

Management of Posaconazole-Induced Pseudohyperaldosteronism

BACKGROUND:

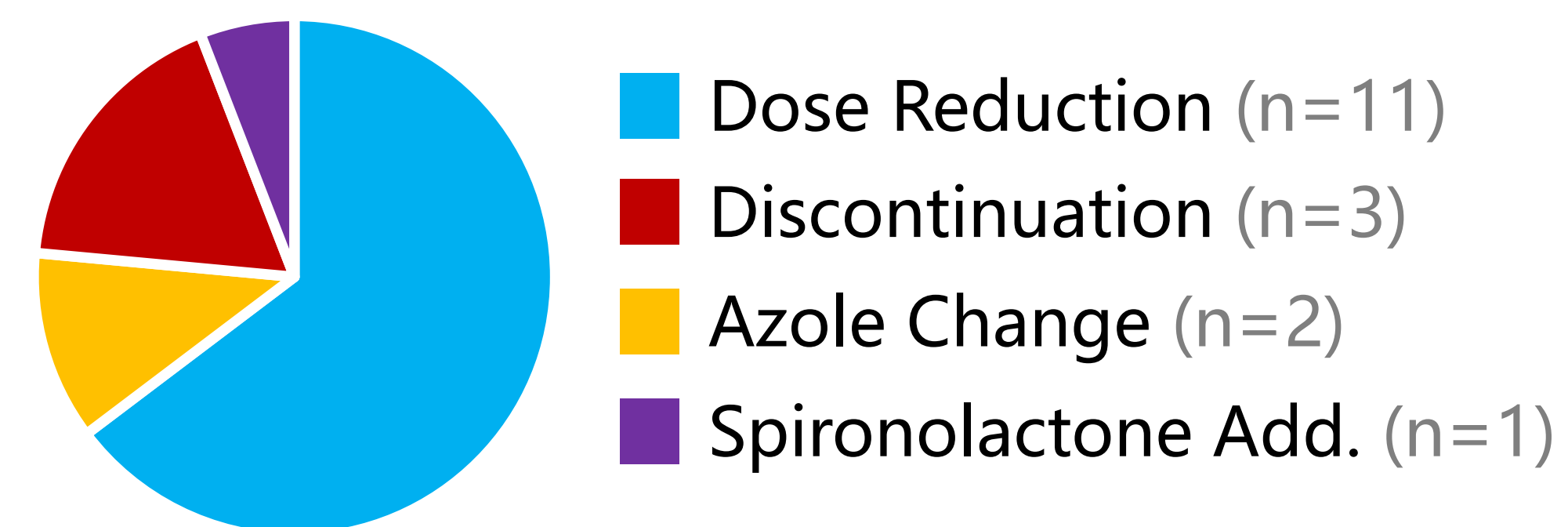
- Elevated posaconazole levels have been associated with the development of posaconazole-induced pseudohyperaldosteronism (PIPH), which presents as new or worsening hypertension and hypokalemia coupled with endocrinology features (elevated 11-deoxycortisol, low aldosterone/renin).¹
- Modifications to therapy in managing PIPH, commonly include dose reduction or switch to an alternative antifungal.

METHODS:

- We retrospectively reviewed 20 consecutive adult patients diagnosed with PIPH and described their management

RESULTS:

- 17 patients underwent therapeutic modification:



- 3 patients continued therapy without modification.
- Fourteen of the 17 patients undergoing therapeutic modifications had abnormally high 11-deoxycortisol levels at PIPH diagnosis, which returned to the normal range in 9 of these 14 (64.3%)

Clinical Responses to Therapeutic Management

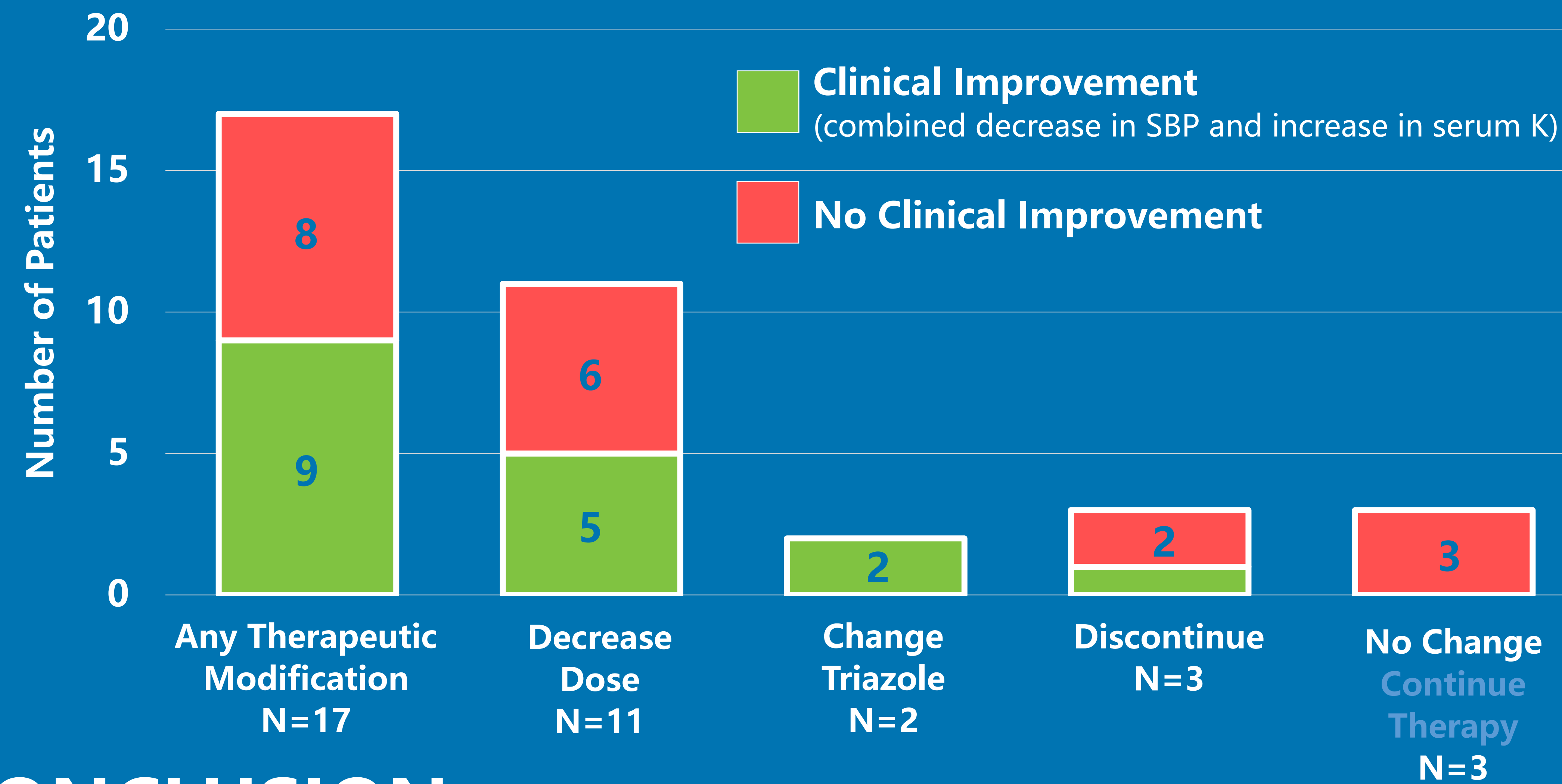
Management	Change in SBP	Change in serum K
Any Modification	-7.1 mmHg	+0.22 mmol/L
Triazole Change or Discontinuation	-8.3 mmHg	+0.48 mmol/L
No Modification	-2.3 mmHg	+0.2 mmol/L

For Table of Specific Management and Corresponding Lab Values for Each Patient – **Scan this QR Code**

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Clinical Responses to Therapeutic Management Choices



CONCLUSION

There is no universally effective strategy in managing PIPH, we propose a **stepwise approach**:

- Dosage reduction with repeat measurement of laboratory/clinical parameters and posaconazole therapeutic drug monitoring
- If resolution is not achieved, an alternative triazole antifungal or the addition of an aldosterone antagonist are additional courses of action that can be taken at clinician discretion.

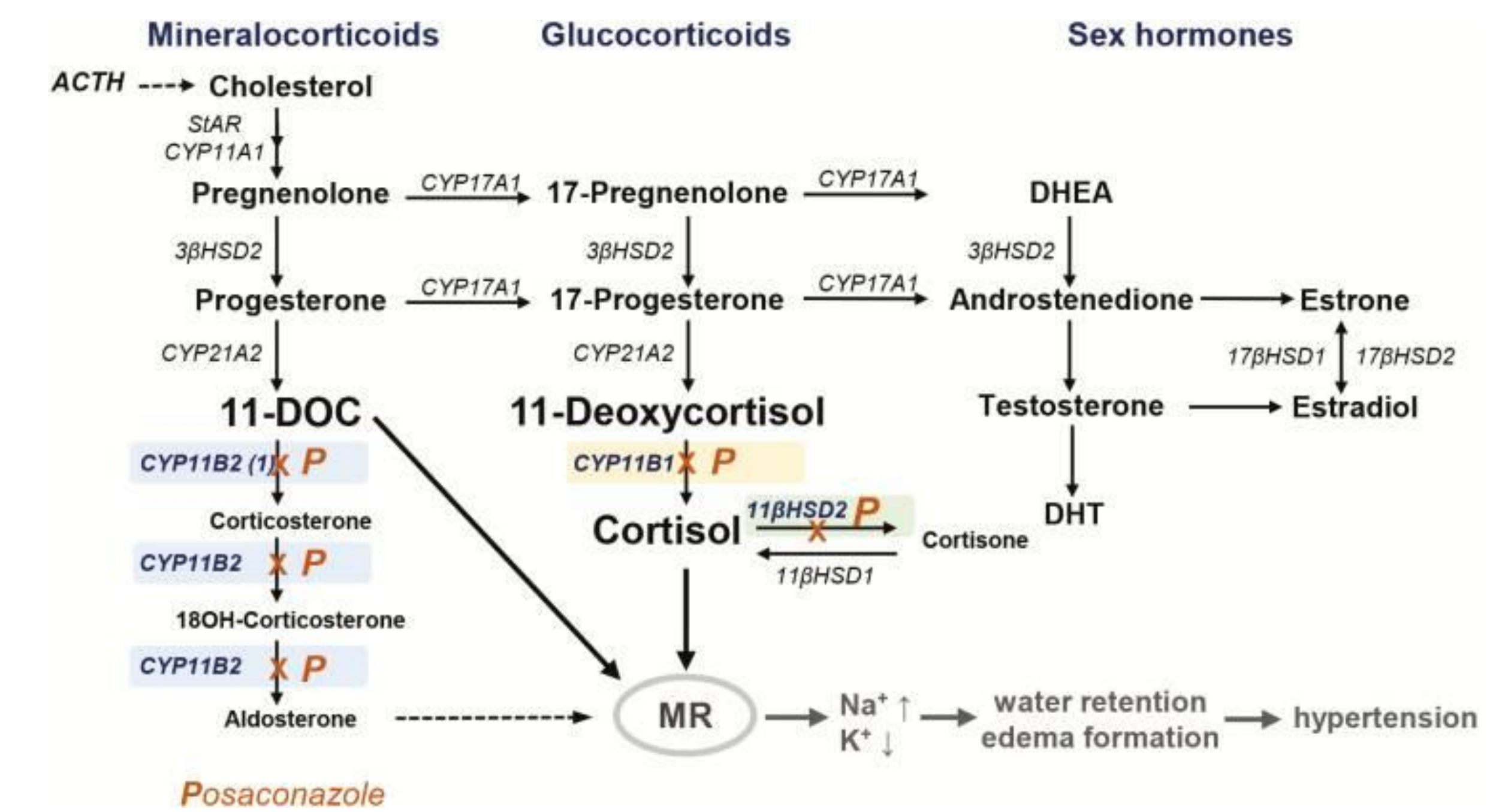
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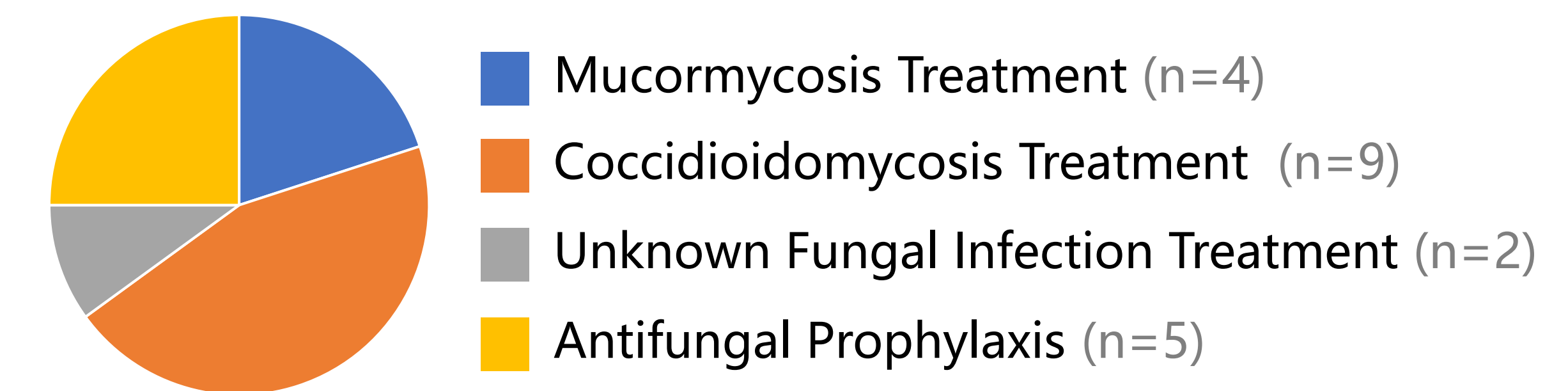
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Primary pathway of steroidogenesis and enzyme inhibition by posaconazole¹



Indication for Posaconazole Therapy



REFERENCES:

- Nguyen MH, Davis MR, Wittenberg R, et al. Posaconazole Serum Drug Levels Associated With Pseudohyperaldosteronism. Clin Infect Dis. 2020;70(12):2593-2598.

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