### Figure 2: Cox Snell residuals (unstratified)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Weibull distribution | Scenario 1  \\eu\data\bib\de_as_prophet\PMx_Playground\gBrown\PostDoc_project_ISoP\CASE_STUDY\IMAGES\Run1_Diagnostics\cox_snell_diag-1.png | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

### Figure 3: Modified Cox Snell residuals (unstratified)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Survival based VPC | | | | |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

### Figure 4: Survival-based VPC (unstratified)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Hazard based VPC | | | | |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

### Figure 5: Hazard-based VPC (unstratified)

### Figure 6: Deviance residuals (unstratified)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | E-max model | | Linear model♠ | |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

### Figure 7A: Survival-based VPC (stratified by dose, Weibull distribution)

|  |  |  |
| --- | --- | --- |
| E-max Model | Scenario 1 | Scenario 2 |
| Linear Model♠ | Scenario 3 | Scenario 4 |

### Figure 7B: Survival-based VPC (stratified by dose, exponential distribution)

|  |  |  |
| --- | --- | --- |
| E-max Model | Scenario 5 | Scenario 6 |
| Linear Model♠ | Scenario 7 | Scenario 8 |

### Figure 8A: Hazard-based VPC (stratified by dose, Weibull distribution)

|  |  |  |
| --- | --- | --- |
| E-max Model | Scenario 1 | Scenario 2 |
| Linear Model♠ | Scenario 3 | Scenario 4 |

### Figure 8B: Hazard-based VPC (stratified by dose, exponential distribution)

|  |  |  |
| --- | --- | --- |
| E-max Model | Scenario 5 | Scenario 6 |
| Linear Model♠ | Scenario 7 | Scenario 8 |

### Figure 9A: Deviance residuals (stratified by gender, Weibull distribution)

|  |  |  |
| --- | --- | --- |
|  | Gender Included | Gender Excluded♠ |
| E-max model | Scenario 1 | Scenario 2 |
| Linear model♠ | Scenario 3 | Scenario 4 |

### Figure 9B: Deviance residuals (stratified by gender, exponential distribution)

|  |  |  |
| --- | --- | --- |
|  | Gender Included | Gender Excluded♠ |
| E-max model | Scenario 5 | Scenario 6 |
| Linear model♠ | Scenario 7 | Scenario 8 |

### Figure 10A: Survival-based VPC (stratified by gender, Weibull distribution)

|  |  |  |
| --- | --- | --- |
|  | Gender Included | Gender Excluded♠ |
| E-max model | Scenario 1 | Scenario 2 |
| Linear model♠ | Scenario 3 | Scenario 4 |

### Figure 10B: Survival-based VPC (stratified by gender, exponential distribution)

|  |  |  |
| --- | --- | --- |
|  | E-max model | Linear model♠ |
| E-max model | Scenario 5 | Scenario 6 |
| Linear model♠ | Scenario 7 | Scenario 8 |

### Figure 11A: Hazard-based VPC (stratified by gender, Weibull distribution)

|  |  |  |
| --- | --- | --- |
|  | Gender Included | Gender Excluded♠ |
| E-max model | Scenario 1 | Scenario 2 |
| Linear model♠ | Scenario 3 | Scenario 4 |

### Figure 11B: Hazard-based VPC (stratified by gender, exponential distribution)

|  |  |  |
| --- | --- | --- |
|  | Gender Included | Gender Excluded♠ |
| E-max model | Scenario 5 | Scenario 6 |
| Linear model♠ | Scenario 7 | Scenario 8 |

### Figure 12: Kaplan Meier Mean Covariate (KMMC) plot, AUCss

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | E-max model | | Linear model♠ | |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |

### Figure 13: Kaplan Meier Mean Covariate (KMMC) plot, gender

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | E-max model | | Linear model♠ | |
| Weibull distribution | Scenario 1 | Scenario 2 | Scenario 3 | Scenario 4 |
| Exponential distribution ♠ | Scenario 5 | Scenario 6 | Scenario 7 | Scenario 8 |