

SUPPLEMENTARY FIGURES FOR THE PUBLICATION:

Spatiotemporal proteomics reveals the molecular consequences of hormone treatment in a mouse model of lower urinary tract dysfunction

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Supplemental material

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Figure S-1. Temporal urinary proteomics of hormone treatment in mice: significantly modulated urine proteins related to acute phase and xenobiotic responses

Figure S-2. Temporal urinary proteomics of hormone treatment in mice: significantly modulated urine proteins related to immunologic processes

Figure S-3. Temporal urinary proteomics of hormone treatment in mice: significantly modulated urine proteins related to blood and iron

Figure S-5. Full gene ontology network of mouse prostate proteomics (from Fig. 4B)

Figure S-6. Significantly enriched biological processes in a prior analysis of human patients with lower urinary tract symptoms ($n=25$ patients vs $n=15$ controls)

Elsewhere:

Figure S-4. Three-dimensional animation of microcomputed tomography experiment in A: one untreated mouse and B: one hormone-treated mouse at 4 weeks

Table S-1. Full list of urine proteins across time (with iBAQ intensity and RM-ANOVA/Tukey's results)

Table S-2. Full list of prostate tissue proteins at 8 weeks (with iBAQ intensity)

Table S-3. Significantly modulated prostate proteins (Perseus volcano results)

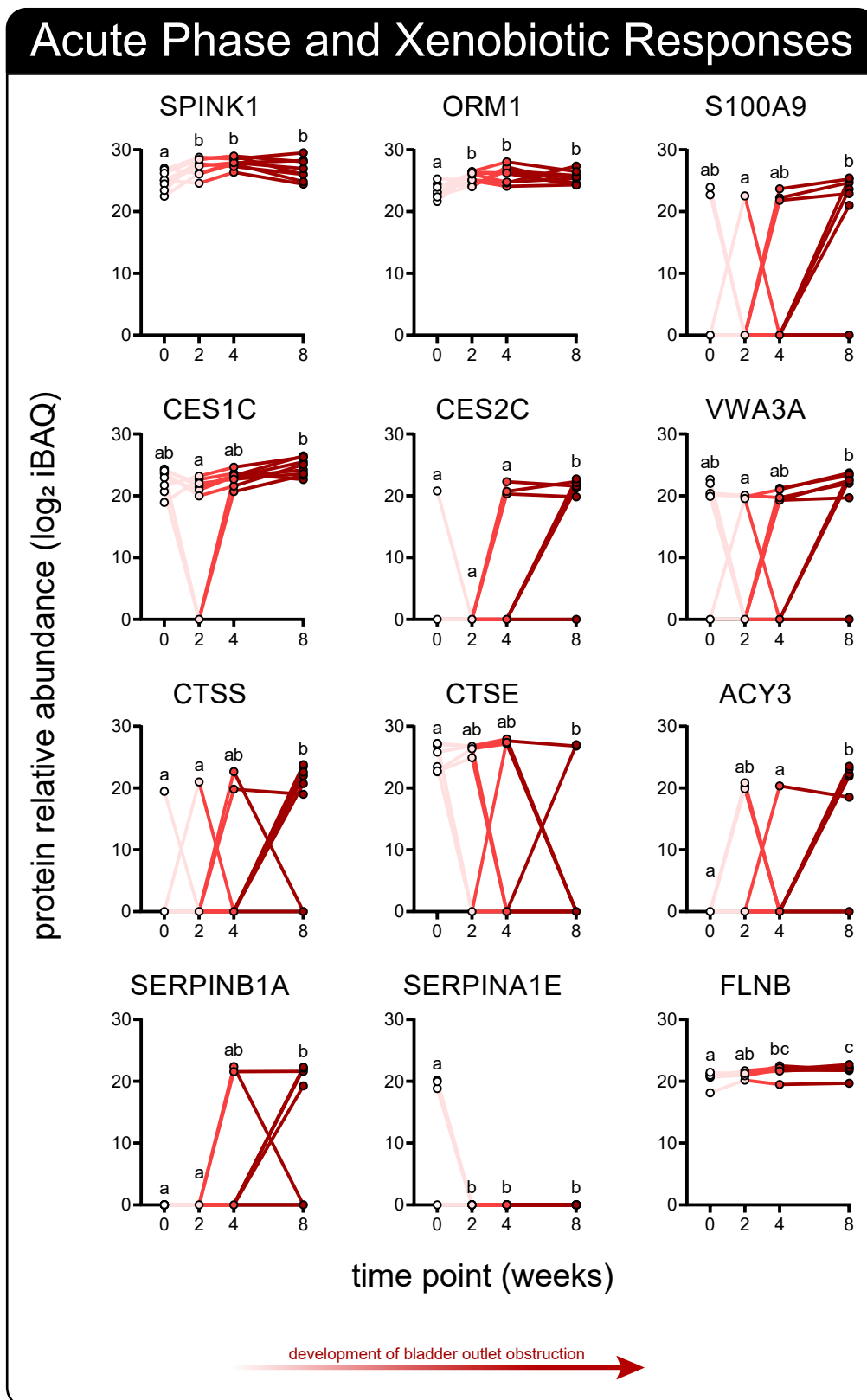


Figure S-1. A subset of significantly modulated urine proteins are related to the acute phase and xenobiotic responses; protein relative abundance (LFQ iBAQ) across 4 time points of disease progression. Distinct letters denote groups with significant differences ($n = 8$; RM-ANOVA, Tukey's post-hoc test, $\alpha = 0.05$).

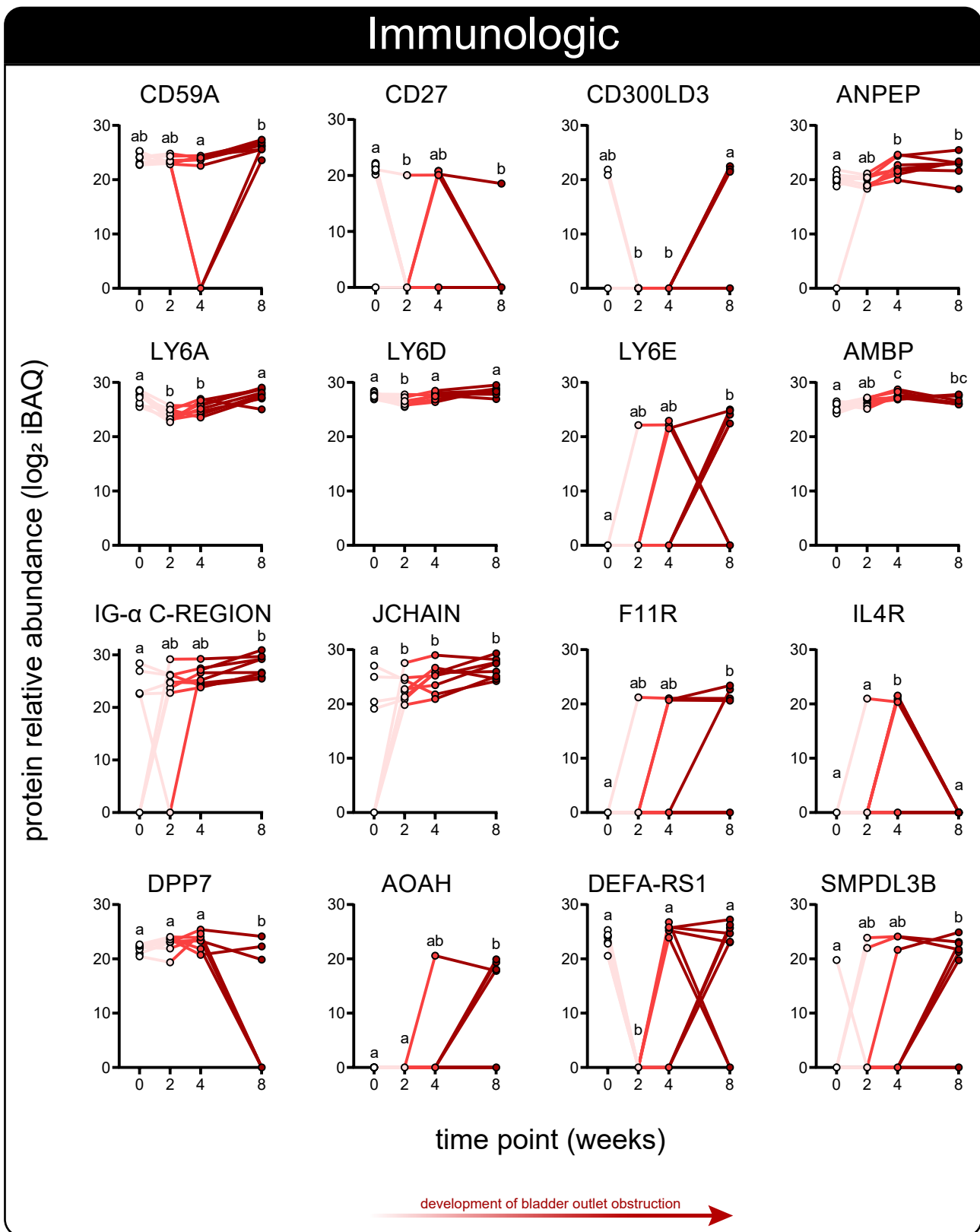


Figure S-2. A subset of significantly modulated urine proteins are related to immunologic processes; protein relative abundance (LFQ iBAQ) across 4 time points of disease progression. Distinct letters denote groups with significant differences ($n = 8$; RM-ANOVA, Tukey's post-hoc test, $\alpha = 0.05$).

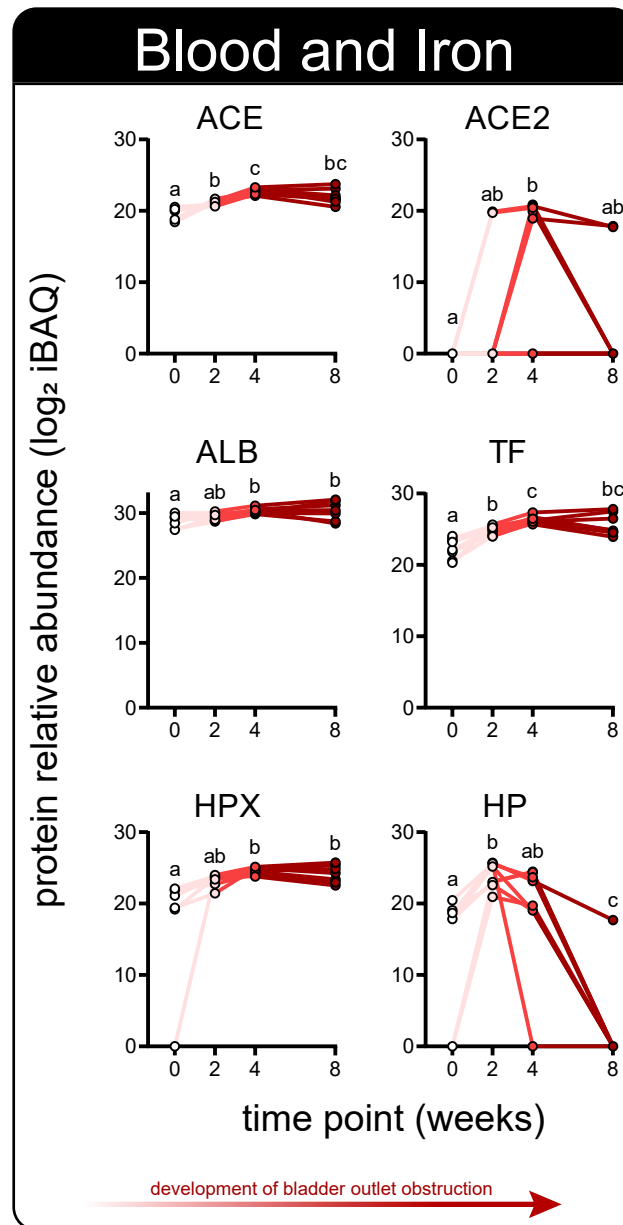


Figure S-3. A subset of significantly modulated urine proteins are related to blood and iron homeostasis; protein relative abundance (LFQ iBAQ) across 4 time points of disease progression. Distinct letters denote groups with significant differences ($n = 8$; RM-ANOVA, Tukey's post-hoc test, $\alpha = 0.05$).

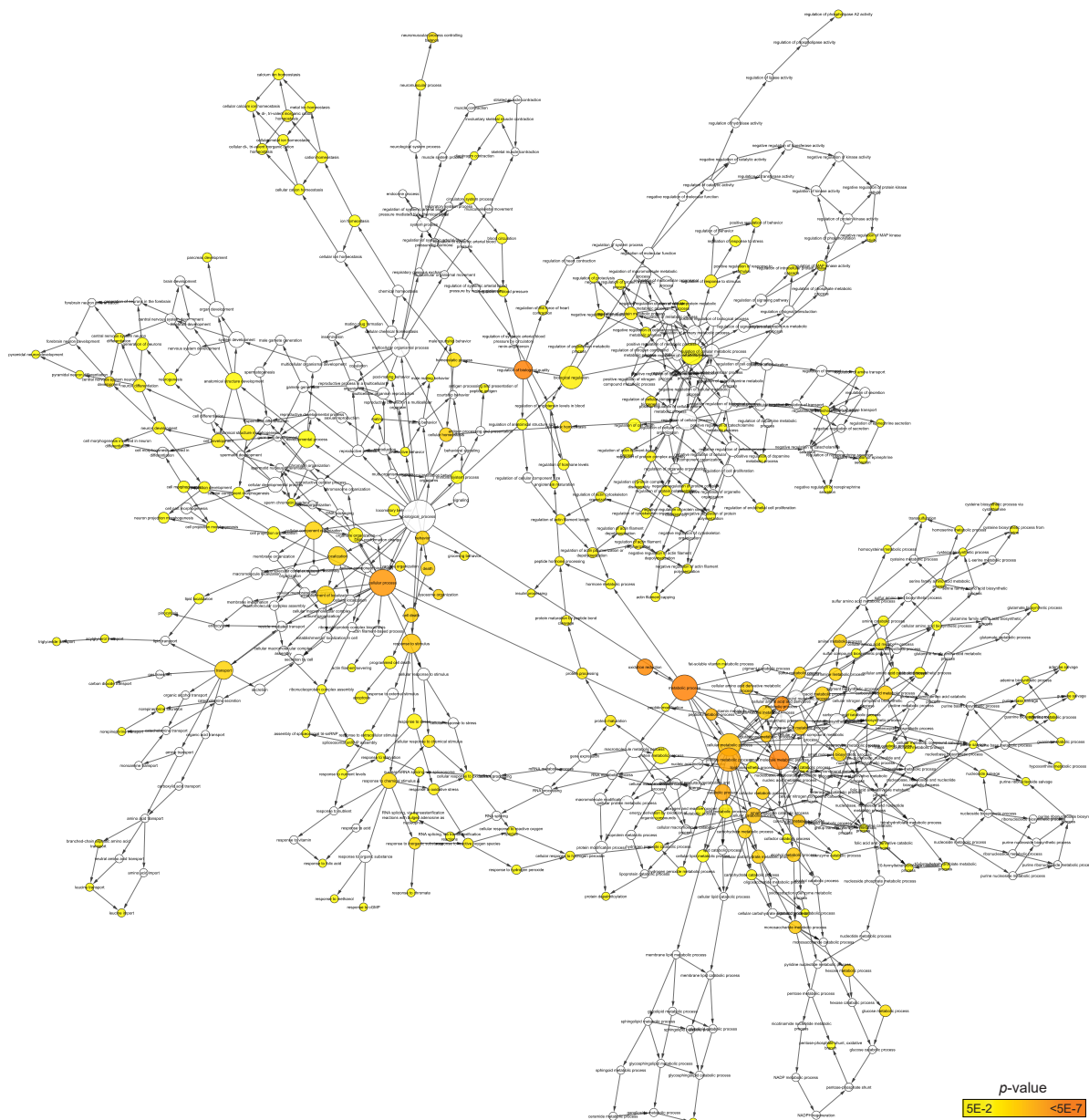


Figure S-5. Full gene ontology network of mouse prostate proteomics (from Fig. 5B): significantly enriched biological processes (Hypergeometric test with Benjamini & Hochberg FDR correction; Cytoscape BiNGO tool).

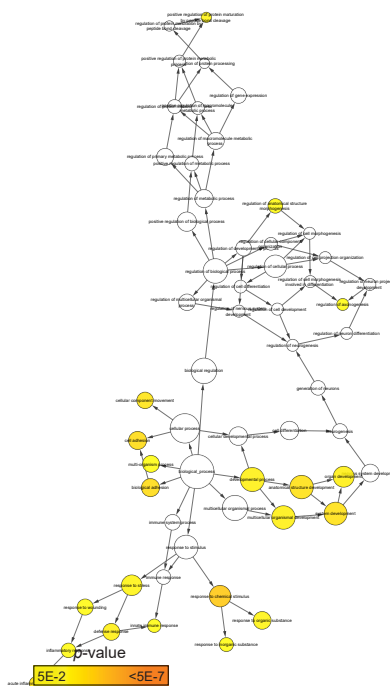


Figure S-6. Significantly enriched biological processes in a prior analysis of human patients with lower urinary tract symptoms ($n = 25$ patients vs $n = 15$ controls). Note similar processes: response to stress, etc. (from DOI: 10.1371/journal.pone.0135415.s004; Hypergeometric test with Benjamini & Hochberg FDR correction; Cytoscape BiNGO tool).