

TABLE 1: Paediatric articles reviewed with paediatric renal cell carcinoma patient characteristics

	Author	Year	Country	Total Number of Patients	Gender		Site			Age range in years (median)	Treatment	Tumour subtype (pRCC, tRCC, ccRCC, chRCC, NOS,)	Stage (TNM or modified Robson)				Outcomes
					Male	Female	Left	Right	Bilateral				I	II	III	IV	
1	Jackson TJ et al.	2019	UK	10	N/A	N/A	N/A	N/A	N/A	6m-≥10yr	Nephrectomy	N/A	N/A	N/A	N/A	N/A	N/A
2	Geller JI et al.	2015	USA	120	57	63	N/A	N/A	2	1.9-22.1yrs (12.9yrs)	RNx88, NSSx18, biopsyx14	56xtRCC, 20xpRCC, 13xchRCC, 4xoncocytoma, 1xccRCC. 25xNOS (6 unclassifiable)	35	11	43	25	N/A
3	Barroca H et al.	2014	Portugal	1	1		1			12yr	PN	RCC NOS	N/A	N/A	N/A	N/A	N/A
4	Gil AT et al.	2013	Portugal	1	1				1	17yr	Bilateral PN	L biopsy ccRCC , R biopsy chRCC.	1				Alive
5	Gilani JA et al.	2011	Pakistan	1	1			1		15yr	RN	RCC NOS	1				N/A
6	Alrashdi I et al.	2009	UK	1	1			1		11yr	RN	pRCC	1				Alive
7	Wu A et al.	2008	USA	13	9	4	N/A	N/A	N/A	9-23yrs (17 years)	5xPN, 8xRN, 1x experimental vaccine and autologous BMT, 1x experimental protocol, 1x IL-2 +cisplatin-based CTx+RTx+sunitinib, 1x re-resection, 1xPN on contralateral tumour	6x tRCC, 5xccRCC 1xpRCC, 1xNOS	7	2	2	2	4 dead, 9 alive
8	Selle B et al.	2006	Germany	49	24	25	25	20	2	1.2-15.9yrs (10.6yrs)	2 of 4 with distant mets had ITx with CTx with surgery. 36x RN, 5xPN, 22/47 (46.8%) adjuvant Tx, 4xRTx (1xadjuvant ,2x with chemo, 1x whole-body hyperthermia). 19 had CTx (11 upfront suspected Wilms). 4x ITx	16x pRCC, 11xtRCC, 12xNOS, 3xccRCC, 2x pRCC + ccRCC, 2x chRCC, 1x sarcomatoid, 2x postNBL-RCC.	17	11	4	8	5 dead, 42 alive
9	Indolfi P et al.	2012	Italy	14	7	7	6	6		1.6-16yr (12.9yrs)	9xRN, 6xCTx, 9xITx, 2xadjuvant antiangiogenic, 4xRTx.	5xtRCC, 2xpRCC, 5xccRCC, 2x NOS.				14	14 dead
10	Indolfi P et al.	2008	Italy	16	7	9	11	5		1.8-17.9yrs (10yrs)	RNx16, 4xpre-op CTx. 9xRLND, 7xlimited LND. 3x CTx post-op, 2xRTx, 12xITx	N/A			16		8 alive, 6 dead
11	Winarti NW et al.	2008	Bali, Indonesia	1	1			1		11yr	Nephroureterectomy	tRCC				1	Alive
12	Menon P et al.	2004	India	1		1		1		8yr	RN	Cystic RCC	N/A	N/A	N/A	N/A	Alive
13	Grant R et al.	1997	Canada	1	1			1		7yr	RN, LND, CTx . Left thoracotomy and wedge resection post-CTx then right thoracotomy and right lower lobe medial basilar segmentectomy	N/A				1	Alive
14	Carcao MD et al.	1998	Canada	16	5	11	N/A	N/A	N/A	3-19 (median 9 yrs)	10xRN, 4x simple nephrectomy (+ 1x bilateral simple), 4xRTx, 2xpalliative RTx, 4xCTx, 1xthoracotomy, 1xITx	5xpRCC, 9xccRCC, 1xchRCC, 1xgranular-cell type RCC.	3		7	6	10 alive, 6 dead
15	Hol JA et al.	2019	Netherlands	2		2	1	1		15yr and 18yr	RNx1, PNx1	N/A	N/A	1	N/A	N/A	2 alive

16	Argani P et al.	2006	USA	5	2	3	5	1		6-22yrs	4xRN, 1xsurgical resection ?RN. 1xPN. All received prior CTx. 1x prior RTx	All tRCC.	N/A	N/A	1	1	1 alive, 1 dead
17	Donnelly LF et al.	1996	USA	1	1				1	12yr	RN + wedge biopsy of opposite kidney	RCC NOS	N/A	N/A	N/A	N/A	Alive
18	Sajid MI et al.	2019	Pakistan	1	1			1		16yr	RN and adrenalectomy	tRCC	1				N/A
19	Indolfi P et al.	2003	Italy	41	18	23	N/A	N/A	1	1.8-17.9 (10.3yrs)	21xRN with adrenalectomy, 15xRN with RLND, 5x biopsy alone, 24xCTx, 11xITx, 7xRTx	7xpRCC, 24xccRCC, 4x granular-cell RCC, 5x tRCC, 1x chRCC. 1x bilateral	18	1	12	9	24 alive, 15 dead.
20	Cook A et al.	2006	Canada	15	N/A	N/A	N/A	N/A	N/A	Mean age 7.9yrs	RNx10, PNx5	8xpRCC, 7xccRCC	N/A	N/A	N/A	6	14 alive, 1 dead
21	Baek HJ et al.	2012	Korea	1	1			1		2yr	Pre-op CTx then RN with RLND. Post-op ITx. Conditioning CTx and 2x allogeneic HSCT	pRCC				1	Alive
22	Abdellah A et al.	2015	Morocco	1	1		1			9yr	RN with RLND	RCC NOS	1				Alive
23	Strouse JJ et al	2005	USA	2	1	1	1	1		15yr and 17yr	2x CTx, 1xRN, 1x palliative RTx	2xRMC				2	2 dead
24	Chowdhury T et al.	2013	UK	1		1	1			11yr	RN with RLND, sunitinib at relapse, exploratory thoracotomies	tRCC				1	Alive
25	Ambalavanan M et al.	2019	USA	24	13	11	N/A	N/A	N/A	3-27yrs (15 yrs)	19xRN, 3xPN, 7xRLND, 11 patients received medicinal anti-cancer therapies. 10 x anti-angiogenic, 8xCTx, 7xmTOR inhibitor, 3x ITx, 4x small-port RTx,	16xtRCC, 6xpRCC, 1xccRCC, 1xchRCC.	8	2	3	11	12 alive, 11 dead
26	Pressey JG et al.	2010	USA	1	1				1	7yr	Right RN, sirolimus	chRCC	N/A	N/A	N/A	N/A	Alive
27	Wedekind MF et al.	2017	USA	2	1	1	N/A	N/A	N/A	16yr, 12 yr	16yr - RN + adjuvant sunitinib, then intratumoral oncolytic virotherapy, zoledronates and ITx. Cabozantinib 12yr - RN + adjuvant sunitinib, RTx, cabozantinib	tRCC				2	1 alive, 1 dead
28	Unal E et al.	2020	Turkey	3	2	1	N/A	N/A	N/A	6yr, 11yr, 13.5yr	RNx3	N/A	2			1	3 alive
29	Schultz TD et al.	2011	Canada	1	1		1			9yrs	RN	pRCC	1				Alive
30	Salehipour M et al.	2009	Iran	1		1		1		3yrs	RN with regional lymphadenectomy	Granular RCC	N/A	N/A	N/A	N/A	Alive
31	Reface MA et al.	2007	Canada	1	1		1			17yrs	RN and LN sampling. 2x IL-2 & IFN. 1xirofulven. 2x cyclophosphamide + topotecan. palliative debulking	pRCC Type 2				1	Dead
32	Birken G et al.	1985	USA	1		1		1		15yrs	Radical adrenalectomy + regional lymphadenectomy. palliative RTx. IFN + cyclic CTx.	Well-differentiated RCC				1	Dead

*RN – radical nephrectomy

*PN – partial nephrectomy

*NSS – nephron-sparing surgery

*NOS – not otherwise specified

*ccRCC – clear-cell renal cell carcinoma

*pRCC – papillary renal cell carcinoma

*chRCC – chromophobe renal cell carcinoma

*tRCC – translocation renal cell carcinoma

*NBL - neuroblastoma

*CTx – chemotherapy

*RTx – radiotherapy

*ITx – immunotherapy

*IFN - interferon

* BMT – bone marrow transplant

*RLND – radical lymph node dissection

*HSCT – haematopoietic stem cell transplantation

*N/A – not available

*Dx – diagnosis

*yr/yrs - years