**Bioinformatics Report**

**Bioinformatics Report Title**

**Version Z**

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|  | **Signature** | **Printed Name** | **Department** | **Date** |
| **Compiled By:** |  |  |  |  |
| **Approval:** |  |  |  |  |

# REVISION HISTORY

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| **Version** | **Modified By** | **Date** | **Amendment Details** |
| a |  |  | First version |
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# EXECUTIVE SUMMARY

* Point 1
* Point 2

Summarise the objectives and conclusions in bullet points

# 1. PROJECT OVERVIEW

## 1.1. Summary of Objectives

## 1.2. Study Plan / Project Plan

# 2. HYPOTHESIS AND ASSUMPTIONS

Confirm that the approach taken relates to the STUDY OBJECTIVES:

E.g. This analysis aims to describes the work done to determine whether subtypes exist within XYZ that are related to ABC or This analysis describes the steps taken to develop a predictive/prognostic signature for DEF.

State any assumptions that are made.

# 3. MATERIALS AND METHODS

This section of the report details the materials and methods in terms of samples/data used, data preparation steps and analysis methods applied (including any thresholds applied and the rationale for these). It encompasses the following categories, and this document contains detail for only the sub-sections relevant to the analysis performed:

* Sample/Data Source
* Data Preparation: (e.g. balancing and sample selection, filtering of data, pre-processing and additional data transformations required, quality control and batch effect testing, additional relevant data preparation steps)
* Data Analysis: (e.g. exploratory analysis, statistical analysis, clustering and subtype identification, functional analysis, additional relevant data analysis results)

This is the main materials and methods section. It should capture what samples or data were used and any pre-processing, QC, filtering etc. It should also contain any thresholds that were used and how they were derived. Finally, it should provide a brief overview of the analysis performed

A flow chart can help to clarify steps taken throughout the analysis and should be used to summarise complex steps or decision processes detailed in this section. It can also provide an overview of any scripts used to analyse the data or the work flow used to analyse the data

## 3.1. Sample Description/Data Source

What are the sources of the samples/data to be analysed? Provide a link to the sample table/clinical info.

## 3.2. Data Preparation

Summarise the results from balancing and sample selection, the final filters identified and applied, the results of alternative transformations applied, QC and batch effect and additional preparatory steps

## 3.3. Data Analysis Methodologies

Describe the methods for all planned analyses

# 4. RESULTS AND DISCUSSION

This section of the report details the data analysis results. Insert relevant subsections to categorise the analysis performed. E.g:

* Quality Control results
* Exploratory analysis
* Statistical analysis
* Clustering and subtype identification
* Functional analysis
* Additional relevant data analysis results

Report the results from all analyses performed

# 5. SUMMARY, CONCLUSION, RECOMMENDATIONS

Briefly summarise the outcome and any pertinent recommendations

# REFERENCES

Detail all references here

# 7. SOFTWARE AND SCRIPT VERSIONS

*Internal scripts:*

Locations of scripts in the analysis. Scripts must be written and stored in compliance with the relevant SOPs.

* Script 1
* Script 2

Or NA

*Databases and versions:*

* DB name, v1.2
* DB name2, v3.4

Or NA

*Annotation:*

* Annotation source, v1.1
* Annotation source2, v2.2

Or NA

*Commercial software:*

* Software name, v5.5
* Software name3, v7.6

Or NA