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, db69e677d9a27ea2a102ba76ee2cdf3f.

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_rdiff_v.Rdata, verification/verification_output/immuno_tab_neg_v.Rdata, verification/verification_output/immuno_tab_neg_v.Rdata, verification/verification_output/immuno_tab_neg_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,
5422b93d428e1c8a2a61780358fe76c8,
f52ec56c07d1fab8034d08a899ba177e.
34a3f33bbfa06f5cc03bcb069e786371,
effaab8ee168b0ffbf7bfa891bb8630a,
0d98901f2f6f658162e4a42f320e6d01,
745e68881d7c9a59502ab6f4235febd7,
c89a1cb7014d142625994756e2925ed3,
4ba660012267eeece6c52c7fcb8650a1,
9d0fb890cb48cc5cdfe3dc3d3294ed57,
80a784c6779533004ab9573a845ad4db,
b39138001cbb11f7c7c22994801f779c.\\
```

Load Data

```
original data <- load(
  here("verification", "verification input", "Tables immuno.Rdata")
immuno_tab_dm_pos_v <- load(</pre>
  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(</pre>
  here("verification", "verification_output", "immuno_tab_strtm_v.Rdata")
immuno tab bind1 v <- load(</pre>
  here("verification", "verification_output", "immuno_tab_bind1_v.Rdata")
immuno_tab_bind2_v<- load(</pre>
  here("verification", "verification_output", "immuno_tab_bind2_v.Rdata")
immuno tab pseudo v <- load(</pre>
  here("verification", "verification output", "immuno tab pseudo v.Rdata")
immuno_tab_gm_v <- load(</pre>
  here("verification", "verification_output", "immuno_tab_gm_v.Rdata")
immuno_tab_gmr_v <- load(</pre>
  here("verification", "verification_output", "immuno_tab_gmr_v.Rdata")
  )
immuno_tab_rgmt_v <- load(</pre>
  here("verification", "verification_output", "immuno_tab_rgmt_v.Rdata")
immuno_tab_rrdiff_v <- load(</pre>
  here("verification","verification_output","immuno_tab_rrdiff_v.Rdata")
```

```
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")
)</pre>
```

Verification

```
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		