

Scoping Review: Overlapping Pathways of Ischemia-induced Oxidative Injury in Bladder Dysfunction

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Purpose:

Summarize research (biomarkers, mechanisms, therapeutics) linking ischemia & oxidative stress to LUTS/D

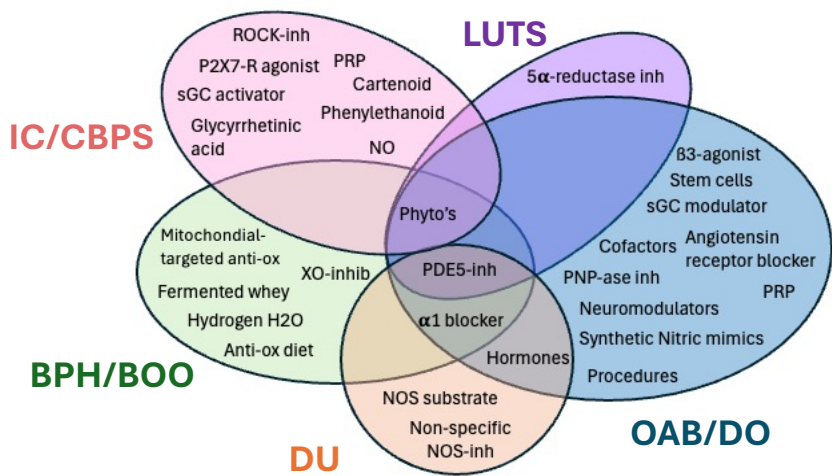
Method:

Search yielded 2028 papers → Screened abstracts/titles → Screened full texts → Added from reference review → **217 final papers**

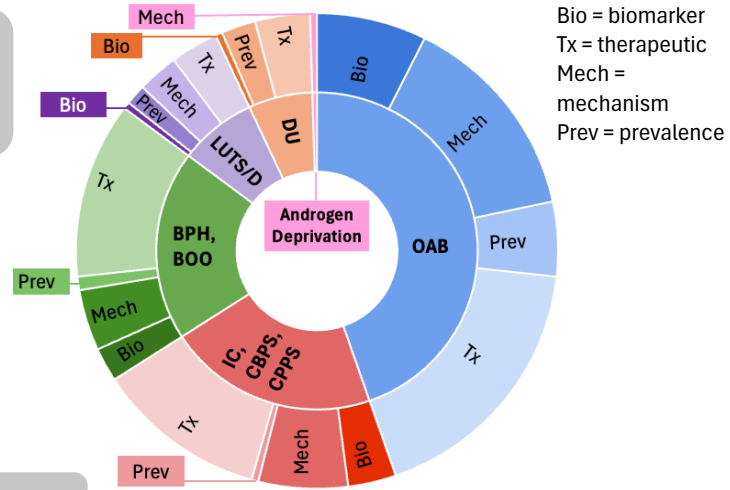
Conclusions:

- 1) Ischemic oxidative injury activates shared pathways across LUTS/D subtypes.
- 2) Pathway overlap limits condition-specific biomarkers but supports broadly applicable vascular/oxidative therapies.
- 3) Key gaps: standardized biomarkers, detrusor underactivity, human translation.

Therapeutics



Clinical Contexts



Mechanisms

