

## SUPPLEMENTARY MATERIAL

# Hyperuricaemia Does Not Interfere with Aortopathy in a Murine Model of Marfan Syndrome

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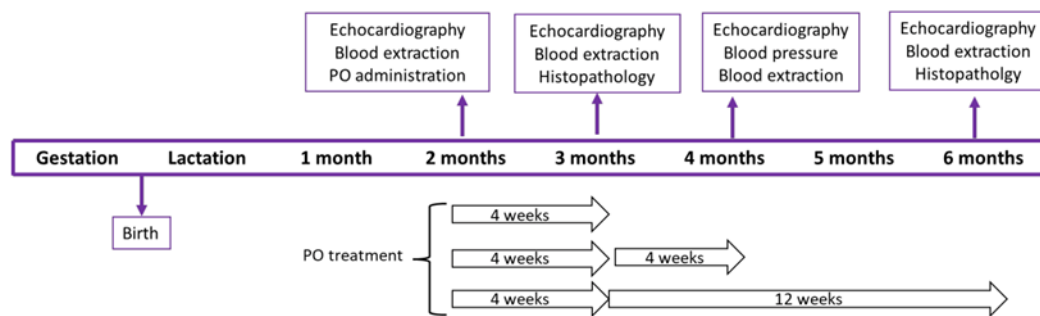
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## SUPPLEMENTARY FIGURE LEGENDS



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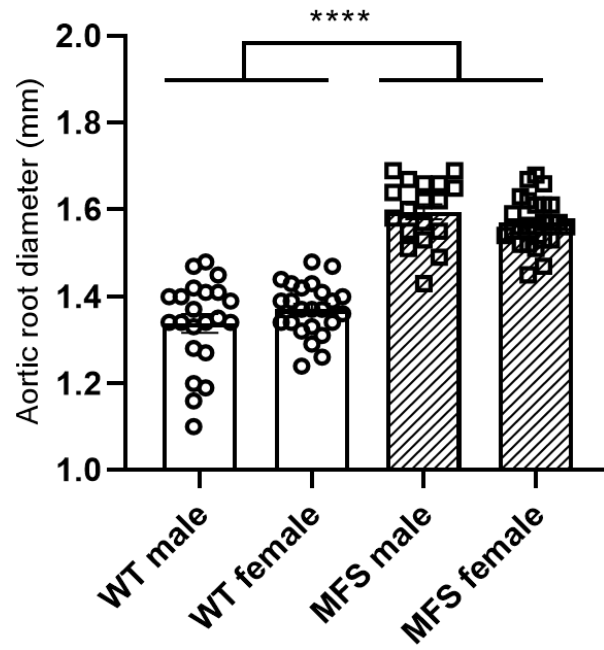
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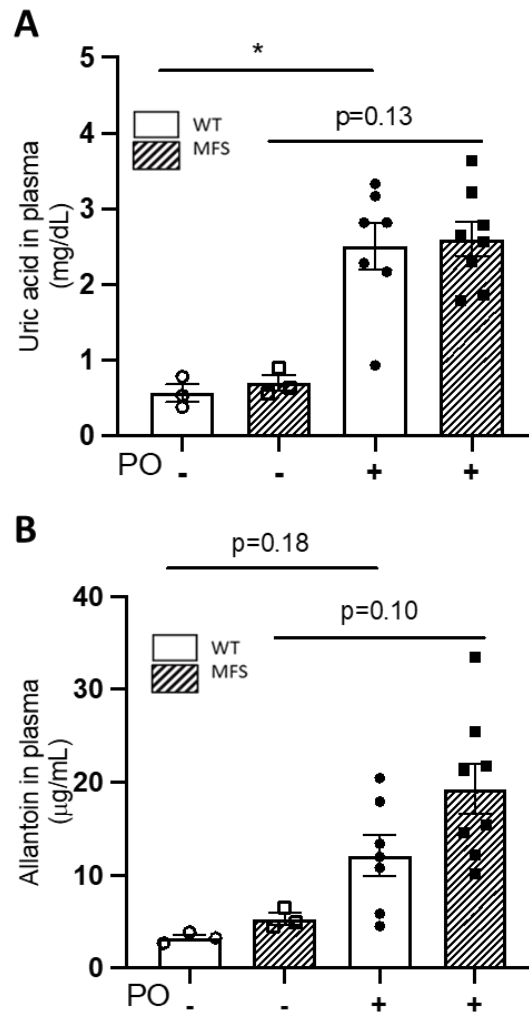


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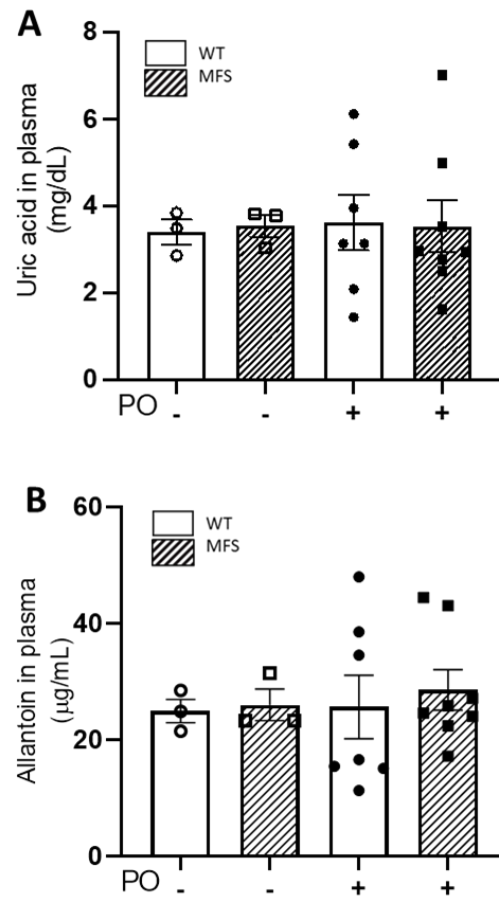
**Supplementary Figure S1. Representative scheme of the experimental protocols for allopurinol treatments.** PO: potassium oxonate. PO was administered to WT and MFS mice for four weeks. Some animals were euthanized and other continued receiving PO for additional 4 weeks or 12 weeks for a total time of 8 and 16 weeks, respectively.



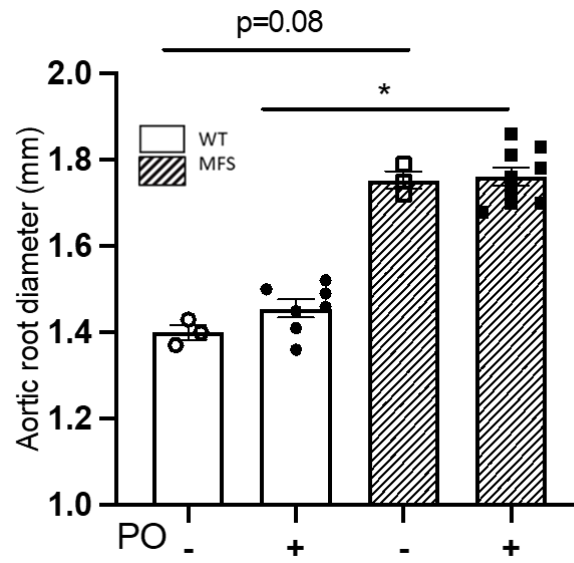
**Supplementary Figure S2. Aortic root diameter in WT and MFS mice at the start point of the study (two months old).** The aortic root diameter of male and female WT and MFS mice was measured with 2D echocardiography. Results are the mean  $\pm$  SEM. Statistical test: Two-way ANOVA. \*\*\*\* $p \leq 0.0001$ .



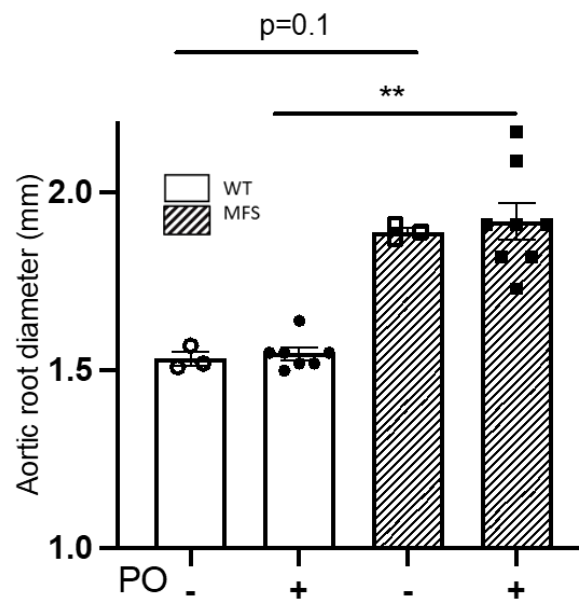
**Supplementary Figure S3. Uric acid and allantoin plasma levels following eight weeks of potassium oxonate treatment.** Three-month-old WT and MFS mice (treated with PO for four weeks) continued receiving PO treatment for four weeks more (total of eight weeks of PO treatment; four-month-old mice) and their uric acid (A) and allantoin (B) plasma levels were determined. Results are the mean  $\pm$  SEM. Statistical tests: Kruskal–Wallis, Dunn’s post hoc. \* $p \leq 0.05$



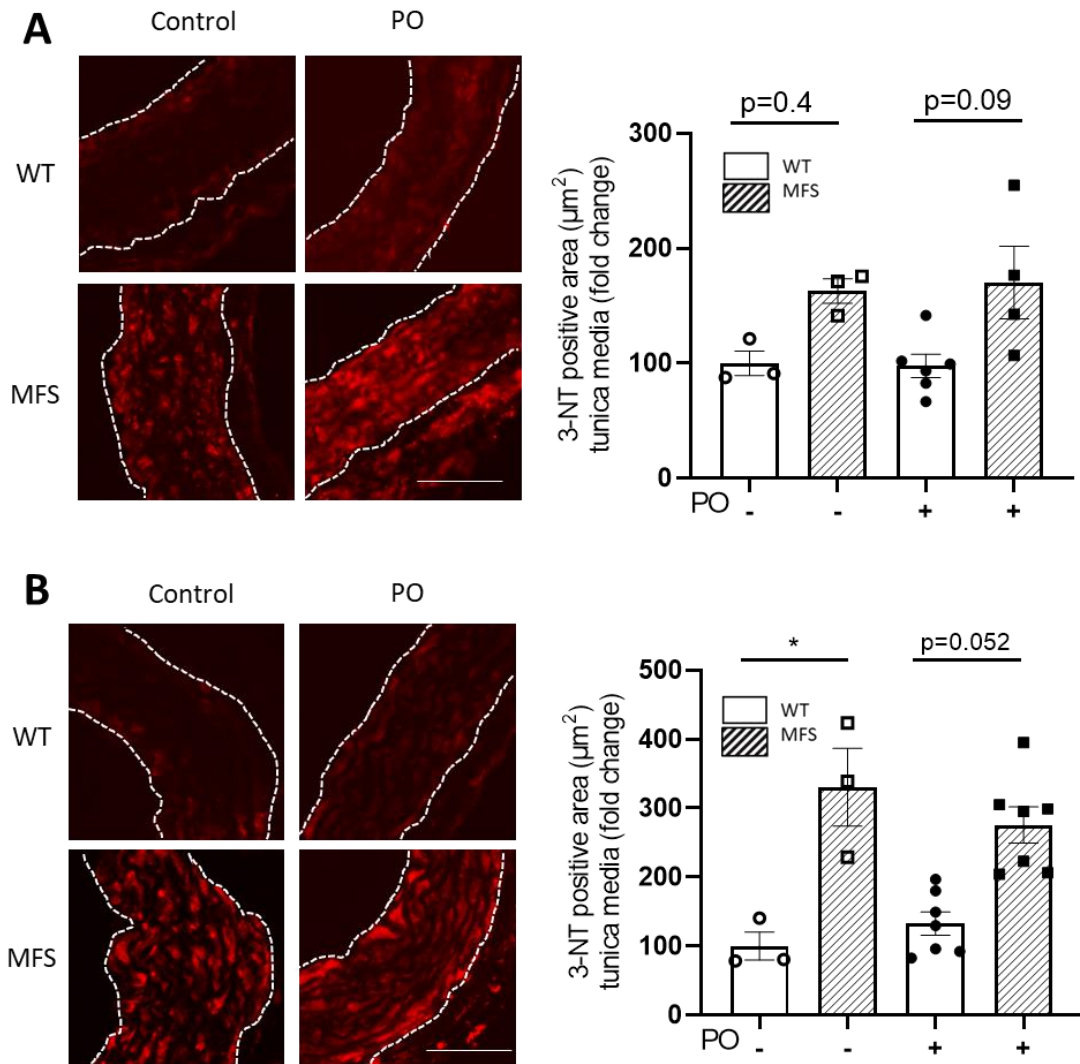
**Supplementary Figure S4. Uric acid and allantoin plasma levels following 16 weeks of potassium oxonate treatment.** Male WT and MFS mice treated for eight weeks with potassium oxonate (PO) were treated for an additional eight weeks (16 weeks of PO treatment; six-month-old mice); uric acid (**A**) and allantoin (**B**) plasma levels were determined. Results are the mean  $\pm$  SEM. Statistical test: Kruskal–Wallis.



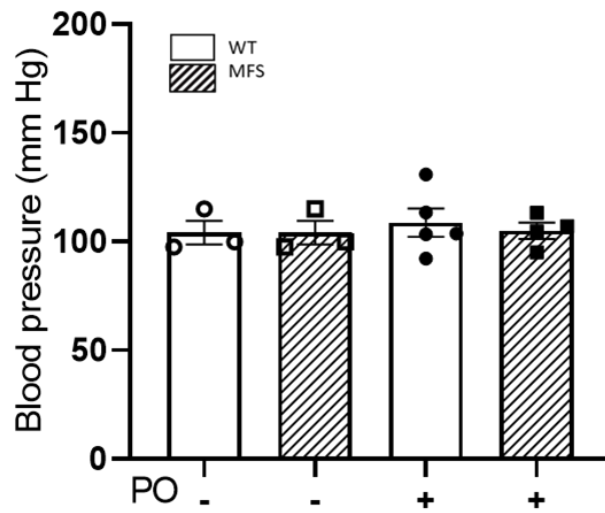
**Supplementary Figure S5. Aortic root diameter in WT and MFS mice following eight weeks of potassium oxonate treatment.** Male WT and MFS mice treated for four weeks with potassium oxonate (PO) were treated for an additional four weeks (eight weeks of PO treatment; four-month-old mice) and the aortic root diameter was measured again with 2D echocardiography. Results are the mean  $\pm$  SEM. Statistical tests: Kruskal–Wallis, Dunn’s post hoc. \* $p \leq 0.05$ .



**Supplementary Figure S6. Aortic root diameter in WT and MFS mice following 16 weeks of potassium oxonate treatment.** Male WT and MFS mice treated for eight weeks with potassium oxonate (PO) were treated for an additional eight weeks (16 weeks of PO treatment; six-month-old mice) and the aortic root diameter was measured again with 2D echocardiography. Results are the mean  $\pm$  SEM. Statistical tests: Kruskal–Wallis, Dunn’s post hoc. \*\* $p \leq 0.01$ .



**Supplementary Figure S7. 3'-nitrotyrosine levels in the aortic media of WT and MFS mice treated with potassium oxonate.** Representative images and quantitative analysis of 3-nitrotyrosine (3-NT) levels in the aortic tunica media of WT and MFS mice treated with potassium oxonate (PO) for 4 weeks (**A**) and 16 weeks (**B**) (mice aged 3 and 6 months of age, respectively). The tunica media is delineated with dashed white lines. Bar, 100  $\mu\text{m}$ . Statistical tests: Kruskal–Wallis and Dunn's multiple comparison tests. \* $p \leq 0.05$ .



**Supplementary Figure S8. Systolic blood pressure in WT and MFS treated with potassium oxonate.** Systolic blood pressure measurements in four-month-old WT and MFS mice treated with potassium oxonate (PO; eight weeks). Results are the mean  $\pm$  SEM. Statistical test: Kruskal-Wallis with Dunn's multiple comparison test.