

Table SI. Literature search strategy and results.

Database	Search field(s)	Query syntax ^a	Results
PubMed	Title/abstract	['adrenal *cyst' (title/abstract) OR 'cystic adrenal lesion*' (title/abstract) OR 'cystic adrenal' (title/abstract)] AND ['cystic renal cell carcinoma' (title/abstract) OR 'cystic renal cancer' (title/abstract) OR 'cystic renal cell cancer' (title/abstract) OR 'cystic adenocarcinoma of kidney' (title/abstract) OR 'cystic clear cell renal carcinoma' (title/abstract) OR 'cystic clear cell renal cell carcinoma' (title/abstract)]	0
PubMed	All fields	('adrenal *cyst' OR 'cystic adrenal lesion*' OR 'cystic adrenal') AND ('cystic renal cell carcinoma' OR 'cystic renal cancer' OR 'cystic renal cell cancer' OR 'cystic adenocarcinoma of kidney' OR 'cystic clear cell renal carcinoma' OR 'cystic clear cell renal cell carcinoma')	1
Web of Science (all databases)	Topic	('adrenal *cyst' OR 'cystic adrenal lesion*' OR 'cystic adrenal') AND ('cystic renal cell carcinoma' OR 'cystic renal cancer' OR 'cystic renal cell cancer' OR 'cystic adenocarcinoma of kidney' OR 'cystic clear cell renal carcinoma' OR 'cystic clear cell renal cell carcinoma')	0

Search date: July 13, 2025. ^aThe truncation symbol * was used in the literature searches.

Table SII. Primary antibodies used in the present study.

Antibody	Manufacturer	Cat. no.	Dilution	Duration of incubation (min)
Vimentin	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZM-0260	Ready-to-use	30
CK7	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZA-0573	Ready-to-use	30
Melan-A	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZM-0398	Ready-to-use	30
Inhibin- α	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZM-0460	Ready-to-use	30
Syn	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZM-0246	Ready-to-use	30
CgA	Wuhan Jiayuan Biomedical Engineering Co., Ltd.	JY-0046	Ready-to-use	40
PAX-8	Beijing Zhongshan Jinqiao Biotechnology Co., Ltd.	ZM-0468	1:2	30
CAIX	Guangzhou Fansi Biotech Co., Ltd.	CCR-0231	Ready-to-use	50
CD10	Wuhan Jiayuan Biomedical Engineering Co., Ltd.	JY-0022	1:3	30

CK7, Cytokeratin 7; Syn, synaptophysin; PAX-8, paired box gene 8; CAIX, carbonic anhydrase IX; DAB, 3,3'-diaminobenzidine.

Table SIII. Scoring criteria for immunohistochemical staining intensity.

Score	Staining intensity ^a	Description
-	Negative	No staining or staining consistent with background
±	Weak staining	Visible but below the threshold for definite positivity
+	Weak positivity	Light staining, distinctly above background
++	Moderate positivity	Clear and prominent staining
+++	Strong positivity	Dark, dense staining

^aStaining intensity was assessed manually.