

# Case Study Competition – Final Round

<b>Track</b>	<i>Data Visualization</i>
<b>College/University</b>	<i>BANARAS HINDU UNIVERSITY</i>
<b>Software/tool used</b>	<i>PYTHON/POWERBI/EXCEL</i>

<b>Student Name</b>	<b>Email ID</b>	<b>PG Course</b>	<b>Current semester/Year</b>
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• **GUIDED BY**

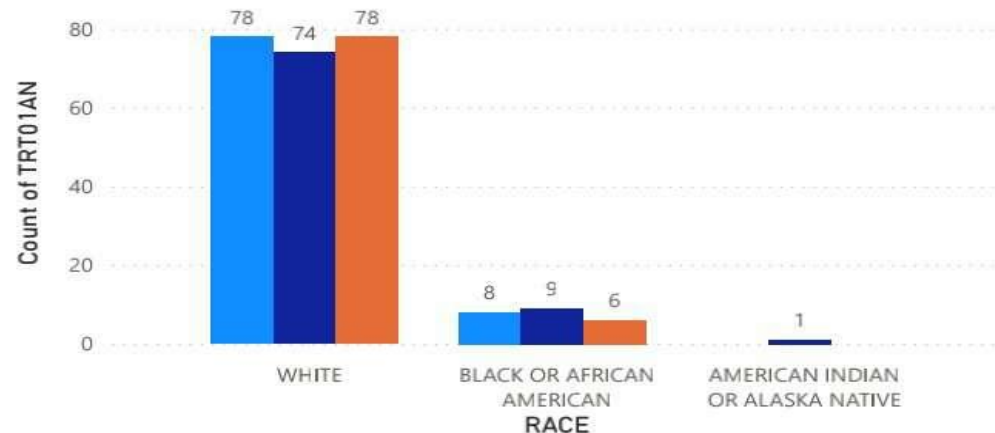
**Shiva Prasad**

**Jacob Mathew**

# Exploring Demographic characteristics by Treatments

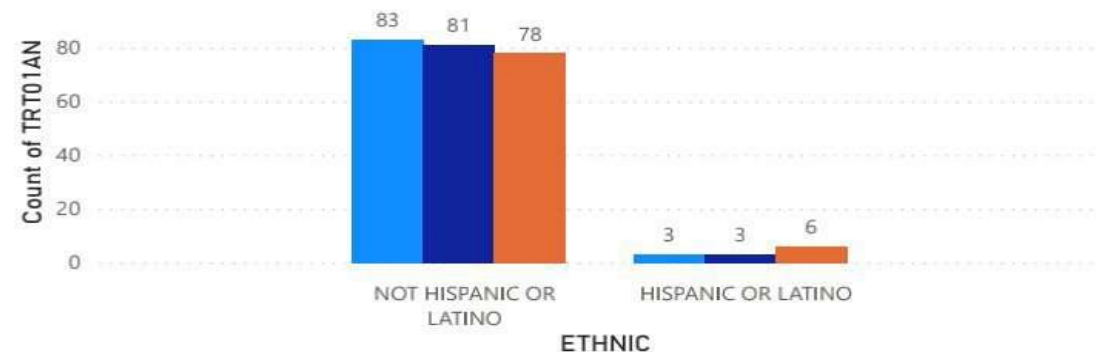
Count of Treatment type by RACE

TRT01P ● ARM A ● ARM B ● ARM C



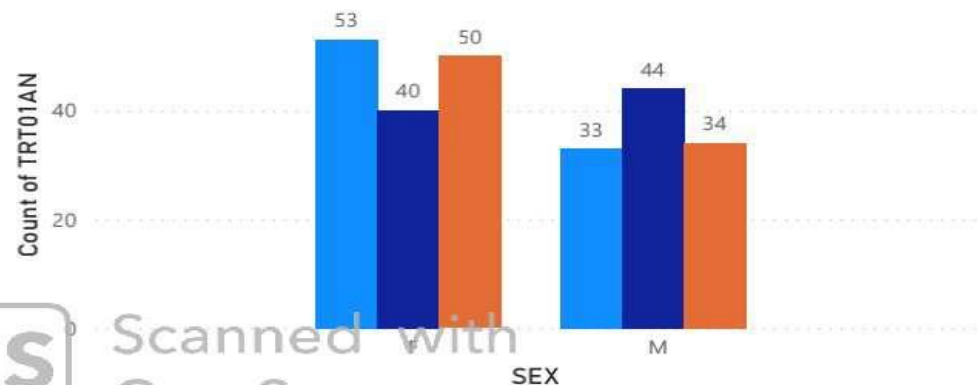
count of treatment type by ethnic

TRT01P ● ARM A ● ARM B ● ARM C



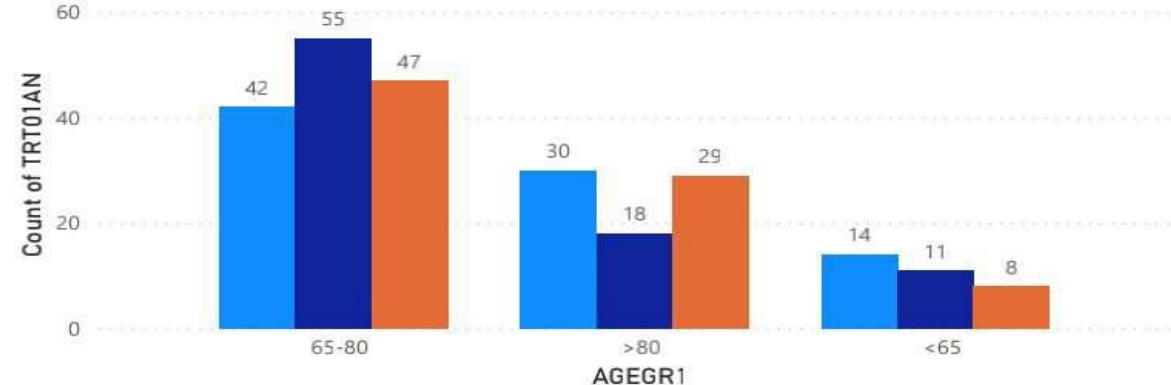
count of treatment type by sex

TRT01P ● ARM A ● ARM B ● ARM C



Count of treatments type by age

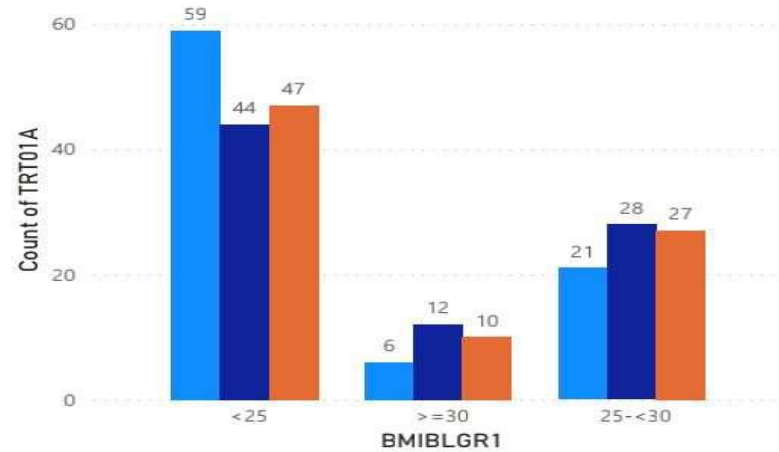
TRT01P ● ARM A ● ARM B ● ARM C



# Exploring Baseline characteristics by Treatments

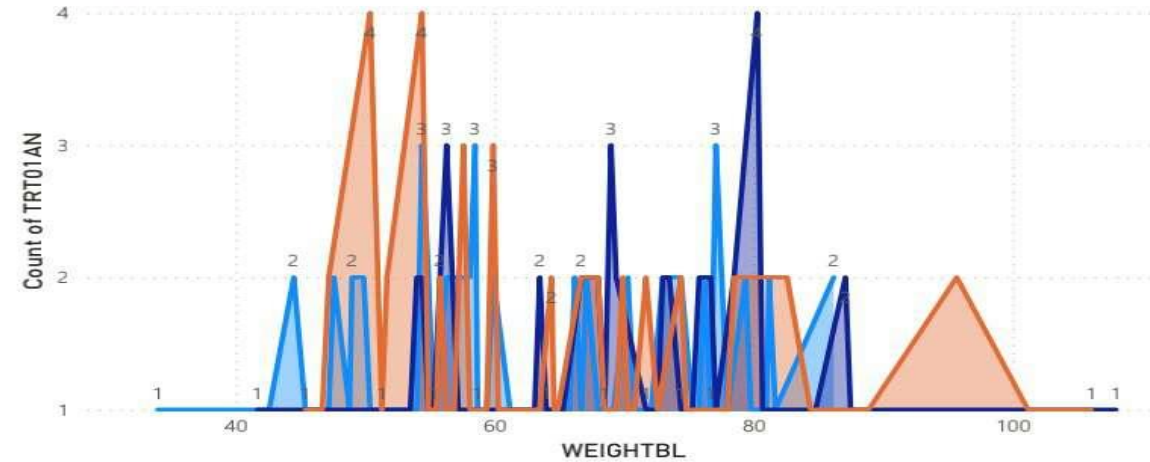
Count of treatment type by baseline BMI

TRT01P ● ARM A ● ARM B ● ARM C



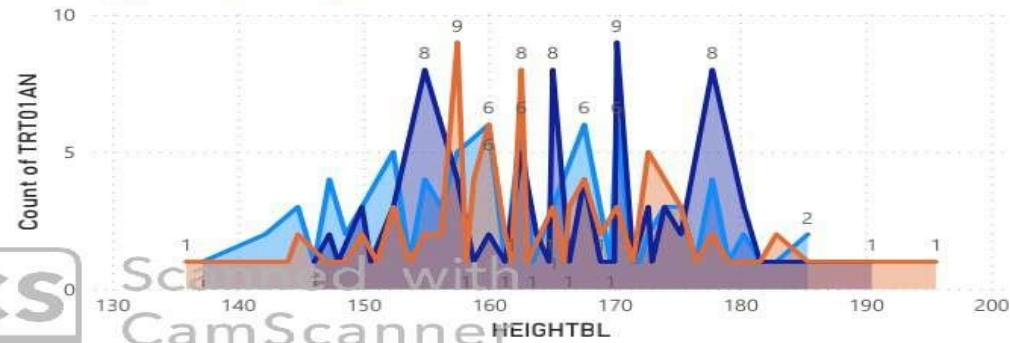
count of treatment type by baseline weight

TRT01P ● ARM A ● ARM B ● ARM C



Count of treatment count by baseline height

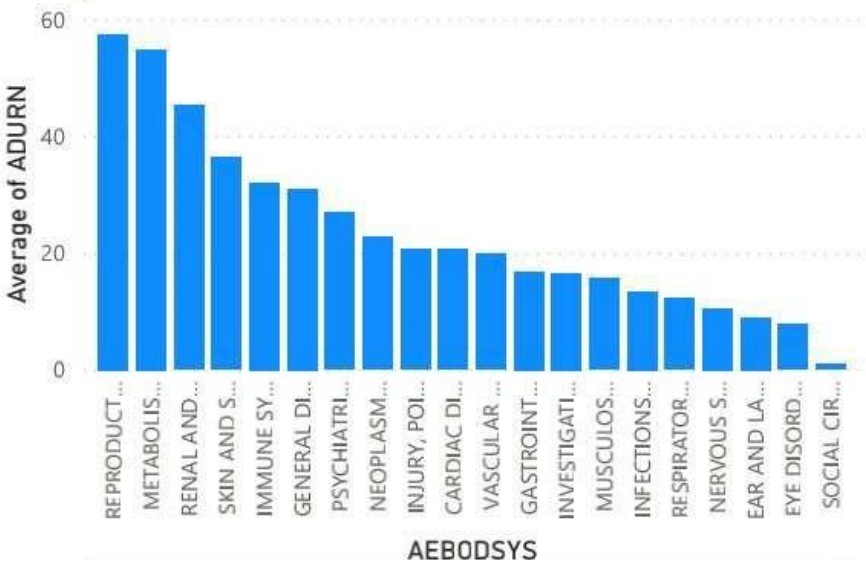
TRT01P ● ARM A ● ARM B ● ARM C



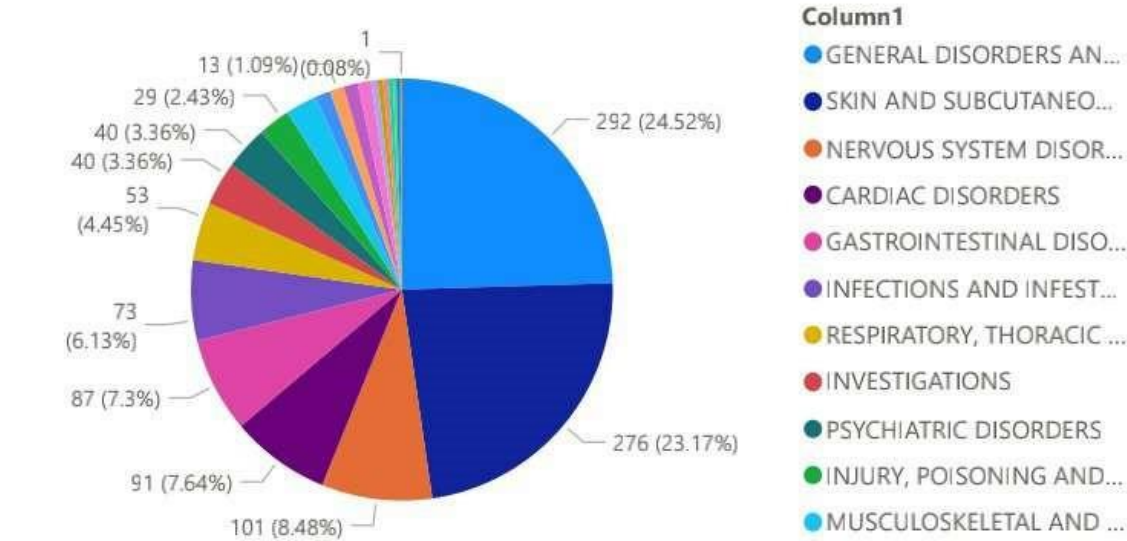
Scanned with  
CamScanner

# Overview of Treatment emergent Adverse Events

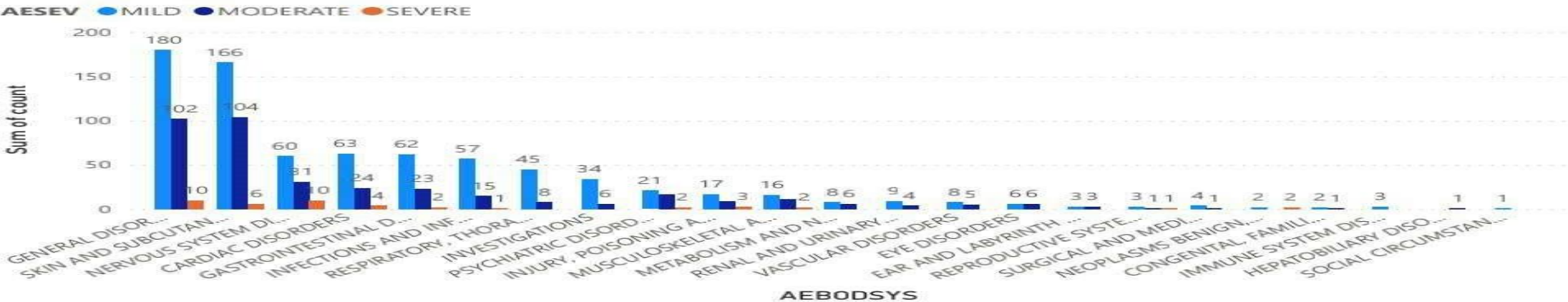
Average duration of the adverse events



count of adverse events



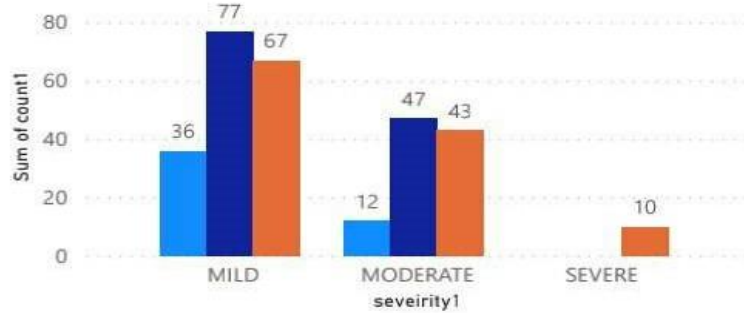
Sum of count by AEBODSYS and AESEV



# AE during on \_therapy by intensity

## GENERAL DISORDERS AND ADMINISTRATION SITE CONDITIONS

ARM1 ● ARM A ● ARM B ● ARM C



## NERVOUS SYSTEM DISORDERS

ARM3 ● ARM A ● ARM B ● ARM C



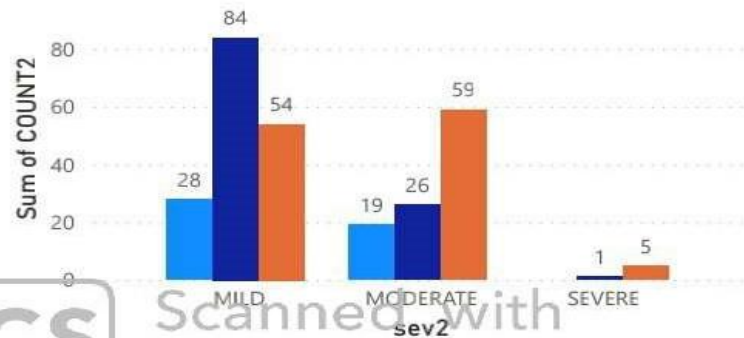
## GASTROINTESTINAL DISORDERS

ARM5 ● ARM A ● ARM B ● ARM C



## SKIN AND SUBCUTANEOUS TISSUE DISORDERS

ARM2 ● ARM A ● ARM B ● ARM C



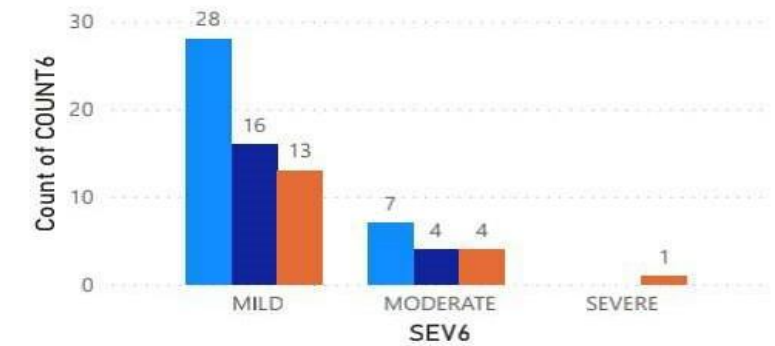
## CARDIAC DISORDERS

ARM4 ● ARM A ● ARM B ● ARM C



## INFECTIONS AND INFESTATIONS

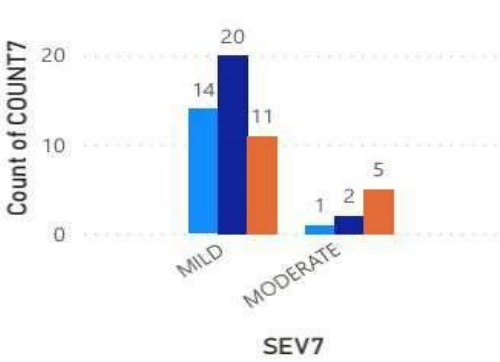
ARM6 ● ARM A ● ARM B ● ARM C





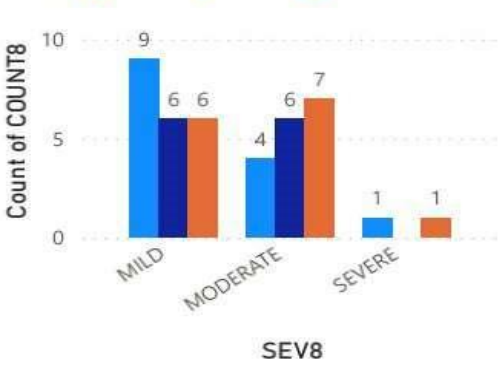
RESPIRATORY, THORACIC AND  
MEDIASTINAL DISORDERS

ARM7 ARM A ARM B ARM C



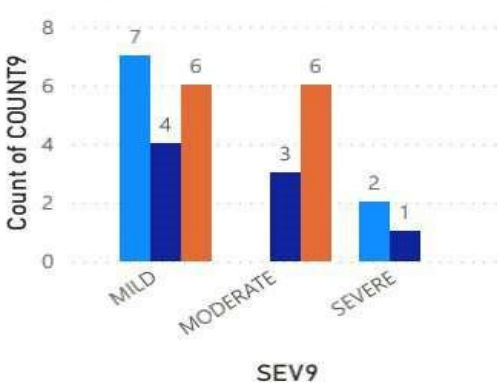
psychiatric disorders

ARM8 ARM A ARM B ARM C



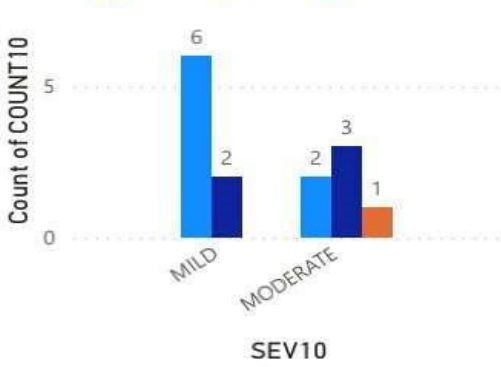
procedure complications

ARM9 ARM A ARM B ARM C

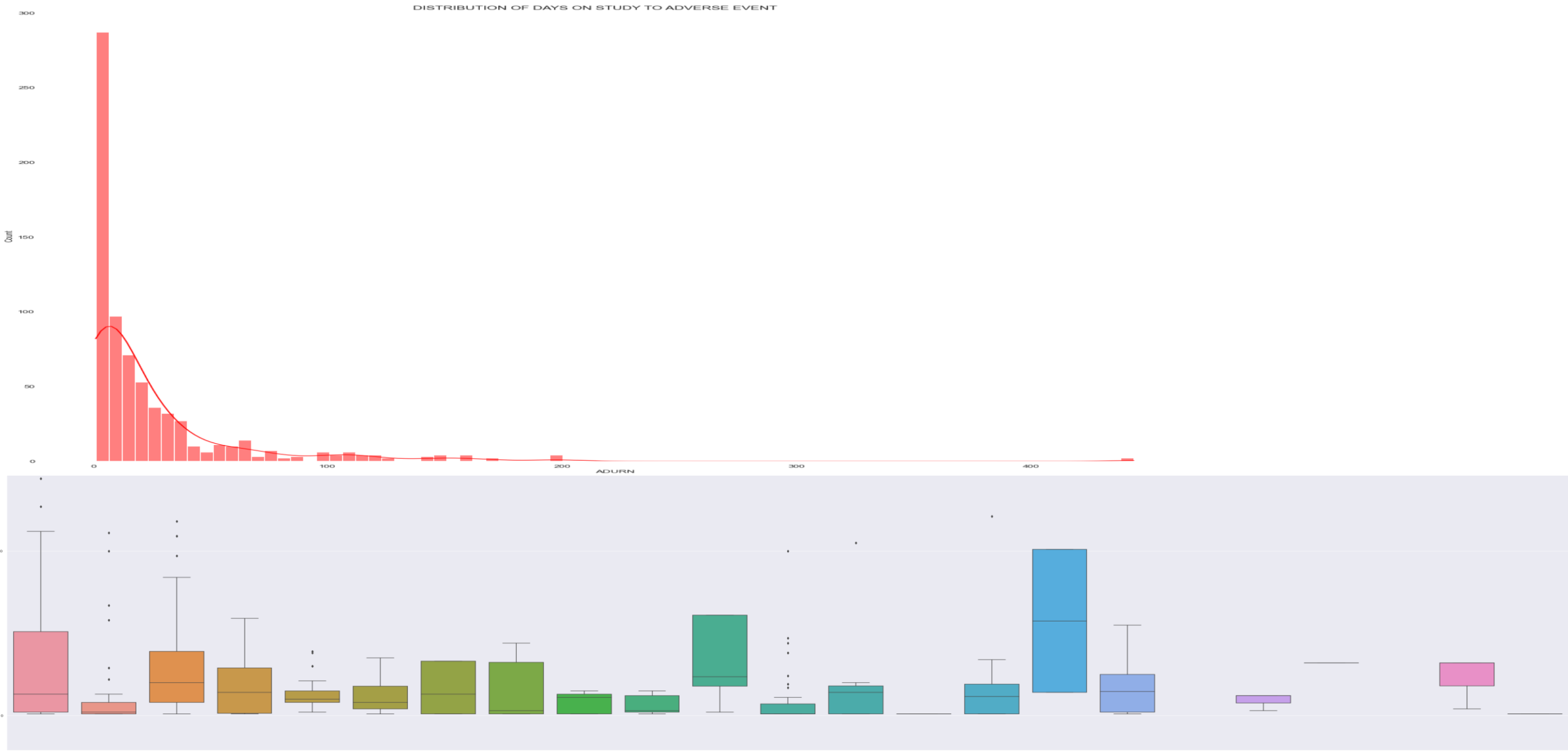


metabolism and nutrition disorders

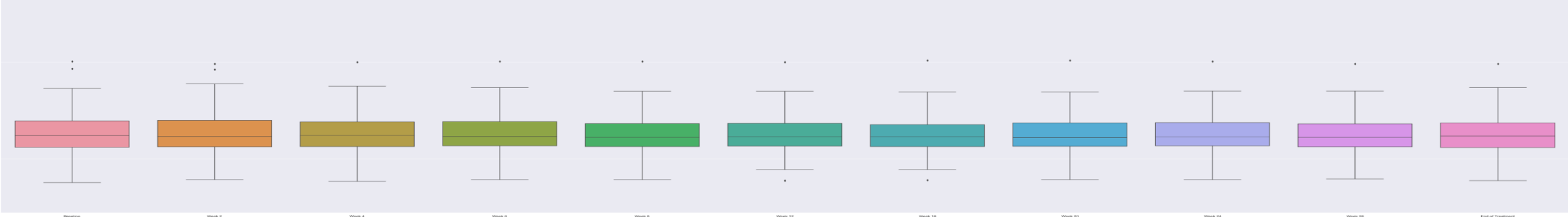
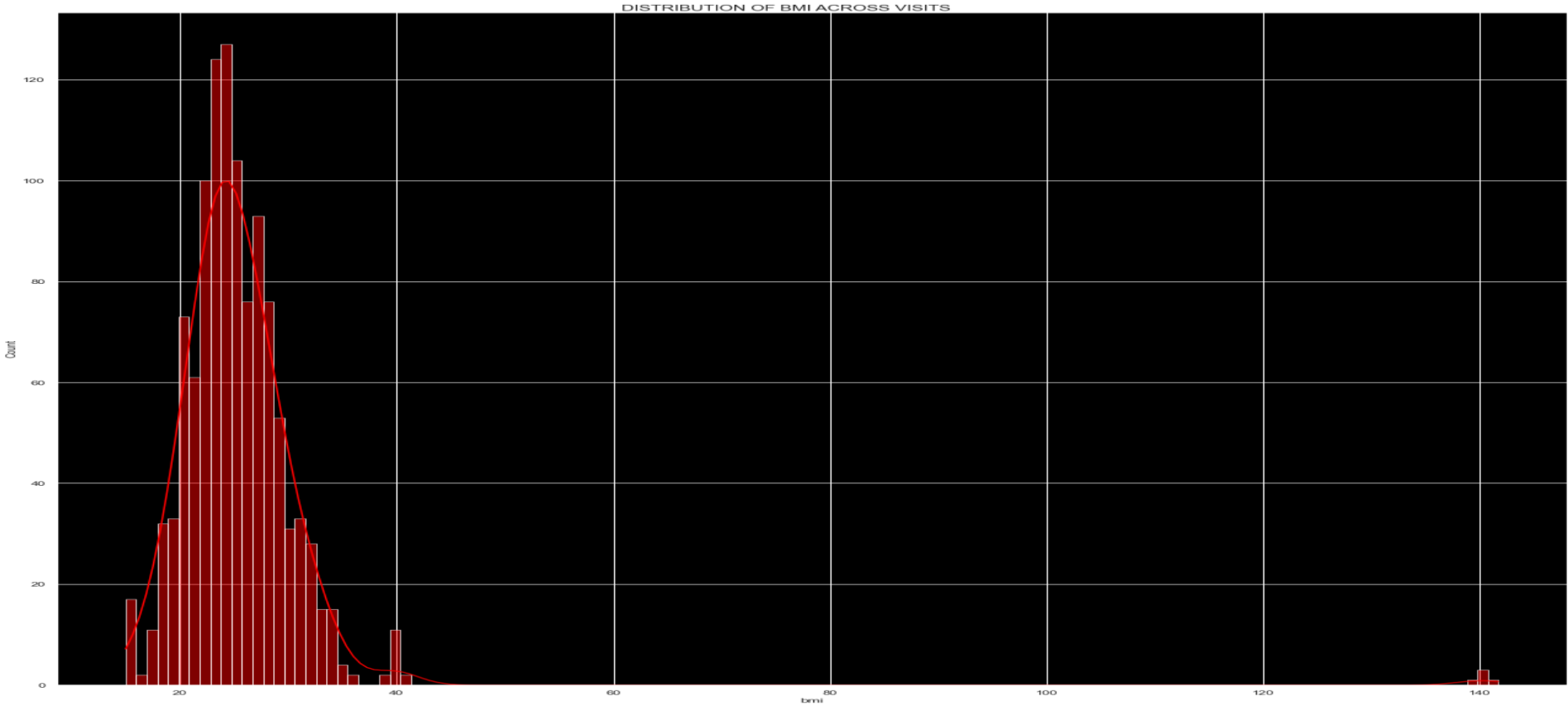
ARM10 ARM A ARM B ARM C



# Distribution of days on study to adverse events



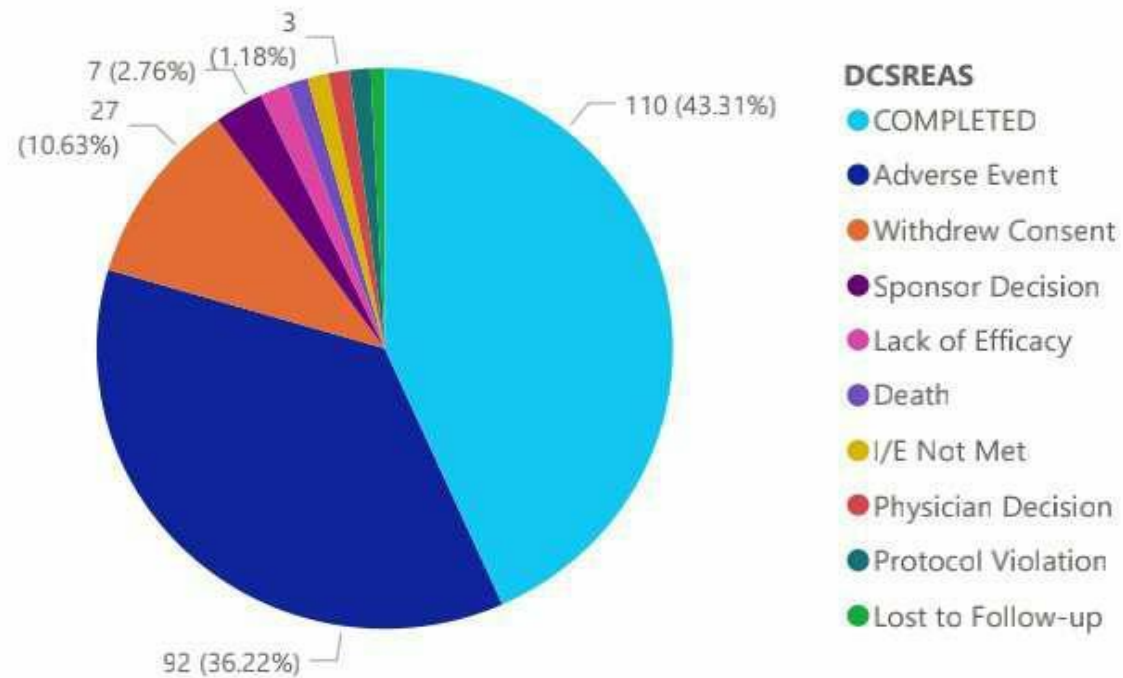
# Distribution of BMI across visits





# Final result of the treatment

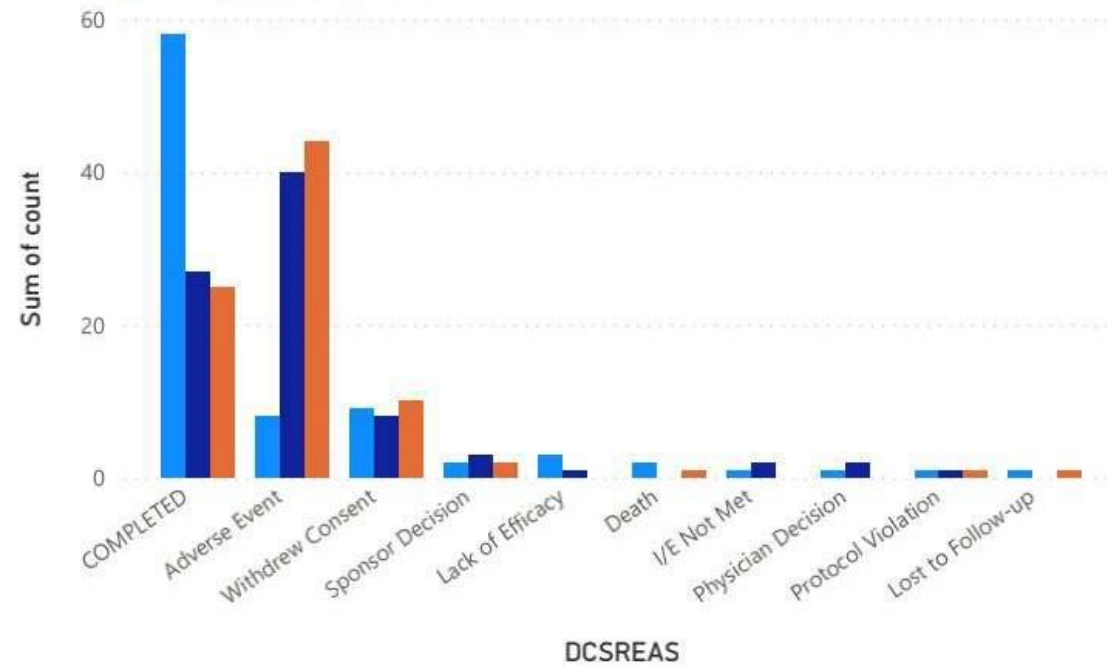
FINAL RESULT OF TREATMENT



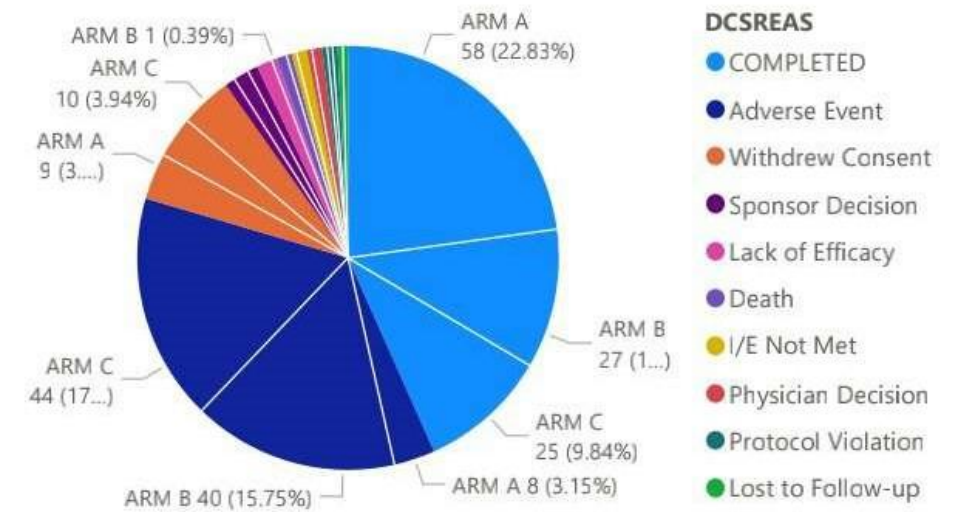
# Final result of the treatment

FINAL RESULT OF THE TREATMENT

TRT01A ● ARM A ● ARM B ● ARM C



FINAL RESULT OF THE TREATMENT



## **CONCLUSION:**

- We have used python and power BI tools to manipulate and explore the data.
- We used plots like barplot, histplot, distplot, BOX-plot, pie chart and Area chart for visualizing the data.
- We found that distribution of BMI across visits follows normal distribution shows there is not much variance in BMI across visits.
- We observed 24 kinds of adverse events occurred during the treatment.
- General disorder adverse event has occurred most with 24.52% among all adverse events followed by skin disorder adverse event with 23%.
- Reproductive system and breast disorders has highest average duration.
- Found severity count for every adverse event.
- We finally observed that 43% of the subjects have completed the treatment and remaining percentage of subjects have discontinued because of various reasons
- Like adverse events, physician decescion, death etc.
- The majority of the subjects who received the treatment of ARMA completed the treatment.

