

## 06\_real\_data\_visualization

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2025-05-28

For DBD

```
load("./Data/03_results_DBD.RData")
# Selected by bSpline model
names(strafied_Data_DBD_int)[!names(strafied_Data_DBD_int) %in% c("id", "status", "obstime")][variablesS

## [1] "Recipientsex1"
## [2] "Lastcreatininemgdl"
## [3] "Cold_ischaemic_period"
## [4] "InitialPrimaryDiseaseET_regroupOthers"
## [5] "Donorcauseofdeath_groupOthers"
## [6] "Recipientsex1:InitialPrimaryDiseaseET_regroupOthers"
## [7] "Recipientsex1:Donorcauseofdeath_groupOthers"
## [8] "Dialysisdaysrenine:Donorsex1"
## [9] "Dialysisdaysrenine:Cold_ischaemic_period"
## [10] "Dialysisdaysrenine:DonorBMI"
## [11] "Donorsex1:InitialPrimaryDiseaseET_regroupOthers"
## [12] "InitialPrimaryDiseaseET_regroupOthers:Donorcauseofdeath_groupOthers"

# Selected by PH model
names(strafied_Data_DBD_int)[!names(strafied_Data_DBD_int) %in% c("id", "status", "obstime")][variablesS

## [1] "Donorage"
## [2] "Dialysisdaysrenine:Donorsex1"
## [3] "Dialysisdaysrenine:Cold_ischaemic_period"
```

```
cor(mean_beta_DBD, mean_beta_DBD_PH)
```

```
## [1] -0.02338826
```

For DBD\_2

```
load("./Data/03_results_DBD_2.RData")
# Selected by bSpline model
names(strafied_Data_DBD_int)[!names(strafied_Data_DBD_int) %in% c("id", "status", "obstime")][variablesS

## [1] "Recipientsex1"
## [2] "InitialPrimaryDiseaseET_regroupOthers"
## [3] "Donorcauseofdeath_groupOthers"
```

```
## [4] "Recipientsex1:Lastcreatininemgdl"
## [5] "Recipientsex1:InitialPrimaryDiseaseET_regroupOthers"
## [6] "Recipientsex1:Donorcauseofdeath_groupOthers"
## [7] "Donorsex1:InitialPrimaryDiseaseET_regroupOthers"
## [8] "InitialPrimaryDiseaseET_regroupOthers:Donorcauseofdeath_groupOthers"
```

```
# Selected by PH model
```

```
names(stratified_Data_DBD_int)[!names(stratified_Data_DBD_int) %in% c("id", "status", "obstime")][variablesS
```

```
## [1] "Donorage" "Donorsex1"
```

```
cor(mean_beta_DBD, mean_beta_DBD_PH)
```

```
## [1] -0.05744871
```

For DCD

```
load("./Data/03_results_DCD.RData")
```

```
# Selected by bSpline model
```

```
names(stratified_Data_DCD_int)[!names(stratified_Data_DCD_int) %in% c("id", "status", "obstime")][variablesS
```

```
## [1] "Recipientage"
## [2] "Recipientsex1"
## [3] "Dialysisdaysrenine"
## [4] "Donorage"
## [5] "Donorsex1"
## [6] "Lastcreatininemgdl"
## [7] "Smoking1"
## [8] "Warm_ischaemic_period_1"
## [9] "Cold_ischaemic_period"
## [10] "HLA_mismatch"
## [11] "InitialPrimaryDiseaseET_regroupOthers"
## [12] "Donorcauseofdeath_groupOthers"
## [13] "Recipient_BMI"
## [14] "Recipientage:Recipientsex1"
## [15] "Recipientage:Dialysisdaysrenine"
## [16] "Recipientage:Donorage"
## [17] "Recipientage:Donorsex1"
## [18] "Recipientage:Warm_ischaemic_period_1"
## [19] "Recipientage:HLA_mismatch"
## [20] "Recipientage:InitialPrimaryDiseaseET_regroupOthers"
## [21] "Recipientage:Donorcauseofdeath_groupOthers"
## [22] "Recipientage:DonorBMI"
## [23] "Recipientsex1:Dialysisdaysrenine"
## [24] "Recipientsex1:Donorage"
## [25] "Recipientsex1:Lastcreatininemgdl"
## [26] "Recipientsex1:Warm_ischaemic_period_1"
## [27] "Recipientsex1:Cold_ischaemic_period"
## [28] "Recipientsex1:HLA_mismatch"
## [29] "Recipientsex1:InitialPrimaryDiseaseET_regroupOthers"
## [30] "Recipientsex1:DonorBMI"
## [31] "Dialysisdaysrenine:Donorsex1"
```

```
## [32] "Dialysisdaysrenine:Lastcreatininemgdl"
## [33] "Dialysisdaysrenine:Cold_ischaemic_period"
## [34] "Dialysisdaysrenine:InitialPrimaryDiseaseET_regroupOthers"
## [35] "Donorage:Warm_ischaemic_period_1"
## [36] "Donorage:HLA_mismatch"
## [37] "Donorage:DonorBMI"
## [38] "Donorsex1:Lastcreatininemgdl"
## [39] "Donorsex1:Smoking1"
## [40] "Donorsex1:Warm_ischaemic_period_1"
## [41] "Donorsex1:Cold_ischaemic_period"
## [42] "Donorsex1:HLA_mismatch"
## [43] "Donorsex1:InitialPrimaryDiseaseET_regroupOthers"
## [44] "Donorsex1:Donorcauseofdeath_groupOthers"
## [45] "Donorsex1:DonorBMI"
## [46] "Donorsex1:Recipient_BMI"
## [47] "Lastcreatininemgdl:HLA_mismatch"
## [48] "Smoking1:Warm_ischaemic_period_1"
## [49] "Smoking1:HLA_mismatch"
## [50] "Smoking1:InitialPrimaryDiseaseET_regroupOthers"
## [51] "Warm_ischaemic_period_1:Cold_ischaemic_period"
## [52] "Warm_ischaemic_period_1:HLA_mismatch"
## [53] "Warm_ischaemic_period_1:InitialPrimaryDiseaseET_regroupOthers"
## [54] "Warm_ischaemic_period_1:Donorcauseofdeath_groupOthers"
## [55] "Warm_ischaemic_period_1:DonorBMI"
## [56] "Cold_ischaemic_period:HLA_mismatch"
## [57] "Cold_ischaemic_period:DonorBMI"
## [58] "HLA_mismatch:InitialPrimaryDiseaseET_regroupOthers"
## [59] "HLA_mismatch:Donorcauseofdeath_groupOthers"
## [60] "HLA_mismatch:DonorBMI"
## [61] "InitialPrimaryDiseaseET_regroupOthers:Donorcauseofdeath_groupOthers"
## [62] "InitialPrimaryDiseaseET_regroupOthers:Recipient_BMI"
```

```
# Selected by PH model
```

```
names(stratified_Data_DCD_int)[!names(stratified_Data_DCD_int) %in% c("id", "status", "obstime")][variablesS
```

```
## [1] "Donorage" "Recipientsex1:DonorBMI"
## [3] "Dialysisdaysrenine:Donorsex1" "Cold_ischaemic_period:Recipient_BMI"
```

```
cor(mean_beta_DCD, mean_beta_DCD_PH)
```

```
## [1] 0.02723568
```

```
For DCD_2
```

```
load("../Data/03_results_DCD_2.RData")
```

```
# Selected by bSpline model
```

```
names(stratified_Data_DCD_int)[!names(stratified_Data_DCD_int) %in% c("id", "status", "obstime")][variablesS
```

```
## [1] "Recipientage"
## [2] "Recipientsex1"
## [3] "Dialysisdaysrenine"
## [4] "Donorage"
```

```

## [5] "Donorsex1"
## [6] "Lastcreatininemgdl"
## [7] "HLA_mismatch"
## [8] "InitialPrimaryDiseaseET_regroupOthers"
## [9] "Donorcauseofdeath_groupOthers"
## [10] "DonorBMI"
## [11] "Recipient_BMI"
## [12] "Recipientage:Dialysisdaysrenine"
## [13] "Recipientage:Donorage"
## [14] "Recipientage:Warm_ischaemic_period_1"
## [15] "Recipientage:InitialPrimaryDiseaseET_regroupOthers"
## [16] "Recipientage:Donorcauseofdeath_groupOthers"
## [17] "Recipientsex1:Donorage"
## [18] "Recipientsex1:Donorsex1"
## [19] "Recipientsex1:Warm_ischaemic_period_1"
## [20] "Recipientsex1:HLA_mismatch"
## [21] "Recipientsex1:InitialPrimaryDiseaseET_regroupOthers"
## [22] "Recipientsex1:DonorBMI"
## [23] "Dialysisdaysrenine:Donorage"
## [24] "Dialysisdaysrenine:Lastcreatininemgdl"
## [25] "Dialysisdaysrenine:Warm_ischaemic_period_1"
## [26] "Dialysisdaysrenine:Cold_ischaemic_period"
## [27] "Dialysisdaysrenine:InitialPrimaryDiseaseET_regroupOthers"
## [28] "Donorage:Donorsex1"
## [29] "Donorage:Warm_ischaemic_period_1"
## [30] "Donorage:HLA_mismatch"
## [31] "Donorage:InitialPrimaryDiseaseET_regroupOthers"
## [32] "Donorage:DonorBMI"
## [33] "Donorsex1:Lastcreatininemgdl"
## [34] "Donorsex1:Warm_ischaemic_period_1"
## [35] "Donorsex1:Cold_ischaemic_period"
## [36] "Donorsex1:HLA_mismatch"
## [37] "Donorsex1:InitialPrimaryDiseaseET_regroupOthers"
## [38] "Donorsex1:Recipient_BMI"
## [39] "Lastcreatininemgdl:Smoking1"
## [40] "Lastcreatininemgdl:Warm_ischaemic_period_1"
## [41] "Lastcreatininemgdl:HLA_mismatch"
## [42] "Lastcreatininemgdl:Donorcauseofdeath_groupOthers"
## [43] "Smoking1:Warm_ischaemic_period_1"
## [44] "Smoking1:DonorBMI"
## [45] "Warm_ischaemic_period_1:Cold_ischaemic_period"
## [46] "Cold_ischaemic_period:DonorBMI"
## [47] "HLA_mismatch:InitialPrimaryDiseaseET_regroupOthers"
## [48] "HLA_mismatch:DonorBMI"
## [49] "InitialPrimaryDiseaseET_regroupOthers:Donorcauseofdeath_groupOthers"
## [50] "InitialPrimaryDiseaseET_regroupOthers:DonorBMI"
## [51] "InitialPrimaryDiseaseET_regroupOthers:Recipient_BMI"

```

*# Selected by PH model*

```
names(stratified_Data_DCD_int)[!names(stratified_Data_DCD_int) %in% c("id", "status", "obstime")][variablesS
```

```

## [1] "Donorage" "Recipientsex1:DonorBMI"
## [3] "Dialysisdaysrenine:Donorsex1" "Cold_ischaemic_period:Recipient_BMI"

```

```
cor(mean_beta_DCD, mean_beta_DCD_PH)
```

```
## [1] 0.08695798
```