

Finasteride-Associated Suicide and Depression in Men Treated for Hypogonadism and Impotence

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INTRODUCTION

- Recent studies have suggested an increased risk of suicidality and psychological adverse events with finasteride use in patients younger than 45
 - We prescribe young patients finasteride for androgenic alopecia, particularly in those who take supplemental testosterone for hypogonadism and sexual dysfunction
- Objective:** Evaluate the ratio of adverse events in patients on finasteride who were also medically treated for hypogonadism and sexual dysfunction

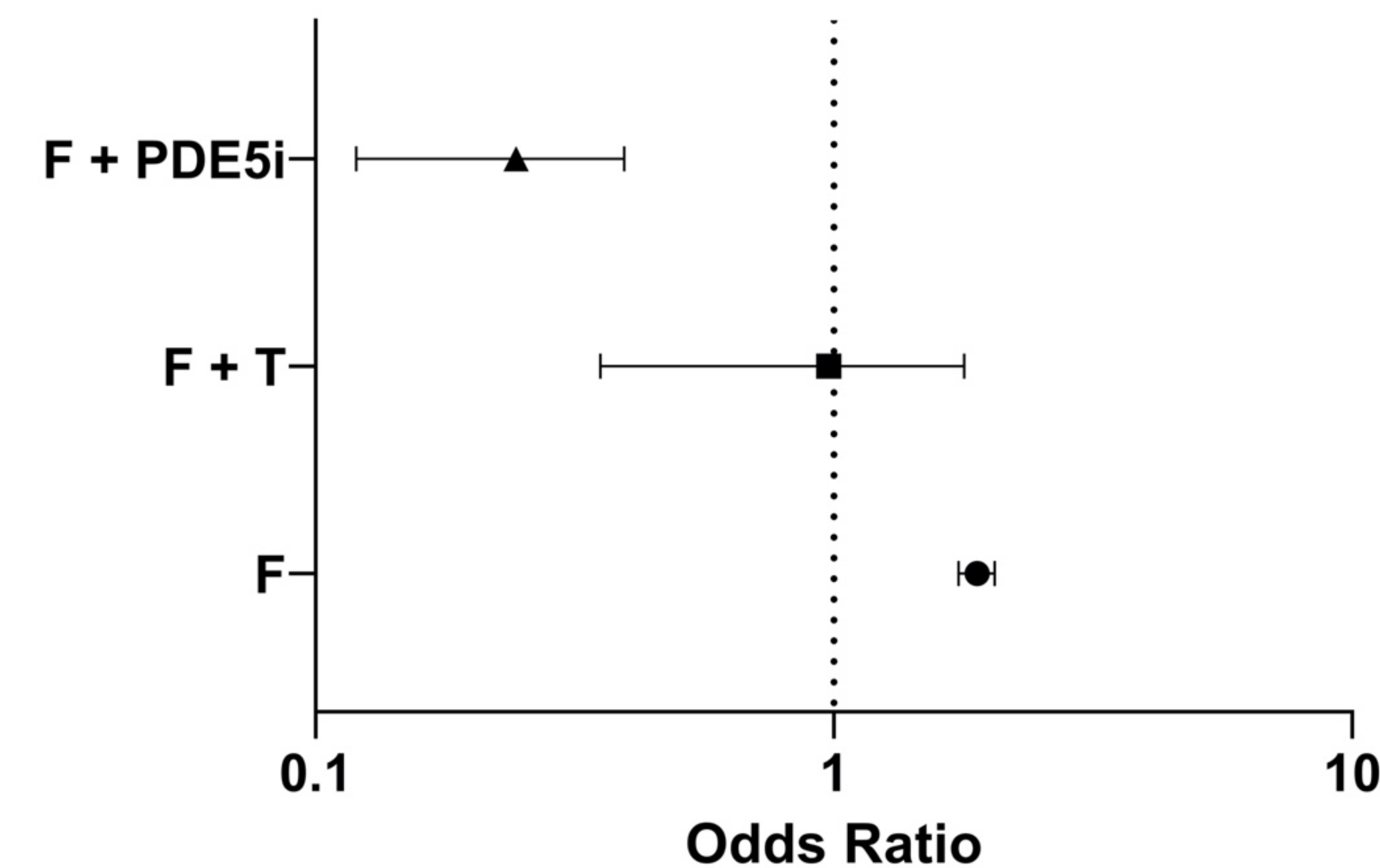
METHODS

- We surveyed VigiBase, the World Health Organization's global database of individual case safety reports to detect adverse reactions of interest reported with finasteride
- Adverse events of interest were reported as anxiety disorder and symptoms, depressed mood disorders and disturbance, and suicidal and self injurious behaviors
- These findings were stratified by indication (BPH and alopecia), age (<45 and >45 years), use of testosterone, and use of phosphodiesterase 5 inhibitors (PDE5i)
- The strength of association was demonstrated by ROR
- Case data obtained in June of 2021

RESULTS

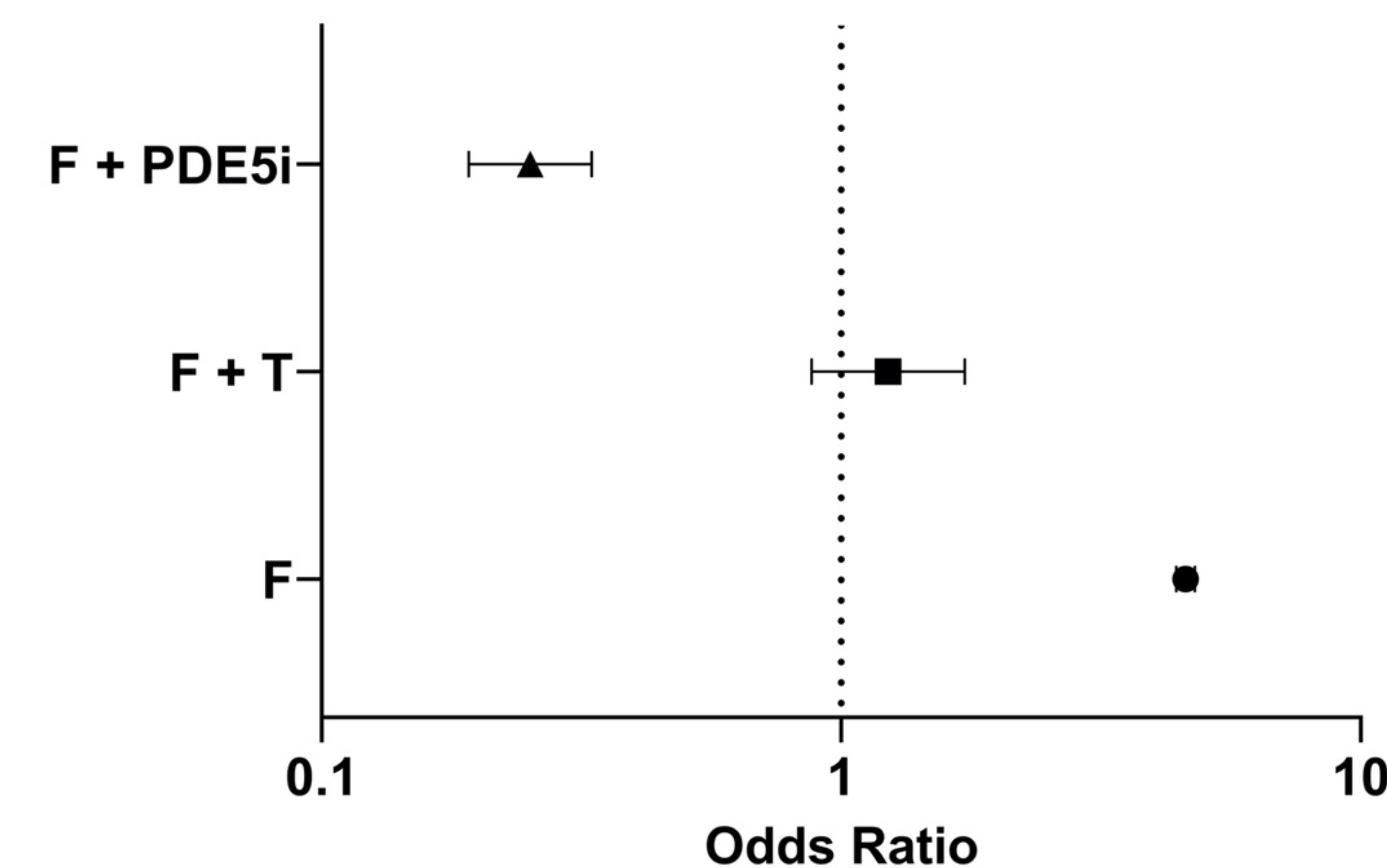
- Finasteride users in VigiBase:
 - 611 reports of suicidality
 - 2392 reports of depressed mood disorders and disturbances
 - 2352 reports of anxiety disorders and symptoms
- Significant disproportionality signal towards suicidality in finasteride alone (ROR 1.89; 95% CI 1.74-2.04)
- Signal was decreased in combination finasteride + PDE5i (ROR 0.22; 95% CI 0.12-0.39) and finasteride + testosterone (ROR 0.80; 95% CI 0.35-1.78)
- Signal toward depression was decreased in combination finasteride + PDE5i (ROR 0.25; 95% CI 0.19-0.33), and finasteride + testosterone (ROR 1.23; 95% CI 0.88-1.72)
- Signal toward anxiety was decreased in combination finasteride + PDE5i (ROR 0.21; 95% CI 0.16-0.27), and finasteride + testosterone (ROR 1.25; 95% CI 0.89-1.76)

Suicidal and Self Injurious Behaviors



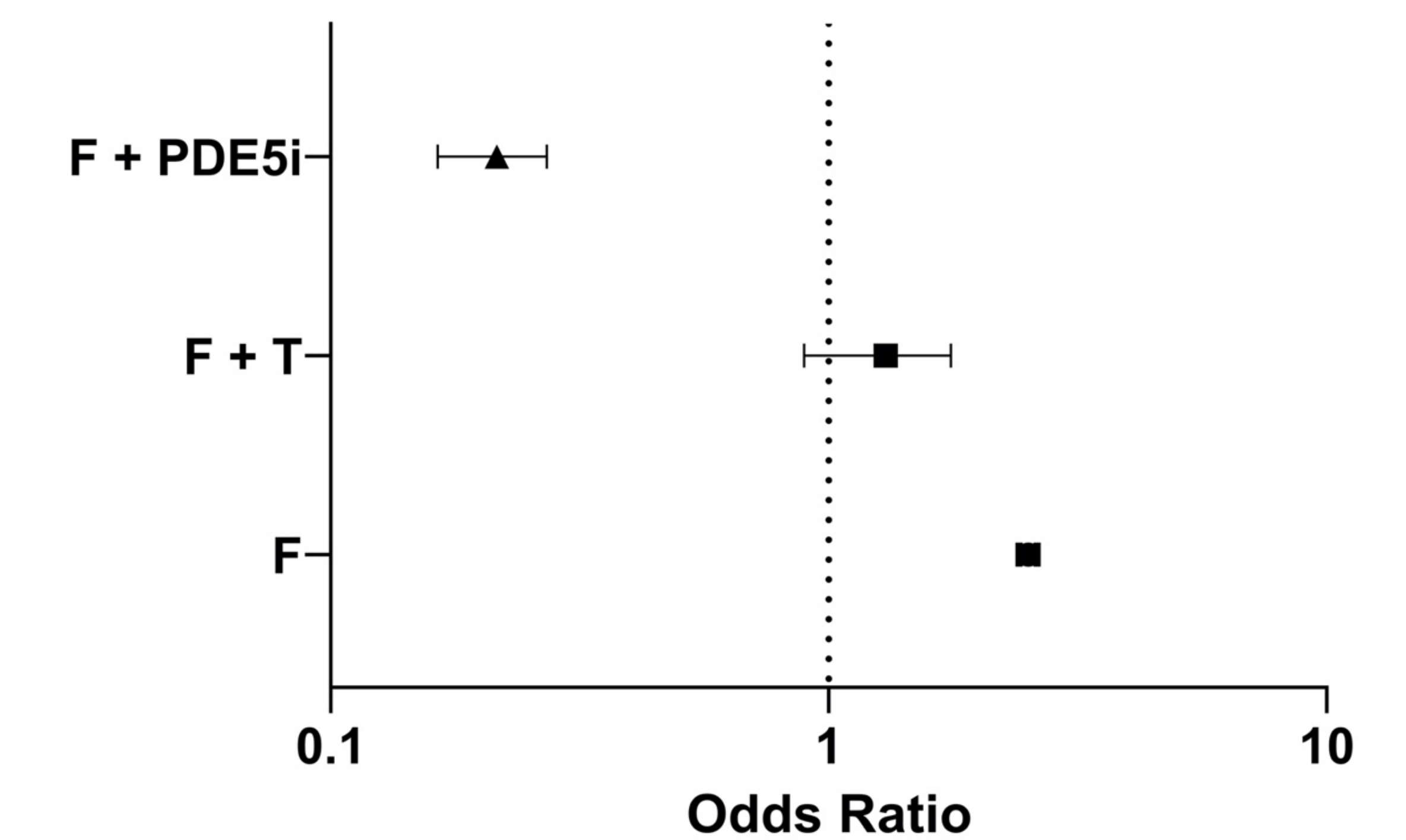
Drug	# of cases	Expected	ROR (95% CI)
F	611	307	1.89 (1.74-2.04)
F+T	6	8	0.80 (0.35-1.78)
F + PDE5i	11	16	0.22 (0.12-0.39)

Depressed Mood Disorders and Disturbance



Drug	# of cases	Expected	ROR (95% CI)
F	2392	544	4.60 (4.41-4.80)
F+T	36	30	1.23 (0.88-1.72)
F + PDE5i	55	63	0.25 (0.19-0.33)

Anxiety Disorder and Symptoms



Drug	# of cases	Expected	ROR (95% CI)
F	2352	966	2.51 (2.41-2.62)
F+T	36	29	1.25 (0.89-1.76)
F + PDE5i	64	63	0.21 (0.16-0.27)

CONCLUSIONS

- RORs of suicidality and psychological adverse events were not elevated in patients with concomitant use of finasteride with testosterone
- Moreover, RORs were decreased in patients with use of combination finasteride and PDE5i
- Treatment of hypogonadism or sexual dysfunction may be protective in the use of finasteride for alopecia

REFERENCES

Nguyen DD, Marchese M, Cone EB, Paciotti M, Basaria S, Bhojani N, Trinh QD. Investigation of Suicidality and Psychological Adverse Events in Patients Treated With Finasteride. JAMA Dermatol. 2021 Jan 1;157(1):35-42. doi: 10.1001/jamadermatol.2020.3385. PMID: 33175100; PMCID: PMC7658800.

