organ-confined disease, a pre-operative high-CONUT score was a strong predictor of worse pathological stage, lymphonode status and presence of renal vein thrombosis.

SC6 A snapshot of nephron sparing surgery in Italy: A prospective, multicenter report on clinical and operative data (the RECORD 2 project)

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Aim of the study: Aim of this study was to provide a snapshot of the clinical and intraoperative data of a representative proportion of patients undergone surgery for renal tumors in Italy.
Materials and methods: We evaluated 4308 patients who had surgical treatment for renal tumors between January 2013 and December 2016 at 26 urological Italian Centers (RECORD 2 project). Preoperative, radiological, operative data were recorded on an on line web based prospectively maintained database. Of these, 157 patients were considered ineligible for the lack of preoperative and intraoperative data. The nephron-sparing surgery (NSS) ratio was calculated as the proportion of patients undergone partial nephrectomy (PN) and the sum of those undergone PN and radical nephrectomy (RN) in each center.
Results: Overall, 4151 patients were analysed. Overall, 65.2% were males and the median age was 64.6 (54.5–72.6) years. The median Charlson comorbidity index (CCI) score and CCI age-adjusted were 1 (IQR 0–2) and 4 (2–5). Patients had a cT1a stage in 2229 (53.7%) cases, cT1b in 1049 (25.3%), cT2 in 488 (11.7%), cT3a in 264 (6.4%), cT3b-c in 85 (2.0%) and cT4 in 36 (0.9%). Patients had a clinically node-positive and metastatic disease in 256 (6.2%) and 175 (4.3%) cases. The median PADUA score was 8 (7–10). The median preoperative estimated glomerular filtration rate (eGFR) was 42 (39–55) ml/min. The comparison of pre- and intra-operative data between PN and RN patients with cT1-2N0M0 disease is shown in Table 1. In this cohort of patients, the use of PN increased significantly compared to RN (Figure 1). Patients with imperative indication to NSS were increasingly treated with PN from 2013 (29.2%) to 2016 (37.5%, $p = 0.01$), while RN decreased from 2013 (26.7%) to 2016 (19.8%; $p < 0.0001$). Patients were treated with open, laparoscopic and robotic approach in 43.7%, 28.3% and 28.0% of the cases. The NSS rate of the centres varied from 20% to 85% and 7 centers had an NSS rate > 70%. The number of RN decreased from 307 (38.1%) in 2013 to 136 (16.9%) in 2016, while the number of PN did not change. In both PN and RN the surgical approach decreased, while the robotic approach increased (Figure 2–4).

Table 1
Pre- and perioperative characteristics of patients treated with partial (PN) and radical (RN) nephrectomy for cT1-4N0M0 tumors treated at 26 centers from 2003 to 2016 (the RECORD 2 Project).

Preoperative characteristics (n = 2584)		**PN (n = 2614)**		**RN (n = 1139)**		**p-value**
Gender, n. %	Male	1697	64,9%	730	64,1%	0,62
	Female	917	35,1%	409	35,9%	
Age (years), median IQR		64,4	54,7–72,1	64,8	53,6–74,0	0,21
BMI (kg/m^2), median IQR		25,8	23,7–28,7	26,2	23,8–29,3	0,46
ASA Score, median IQR		2	2–3	2	2-3	<0,0001
CCI PS score, median IQR		1	0–2	1	0-2	0,24
AA-CCI PS score		4	2–5	4	2-5	0,006
Surgical indication, n. %	Elective	2216	84,8%	944	83,8%	<0,0001
	Relative	312	11,9%	161	14,1%	
	Imperative	86	3,3%	24	2,1%	
Tumor side, n. %	Right	1315	50,3%	581	51,0%	<0,0001
	Left	1254	48,0%	549	48,2%	
	Bilateral	45	1,7%	9	0,8%	
Clinical T, n. %	T1a	1892	72,4%	208	18,3%	<0,0001
	T1b	635	24,3%	398	34,9%	
	T2a	78	3,0%	236	20,7%	
	T2b	9	0,3%	94	8,3%	
	T3a	–	–	146	12,8%	
	T3b-c	–	–	46	4,0%	
	T4	–	–	11	1,0%	
Tumor growth pattern, n. %	≥50% Exophytic	1491	57,0%	498	43,7%	<0,0001
	<50% Exophytic	917	35,1%	471	41,4%	
	Entirely endophytic	206	7,9%	170	14,9%	
Tumor site, n. %	Polar	1711	65,5%	705	61,9%	0,03
	Mediorenal	903	34,5%	434	38,1%	
Renal sinus involved, n. %	Not involved	2209	84,5%	698	61,3%	<0,0001
	Involved	405	15,5%	441	38,7%	
PADUA score, median IQR		7	7–9	10	8–11	0,0001
Hemoglobin (mg/dL), median (IQR)		14,2	13,2–15,1	13,6	12,3–14,9	0,0001
Creatinine (mg/dL), median (IQR)		0,9	0,8–1,0	0,9	0,8–1,1	0,001
eGFR (mL/min), median IQR		85,9	69,9–100,4	78,7	63,3–94,3	<0,0001
Perioperative characteristics						
Surgical approach n. %	Open	901	34,5%	738	64,8%	<0,0001
	Laparoscopic	729	27,9%	333	29,2%	
	Robotic	984	37,6%	68	6,0%	
Type of resection, n. %	Enucleation	946	36,2%	–	–	<0,0001
	Standard PN	1668	63,8%	–	–	
Pedicle clamping, n. %	Off-clamp	1231	47,1%	–	–	–
	On-clamp	1383	52,9%	–	–	

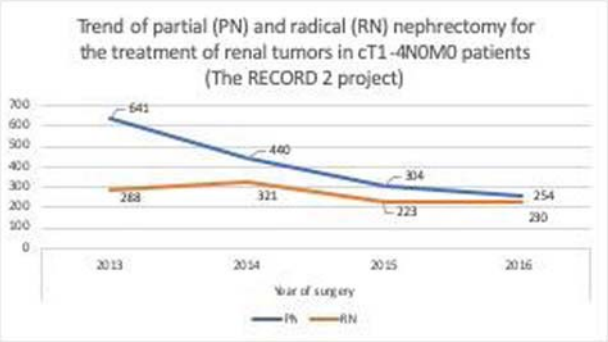

Figure 1

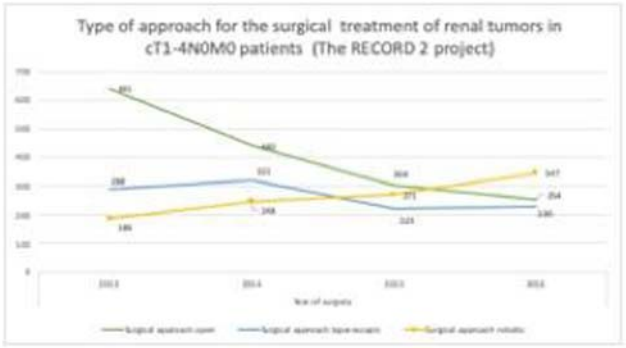

Figure 2

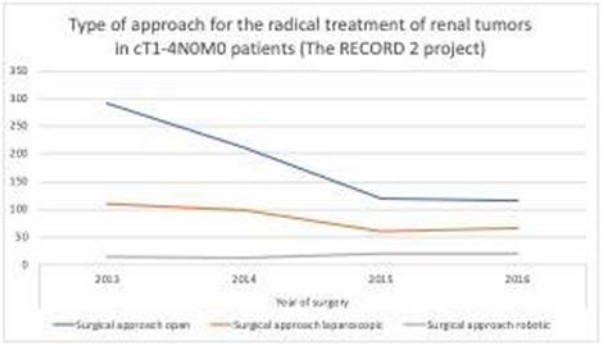

Figure 3

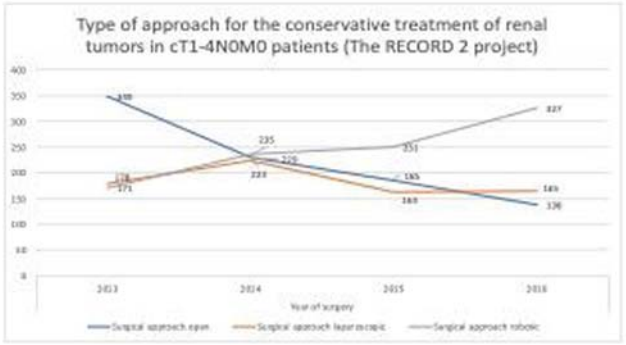

Figure 4

Figure: (abstract: SC6).

Discussion: The utilization rate of PN in Italy is increasing over time. PN increased in patients with imperative indication to surgery. The use of robotic approach increased over time in both PN and RN.

SC7 Does the surgical technique impact the oncologic outcomes after partial nephrectomy? A comparison between open, laparoscopic and robotic approach in a single high-volume tertiary center

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Aim of the study: To compare the oncologic outcomes of patients who underwent Open partial nephrectomy (OPN), Laparoscopic partial nephrectomy (LPN) and Robotic partial nephrectomy (RPN) at mid-long term follow up.
Materials and methods: Patients were stratified according to the surgical technique: OPN vs LPN vs RPN. Differences in categorical and continuous variables were analyzed using the chi-squared test and the Mann-Whitney U-test, respectively. Outcomes of interest: disease free survival (DFS) and cancer-specific survival (CSS) were plotted using Kaplan-Meier survival curves. The predictors of DFS and CSS were assessed using a univariable and multivariable Cox proportional hazard models.
Results: Out of 547 patients who underwent PN, 293 (54%), 153 (28%) and 101 (19%) underwent OPN, LPN and RPN, respectively. RPN was associated with high PADUA risk compared to OPN and LPN (19% vs 12% vs 10%; $p = 0.03$), longer median operative time (218 min vs 130 min vs 136 min $p < 0.001$). Patients in the OPN group had longer median follow-up compared to those in the LPN and RPN groups (75 months vs 43 months vs 26 months; $p < 0.001$) and higher recurrence rate (10% vs 6% vs 3%; $p = 0.048$). OPN was associated with higher cancer related death rates compared to LPN and RPN (4% vs 1% vs 1%; $p = 0.03$). However, DFS rates and CSS rates are comparable between the three surgical techniques at median follow up of 45 months. At multivariable analysis, high tumor grade (odds ratio OR = 11.1; $p < 0.001$), pathologic stage >pT1 (OR = 11.1; $p < 0.001$), intermediate/high PADUA risk (OR = 2.1; $p = .0.1$) and PSM (OR = 12.7; $p < 0.001$) were independent predictors of any recurrence, PSM (OR = 60.8; $p < 0.001$) was the only predictor of local recurrence, intermediate/high PADUA risk (OR = 4.2; $p = 0.007$), pathologic stage >pT1 (OR = 7.7; $p < 0.001$) and high tumor grade (OR = 8.495%; $p < 0.001$) were independent predictors of distant recurrence and high tumor grade (OR = 4.2; $p = 0.02$) was the only independent predictor of CSS.
Discussion: OPN, LPN and RPN provides comparable oncologic outcomes. DFS is mainly affected by high tumor grade, pathologic stage, positive surgical margins and Padua risk.

SC8 Renal cell carcinoma with venous tumour thrombus: 20-year experience of a single academic centre

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Aim of the study: Surgical treatment of renal cell carcinoma (RCC) with venous tumour thrombus represents a challenging option to manage the disease. Up to 10% of pts with RCC have tumour thrombus involving the renal vein or the inferior vena cava (IVC), with