Figure S1. Recurrence rates and recurrence-free survival for SFI and PFI in the 3 types after PN. Recurrence rate of SFI and PFI for pT3a RCC with (A) type A, (B) type B and (C) type C. Recurrence-free survival of SFI and PFI for pT3a RCC with (D) type A, (E) type B and (F) type C. SFI, sinus fat invasion; PFI, perinephric fat invasion; RCC, renal cell carcinoma; PN, partial nephrectomy.
Table SI. Univariate Cox regression analysis for predictors of disease recurrence.

| Variable                  | HR    | 95% Confidence interval | P-value |
|---------------------------|-------|-------------------------|---------|
| Sex                       |       |                         |         |
| Female Ref.               | 0.714 | 0.256-1.988             | 0.519   |
| Male                      | 0.821 | 0.718-1.001             | 0.762   |
| Age                       |       |                         |         |
| Laterality                |       |                         |         |
| Left Ref.                 | 0.566 | 0.195-1.637             | 0.393   |
| Right                     |       |                         |         |
| Surgical approach         |       |                         |         |
| Open Ref.                 | 1.267 | 0.415-3.862             | 0.678   |
| Laparoscopic              |       |                         |         |
| Tumor size                | 1.321 | 0.323-1.972             | 0.692   |
| Histological type         |       |                         |         |
| Non-clear cell Ref.       | 1.833 | 0.634-5.306             | 0.264   |
| Clear cell                |       |                         |         |
| Fuhrman grade             |       |                         |         |
| Low (I-II) Ref.           | 0.754 | 0.266-2.139             | 0.596   |
| High (III-IV)             |       |                         |         |
| Margin status             |       |                         |         |
| Negative Ref.             | 0.797 | 0.093-6.804             | 0.836   |
| Positive                  |       |                         |         |
| Sub-classification        |       |                         |         |
| Type A Ref.               | 0.865 | 0.237-1.352             | 0.273   |
| Type B                    | 1.734 | 0.978-3.425             | 0.009   |
| Type C                    |       |                         |         |

*Graded according to Fuhrman SA, Lasky LC, Limas C: Prognostic significance of morphologic parameters in renal cell carcinoma. The American journal of surgical pathology 1982, 6(7): 655-663. HR, hazard ratio; Ref., reference.