

SUPPLEMENTAL TABLE 1

Search terms and strategy for systematic literature review

Database	Search query	Articles returned (n)
PubMed	(((((((“urinary bladder, overactive”[mesh]) OR (overactiv*[tiab] AND (bladder*[tiab] OR detrusor*[tiab])) OR (oab[tiab]) OR (“urinary incontinence, urge”[mesh]) OR (urge incontinen*[tiab]) OR (urinary reflex incontinen*[tiab]) OR (reflex incontinen*[tiab])) AND (((((((genetic phenomena[mesh]) OR (gene expression[mesh]) OR (genetics[mesh]) OR (genetics [subheading]) OR (gene[tiab]) OR (genes[tiab]) OR (genetic*[tiab]) OR (genom*[tiab]) OR (genotyp*[tiab]) OR (biomarker*[tiab])) NOT (animals[mesh] NOT humans[mesh]) AND (english[lang])	444
Ovid or Medline	exp urinary bladder, overactive overactiv*.ti. or overactiv*. ab. bladder*.ti. or bladder*. ab. or detrusor*.ti. or detrusor*. ab. oab.ti. or oab.ab. exp urinary incontinence, urge urge incontinen*.ti. or urge incontinen*. ab. urinary reflex incontinen*.ti. or urinary reflex incontinen*. ab. reflex incontinen*.ti. or reflex incontinen*. ab. exp genetic phenomena exp gene expression profiling exp genetics genetics.mp. gene.ti. or gene.ab. genes.ti. or genes.ab. genetic*.ti. or genetic*. ab. genom*.ti. or genom*. ab. genotyp*.ti. or genotyp*. ab. biomarker*.ti. or biomarker*. ab. exp animals exp humans	410
Cochrane	MeSH descriptor: [Urinary Bladder, Overactive] explode all trees (overactiv*):ti OR (overactiv*):ab (bladder*):ti OR (bladder*):ab OR (detrusor*):ti OR (detrusor*):ab (oab):ti OR (oab):ab MeSH descriptor: [Urinary Incontinence, Urge] explode all trees (urge incontinen*):ti OR (urge incontinen*):ab (urinary reflex incontinen*):ti OR (urinary reflex incontinen*):ab (reflex incontinen*):ti OR (reflex incontinen*):ab MeSH descriptor: [Genetic Phenomena] explode all trees MeSH descriptor: [Gene Expression Profiling] explode all trees MeSH descriptor: [Genetics] explode all trees (gene):ti OR (gene):ab (genes):ti OR (genes):ab (genetic*):ti OR (genetic*):ab (genom*):ti OR (genom*):ab (genotyp*):ti OR (genotyp*):ab (biomarker*):ti OR (biomarker*):ab	34

MeSH, Medical Subject Headings.

Isali. Gene expression in overactive bladder patients. *Am J Obstet Gynecol* 2023.

SUPPLEMENTAL TABLE 2**Newcastle-Ottawa Quality Assessment Scale for the included datasets**

Included studies	Selection	Comparability	Exposure
O'reilly et al, ²² 2002	**	***	***
Maake et al, ²³ 2006	**	***	***
Moore et al, ²⁴ 2001	**	***	***
Schofield et al, ²⁵ 2005	**	**	***
Mukerji et al, ²⁶ 2006	***	**	***
Roosen et al, ²⁷ 2009	**	**	**
Neuhaus et al, ²⁸ 2005	**	***	***
Roberts et al, ²⁹ 2020	***	**	**
Mukerji et al, ³⁰ 2006	***	***	**

Overall, the included studies had fair to good quality: good quality, 3 or 4 stars in the selection domain, 1 or 2 stars in the comparability domain, and 2 or 3 stars in the exposure domain; fair quality, 2 stars in the selection domain, 1 or 2 stars in the comparability domain, and 2 or 3 stars in the exposure domain; and poor quality, 0 or 1 star in the selection domain, 0 star in the comparability domain, or 0 or 1 star in the exposure domain.

Isali. Gene expression in overactive bladder patients. Am J Obstet Gynecol 2023.

SUPPLEMENTAL TABLE 3

Joanna Briggs Institute critical appraisal checklist applied for included studies in the systematic review

Questions	O'reilly et al, ²² 2002	Maake et al, ²³ 2006	Moore et al, ²⁴ 2001	Schofield et al, ²⁵ 2005	Mukerji et al, ²⁶ 2006	Roosen et al, ²⁷ 2009	Neuhaus et al, ²⁸ 2005	Roberts et al, ²⁹ 2020	Mukerji et al, ³⁰ 2006
Were the groups comparable other than the presence of disease in cases or the absence of disease in controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were cases and controls matched appropriately?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were the same criteria used for identification of cases and controls?	NA	NA	Yes	NA	Yes	Yes	Yes	Yes	Yes
Was exposure measured in a standard, valid and reliable way?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was exposure measured in the same way for cases and controls?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were confounding factors identified?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were strategies to deal with confounding factors stated?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Were outcomes assessed in a standard, valid and reliable way for cases and controls?	NA	NA	NA	NA	NA	NA	NA	NA	NA
Was the exposure period of interest long enough to be meaningful?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Was appropriate statistical analysis used?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

NA, not applicable.

Isali. Gene expression in overactive bladder patients. *Am J Obstet Gynecol* 2023.