

Supplementary Table S1. Search strategy from inception to 12 February 2025.

Database	Search string
Pubmed	("Immunoglobulin G4 related disease [MeSH Terms]" OR "IgG4 RD" OR "Hyper IgG4 disease" OR "Hyper IgG4 related disease" OR "IgG4 related autoimmune disease" OR "IgG4 associated disease" OR "IgG4 related sclerosing disease" OR "IgG4 related disease" OR "IgG4 syndrome" OR "Hyper IgG4 syndrome" OR "IgG4 spectrum disease" OR "IgG4 related systemic disease") AND ("prostate" OR "pelvis" OR "pelvian" OR prostat*)
OVID	(exp immunoglobulin g4 related disease/ or IgG4 RD.af. or Hyper IgG4 disease.af. or (hyper.af. and (exp immunoglobulin g4 related disease/ or (immunoglobulin.af. and g4 related.af. and disease.af.) or immunoglobulin g4 related disease.af. or (igg4.af. and related.af. and disease.af.) or IgG4 related disease.af.) or IgG4 related autoimmune disease.af. or IgG4 associated disease.af. or IgG4 related sclerosing disease.af. or IgG4 related disease.af. or IgG4 syndrome.af. or Hyper IgG4 syndrome.af. or ((exp immunoglobulin g/ or immunoglobulin g.af. or igg4.af.) and (spectrum.af. or spectrum s.af. or spectrums.af.) and (exp disease/ or disease.af. or diseases.af. or disease s.af. or diseased.af.)) or IgG4 related systemic disease.af.) and (prostate.af. or pelvis.af. or pelvian.af. or prostat* .af))
Web of Science	ALL= (("Immunoglobulin G4 related disease" OR "IgG4 RD" OR "Hyper IgG4 disease" OR "Hyper IgG4 related disease" OR "IgG4 related autoimmune disease" OR "IgG4 associated disease" OR "IgG4 related sclerosing disease" OR "IgG4 related disease" OR "IgG4 syndrome" OR "Hyper IgG4 syndrome" OR "IgG4 spectrum disease" OR "IgG4 related systemic disease") AND ("prostat*" OR "pelvi*"))
Scopus	TITLE-ABS-KEY(("Immunoglobulin G4 related disease" OR "IgG4 RD" OR "Hyper IgG4 disease" OR "Hyper IgG4 related disease" OR "IgG4 related autoimmune disease" OR "IgG4 associated disease" OR "IgG4 related sclerosing disease" OR "IgG4 related disease" OR "IgG4 syndrome" OR "Hyper IgG4 syndrome" OR "IgG4 spectrum disease" OR "IgG4 related systemic disease") AND ("prostat*" OR "pelvi*"))

Supplementary Table S2. Characteristics of studies included in the systematic review of IgG4-related prostatitis.

Article number	First author, year of publication	Type of publication	Number of cases	Article number	First author, year of publication	Type of publication	Number of cases
1	Cho YJ, 2018	Review	1	26	Simpson RS, 2020	Case report	1
2	Pan Q, 2020	Case report	1	27	Medlicott SAC, 2018	Case report	1
3	Ezaki T, 2020	Case report	1	28	Hirata Y, 2018	Case report	1
4	Strainiene S, 2020	Case report	1	29	Inui K, 2017	Case report	1
5	Foley RW, 2020	Case report	1	30	Flanagan EP, 2014	Case report	1
6	Bourlon M, 2013	Case report	1	31	Schäfer VS, 2014	Case report	1
7	Ueki H, 2019	Case report	1	32	Chen H, 2014	Prospective study	1
8	Mitsuyama T, 2013	Case report	1	33	Taniguchi Y, 2013	Case report	1
9	Matsubayashi H, 2009	Case report	3	34	Nishimori I, 2007	Case report	2
10	Buijs J, 2014	Case report	9	35	Saeki T, 2010	Case report	1
11	Li D, 2015	Case report	1	36	Uehara T, 2008	Case report	6
12	Kagawa M, 2014	Case report	1	37	Verma S, 2020	Case report	1
13	Dong P, 2019	Case report	1	38	Yoshimura Y, 2006	Case report	1
14	Vankadari K, 2019	Case report	1	39	Nguyen V, 2011	Case report	1
15	Fujii M, 2014	Case report	1	40	LI XK, 2023	Letter to editor	1
16	Koda R, 2019	Case report	1	41	Lee ZR, 2023	Case report	1
17	Miyashita T, 2010	Review	1	42	Aoki S, 2022	Case report	1
18	Sakamaki A, 2013	Case report	1	43	Conant JL, 2024	Case report	1
19	Horita S, 2019	Case report	1	44	Huang W, 2023	Letter to editor	1
20	Migita K, 2012	Case report	1	45	Jazdarehee A, 2022	Case report	1
21	Jain V, 2016	Case report	1	46	Joshi PV, 2022	Case report	1
22	Hart PA, 2013	Case report	1	47	Kotha S, 2023	Case report	1
23	Dy RV, 2014	Case report	1	48	Yu Y, 2023	Case report	1
24	Takahashi H, 2015	Case report	1	49	Jeerangsapasuk W, 2025	Case report	1
25	Yueh HZ, 2021	Case report	1	Total number of cases			66

Supplementary Table S3. Comparison of demographics, clinical features, and outcomes between isolated and multiorgan IgG4-related prostatitis cases.

Parameter	Isolated disease	Multiorgan disease
Number of cases	5	60
Age, mean $\pm$ SD (years)	47.2 $\pm$ 21.8	62.2 $\pm$ 13.2
Disease duration, mean $\pm$ SD (months)	32.7 $\pm$ 26.6	22.3 $\pm$ 22.5
Serum IgG4 mean $\pm$ SD, (mg/dL)	610.2 $\pm$ 471.5	1009.9 $\pm$ 837.5
BPH (n, %)	1 (20.0%)	12 (24.5%)
Cancer (n, %)	2 (40.0%)	10 (17.2%)
Complete response (n, %)	2 (40.0%)	25 (41.7%)
Partial response (n, %)	2 (40.0%)	21 (35.0%)
Death (n, %)	1 (20.0%)	2 (3.3%)

SD: standard deviation; BPH: benign prostatic hyperplasia.