

# Presentation

Minsu Kim, Alona Muzikansky, Ariane Stark, Jadey Wu

# Introduction

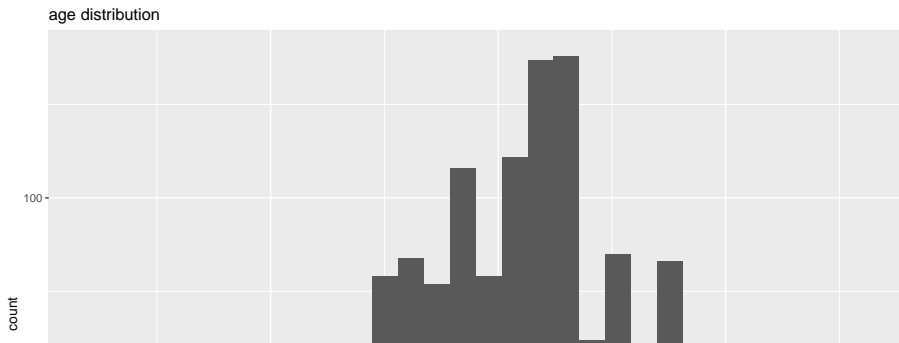
Introduction text here

# Descriptive Statistics

put summary

```
age.hist <- ggplot(data.work, aes(data.work$AGE)) + geom_histogram(  
  labs(title = "age distribution", x = "age")  
age.hist
```

## 'stat\_bin()' using 'bins = 30'. Pick better value with 'bin



# Ariane: Analysis of Sex and Chronic Heart Failure: Overview

Question: Is there an association between sex and chronic heart failure?

Sex	Chronic Heart Failure	
	No	Yes
Female	353	149
Male	699	179

# Analysis of Sex and Chronic Heart Failure: Tests

Pearson  $\chi^2$  Test of Independence:

X-squared  
14.71773

p-value = 0.00012

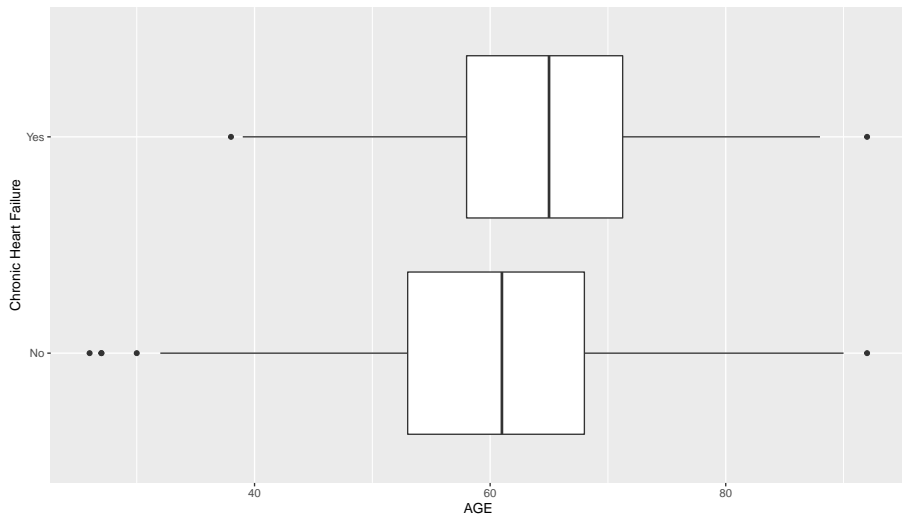
Likelihood Ratio Test of Independence:

G  
14.93905

p-value = 0.00011

# Analysis of Age(Continuous) and Chronic Heart Failure: Overview

Question: Is there an association between age and chronic heart failure?



# Analysis of Age(Continuous) and Chronic Heart Failure: Summary Statistics

	Chronic Heart Failure	
	No	Yes
Min.	26	38
1st Qu.	53	58
Median	61	65
Mean	60.42586	64.51220
3rd Qu.	68.00	71.25
Max	92	92

# Analysis of Age(Continuous) and Chronic Heart Failure: Test

Analysis was done using a two sided Wilcoxon Rank Sum Test to test if there is a difference in Chronic Heart Failure outcome across age.

W

136546.5

p-value = 1e-08



# Analysis of Age(Categorical) and Chronic Heart Failure: Overview

Question: Is there an association between age(decade) and chronic heart failure?

Age	Chronic Heart Failure	
	No	Yes
20s	3	0
30s	44	2
40s	114	24
50s	294	67
60s	365	126
70s	197	86
80s	32	22
90s	3	1

# Analysis of Age(Categorical) and Chronic Heart Failure: Test

Pearson  $\chi^2$  Test of Independence:

X-squared

35.41942

p-value = 1e-05

Likelihood Ratio Test of Independence:

G

38.86163

p-value = 2.08e-06

# Alona

Alona

Minsu

# Jadey

Jadey