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Question: Should Antiandrogens compared to Placebo be used for COVID-19 patients?

Setting: Outpatient

Certainty assessment							№ of patients		Effect		Certainty
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Antiandrogens	Placebo	Relative (95% CI)	Absolute (95% CI)	
All-cause mortality											
1 ^{1,a}	randomised trials	serious ^b	not serious	not serious	serious ^c	none	0/114 (0.0%)	2/100 (2.0%)	RR 0.18 (0.01 to 3.62)	16 fewer per 1.000 (from 20 fewer to 52 more)	⊕⊕○○ LOW
Progression / exacerbation of lung disease											
1 ^{1,a}	randomised trials	serious ^b	not serious	not serious	not serious	none	0/114 (0.0%)	27/100 (27.0%)	RR 0.02 (0.00 to 0.26)	265 fewer per 1.000 (from 200 fewer to -)	⊕⊕⊕○ MODERATE
Number of patients with respiratory failure and respiratory distress syndrome											
1 ^{1,a}	randomised trials	serious ^b	not serious	not serious	not serious	none	0/114 (0.0%)	9/100 (9.0%)	RR 0.05 (0.00 to 0.78)	85 fewer per 1.000 (from 20 fewer to -)	⊕⊕⊕○ MODERATE
SARS-CoV-2 clearance											
2 ^{2,3,d}	randomised trials	serious ^b	not serious	not serious	not serious	none	196/235 (83.4%)	44/131 (33.6%)	RR 2.52 (1.96 to 3.22)	511 more per 1.000 (from 322 more to 746 more)	⊕⊕⊕○ MODERATE
Number of patients with any adverse event											

Certainty assessment							№ of patients		Effect		Certainty
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Antiandrogens	Placebo	Relative (95% CI)	Absolute (95% CI)	
1 ^{3,e}	randomised trials	serious ^b	not serious	not serious	very serious ^f	none	14/43 (32.6%)	17/44 (38.6%)	RR 0.84 (0.48 to 1.49)	62 fewer per 1.000 (from 201 fewer to 189 more)	⊕○○○ VERY LOW

Explanations

- a. The study compares Proxalutamide with placebo (Cadegiani 2020)
- b. Downgraded of one level for unclear risk of selection, performance, detection, attrition and reporting bias
- c. Downgraded of one level for wide CI
- d. Dutasteride (Cadegiani 2021a), Proxalutamide (Cadegiani 2021b)
- e. Dutasteride (Cadegiani 2021a)
- f. Downgraded of two levels for very small sample size (<100)

References

1. Cadegiani FA, McCoy J, Wambier CG, Kovacevic M, Shapiro J, Sinclair R, et al. Proxalutamide (GT0918) Reduces the Rate of Hospitalization and Death in COVID-19 Male Patients: A Randomized Double-Blinded Placebo-Controlled Trial. Research Square; 2020. DOI: 10.21203/rs.3.rs-135303/v1.
2. Cadegiani FA (b), McCoy J, Gustavo Wambier C, Vaño-Galván S, Shapiro J, Tosti A, et al. Proxalutamide Significantly Accelerates Viral Clearance and Reduces Time to Clinical Remission in Patients with Mild to Moderate COVID-19: Results from a Randomized, Double-Blinded, Placebo-Controlled Trial. Cureus. 2021 Feb 22;13(2):e13492. doi: 10.7759/cureus.13492.
3. Cadegiani F A (a), McCoy J, Gustavo Wambier C, Goren A. Early Antiandrogen Therapy With Dutasteride Reduces Viral Shedding, Inflammatory Responses, and Time-to-Remission in Males With COVID-19: A Randomized, Double-Blind, Placebo-Controlled Interventional Trial (EAT-DUTA AndroCoV Trial – Biochemical). 2021. Cureus 13(2): e13047. doi:10.7759/cureus.13047