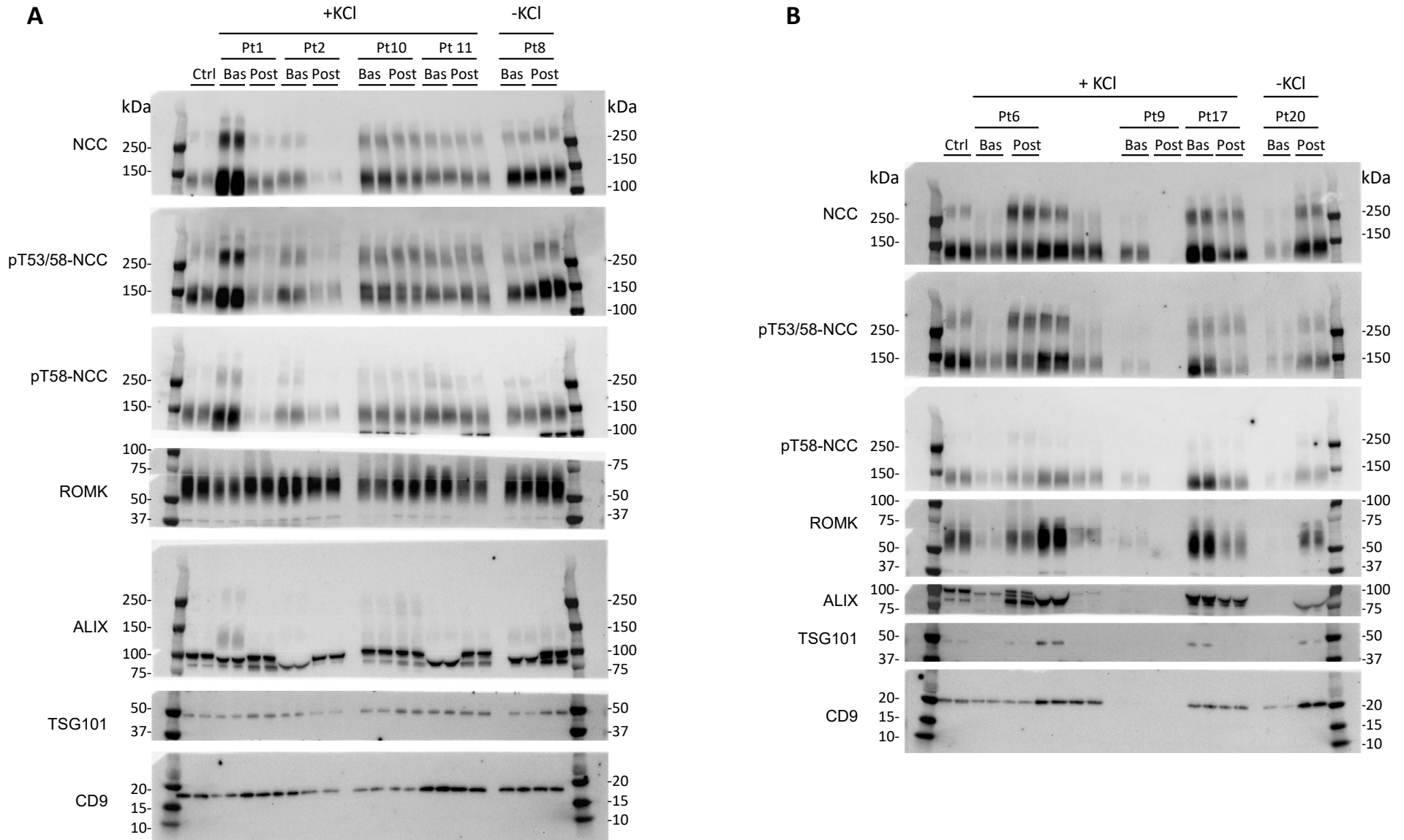


## **Supplementary material**

### **Table of contents**

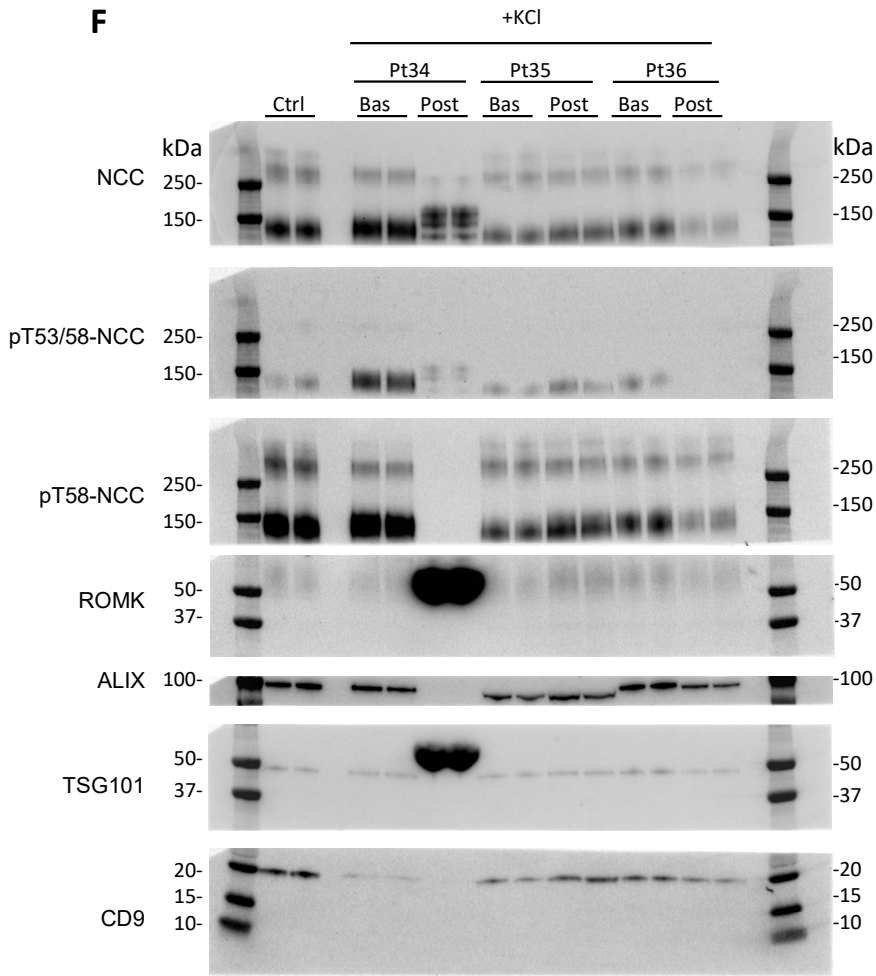
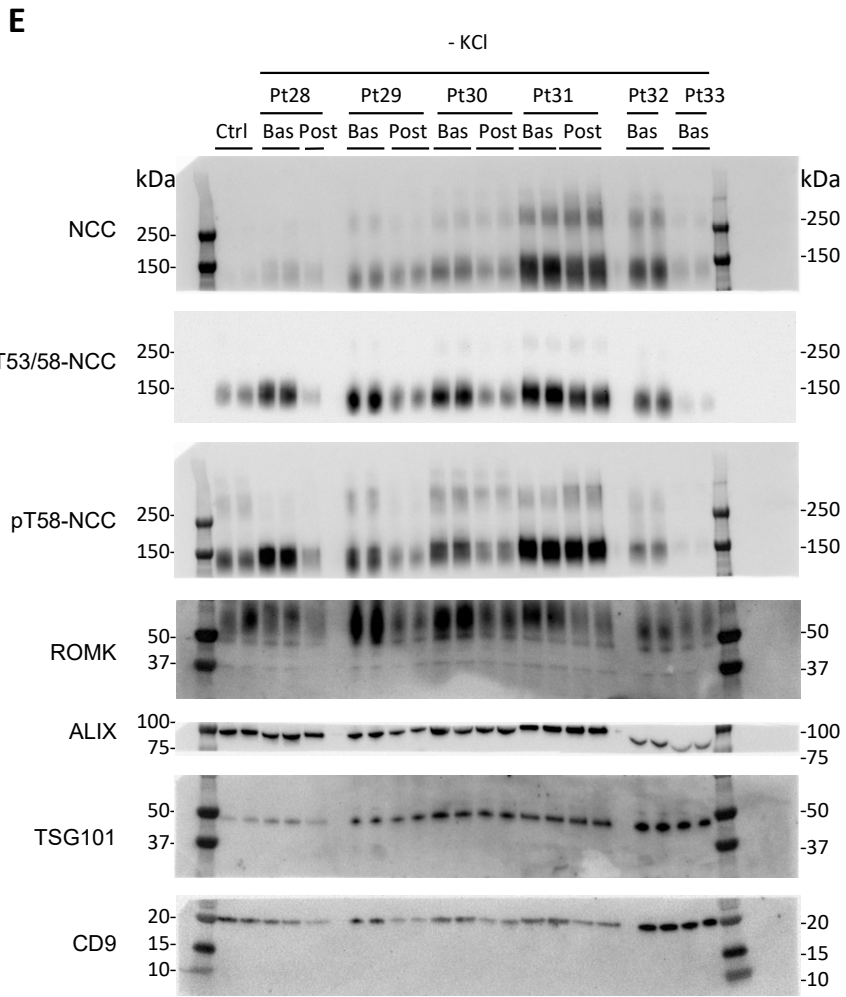
- **Supplementary Figure S1 (A-J)**
- **Supplementary Figure S2**
- **Supplementary Figure S3**
- **Supplementary Figure S4**
- **Supplementary Table S1**

**Supplementary Figure S1.** Immunoblots of analysed proteins in all participants. Each image was merged by a chemiluminescent blot image with a colorimetric image of the same blot using Image Lab software. pT53/58-NCC of the fifth image was a chemiluminescent blot image. The control on each blot is a uEV pool containing resuspension of mixed uEVs isolated from a large amount of urine collected from two healthy volunteers between 9AM and 4PM on multiple days.



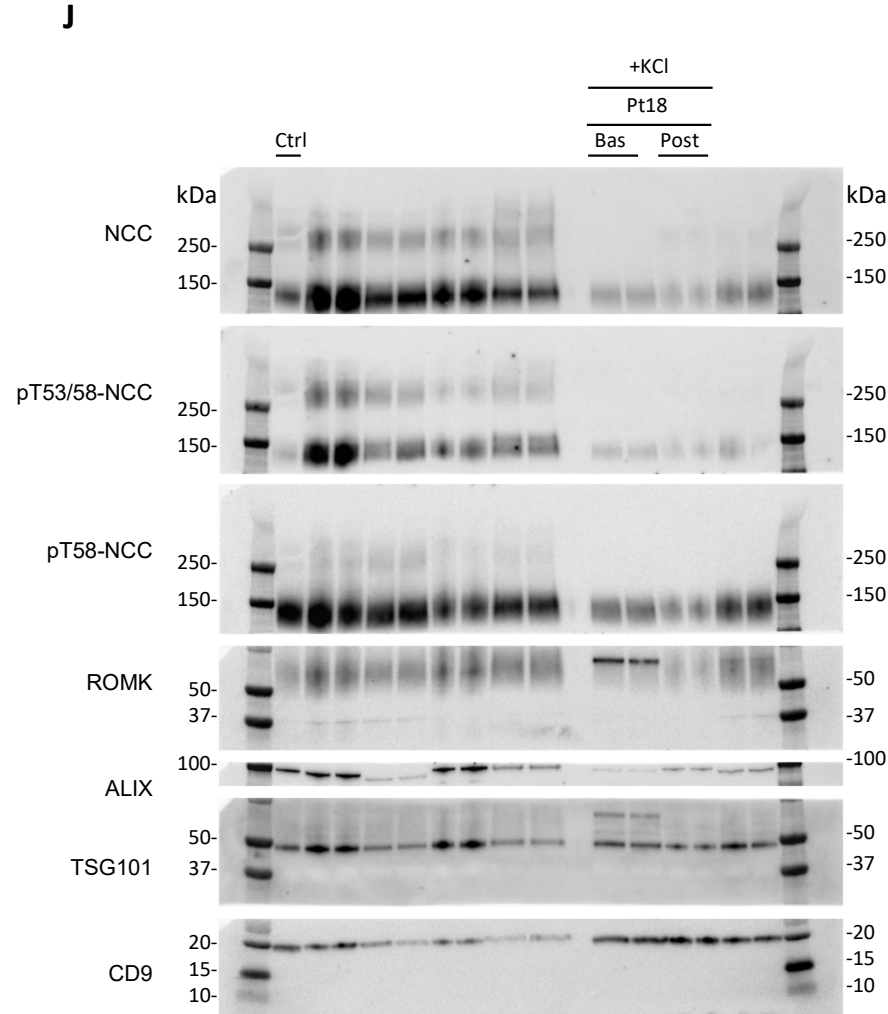
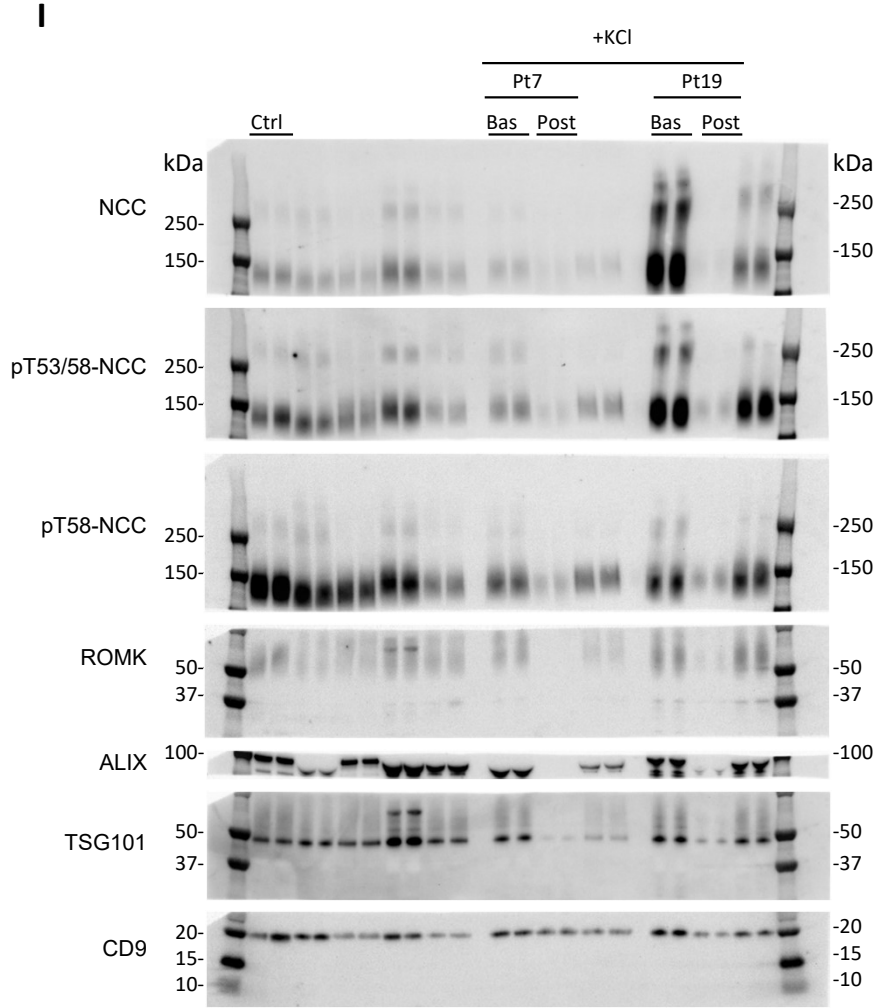


**Supplementary Figure S1**

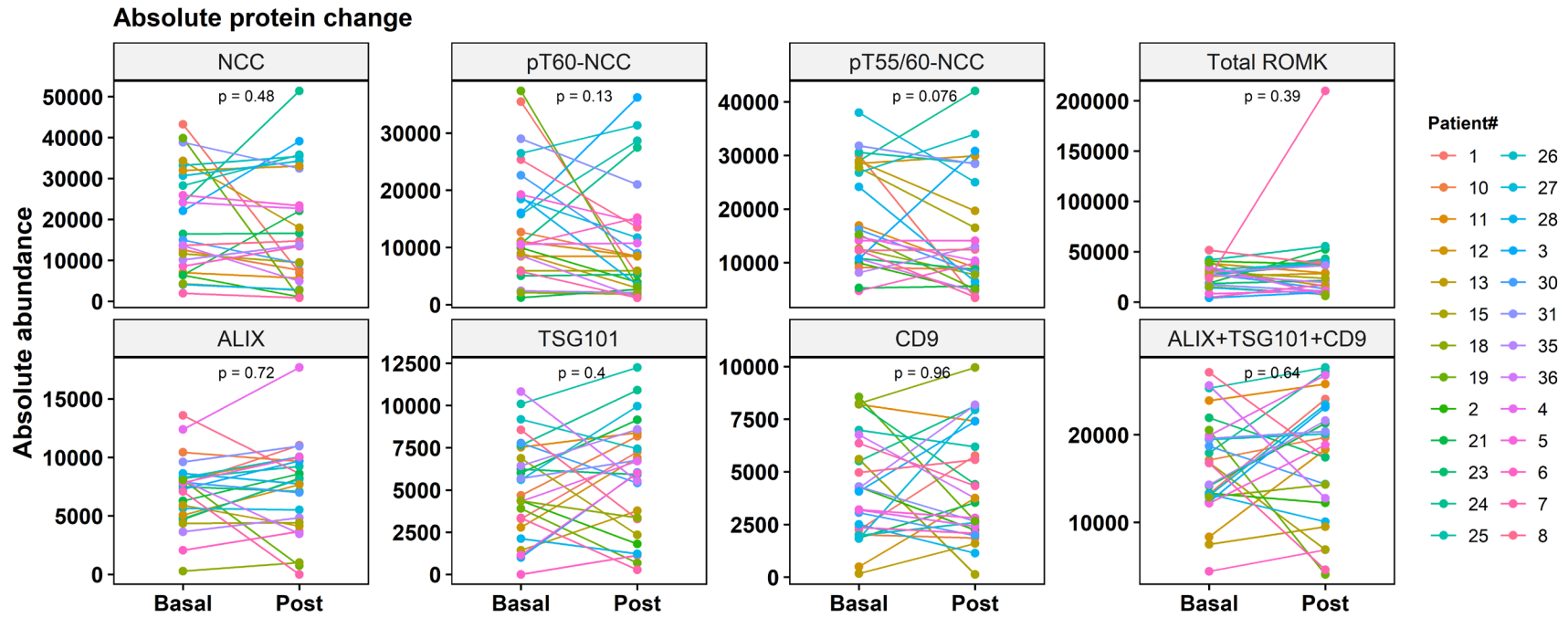




Supplementary Figure S1

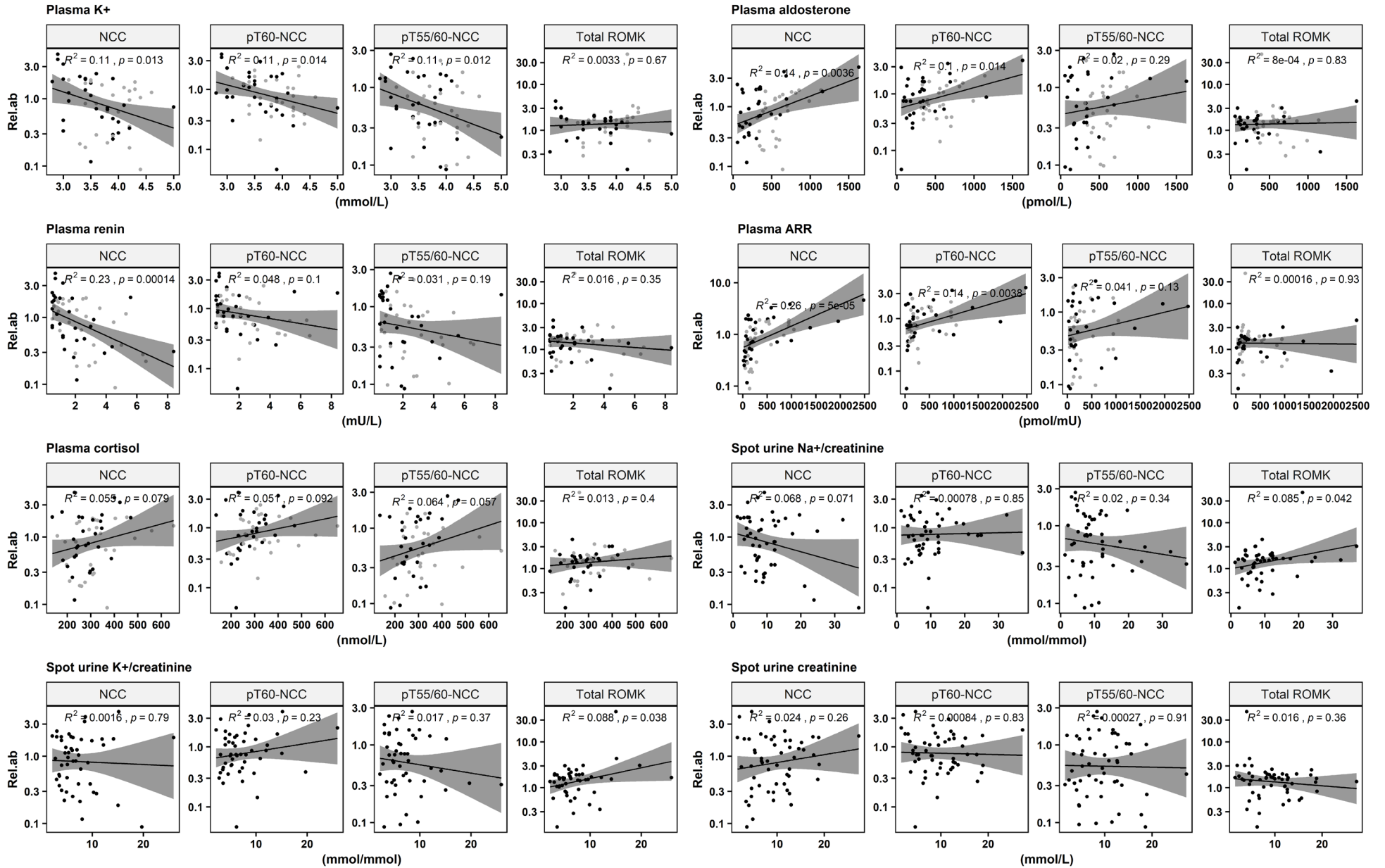


**Supplementary Figure S2.** Changes of absolute abundances of uEV proteins among the 26 PA patients within the 24-hour experiment period.



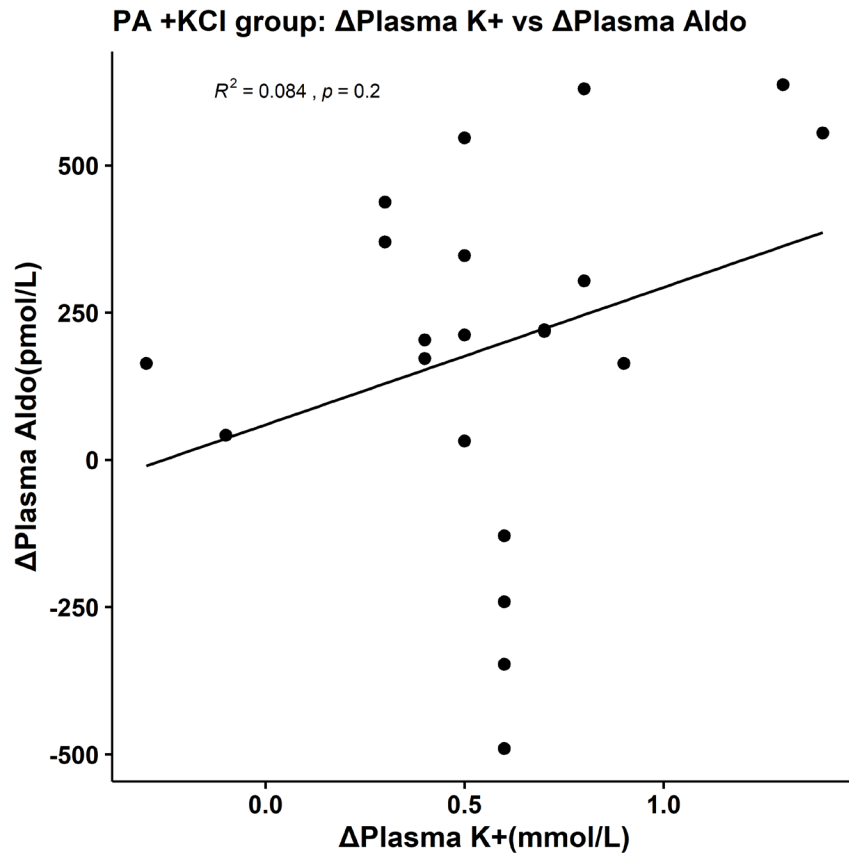
# Supplemental Figure S3. Correlations of the analysed proteins with biochemical parameters.

Test • Basal • Post





**Supplemental Figure S4.** Correlation between changes in plasma K<sup>+</sup> and plasma aldosterone in PA patients receiving KCl replacement.



**Supplemental Table S1.** Detection of EV-enriched proteins in each uEV isolate, and sample inclusion in analyses.

Patient No.	Basal uEV isolate				Post-test uEV isolate				SSST Diagnosis	Included in baseline differences	Included in paired comparison	Included in correlation analyses	
	ALIX	TSG101	CD9	Successful isolation of uEV	ALIX	TSG101	CD9	Successful isolation of uEV				Basal	Post-test
1	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
2	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
3	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
4	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
5	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
6	+	-	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
7	+	+	+	+	-	+	+	+	PA	Yes	Yes	Yes	Yes
8	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
9	+	-	-	-	-	-	-	-	PA	No	No	No	No
10	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
11	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
12	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
13	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
14	+	+	+	+	+	+	+	+	LRH	NA	NA	NA	NA
15	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
16	-	+	+	+	-	-	+	-	LRH	NA	NA	NA	NA
17	+	+	+	+	+	-	+	+	LRH	NA	NA	NA	NA
18	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
19	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
20	-	-	+	-	+	+	+	+	PA	No	No	No	Yes
21	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
22	-	+	+	+	+	+	+	+	LRH	NA	NA	NA	NA
23	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes

24	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
25	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
26	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
27	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
28	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
29	+	+	+	+	+	+	+	+	LRH	NA	NA	NA	NA
30	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
31	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
32	+	+	+	+	NA	NA	NA	NA	PA	Yes	No	Yes	NA
33	+	+	+	+	NA	NA	NA	NA	PA	Yes	No	Yes	NA
34	+	+	+	+	-	-	-	-	PA	Yes	No	Yes	No
35	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
36	+	+	+	+	+	+	+	+	PA	Yes	Yes	Yes	Yes
37	+	+	+	+	-	-	+	-	PA	Yes	No	Yes	No
38	+	+	+	+	+	+	+	+	LRH	NA	NA	NA	NA
Sum										Yes30, No2, NA6	Yes26, No6, NA6	Yes30, No2, NA6	Yes 27, No3, NA8

+, detected in uEV isolate; -, not detected in uEV isolate; NA, not applicable (inadequate urine for uEV isolation or patients who were diagnosed of LRH that excluded in analyses). Yes, included in analyses; No, not included in analyses.