Verification Report: immuno_tabular

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Description

This is the verification report for the `immuno_tabular` folder of the `correlates_reporting` project for CoVPN.

In this document, the output of `make_table_all.R` is compared against the output of `immuno_table_verification.Rmd`. The two scripts use the same base mock data. The two datasets generated by each of the two scripts will be compared with each other to confirm they contain the same values.

`immuno_table_verification.Rmd` was independently double programmed based on the specifications found in `table_specifications.pdf`. This script outputs its processing to
`verification/verification_output/immuno_tab_dm_pos_v.Rdata`,
`verification/verification_output/immuno_tab_dm_neg_v.Rdata`,
`verification/verification_output/immuno_tab_strtm_v.Rdata`,
`verification/verification_output/immuno_tab_bind1_v.Rdata`,
`verification/verification_output/immuno_tab_bind2_v.Rdata`,
`verification/verification_output/immuno_tab_pseudo_v.Rdata`,
`verification/verification_output/immuno_tab_gm_v.Rdata`,
`verification/verification_output/immuno_tab_gmr_v.Rdata`,
`verification/verification_output/immuno_tab_rgmt_v.Rdata`,
`verification/verification_output/immuno_tab_rrdiff_v.Rdata`,
`verification/verification_output/immuno_tab_neg_v.Rdata`,
`verification/verification_output/immuno_tab_pos_v.Rdata`,
`verification/verification_output/immuno_tab_vacc_v.Rdata`,
`verification/verification_output/immuno_tab_plcb_v.Rdata`.

The file `verification/verification_input/practice_data.csv` and
`verification/verification_input/Tables_immuno.Rdata` were provided by the original programmer to the tester for verification purposes of `make_table_all.R` when all time points are available. Their md5 hash are ca0808ae032cd04b13d5f621b939a205, 0c611f1d9e71fa7a0c6a31f0e8799c9c.

The file
`verification/verification_output/immuno_tab_dm_pos_v.Rdata`,
`verification/verification_output/immuno_tab_dm_neg_v.Rdata`,
`verification/verification_output/immuno_tab_strtm_v.Rdata`,
`verification/verification_output/immuno_tab_bind1_v.Rdata`,
`verification/verification_output/immuno_tab_bind2_v.Rdata`,
`verification/verification_output/immuno_tab_pseudo_v.Rdata`,
`verification/verification_output/immuno_tab_gm_v.Rdata`,
`verification/verification_output/immuno_tab_gmr_v.Rdata`,
`verification/verification_output/immuno_tab_rgmt_v.Rdata`,
`verification/verification_output/immuno_tab_rrdiff_v.Rdata`,
`verification/verification_output/immuno_tab_neg_v.Rdata`,
`verification/verification_output/immuno_tab_pos_v.Rdata`,

verification/verification_output/immuno_tab_vacc_v.Rdata,
verification/verification_output/immuno_tab_plcb_v.Rdata
were created by the tester for verification using the `immuno_table_verification.Rmd` script and using all
time points available. Their md5 hash are be7ee6bb71d7ab08bde79aaa9ca79fa4,
80f282ab97e6cdd0156e605b1caf3dea,
5e0a3358c940d0e955b1a0871a5f250c,
b2c74bf6ce6a824d62acf255ceba81da,
c186845240732a5ad50d5d69d1d303ea,
effaab8ee168b0ffbf7bfa891bb8630a,
0d98901f2f6f658162e4a42f320e6d01,
745e68881d7c9a59502ab6f4235febd7,
1c9fa83ec56183abfc8a5fca025efcad,
b182679ec0d5d02e71b58abe3ed73828,
29d8d9176c962d3a1055014187a8d144,
b111c683b750f7efae57cfcf4b75b720,
98cac8a7f4718134ef33183781df1a7a.

Load Data

```
original_data <- load(
  here("verification","verification_input","Tables_immuno.Rdata")
  )
immuno_tab_dm_pos_v <- load(
  here("verification","verification_output","immuno_tab_dm_pos_v.Rdata")
  )
immuno_tab_dm_neg_v <- load(
  here("verification","verification_output","immuno_tab_dm_neg_v.Rdata")
  )
immuno_tab_strtm_v <- load(
  here("verification","verification_output","immuno_tab_strtm_v.Rdata")
  )
immuno_tab_bind1_v <- load(
  here("verification","verification_output","immuno_tab_bind1_v.Rdata")
  )
immuno_tab_bind2_v<- load(
  here("verification","verification_output","immuno_tab_bind2_v.Rdata")
  )
immuno_tab_pseudo_v <- load(
  here("verification","verification_output","immuno_tab_pseudo_v.Rdata")
  )
immuno_tab_gm_v <- load(
  here("verification","verification_output","immuno_tab_gm_v.Rdata")
  )
immuno_tab_gmr_v <- load(
  here("verification","verification_output","immuno_tab_gmr_v.Rdata")
  )
immuno_tab_rgmt_v <- load(
  here("verification","verification_output","immuno_tab_rgmt_v.Rdata")
  )
immuno_tab_rrdiff_v <- load(
  here("verification","verification_output","immuno_tab_rrdiff_v.Rdata")
  )
```

```r
immuno_tab_neg_v<- load(
  here("verification","verification_output","immuno_tab_neg_v.Rdata")
  )
immuno_tab_pos_v <- load(
  here("verification","verification_output","immuno_tab_pos_v.Rdata")
  )
immuno_tab_vacc_v <- load(
  here("verification","verification_output","immuno_tab_vacc_v.Rdata")
  )
immuno_tab_plcb_v <- load(
  here("verification","verification_output","immuno_tab_plcb_v.Rdata")
  )
```

Verification

```r
testthat::expect_equal(tab_dm_neg_v, tab_dm_neg)

testthat::expect_equal(tab_dm_pos_v, tab_dm_pos)

testthat::expect_equal(tab_strtm_v, tab_strtm)

testthat::expect_equal(tab_bind1_v, tab_bind1)

testthat::expect_equal(tab_bind2_v, tab_bind2)

testthat::expect_equal(tab_pseudo_sub_v, tab_pseudo)

testthat::expect_equal(tab_gm_v, tab_gm)

testthat::expect_equal(tab_gmr_v, tab_gmr)

testthat::expect_equal(tab_rgmt_v, tab_rgmt)

testthat::expect_equal(tab_rrdiff_v, tab_rrdiff)

testthat::expect_equal(tab_neg_v, tab_neg)

testthat::expect_equal(tab_pos_v, tab_pos)

testthat::expect_equal(tab_vacc_v, tab_vacc)

testthat::expect_equal(tab_plcb_v, tab_plcb)
```

Signatures

Role	Name	Signature	Date
Tester	Yiwen Lu		