

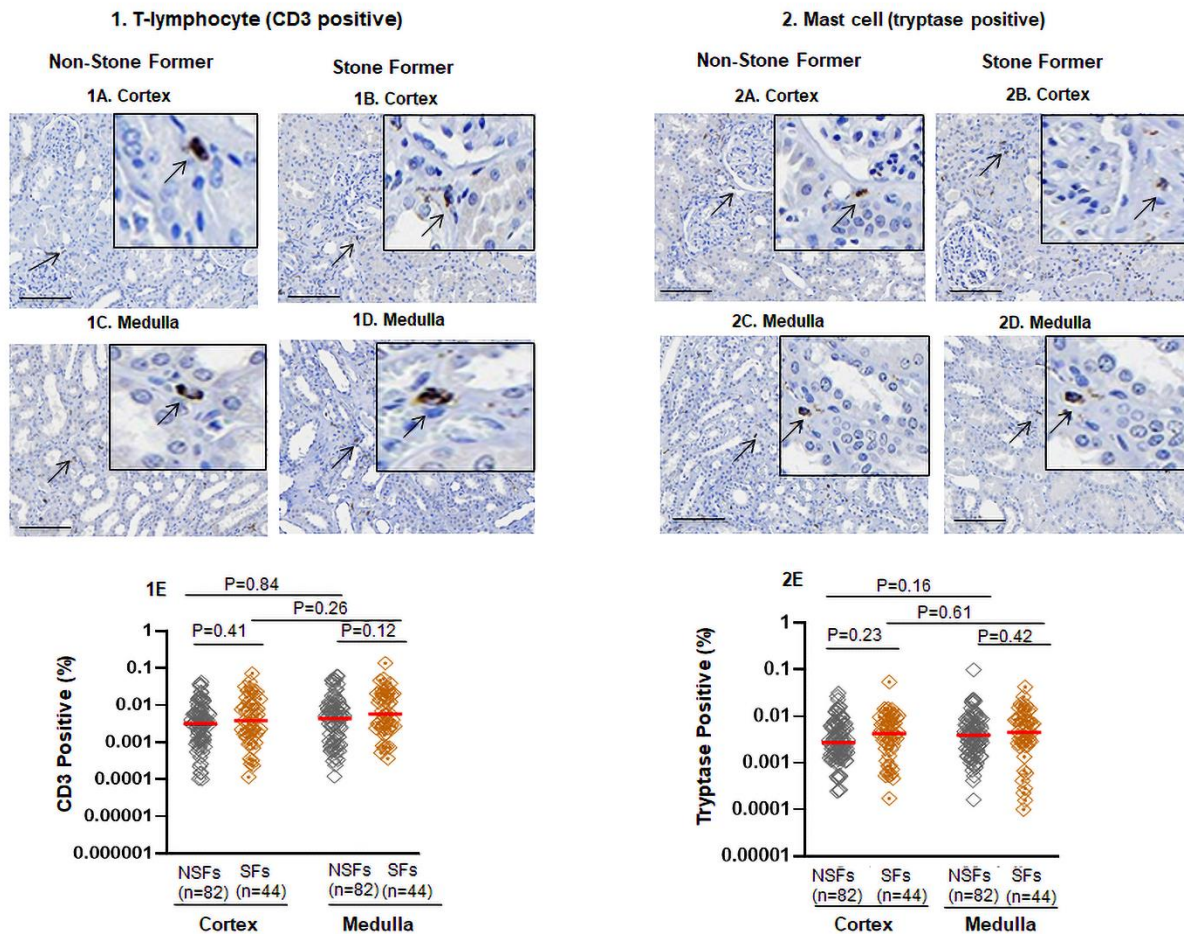
## **Supplemental Material Table of Content**

**Supplemental Figure 1.** Presence of T-lymphocyte (CD3 positive) and mast cell (tryptase positive) in cortex and medulla of kidney tissues from unilateral nephrectomy patients without (NSFs; non-stone formers) and with (SFs; stone formers) a history of urinary stone disease.

**Supplemental Figure 2.** Correlation between calcification and M1 macrophage (CD68 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone formers) and with (stone formers) history of urinary stone disease.

**Supplemental Figure 3.** Correlation between calcification and M2 macrophage (CD163 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone formers) and with (stone formers) history of urinary stone disease.

**Supplemental Figure 4.** Correlation between calcification and M2 macrophage (CD206 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone formers) and with (stone formers) history of urinary stone disease.

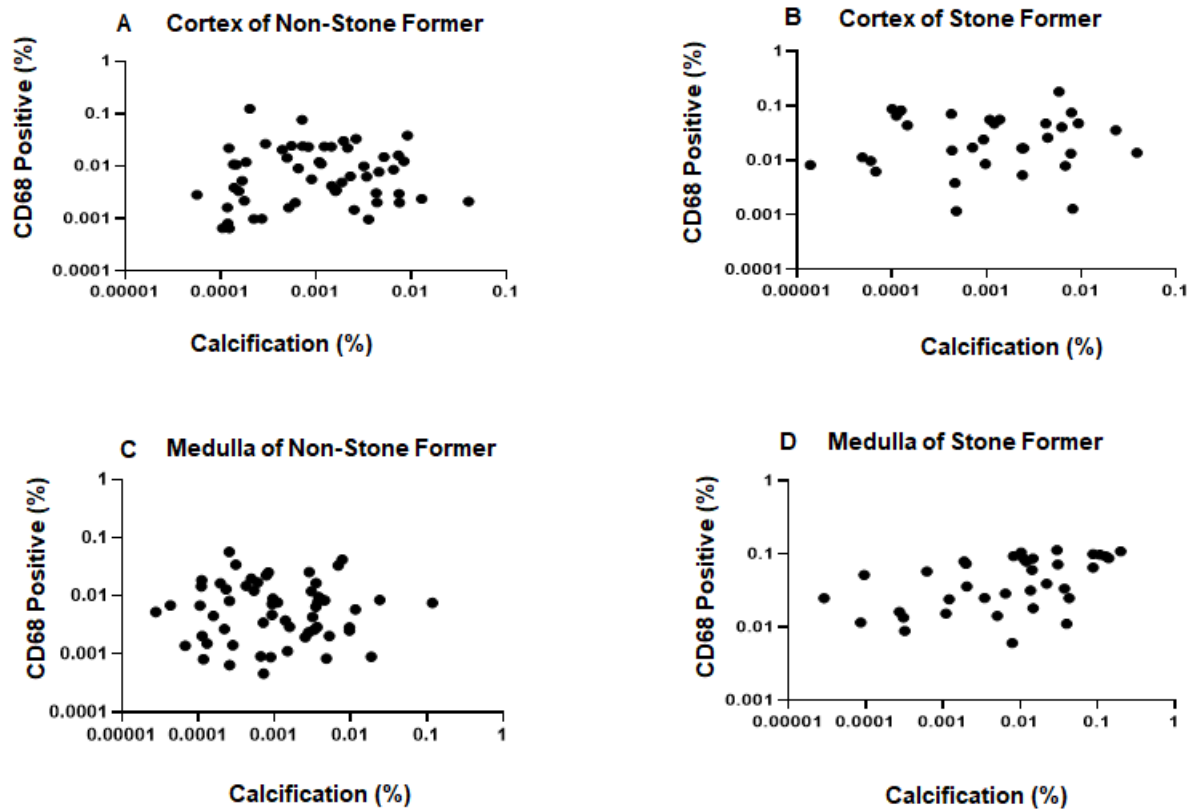


**Supplemental Figure 1**

**Supplemental Figure 1.** Presence of T-lymphocyte (CD3 positive) and mast cell (tryptase positive) in cortex and medulla of kidney tissues from unilateral nephrectomy patients without (NSFs; non-stone formers) and with (SFs; stone formers) history of urinary stone disease. Representative of CD3 positive T-lymphocyte in cortex of NSFs (1A) and SFs (1B) and medulla of NSFs (1C) and SFs (1D). The percent positivity of T-lymphocytes in kidney tissue of individual NSFs and SFs are presented in 1E. Representative of tryptase positive mast cells in the cortex of NSFs (2A) and SFs (2B) and the medulla of NSFs(2C) and SFs (2D).The percent positivity of mast cells in

kidney tissue of individual NSFs and SFs are presented in 2E. Images were taken using 20X visual field. Scale bars = 60  $\mu\text{m}$ . Arrows show positive staining for each cell specific marker. Red lines represent the median. Each gray or orange diamond represents the percentage of T-lymphocyte (1E) or mast cell (2E) presence in an individual patient.  $P < 0.05$  indicates significant differences.

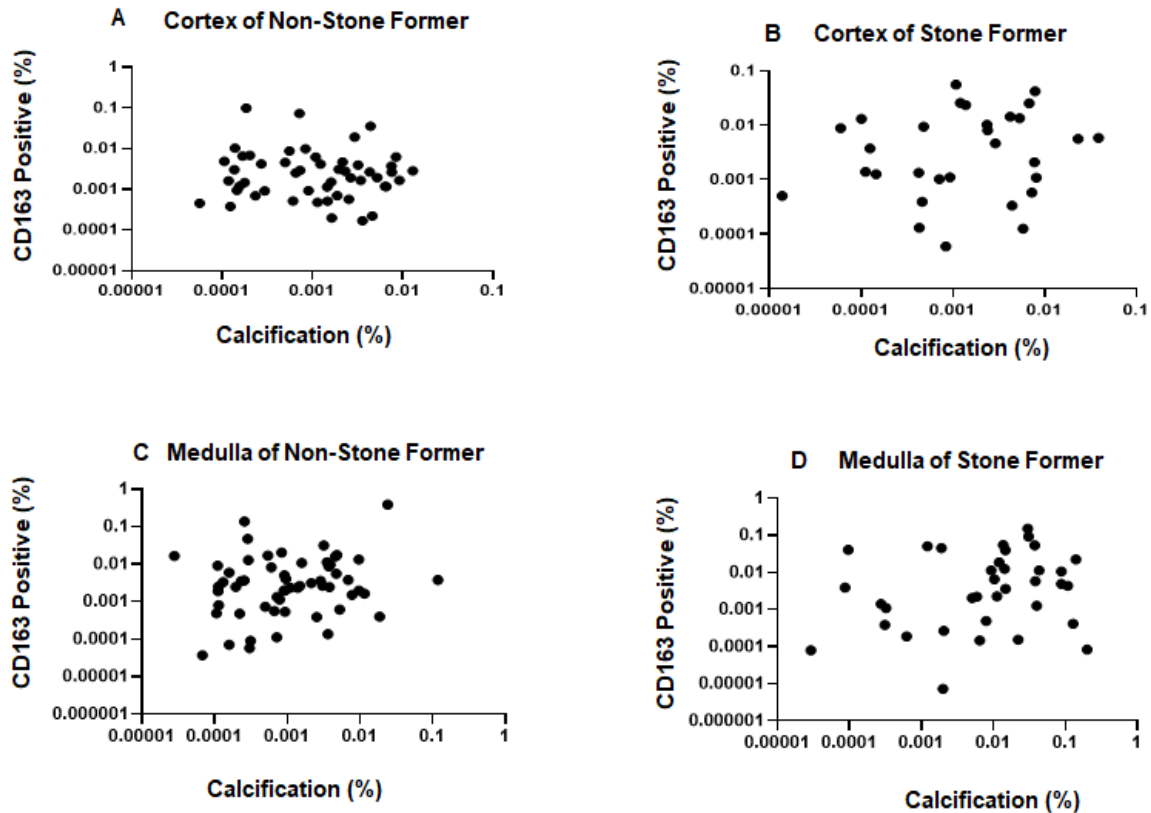
### M1 Macrophage (CD68 Positive)



**Supplemental Figure 2**

**Supplemental Figure 2.** Correlation between calcification and M1 macrophage (CD68 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone former) and with (stone former) history of urinary stone disease. Correlation plot between calcification and CD68 positive M1 macrophage in the cortex of non-stone former (A;  $\rho=0.17$  and  $p=0.11$ ) and stone former (B;  $\rho=0.003$  and  $p=0.99$ ). Correlation plot between calcification and CD68 positive M1 macrophage in the medulla of non-stone former (C;  $\rho=0.05$  and  $p=0.62$ ) and stone former (D;  $\rho=0.48$  and  $p=0.001$ ).  $P < 0.05$  indicates significant differences.

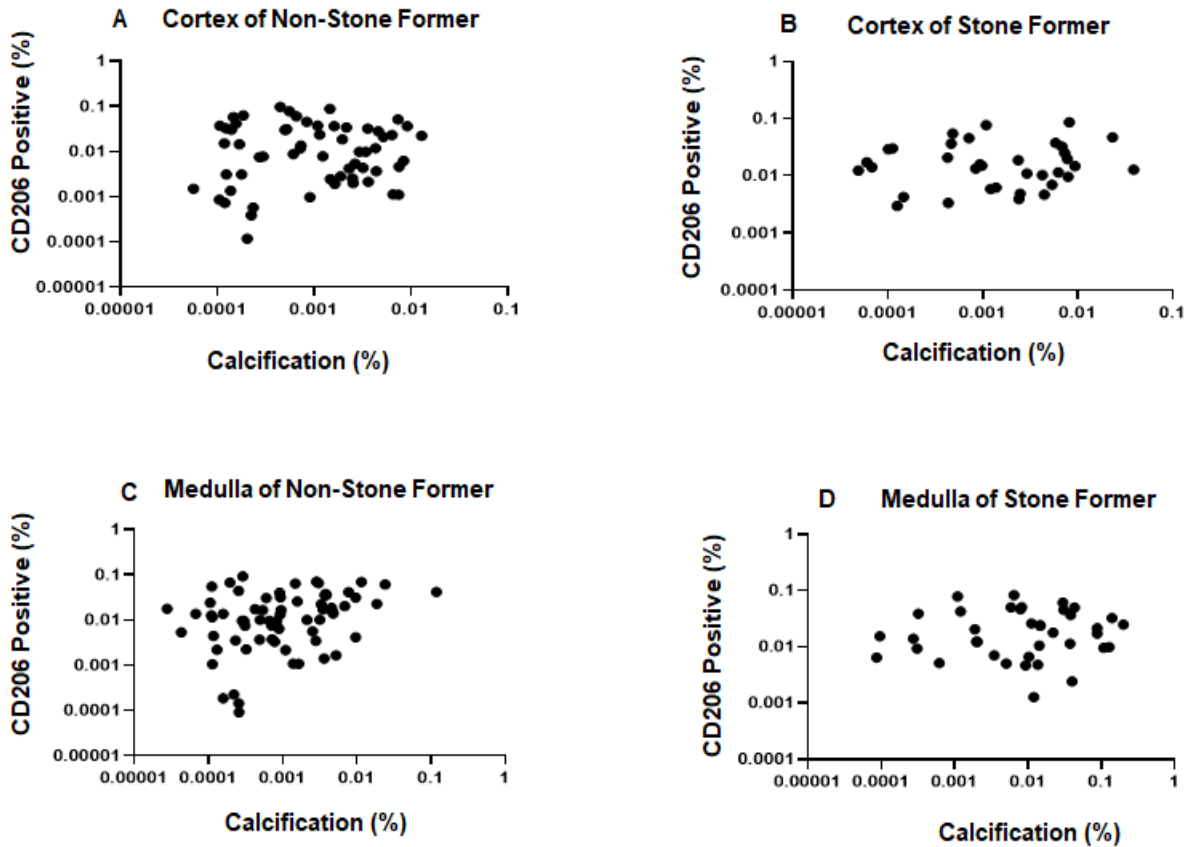
### M2 Macrophage (CD163)



Supplemental Figure 3

**Supplemental Figure 3.** Correlation between calcification and M2 macrophage (CD163 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone former) and with (stone former) history of urinary stone disease. Correlation plot between calcification and CD163 positive M2 macrophage in the cortex of non-stone former (A;  $\rho=0.16$  and  $p=0.14$ ) and stone former (B;  $\rho=0.23$  and  $p=0.13$ ). Correlation plot between calcification and CD163 positive M2 macrophage in the medulla of non-stone former (C;  $\rho=0.26$  and  $p=0.01$ ) and stone former (D;  $\rho=0.29$  and  $p=0.06$ ).  $P < 0.05$  indicates significant differences.

## M2 Macrophage (CD206)



**Supplemental Figure 4**

**Supplemental Figure 4.** Correlation between calcification and M2 macrophage (CD206 positive) in kidney tissue from unilateral nephrectomy patients without (non-stone former) and with (stone former) history of urinary stone disease. Correlation plot between calcification and CD206 positive M2 macrophage in the cortex of non-stone former (A;  $\rho=0.17$  and  $p=0.12$ ) and stone former (B;  $\rho=0.28$  and  $p=0.07$ ). Correlation plot between calcification and CD206 positive M2 macrophage in the

medulla of non-stone former (C;  $\rho=0.35$  and  $p=0.001$ ) and stone former (D;  $\rho=0.25$  and  $p=0.10$ ).  $P < 0.05$  indicates significant differences.