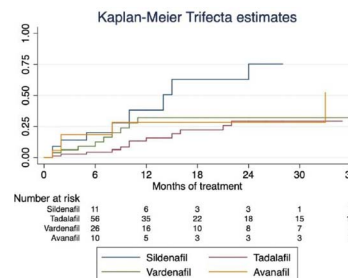


Figure 1.
Kaplan-Meier curve depicts the probability of achieving TRIFECTA over time according to different PDE5is