PROJECT DEVELOPMENT PHASE

Delivery of Sprint - 01

DATE	29th October 2022
TEAM ID	PNT2022TMID29954
PROJECT TITLE	Visualizing and Predicting Heart Diseases with an Interactive Dashboard

SPRINT - 01

- Data Collection
- Data Preparation

SPRINT - 02

- Data Exploration

SPRINT - 03

- Dashboard Creation

SPRINT - 04

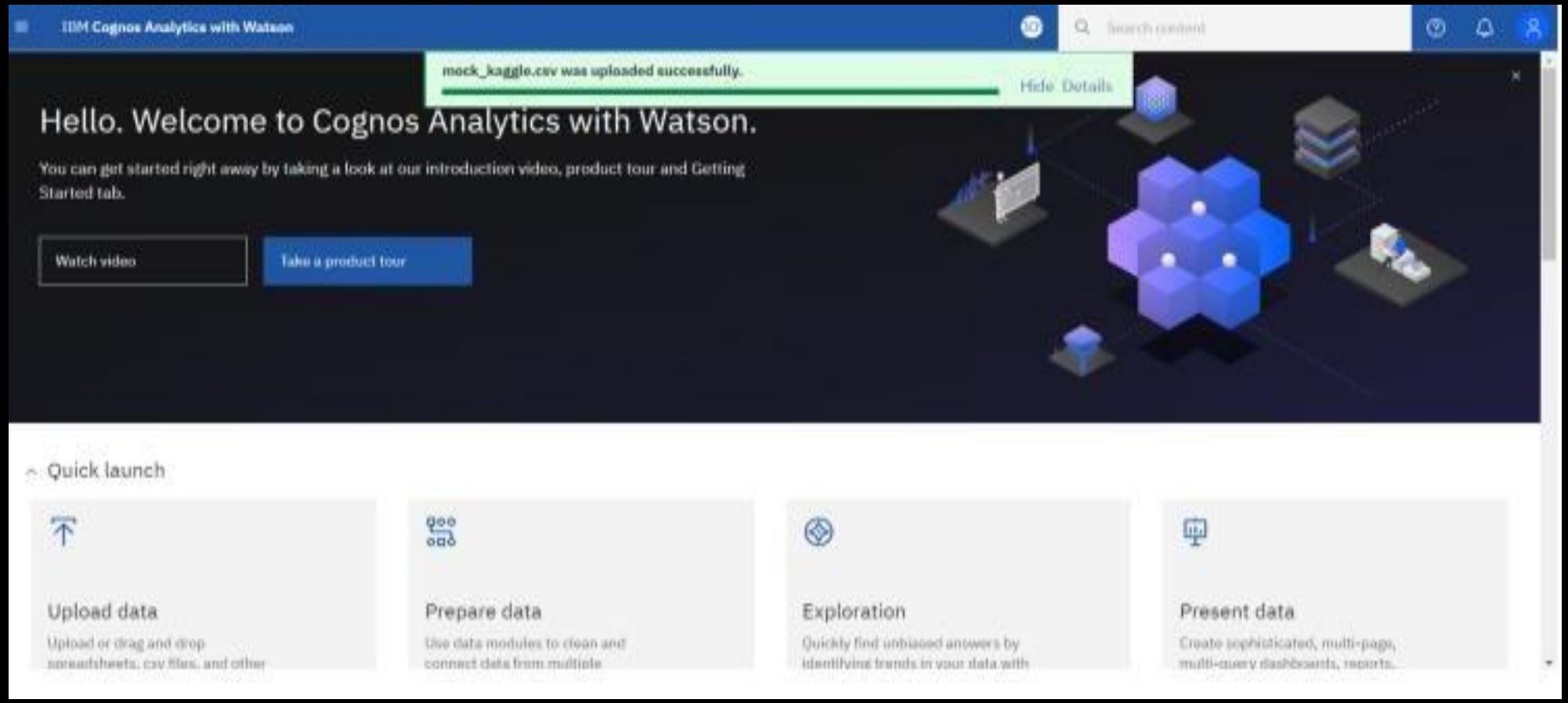
- Report Creation
- Story Creation

Data Collection

(i) DOWNLOADING DATASET:

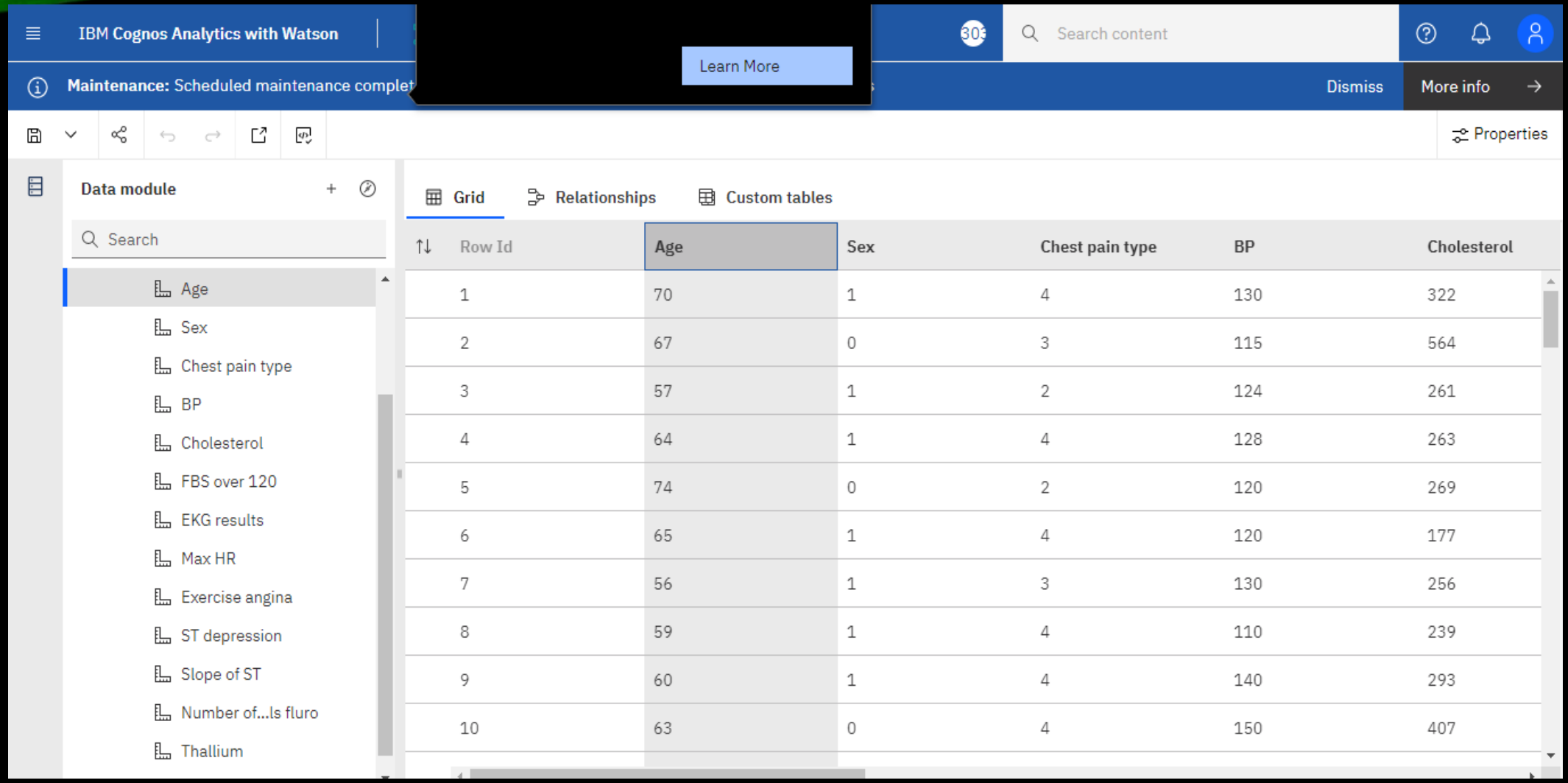
Dataset link : heart-disease-prediction dataset

(ii) UPLOADING DATASET



DATA PREPARATION

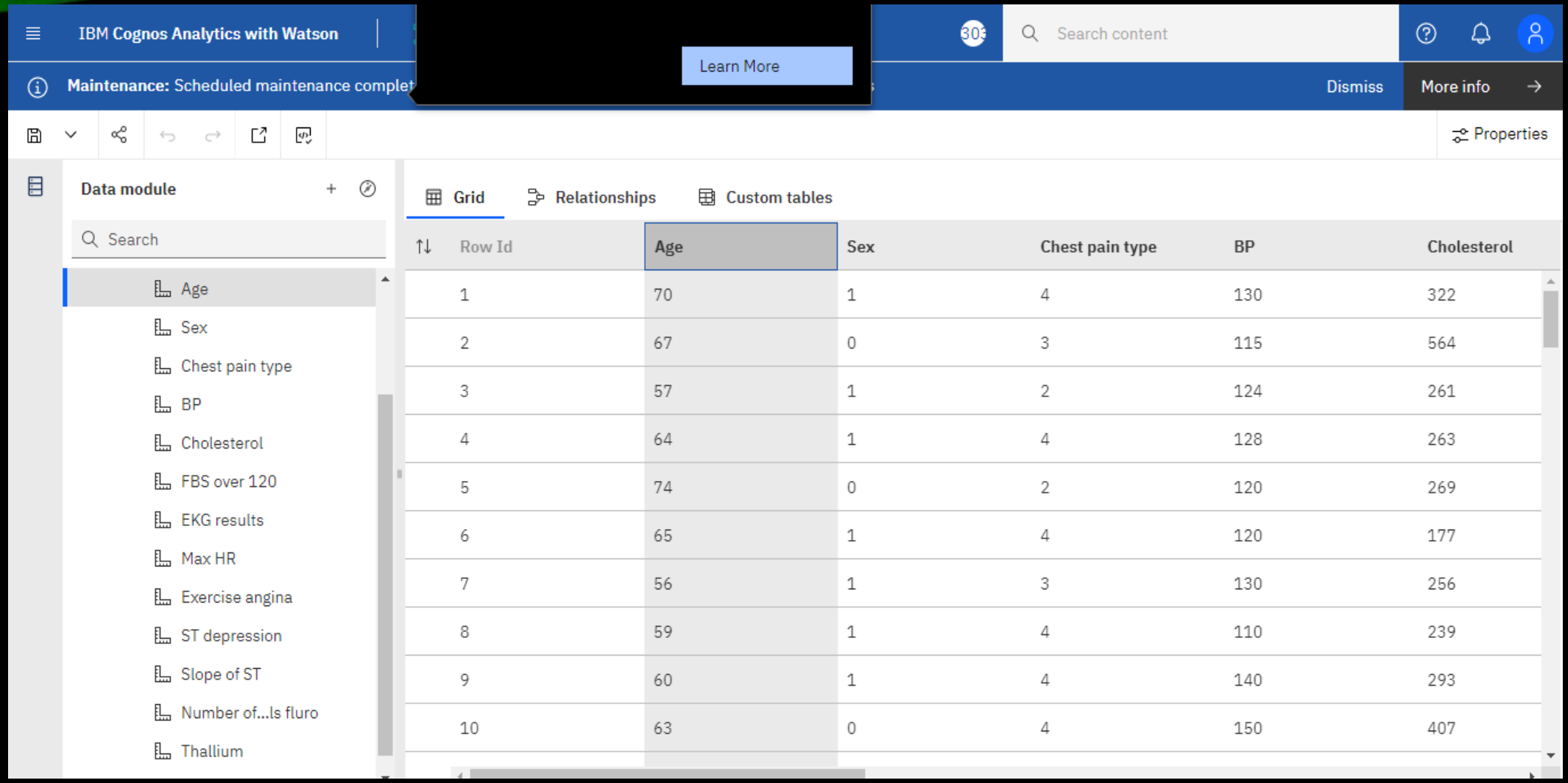
Prepare the Dataset



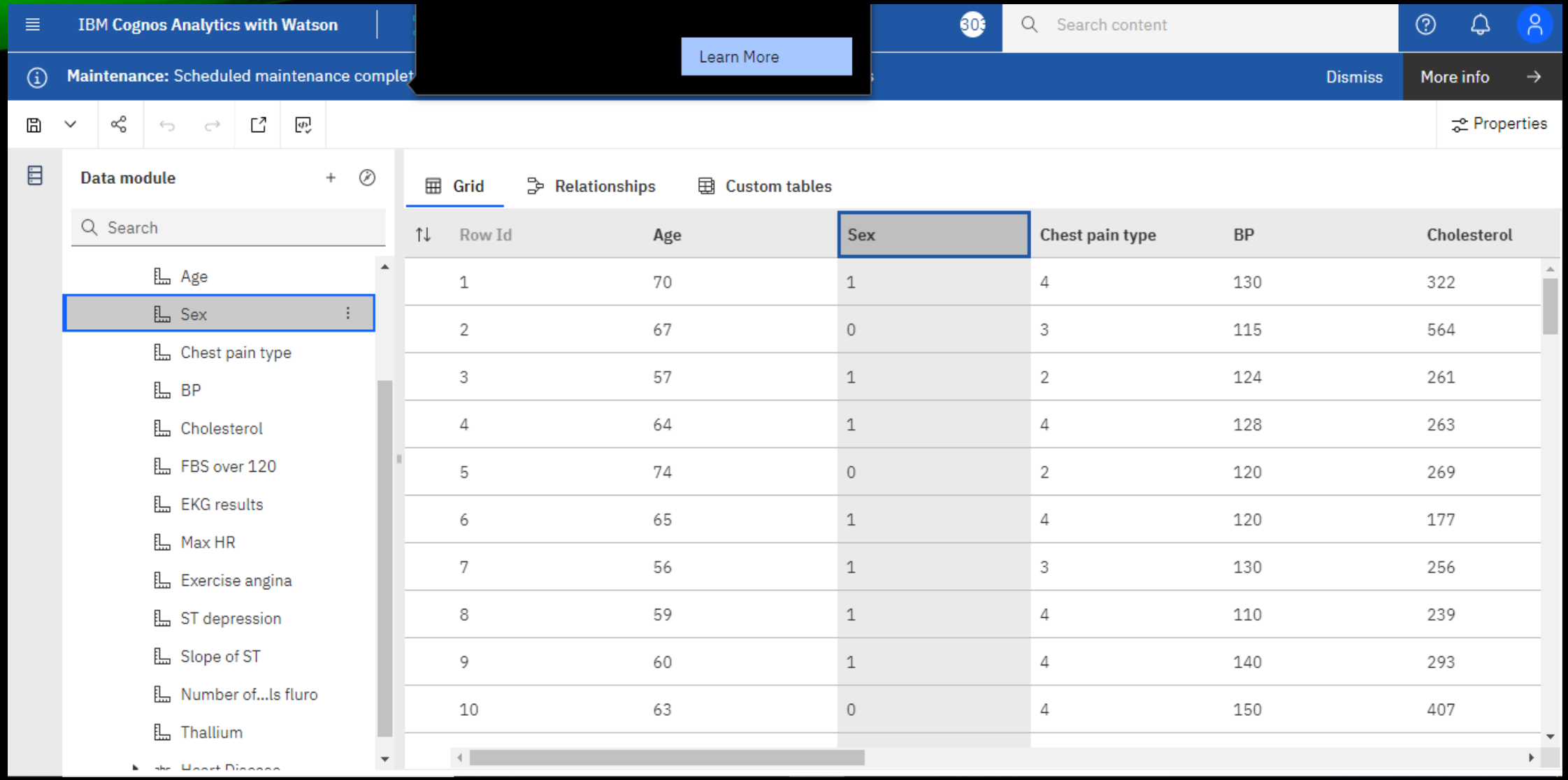
Row Id	Age	Sex	Chest pain type	BP	Cholesterol
1	70	1	4	130	322
2	67	0	3	115	564
3	57	1	2	124	261
4	64	1	4	128	263
5	74	0	2	120	269
6	65	1	4	120	177
7	56	1	3	130	256
8	59	1	4	110	239
9	60	1	4	140	293
10	63	0	4	150	407

DATA PREPARATION

AGE :

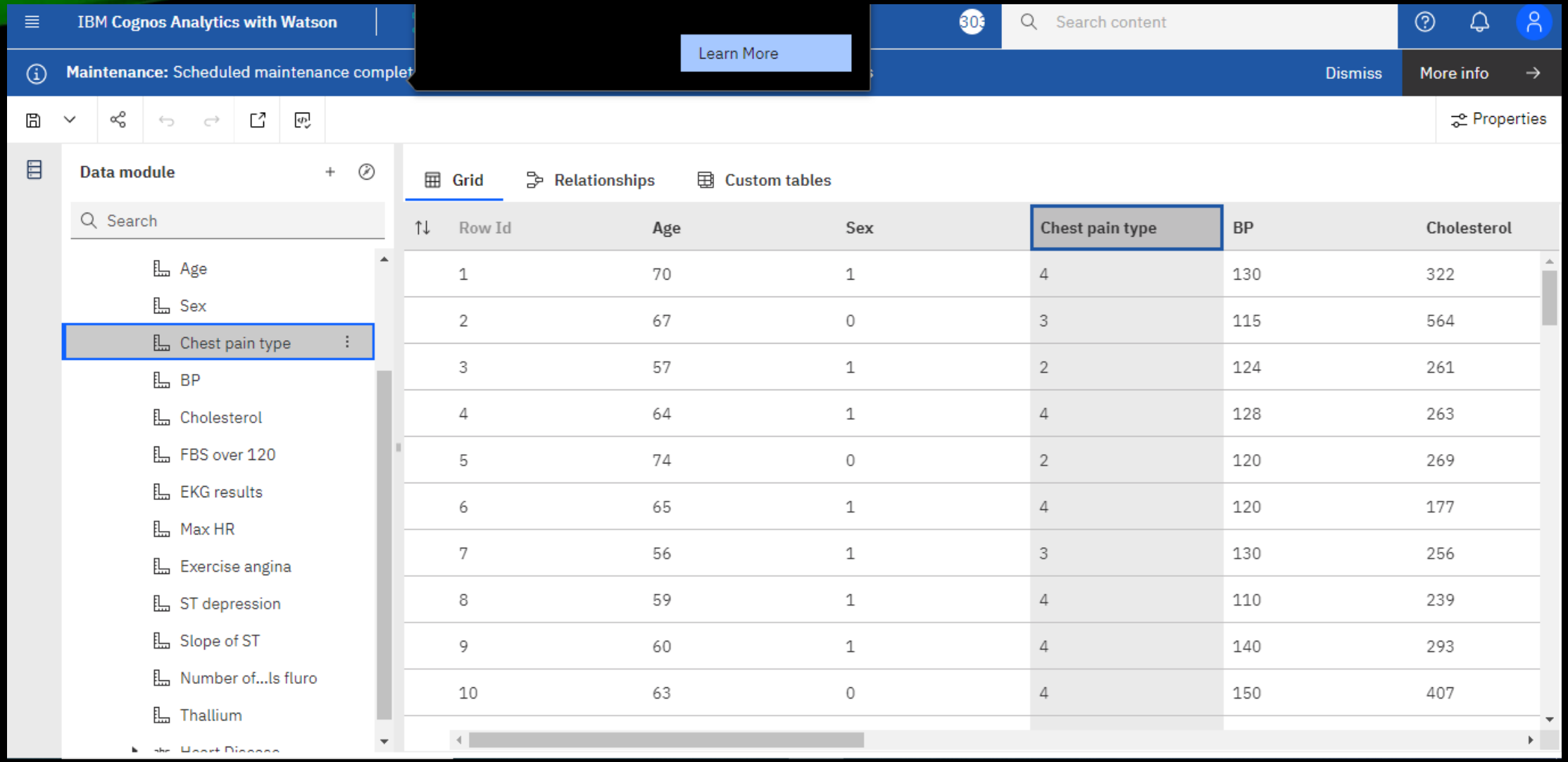


DATA PREPARATION
GENDER:



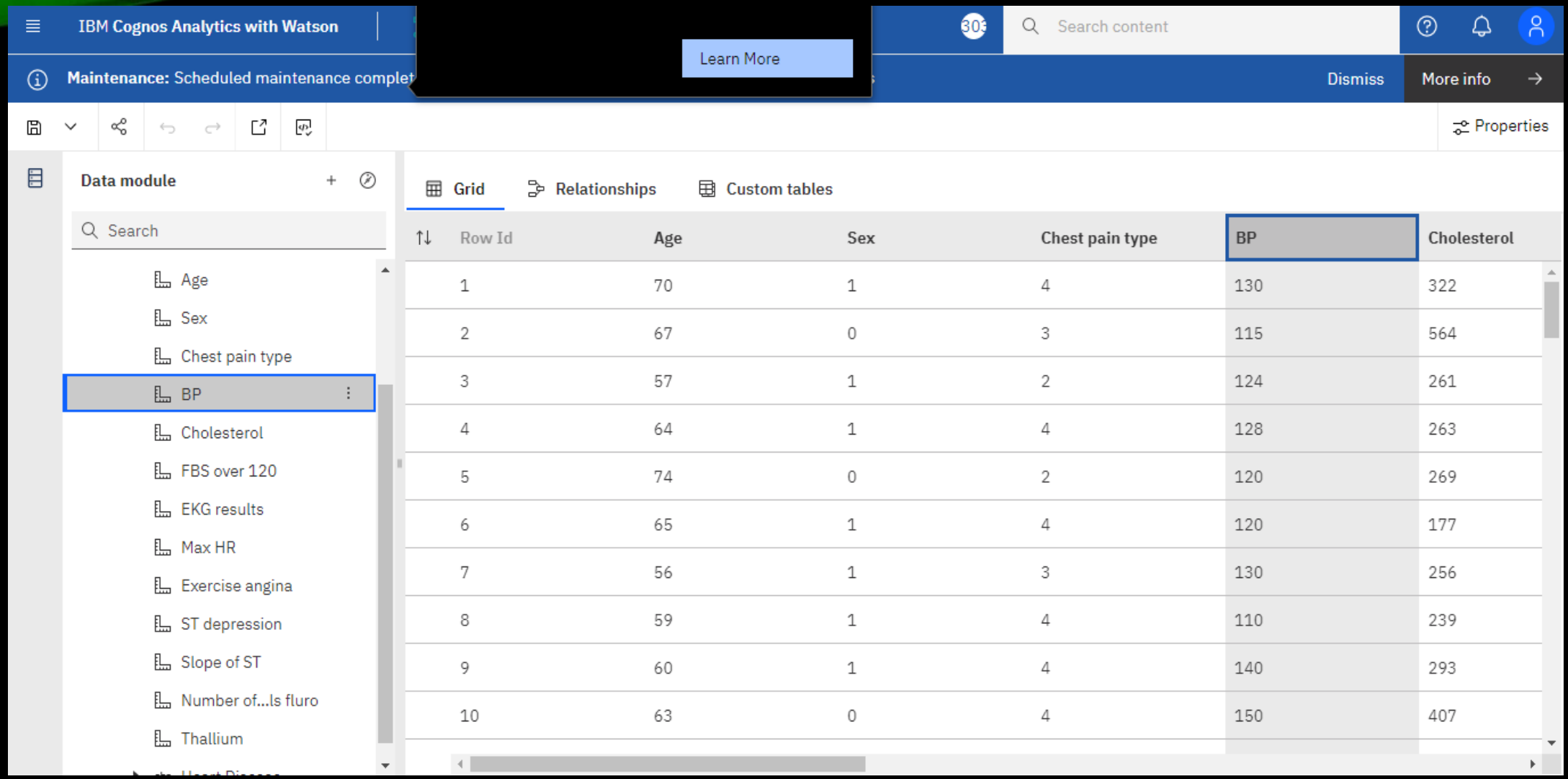
DATA PREPARATION

CHEST PAIN TYPE :



DATA PREPARATION

BP :



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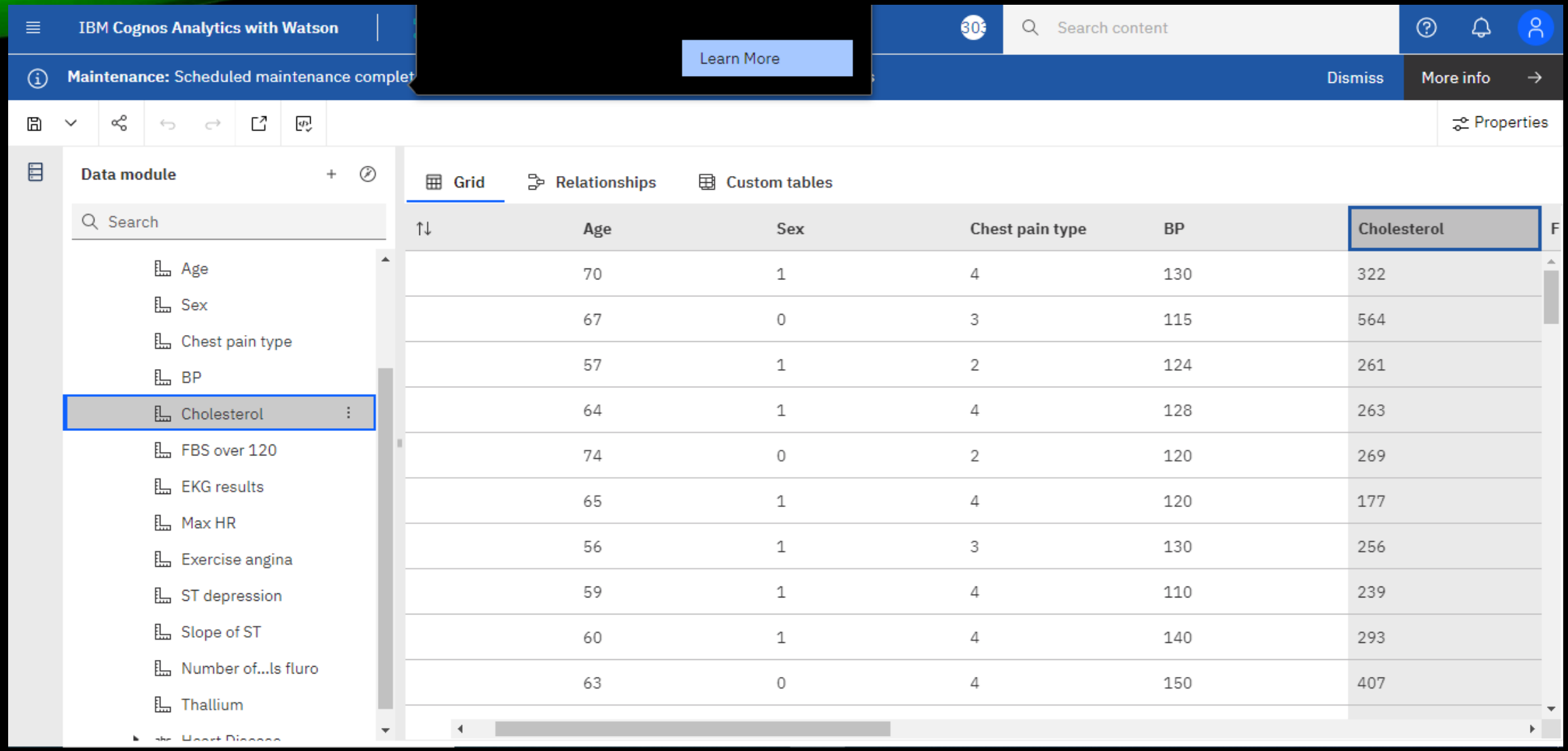
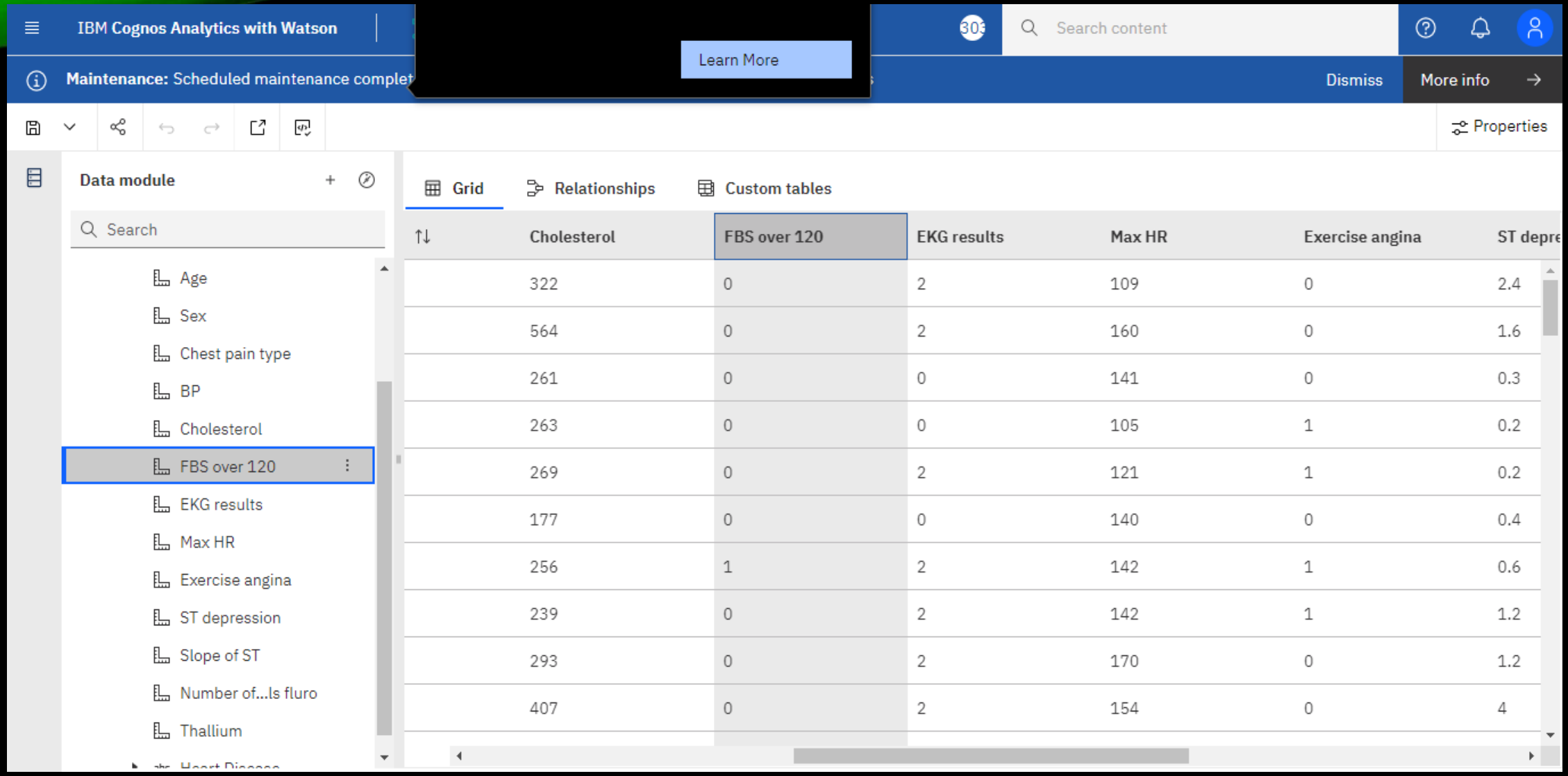
7	56	1	3	130	256
8	59	1	4	110	239
9	60	1	4	140	293
10	63	0	4	150	407

DATA PREPARATION

CHOLESTEROL :



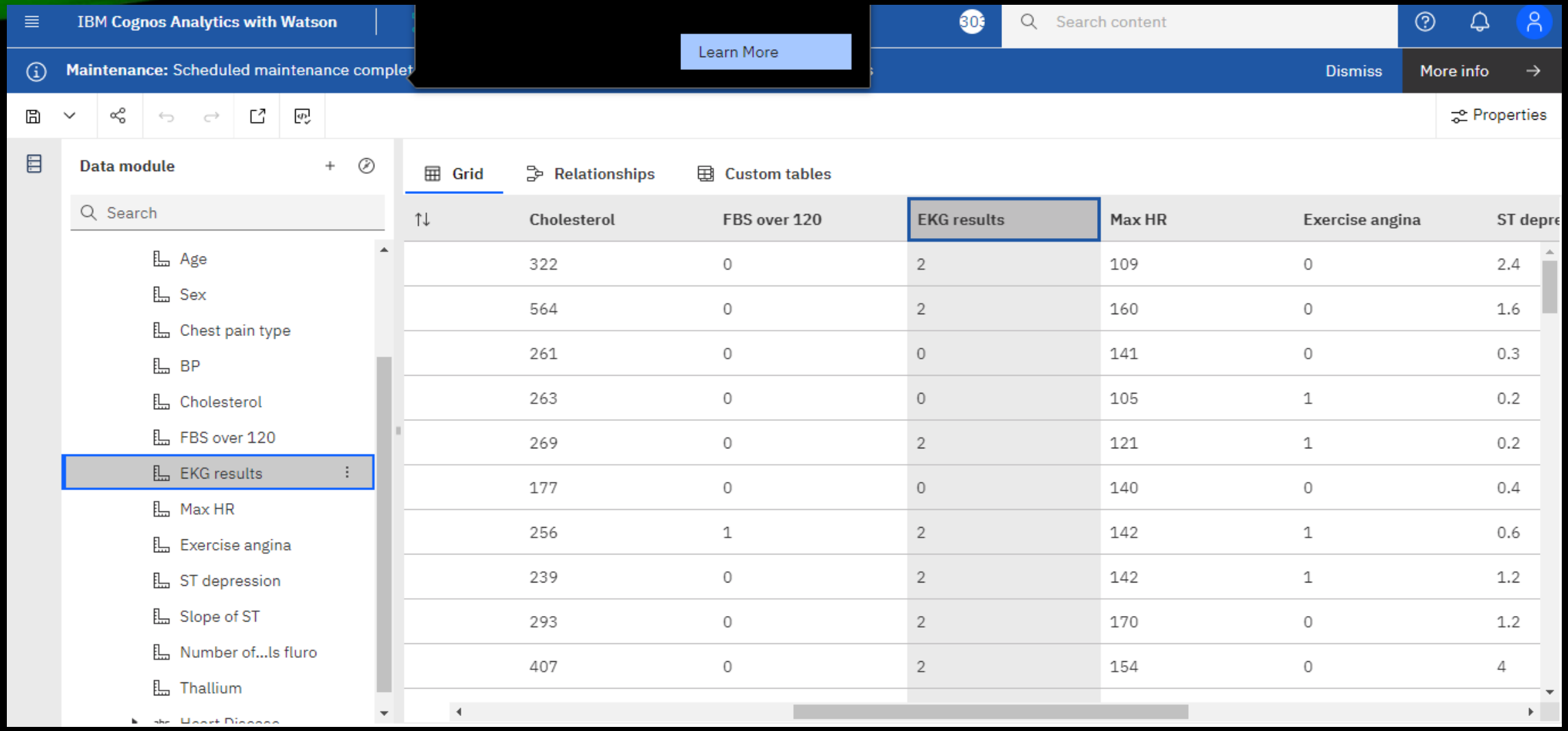
DATA PREPARATION
FBS over 120:



Cholesterol	FBS over 120	EKG results	Max HR	Exercise angina	ST depre
322	0	2	109	0	2.4
564	0	2	160	0	1.6
261	0	0	141	0	0.3
263	0	0	105	1	0.2
269	0	2	121	1	0.2
177	0	0	140	0	0.4
256	1	2	142	1	0.6
239	0	2	142	1	1.2
293	0	2	170	0	1.2
407	0	2	154	0	4

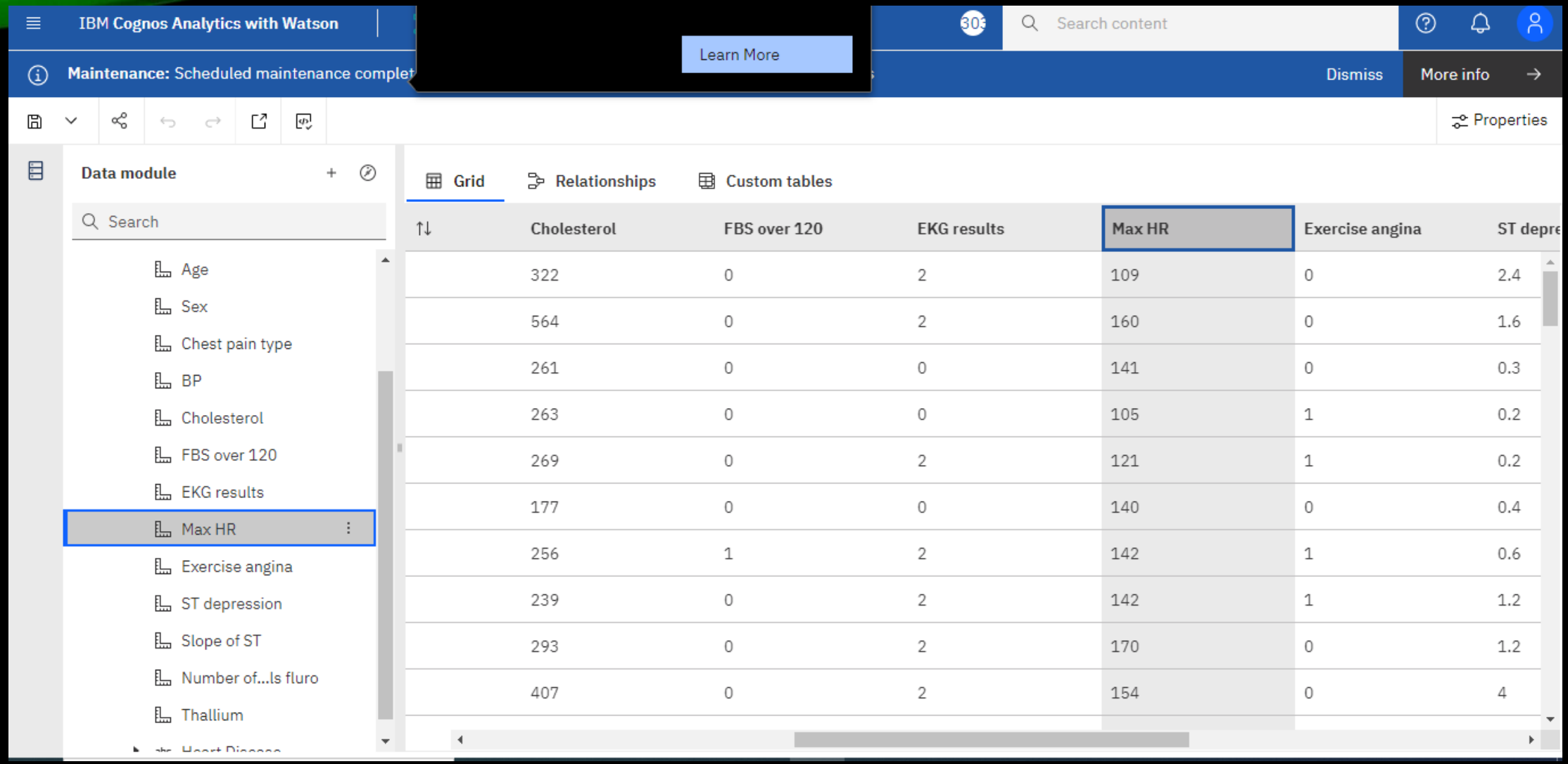
DATA PREPARATION

EKG Results:



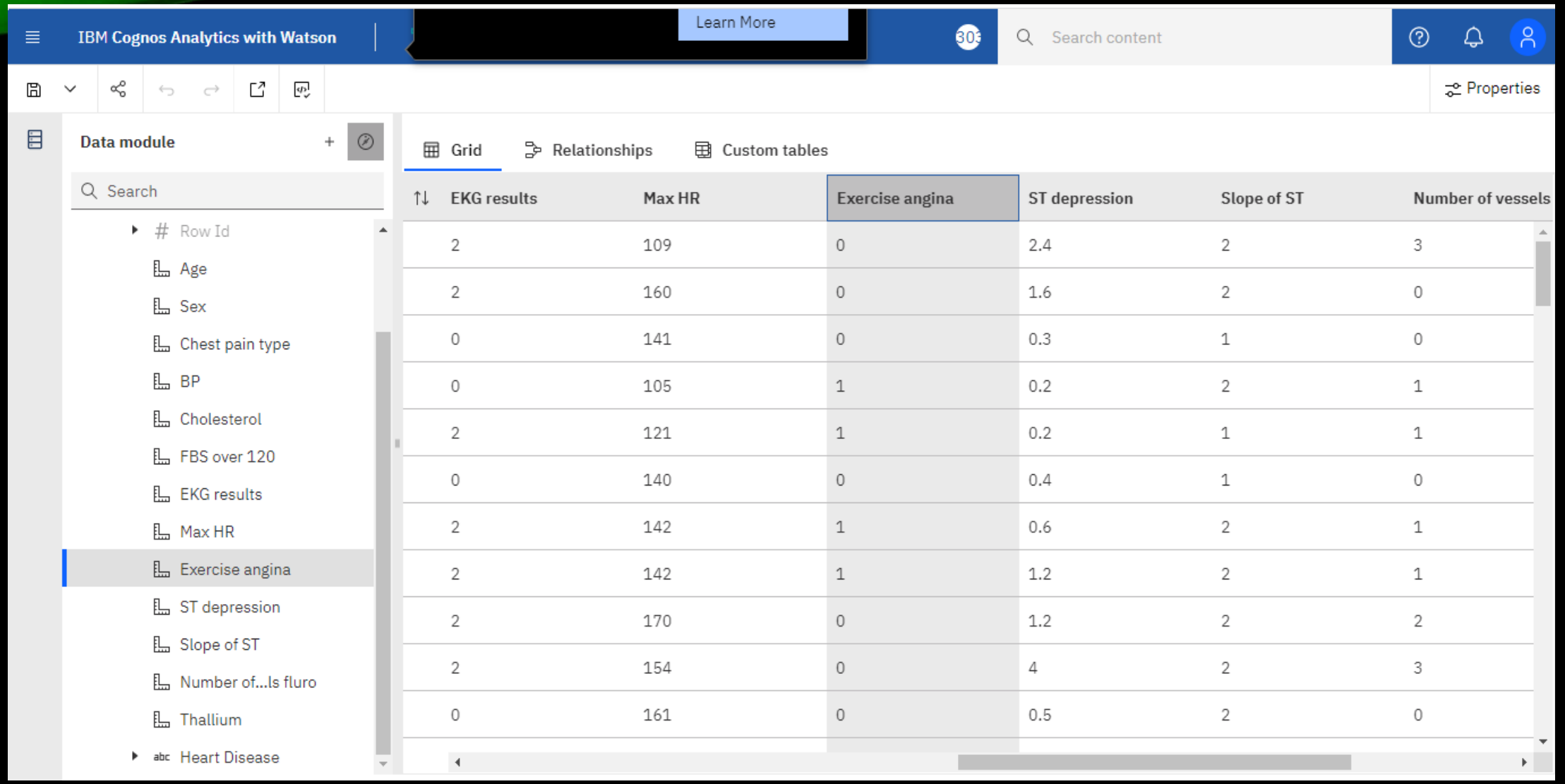
DATA PREPARATION

MAX HR :



DATA PREPARATION

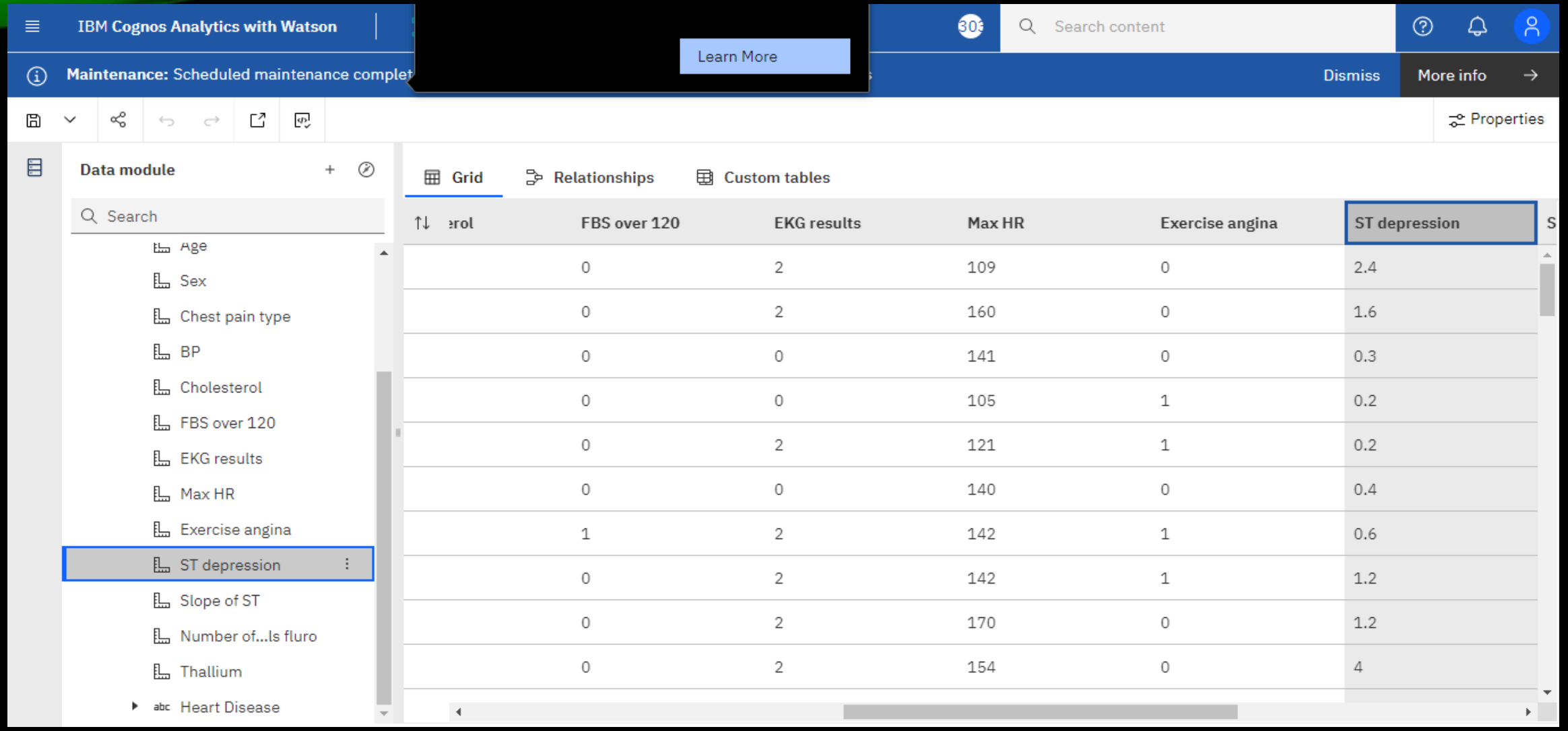
EXERCISE ANGINA:



EKG results	Max HR	Exercise angina	ST depression	Slope of ST	Number of vessels
2	109	0	2.4	2	3
2	160	0	1.6	2	0
0	141	0	0.3	1	0
0	105	1	0.2	2	1
2	121	1	0.2	1	1
0	140	0	0.4	1	0
2	142	1	0.6	2	1
2	142	1	1.2	2	1
2	170	0	1.2	2	2
2	154	0	4	2	3
0	161	0	0.5	2	0

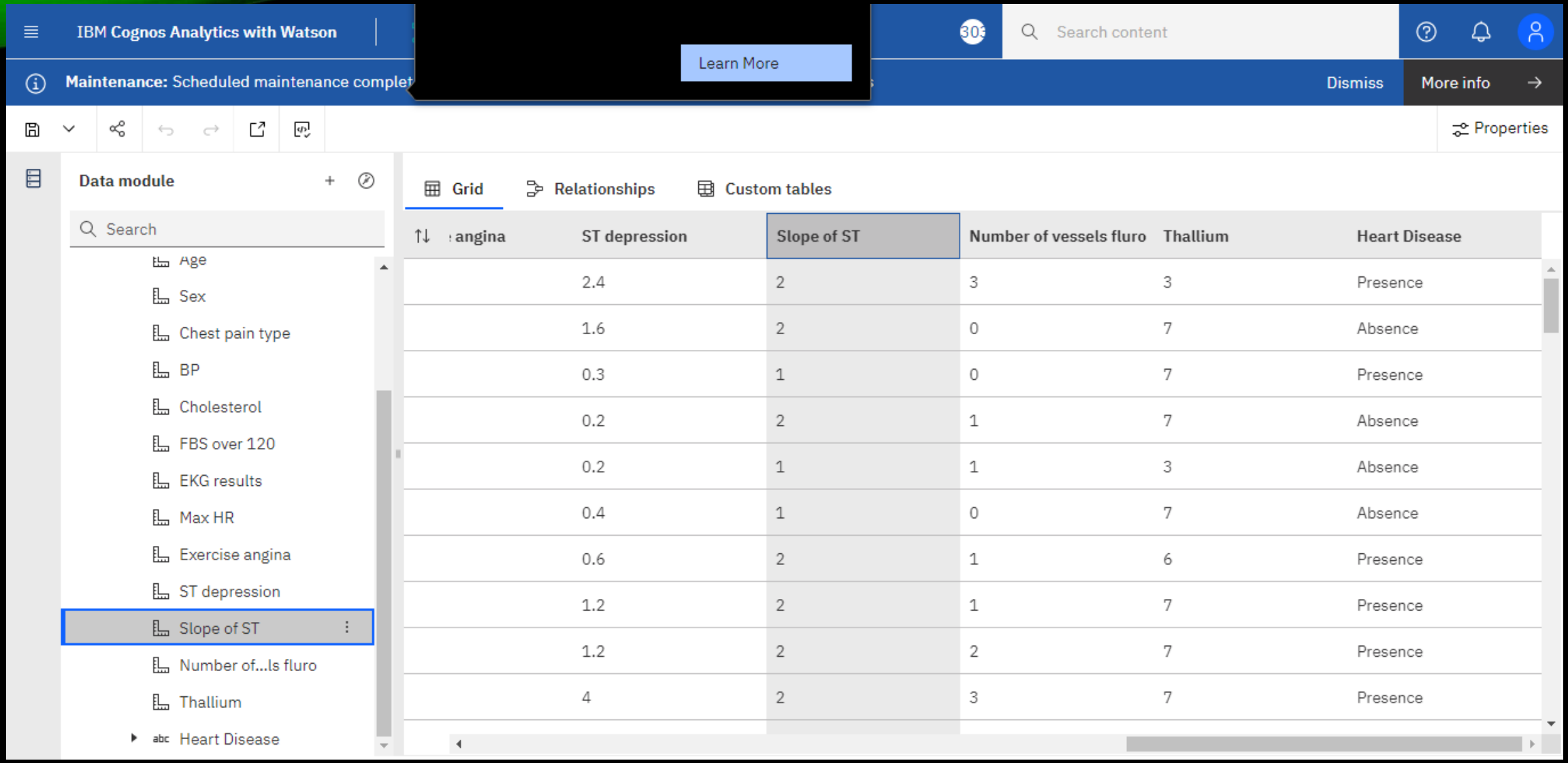
DATA PREPARATION

ST Depression :



DATA PREPARATION

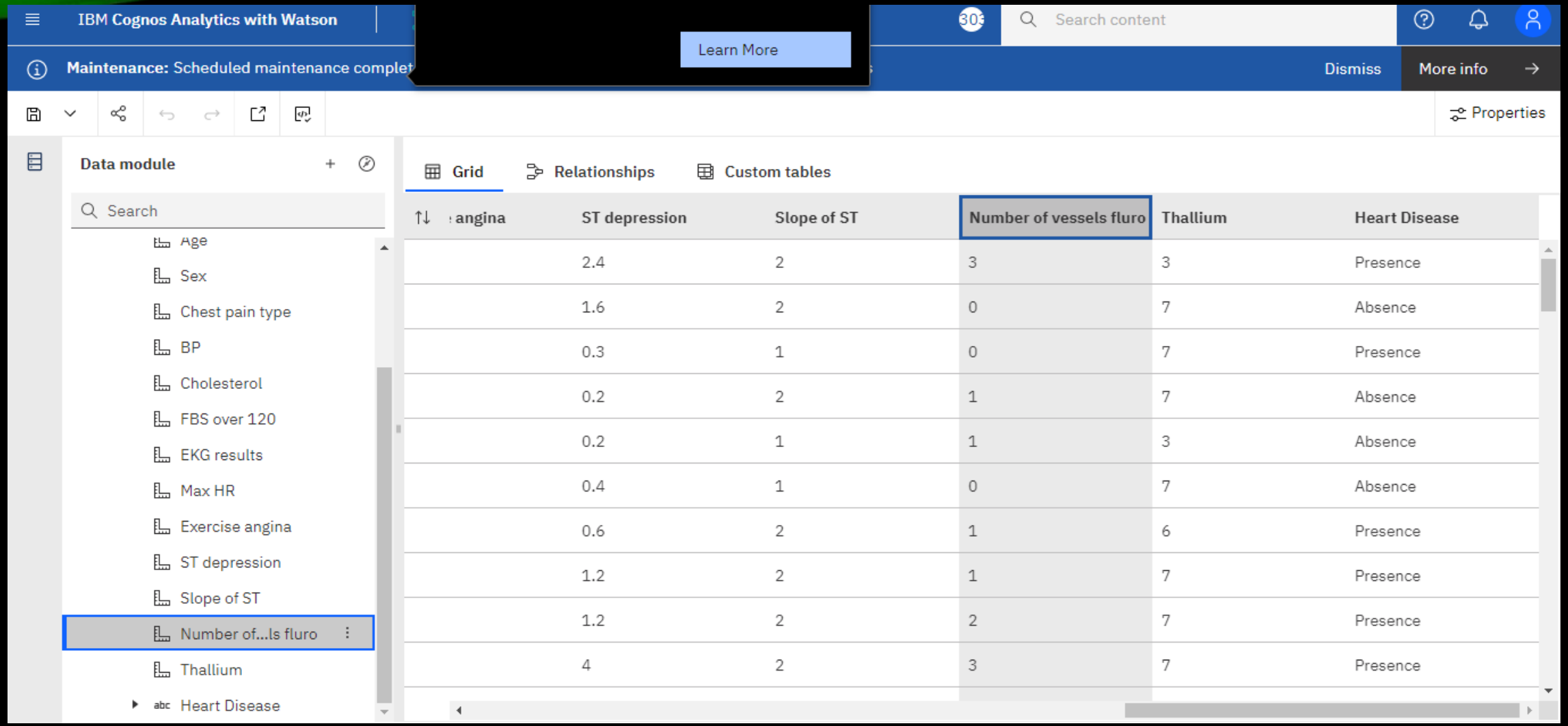
Slope of ST :



angina	ST depression	Slope of ST	Number of vessels fluro	Thallium	Heart Disease
	2.4	2	3	3	Presence
	1.6	2	0	7	Absence
	0.3	1	0	7	Presence
	0.2	2	1	7	Absence
	0.2	1	1	3	Absence
	0.4	1	0	7	Absence
	0.6	2	1	6	Presence
	1.2	2	1	7	Presence
	1.2	2	2	7	Presence
	4	2	3	7	Presence

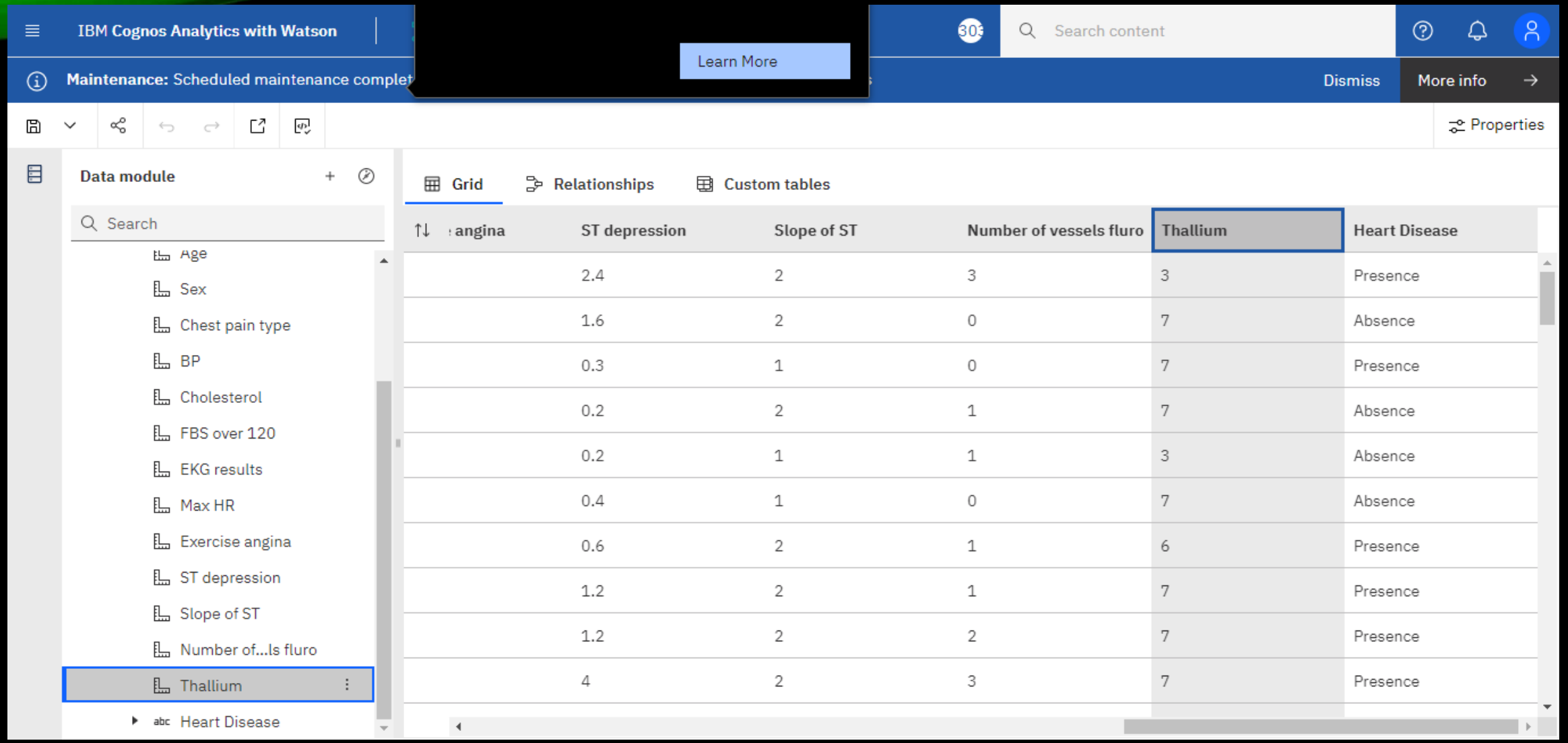
DATA PREPARATION

No Of Vessels Fluro :



DATA PREPARATION

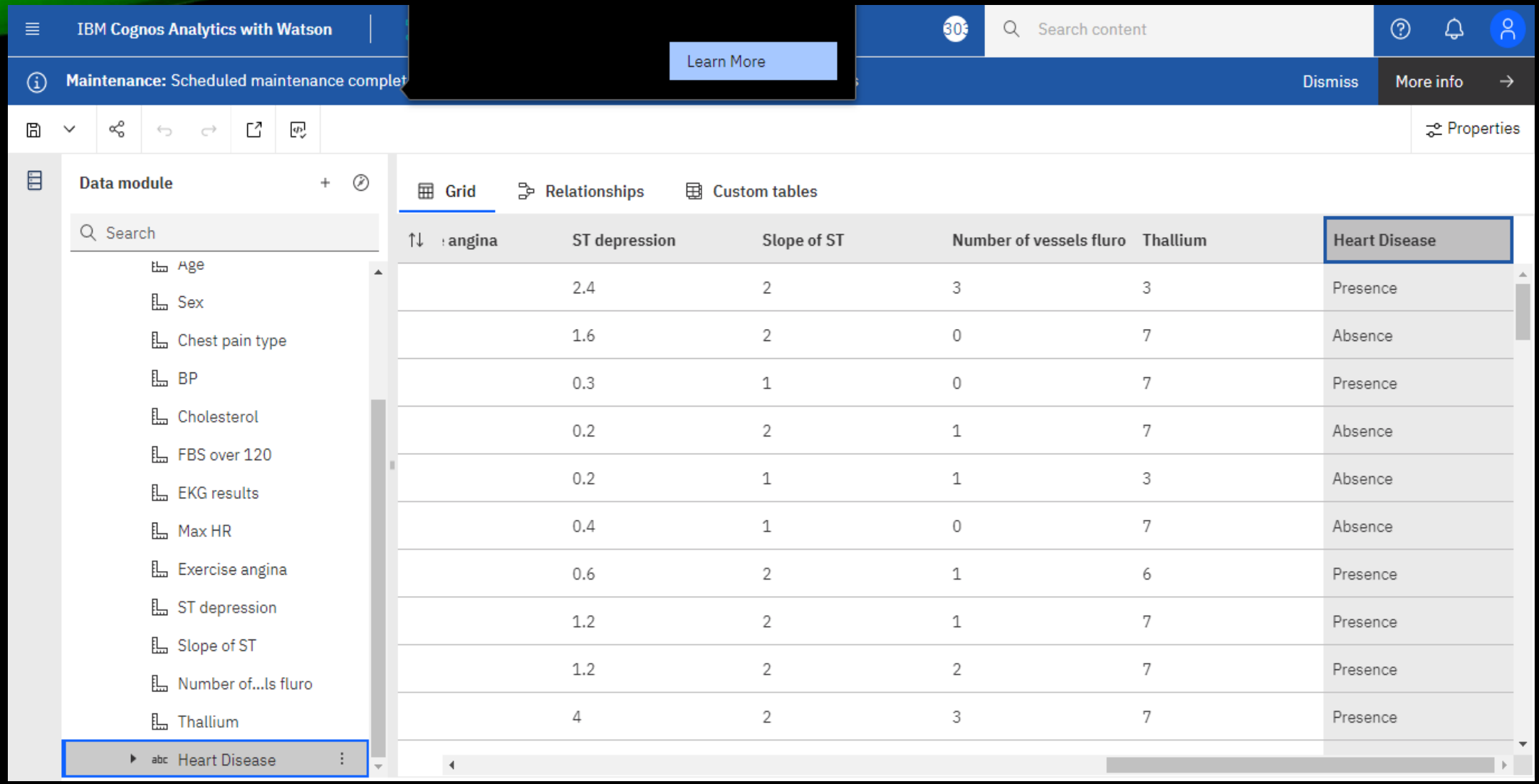
Thallium:



angina	ST depression	Slope of ST	Number of vessels fluro	Thallium	Heart Disease
	2.4	2	3	3	Presence
	1.6	2	0	7	Absence
	0.3	1	0	7	Presence
	0.2	2	1	7	Absence
	0.2	1	1	3	Absence
	0.4	1	0	7	Absence
	0.6	2	1	6	Presence
	1.2	2	1	7	Presence
	1.2	2	2	7	Presence
	4	2	3	7	Presence

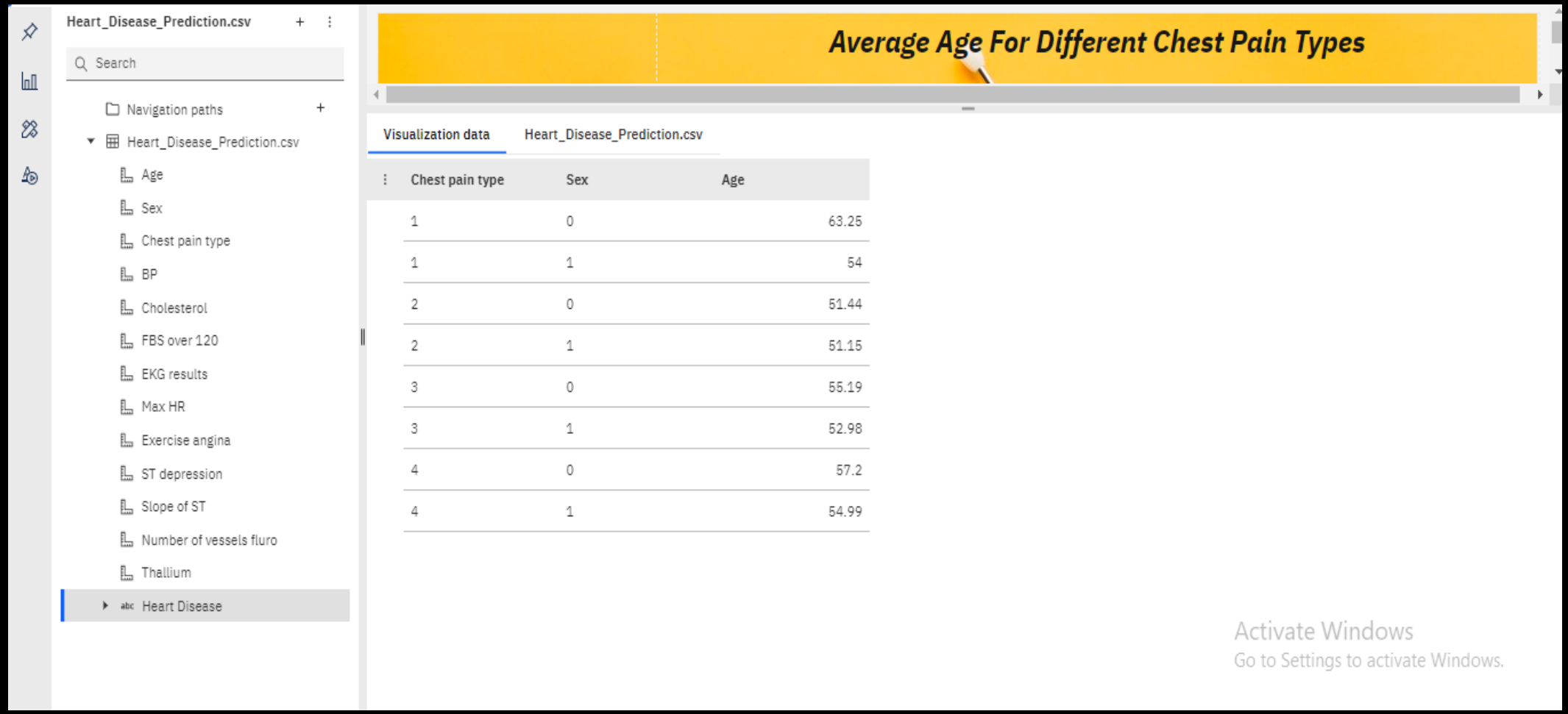
DATA PREPARATION

Heart Disease :



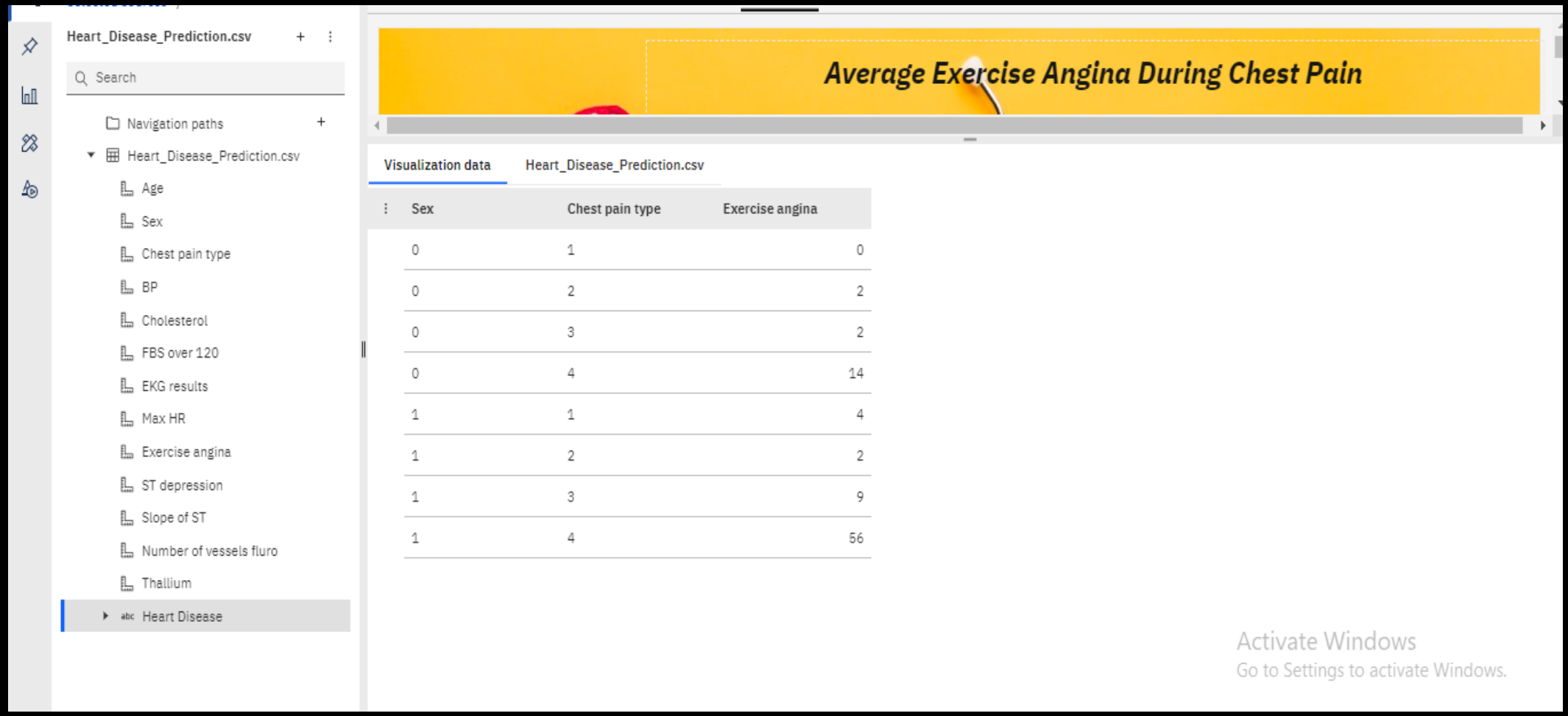
DATA PREPARATION

Average age for different chest pain :



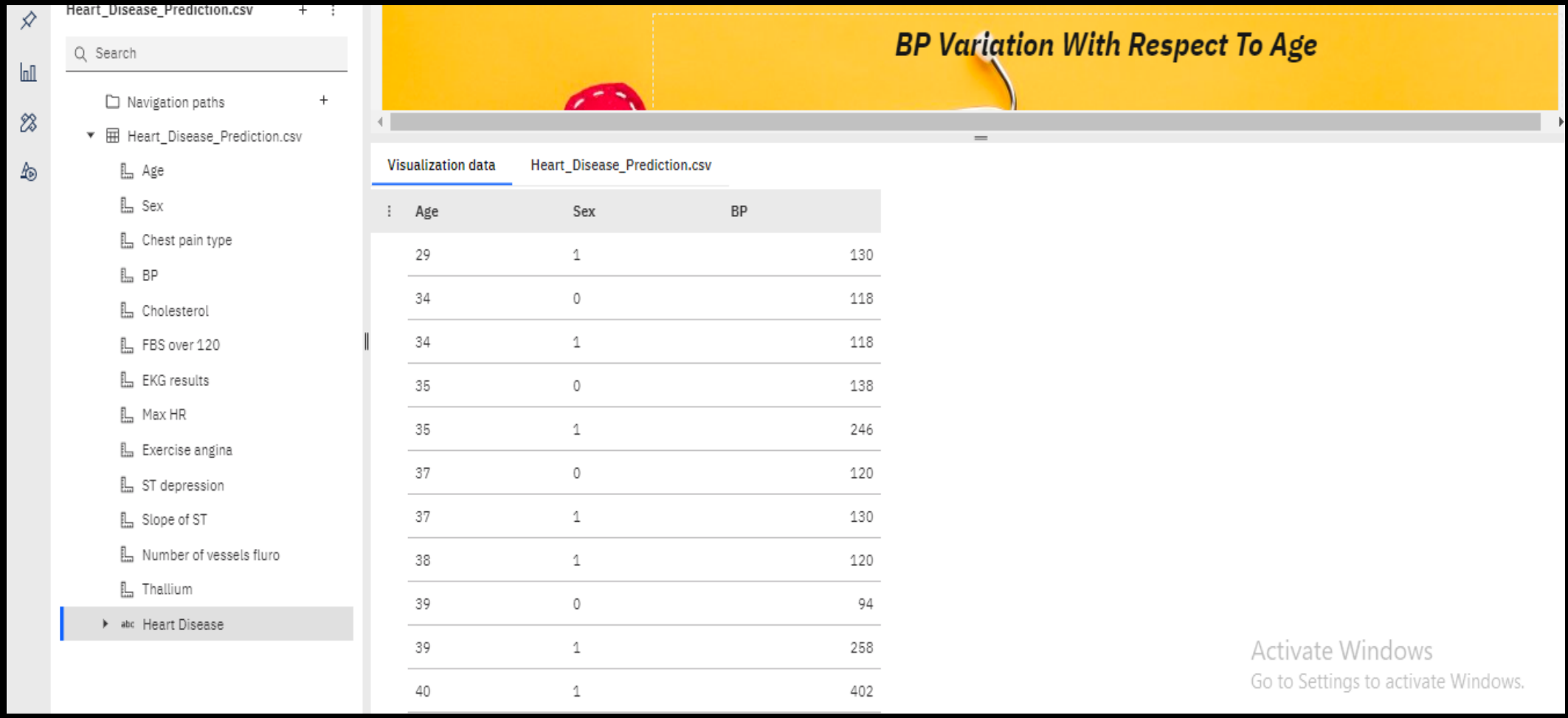
DATA PREPARATION

Average Exercise Angina During Chest Pain :



DATA PREPARATION

BP Variation with respect to Age:

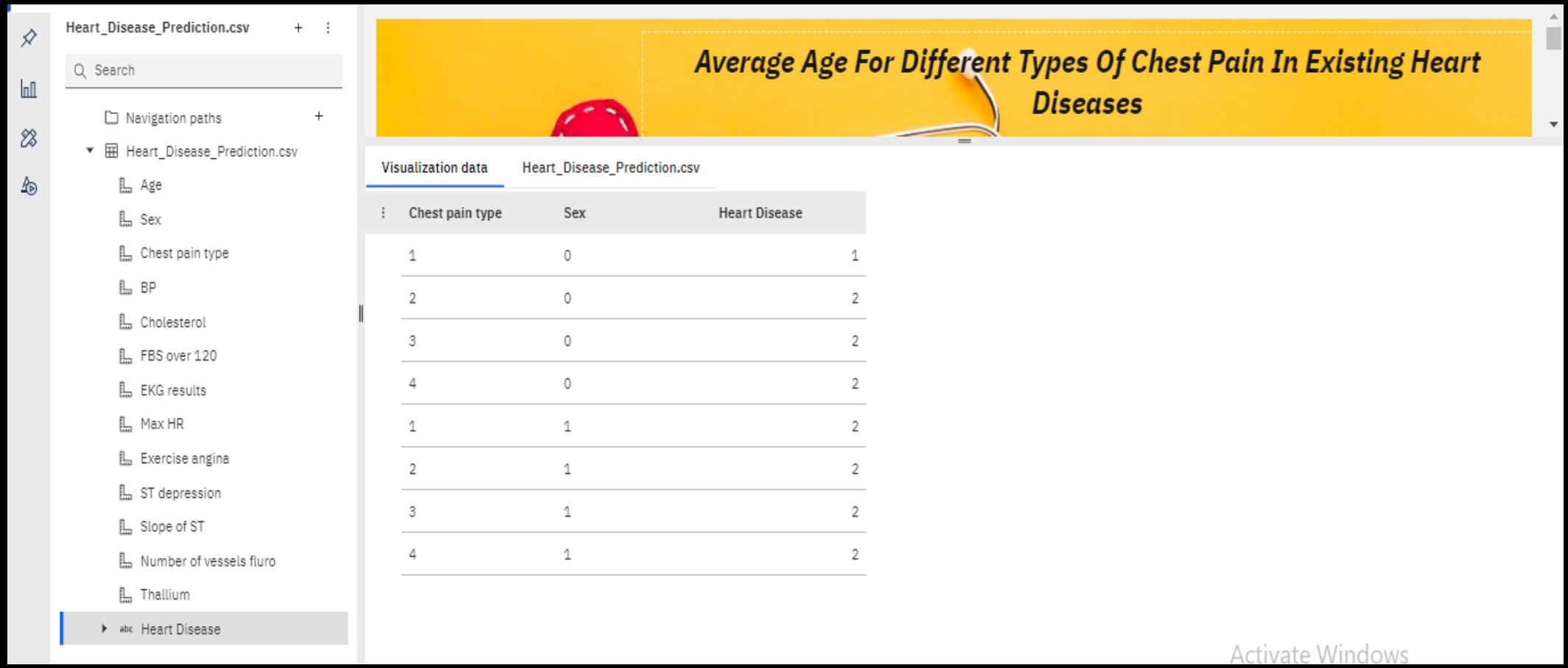


DATA PREPARATION

Effect of Existing Heart disease on Average of Exercise Angina :

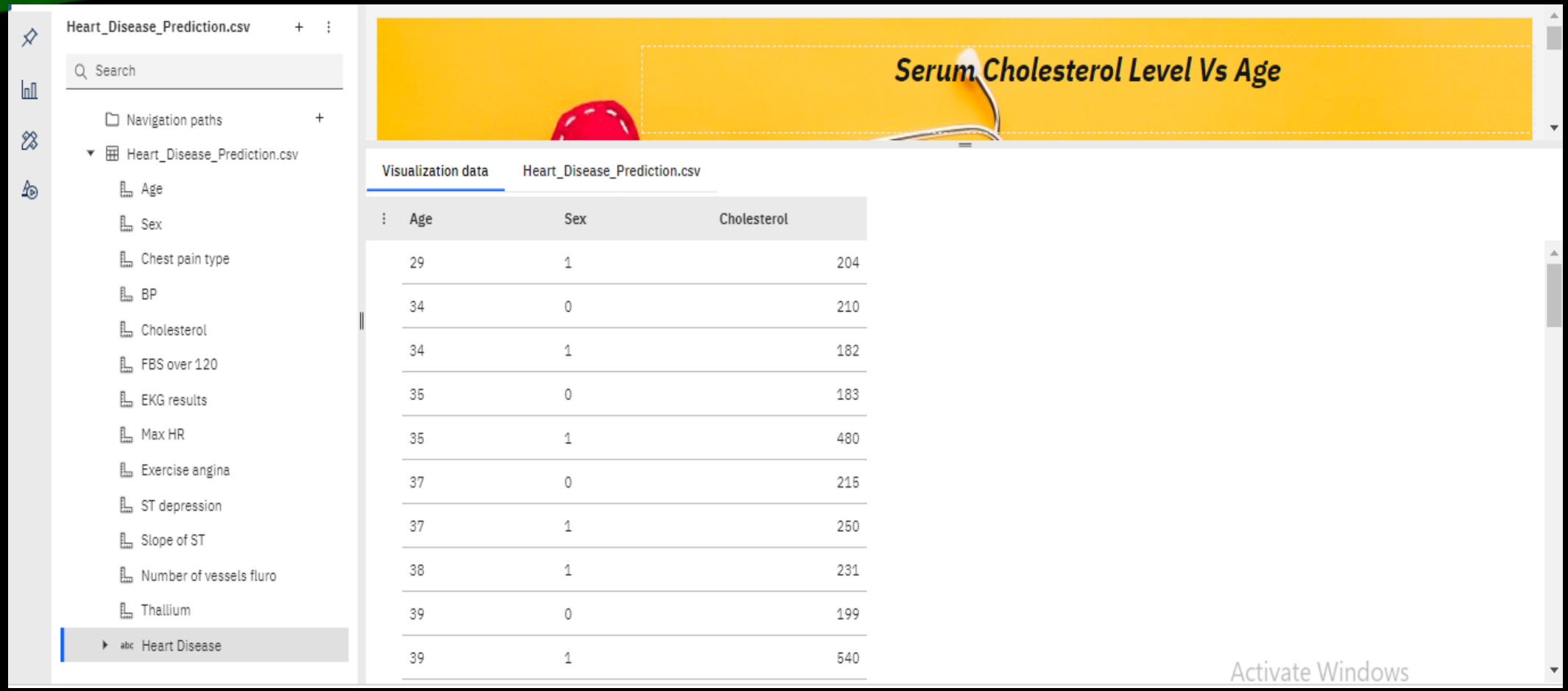
DATA PREPARATION

Average Age for Different types of Chest pain in Existing Heart Disease:



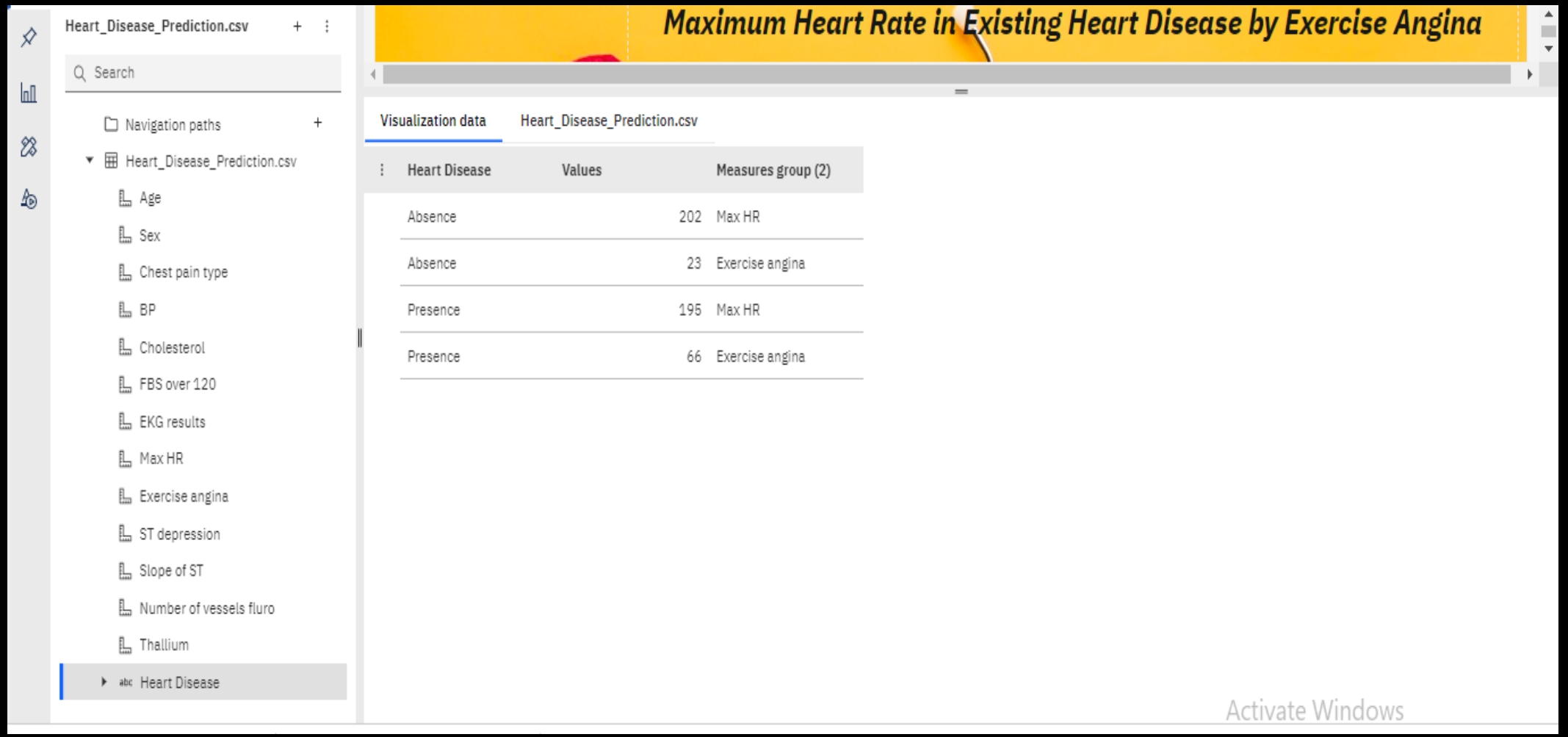
DATA PREPARATION

Serum Cholesterol level Vs Age:



DATA PREPARATION

Max HR in Existing Heart disease by Exercise Angina:



PREPARED DATA

Heart disease Module link:

https://us3.ca.analytics.ibm.com/bi/?perspective=ca-modeller&pathRef=.public_folders%2FData%2Bmodule%2FHeart%2BDisease%2Bmodule