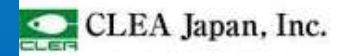


# Characterization and progression of heart failure with preserved ejection fraction in SDT fatty rats.

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## PURPOSE AND OBJECTIVES

The Spontaneously Diabetic Torii (SDT) fatty rat is a well-established type-2 diabetic model with multiple comorbidities. However, the onset and spontaneous progression of cardiac dysfunction is not yet reported. We assessed the natural evolution of cardiac function in SDT fatty at different ages starting at 7-week of age.

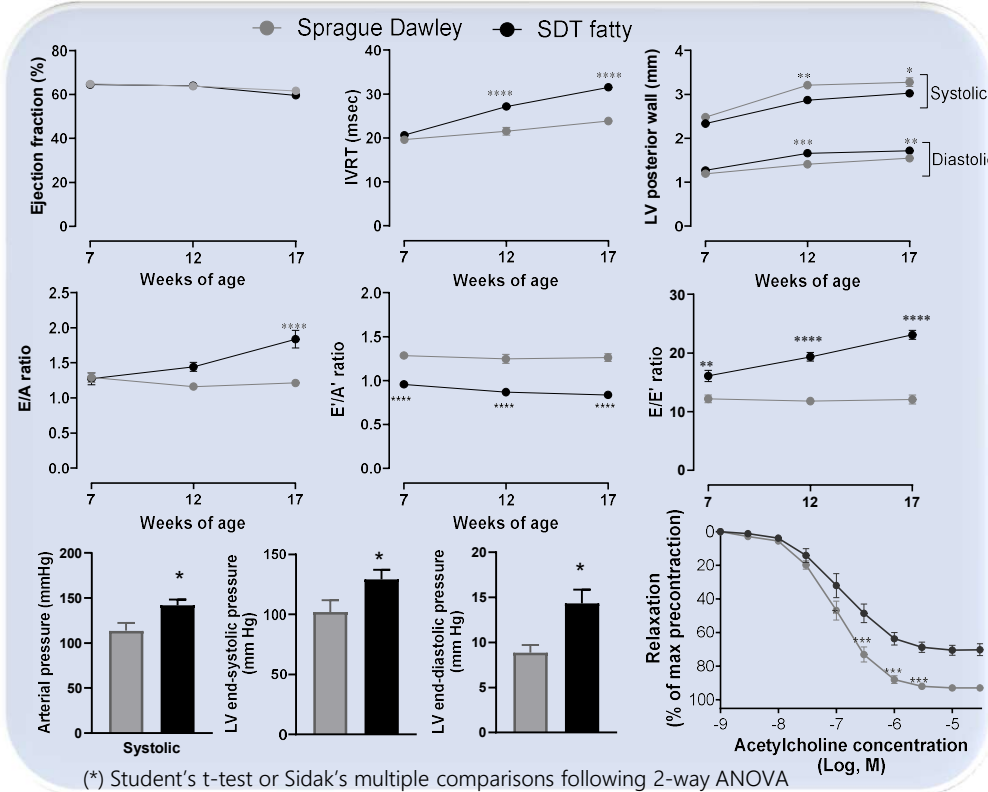
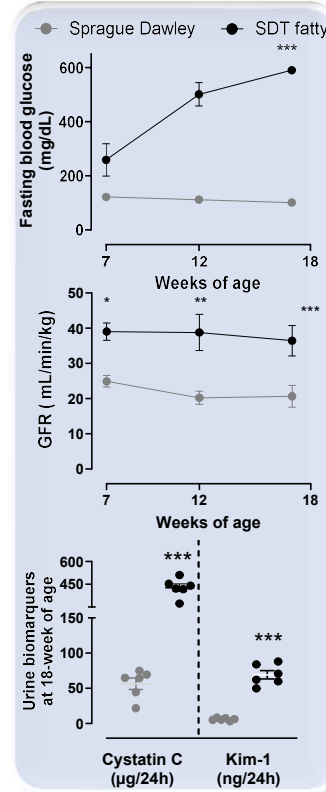
## METHODS

5-week-old male rats  
Lean Sprague Dawley (n=6)  
SDT fatty (n=6)



- Echocardiography
  - Glomerular Filtration rate (FITC-Sinistrin)
  - Urine parameters
  - Blood parameters
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- +
- Invasive hemodynamics
  - Vascular function (isolated thoracic aorta)

## RESULTS:



(\*) Student's t-test or Sidak's multiple comparisons following 2-way ANOVA

## CONCLUSION

SDT fatty rats developed diastolic dysfunction characterized by a restrictive profile combining compliance, relaxation impairment and higher filling pressure along with hypertension. This type 2 diabetic model seems a very promising model to translate the metabolic syndrome clinical HFpEF phenogroups and is consequently a relevant model to evaluate drugs targeting HFpEF.