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- Aggregate data will be included; with any direct reference to individual patients excluded

*Complete removal of patient data listings may mean that page numbers are no longer consecutively numbered

GlaxoSmithKline group of companies

Division : Worldwide Development

Information Type : Statistical Report

Title : MID207941 Meta Analysis Report

Compound Number : GW685698 + GW642444

Description: Meta-Analysis Plan for MID207941: A Study to Evaluate Risk Factors for Pneumonia and Chronic Obstructive Pulmonary Disease (COPD) Exacerbations in a COPD Population of Patients Treated with GW685698 + GW642444 (Fluticasone Furoate + Vilanterol); GW642444 (Vilanterol); CCI18781 (Fluticasone Propionate); GR33343 (Salmeterol); CCI18781+ GR33343 (Fluticasone Propionate + Salmeterol) and Placebo.

Compound Number: GW685698, GW642444, CCI18781, GR33343

Effective Date: 06-SEP-2018

Subject: COPD, pneumonia, COPD exacerbations, inhaled corticosteroids

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207941 META ANALYSIS REPORT

1. BACKGROUND AND AIMS

The effect of single factors on the risk of exacerbations and pneumonia in chronic obstructive pulmonary disease (COPD) has been explored previously. The risk of pneumonia has been found to be increased by inhaled corticosteroid (ICS) treatment, worse lung function, and low body mass index (BMI) [Crim, 2009; Mullerova, 2012].

Here, we examined how risk factors for exacerbations and pneumonia interact with each other, to give probability estimates for the occurrence of an exacerbation or pneumonia.

2. METHODS

In a pooled analysis (MID207941) of five studies of patients with COPD treated with ICS/long-acting β₂-agonist (LABA) combinations and comparator arms of ICS, LABA and/or placebo (NCT01009463 [Dransfield, 2013], NCT0101795, NCT00144911, NCT00115492 [Dransfield, 2013], and the Towards a Revolution in COPD Health [TORCH] study [Crim, 2009]), we used backwards elimination in a Cox's proportional hazards (PH) regression model to evaluate which combination of risk factors best predict:

- 1. time to first pneumonia
- 2. time to first moderate/severe COPD exacerbation.

We first examined a set of seven binary covariates: age (<65 years, \geq 65 years), BMI (<25 kg/m², \geq 25 kg/m²), Global Initiative for Chronic Obstructive Lung Disease (GOLD) stage (I & II: pre-bronchodilator forced expiratory volume in one second [FEV₁] \geq 50%, III & IV: pre-bronchodilator FEV₁ <50%), history of exacerbations in the year prior to the study (<2, \geq 2), history of smoking (former smoker, current smoker), sex (male, female), and study treatment (with ICS, without ICS).

We repeated the analyses with an expanded set of nine binary covariates, including race (Asian, non-Asian) and World Bank Country Income Group (high income, non-high income).

The backwards elimination process used to find the covariates that best explain the data worked as follows:

- 1. A Cox PH model containing all main and interaction effects was fitted (28 covariates in the smaller set or 45 covariates in the larger set);
- 2. The least statistically significant covariate was then removed until all remaining covariates were significant (p<0.1);
- 3. Main effects, however, were not removed from the model if they were present in an interaction effect that still remained in the model.

3. RESULTS

3.1. Pneumonia model

In the smaller covariate set, a low BMI, history of exacerbations, worse lung function (GOLD stage), and treatment with an ICS appeared to be important factors increasing the risk of pneumonia (Source: Figure 1.8; Table 1.3). Additionally, three interactions remained in the model (Source: Table 1.1).

- 1. The risk of pneumonia associated with age (≥65 vs <65 years) increased for men compared with women.
- 2. The risk of pneumonia associated with an exacerbation history (≥2 vs <2) was higher for younger subjects than for older subjects.
- 3. The risk of pneumonia associated with ICS treatment (vs non-ICS) was higher for subjects with lower BMI (<25 kg/m²) than for those with higher BMI. No other risk factors were found to be modified by treatment with an ICS.

To investigate more fully how BMI modifies the risk of treatment with an ICS, we re-ran the analysis using a more detailed BMI covariate (Source: Table 1.5; Table 1.6; Figure 1.7).

The modeled probability of a pneumonia event varied between 3% and 12% during the first year in the identified subgroups. The most at-risk subgroups, were generally older, with a low BMI, a history of exacerbations, worse lung function (GOLD stage), and treated with an ICS. The inverse was true for the least at-risk subgroups (Source: Table 1.2; Figure 1.4).

The selected model from the larger covariate set qualitatively replicated the findings from this selected model and retained all the above terms (Source: Table 2.1). Income and race did not affect pneumonias in a qualitatively consistent manner across the different interaction levels (Source: Table 2.2; Table 2.3; Table 2.5; Figure 2.4; Figure 2.6).

3.2. Exacerbation model

In the smaller covariate set, history of exacerbations, worse lung function (GOLD stage), female gender, and non-ICS treatment appeared to be important factors increasing the risk of exacerbation. Four interactions remained in the model: age by smoking status, BMI by exacerbation history, sex by treatment, and sex by smoking status (Source: Table 1.10; Table 1.30; Figure 1.50).

The modeled probability of an exacerbation varied between 31% and 82% during the first year in the identified subgroups. The most at-risk subgroups were generally female, with a low BMI, a history of exacerbations, and worse lung function (as measured by GOLD stage), reflecting the inclusion criteria for the studies included in this analysis. The inverse was true for the least at-risk subgroups (Source: Table 1.20; Figure 1.40).

The selected model from the larger covariate set differed somewhat from the model selected from the smaller covariate set; of the interactions found above, only sex by smoking status and BMI by exacerbation history were replicated (Source: Table 2.10; Table 2.20; Table 2.30; Figure 2.40; Figure 2.50).

3.3. Exacerbation model using pneumonia subgroups

Of particular interest from a risk—benefit point of view, is how the subgroups selected in the pneumonia model behave in terms of exacerbations. We refitted the model selected by pneumonia data to the exacerbation data, to investigate how the subgroups selected to explain the risk of pneumonia would predict exacerbation.

Of note, subjects <25 kg/m² treated with ICS vs non-ICS had a hazard ratio of 0.87 (95% CI: 0.81, 0.93) for exacerbations and 1.83 (95% CI: 1.54, 2.17) for pneumonia. Subjects ≥25 kg/m² treated with ICS vs non-ICS had a hazard ratio of 0.85 (95% CI: 0.79, 0.91) for exacerbations and 1.32 (1.09, 1.59) for pneumonia (Source: Figure 9.3; Table 9.2).

Probabilities from survival curves for pneumonia and exacerbations were presented for the subgroups defined by the pneumonia model (Source: Table 9.1; Figure 9.4).

4. CONCLUSIONS

The modeled probabilities of an exacerbation (31% to 82%) were considerably higher than those for pneumonia (3% and 12%).

Age may interact with sex and exacerbation history to predict pneumonia. Sex may interact with smoking status, and BMI may interact with exacerbation history to predict exacerbations.

The only risk factor for pneumonia modified by ICS treatment was BMI. When exacerbations were modeled using the same subgroups as found in the pneumonia model (i.e. those which best explain the risk of pneumonia) it did not appear that BMI significantly modified the treatment effect on exacerbations.

This analysis suggests that in patients with lower BMI, ICS treatment increases the risk of pneumonia but without increasing benefit in terms of exacerbation reduction; as a consequence, the risk—benefit ratio will be worse in such patients.

It is possible to develop a personal risk predictor for pneumonia and exacerbations in COPD patients from the model estimates found.

The nature of repeated testing in the backwards elimination procedure did not conserve the type I error, and the results are hypothesis generating.

5. REFERENCES

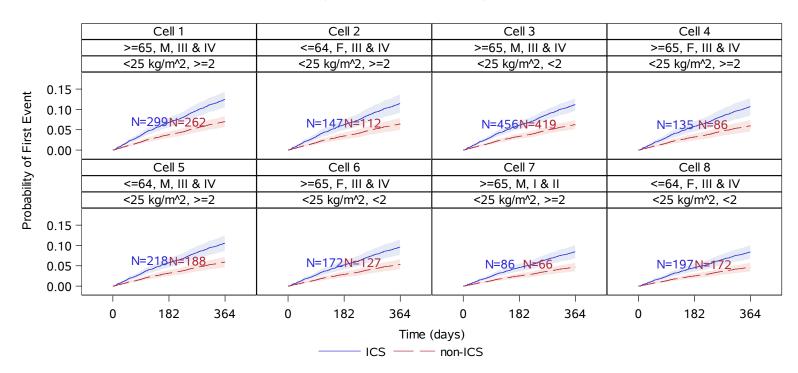
Crim C, Calverley PMA, Anderson JA, Celli B, Ferguson GT, et al. Pneumonia risk in COPD patients receiving inhaled corticosteroids alone or in combination: TORCH study results. Eur Respir J 2009;34:641–647.

Mullerova H, Chigbo C, Hagan GW, Woodhead MA, Miravitlles M, et al. The natural history of community-acquired pneumonia in COPD patients: a population database analysis. Respir Med 2012;106:1124–1133.

Dransfield MT, et al. Once-daily inhaled fluticasone furoate and vilanterol versus vilanterol only for prevention of exacerbations of COPD: two replicate double-blind, parallel-group, randomised controlled trials Lancet Respir Med 2013;1:210–23.

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Population: Intent-to-Treat

Figure 1.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Seven Covariates)

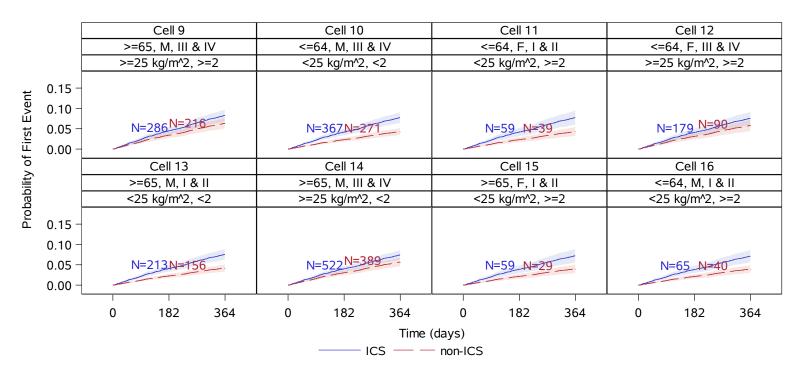


Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 1.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Seven Covariates)

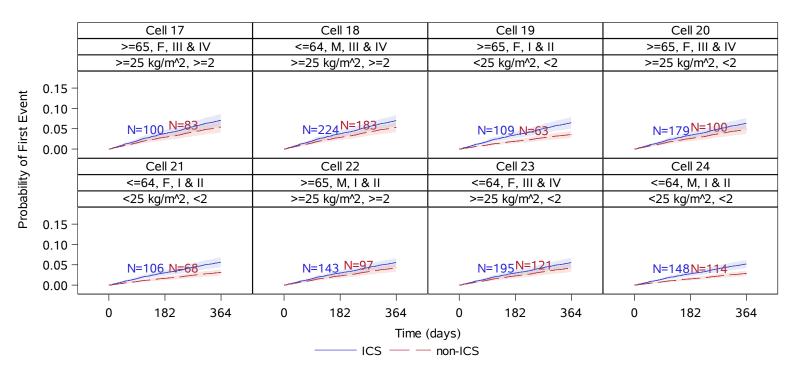


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Figure 1.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Seven Covariates)

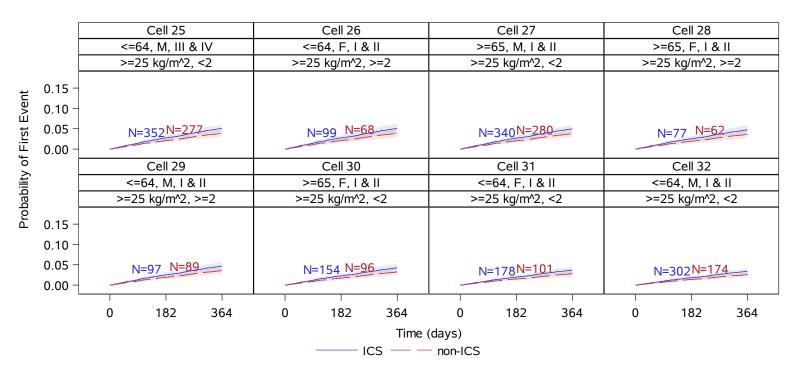


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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 1.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Seven Covariates)



Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

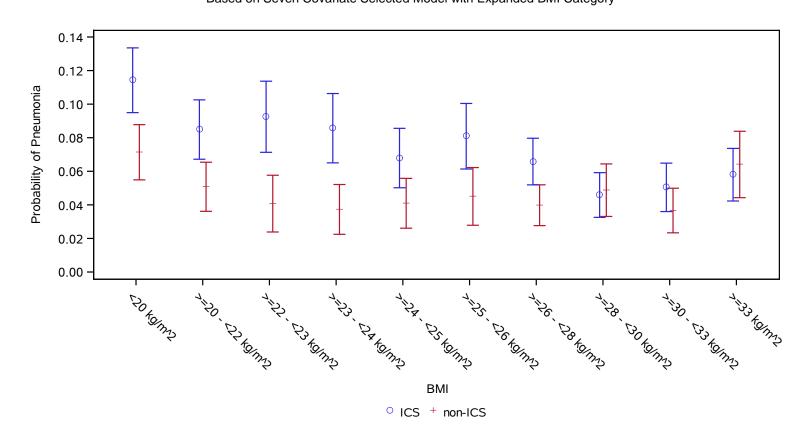
Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 1.7
Pneumonia Probabilities by BMI Decile (Direct Adjusted Probabilities)
Based on Seven Covariate Selected Model with Expanded BMI Category

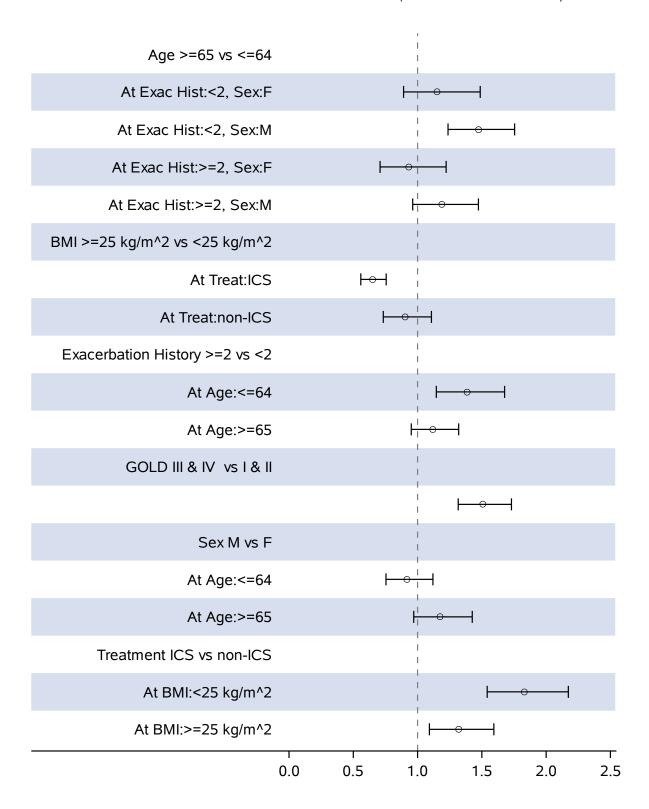


Average probability estimates based on direct adjusted survival curves of the ITT sample.

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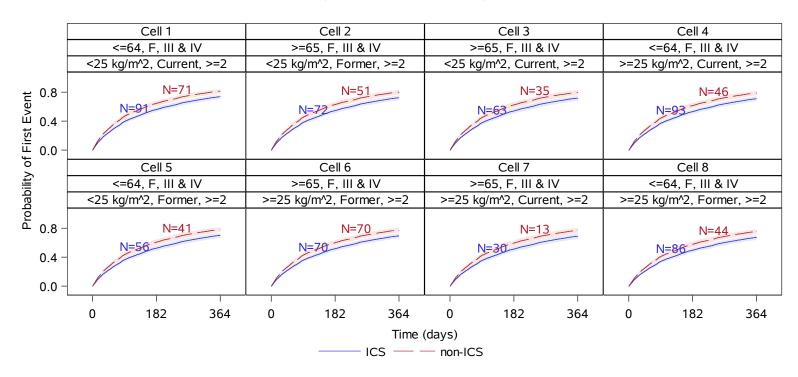
Figure 1.8
Hazard Ratios from Selected Pneumonia Cox Model (Based on Seven Covariates)



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Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



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Cell Header Line 2: BMI, Smoking., Exac.

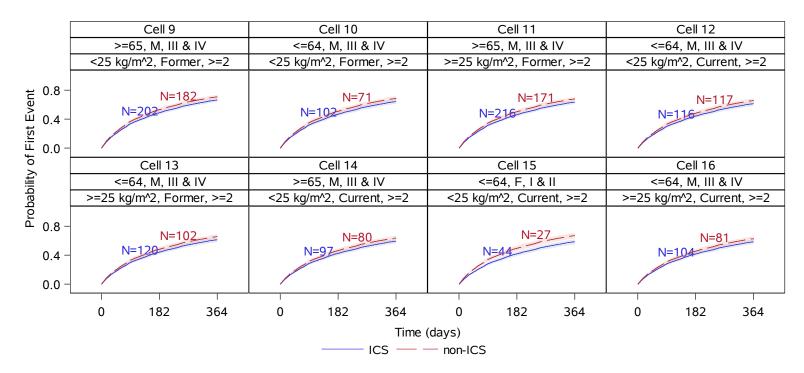
Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



Cell Header Line 1: Age, Sex, GOLD

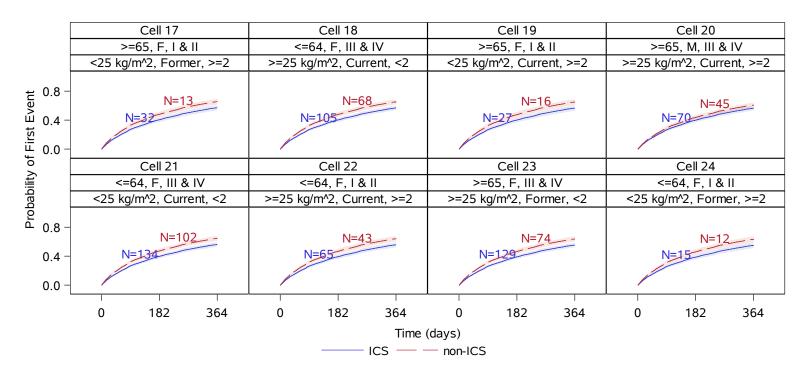
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Population: Intent-to-Treat

Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



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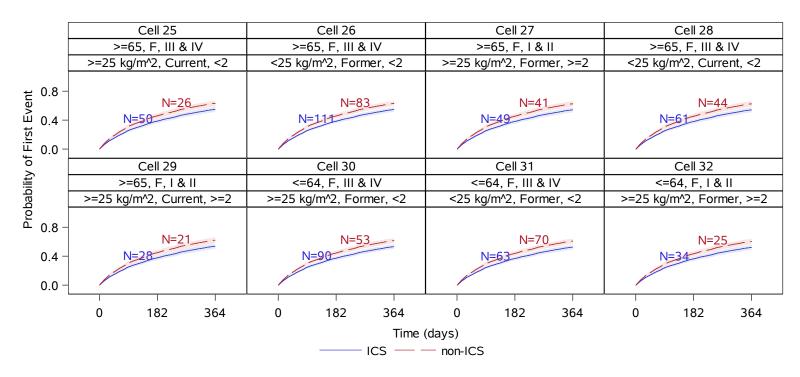
Cell Header Line 2: BMI, Smoking., Exac.

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Population: Intent-to-Treat

Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



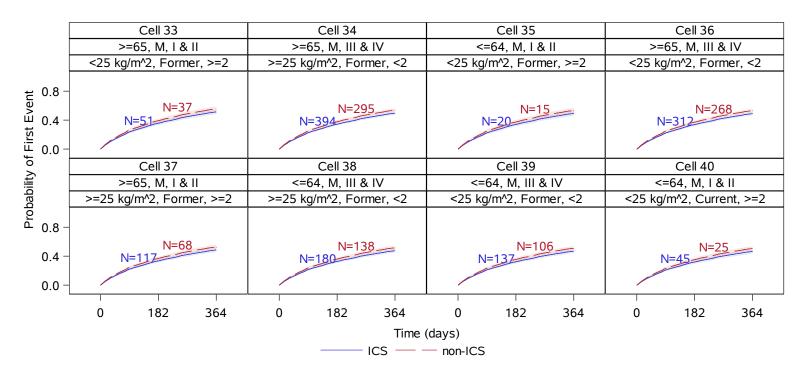
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Population: Intent-to-Treat

Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



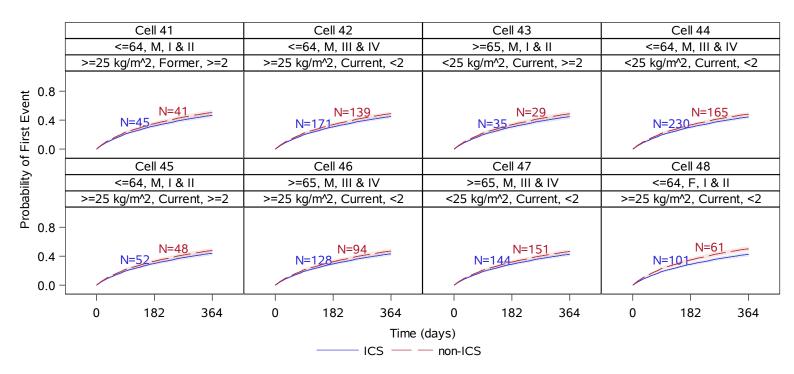
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Cell Header Line 2: BMI, Smoking., Exac.

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Figure 1.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



Cell Header Line 1: Age, Sex, GOLD

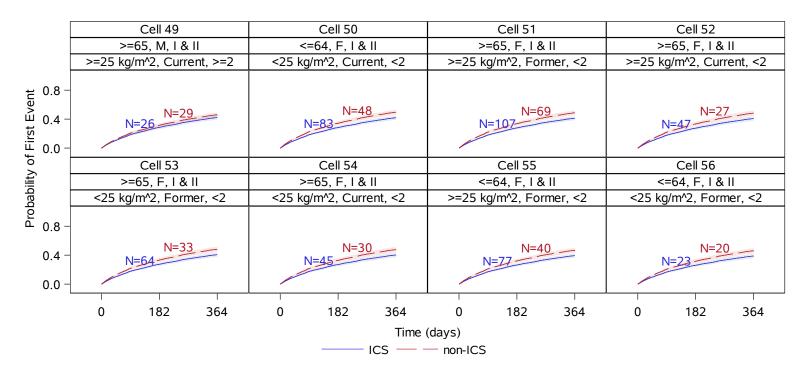
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Population: Intent-to-Treat

Figure 1.40
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



Cell Header Line 1: Age, Sex, GOLD

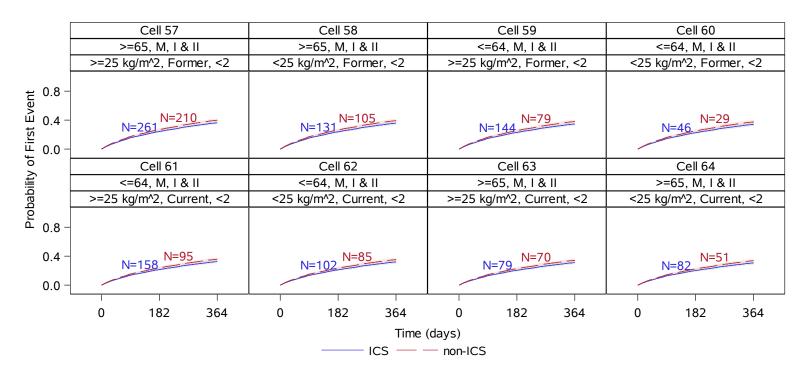
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Population: Intent-to-Treat

Figure 1.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates)



Cell Header Line 1: Age, Sex, GOLD

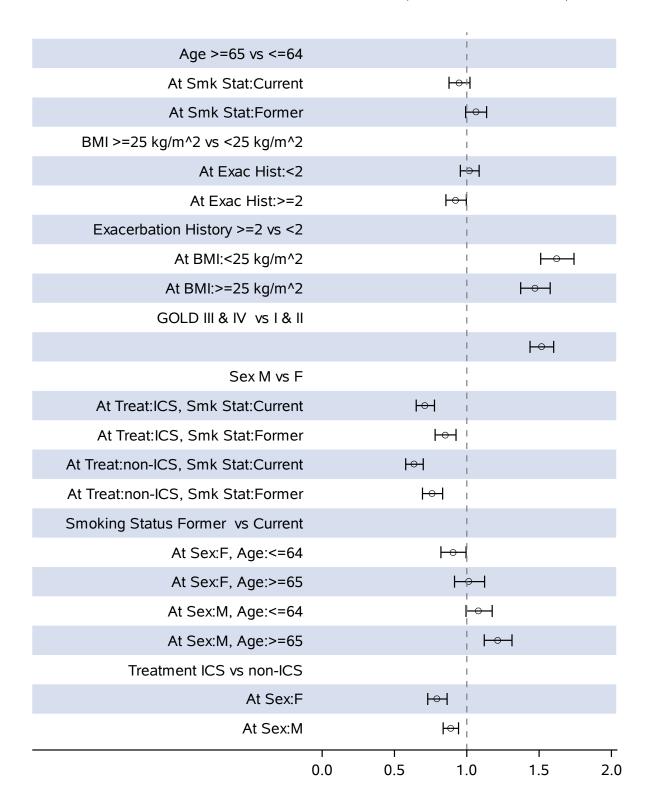
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 1.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates)

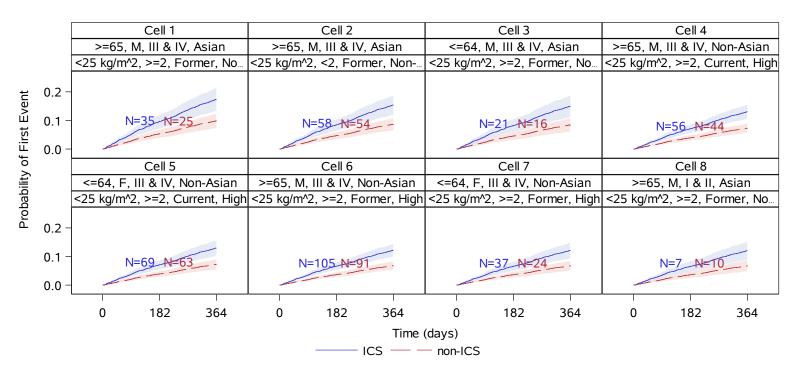


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Protocol: 207941

Population: Intent-to-Treat Figure 2.4

Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



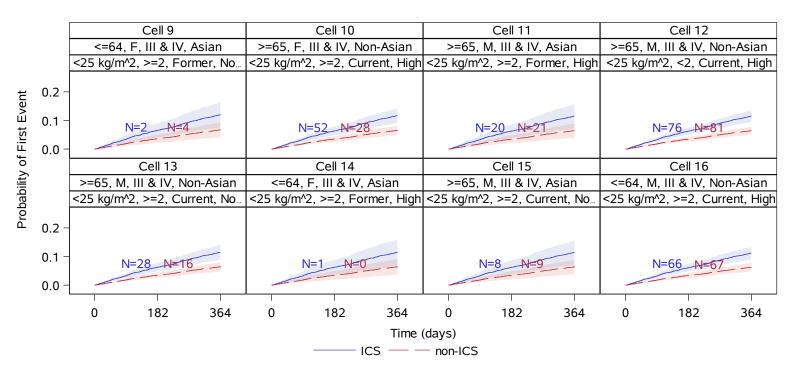
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Protocol: 207941

Population: Intent-to-Treat Figure 2.4

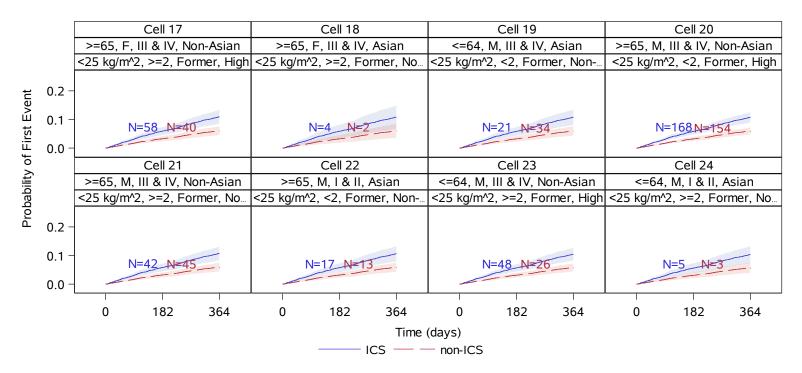
Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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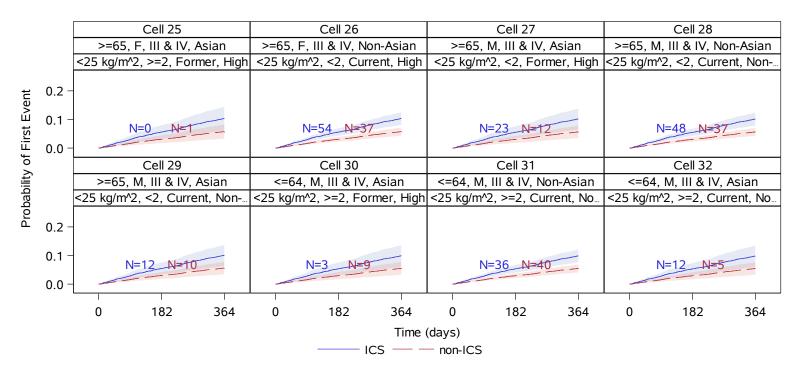
Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)

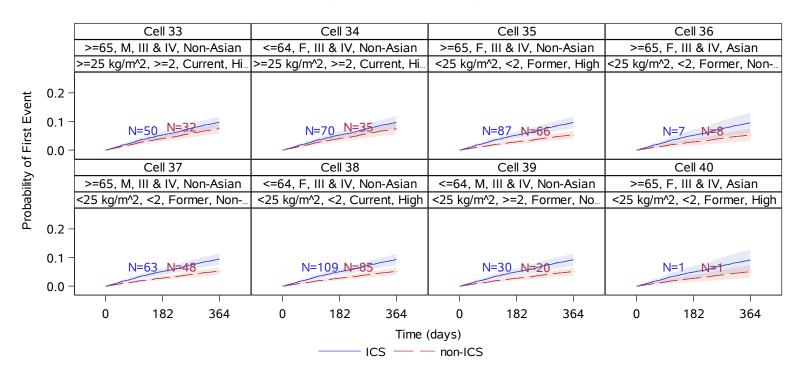


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Population: Intent-to-Treat

Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)

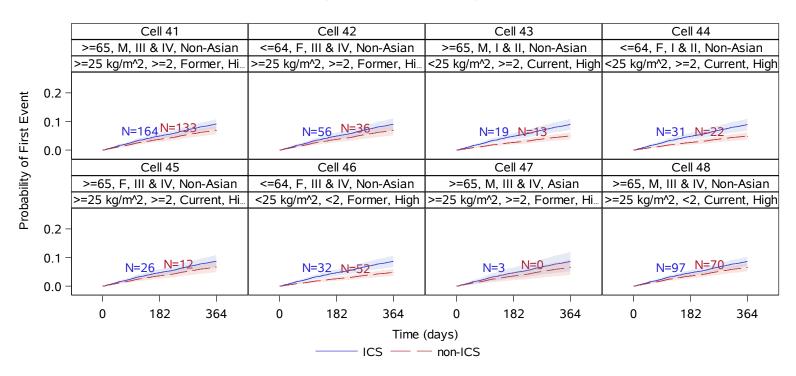


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Population: Intent-to-Treat

Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



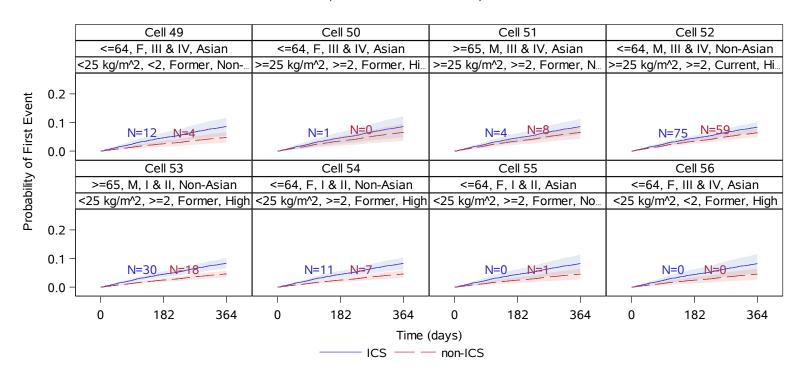
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

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Protocol: 207941 Page 7 of 32 Population: Intent-to-Treat

Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)

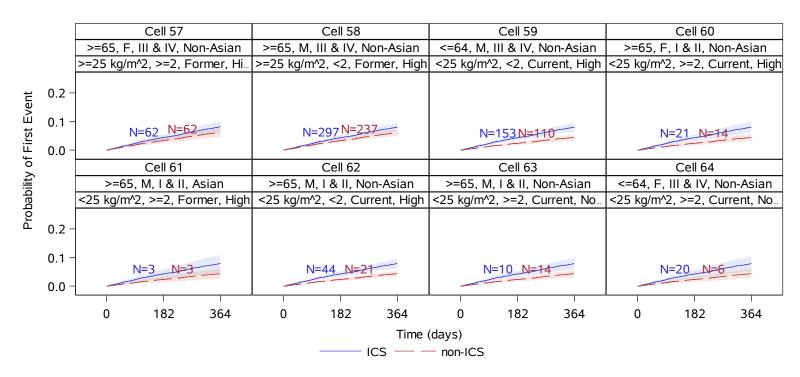


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Population: Intent-to-Treat

Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

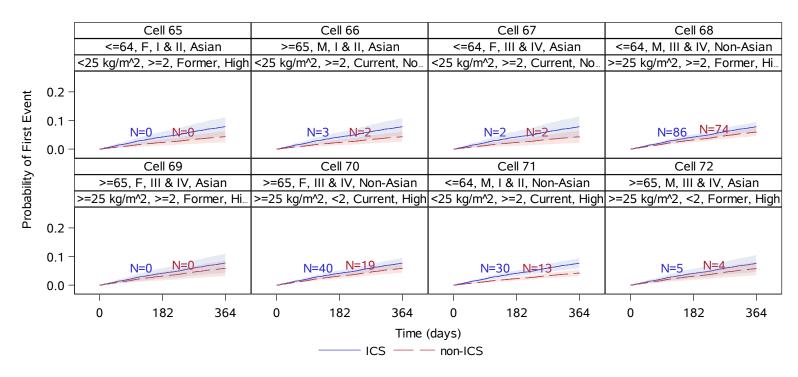
Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Protocol: 207941

Population: Intent-to-Treat Figure 2.4

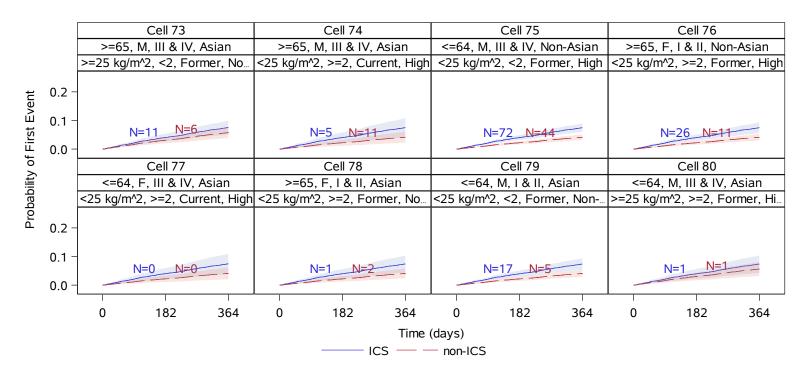
Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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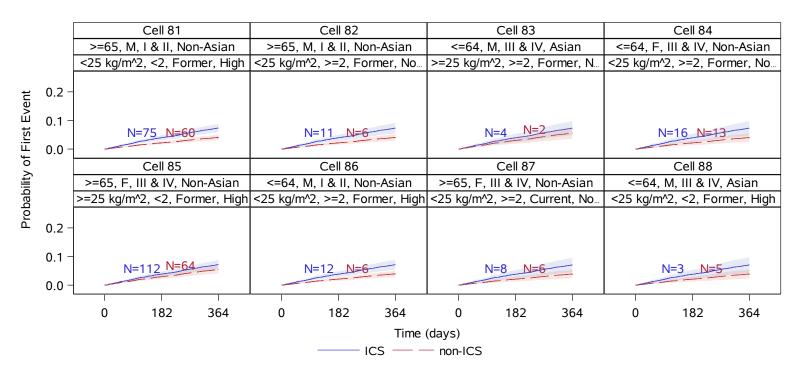
Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



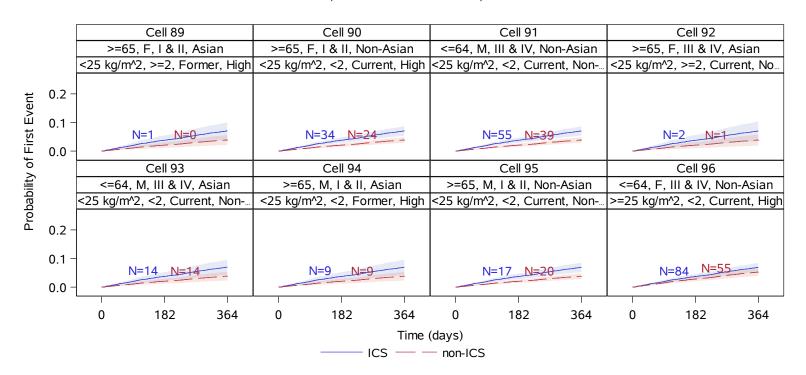
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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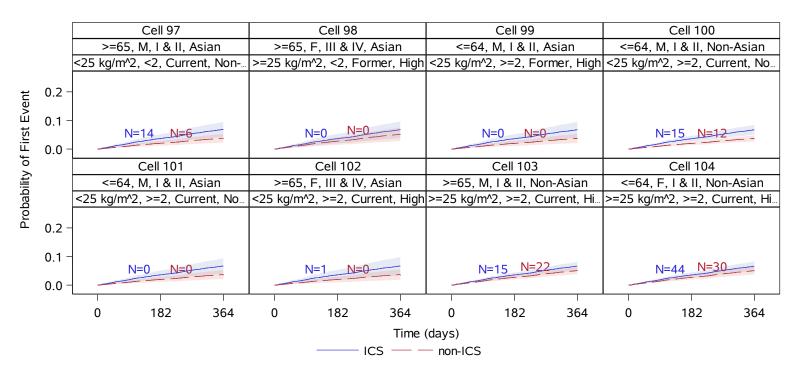
Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race

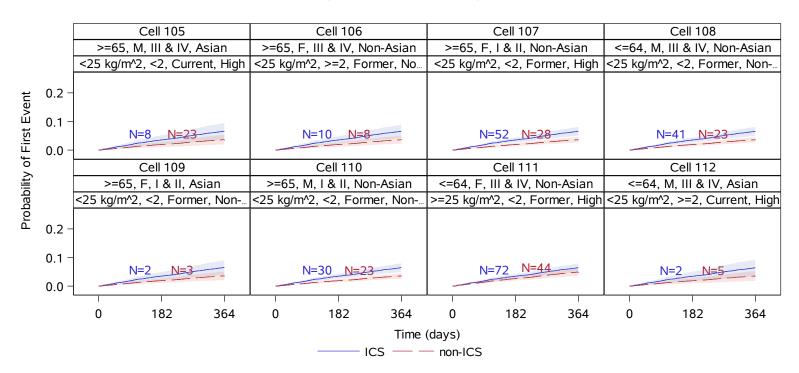
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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



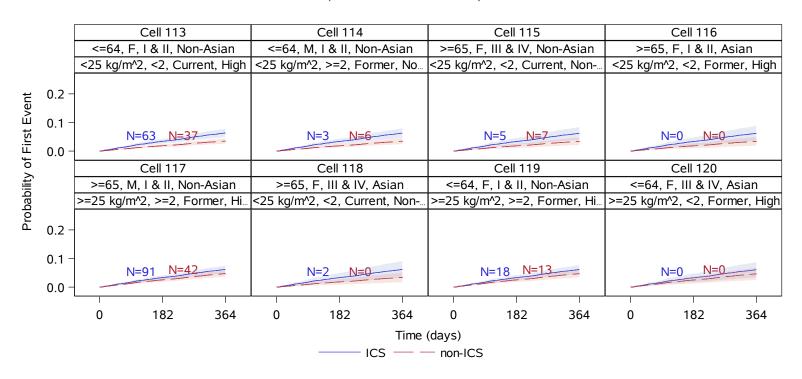
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



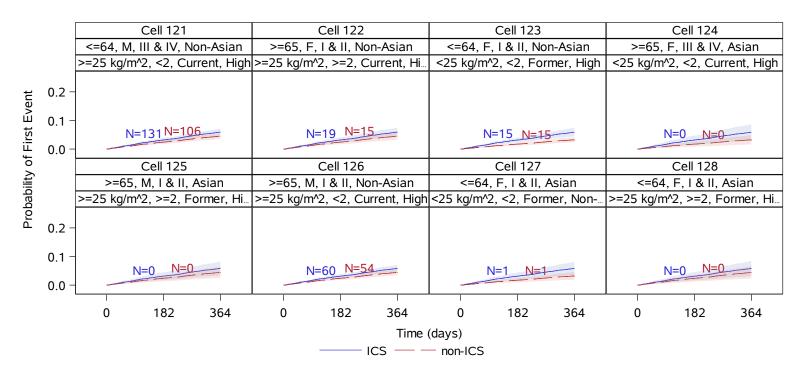
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



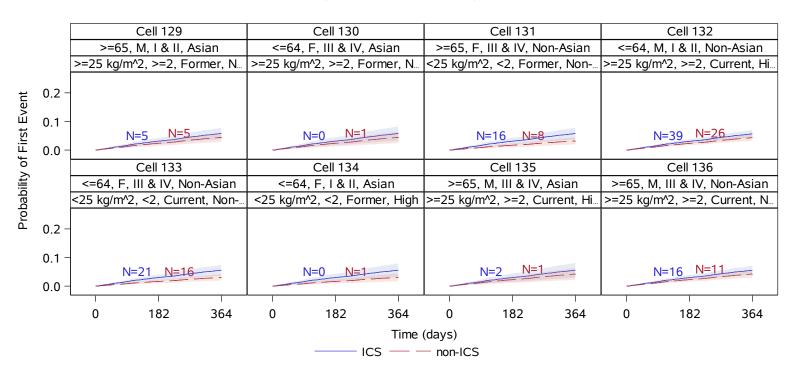
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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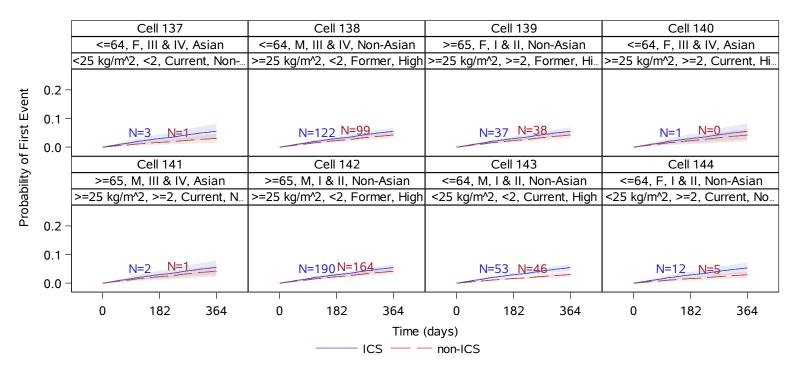
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Figure 2.4

Probability of First Pneumonia During Year on Study Treatment Survival Curves

Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



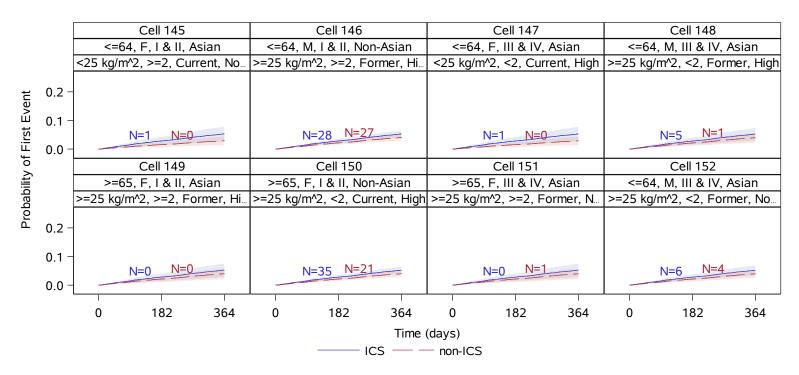
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



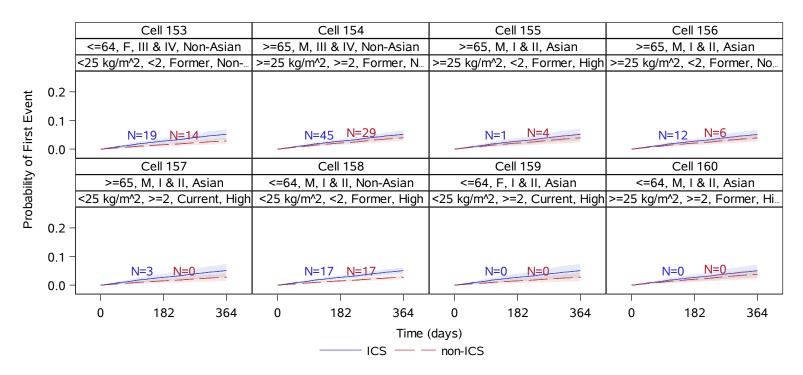
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



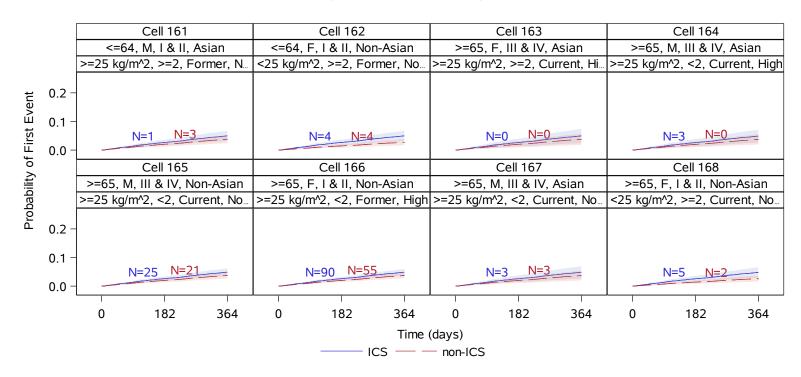
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



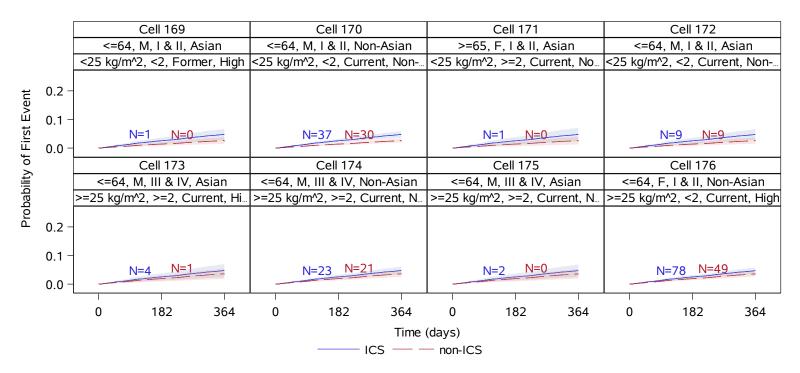
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



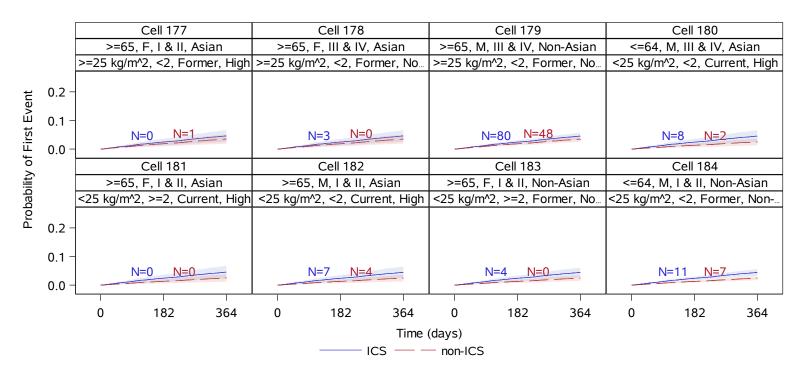
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



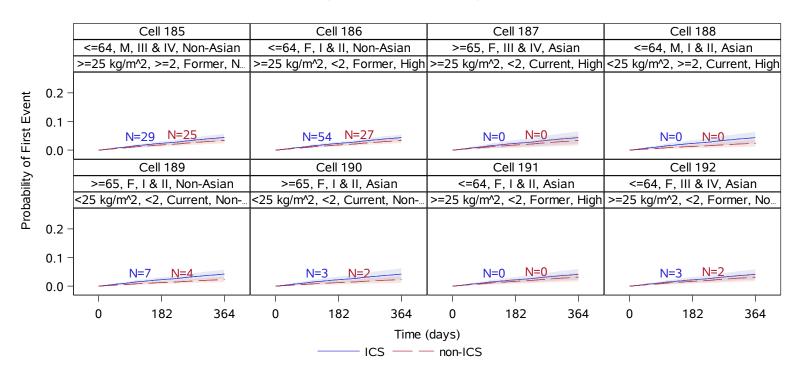
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



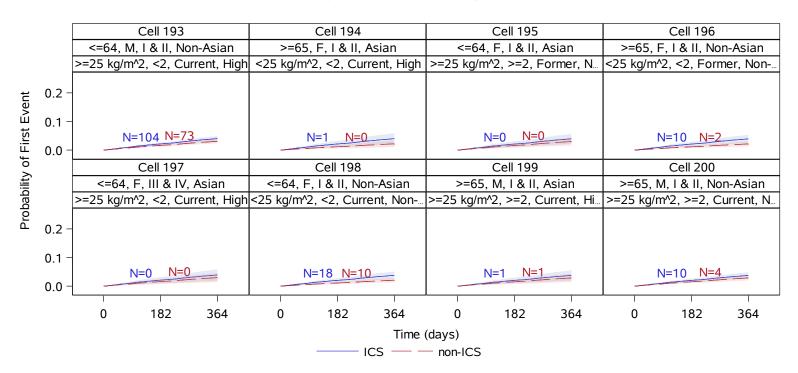
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



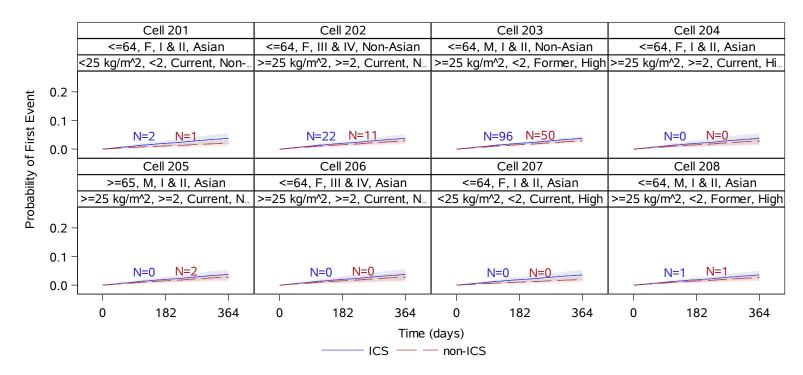
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



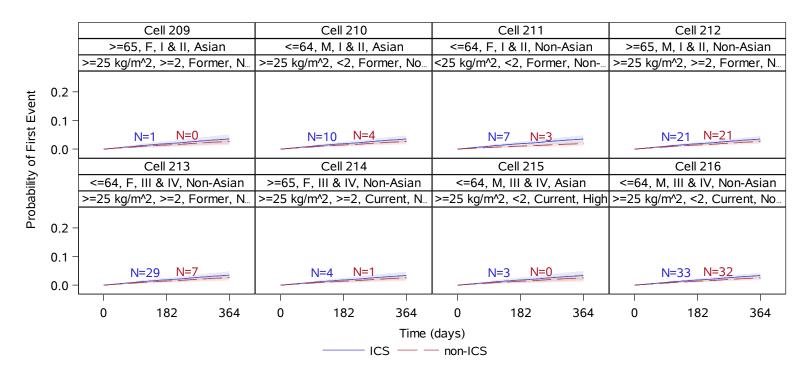
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4
Probability of First Pneumonia During Year on Study Treatment Survival Curves
(Based on Nine Covariates)



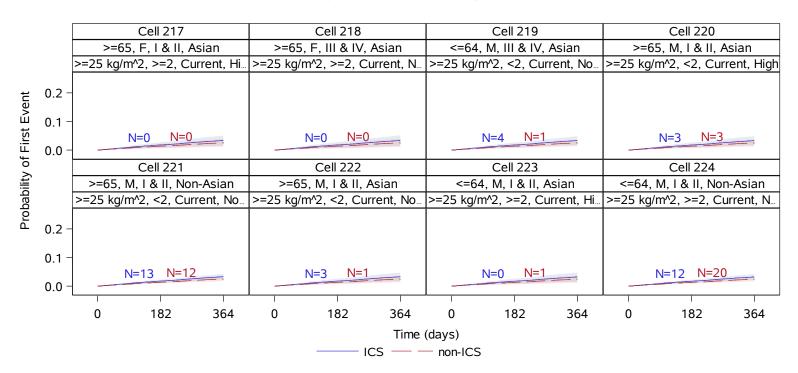
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



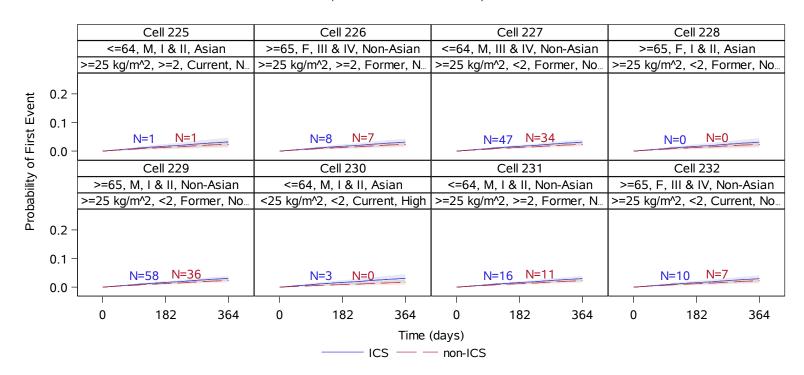
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



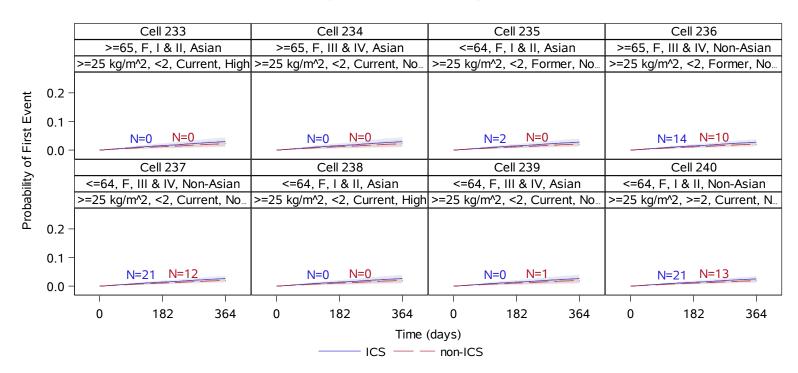
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



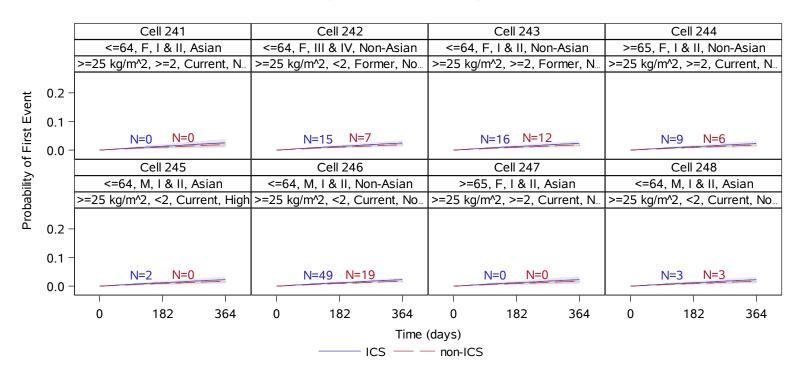
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



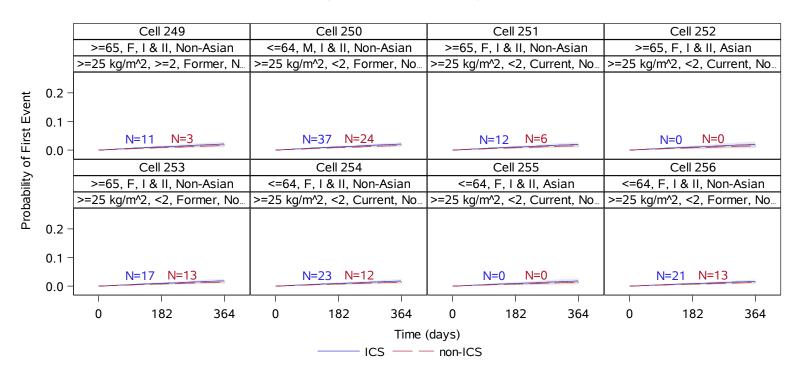
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.4 Probability of First Pneumonia During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race

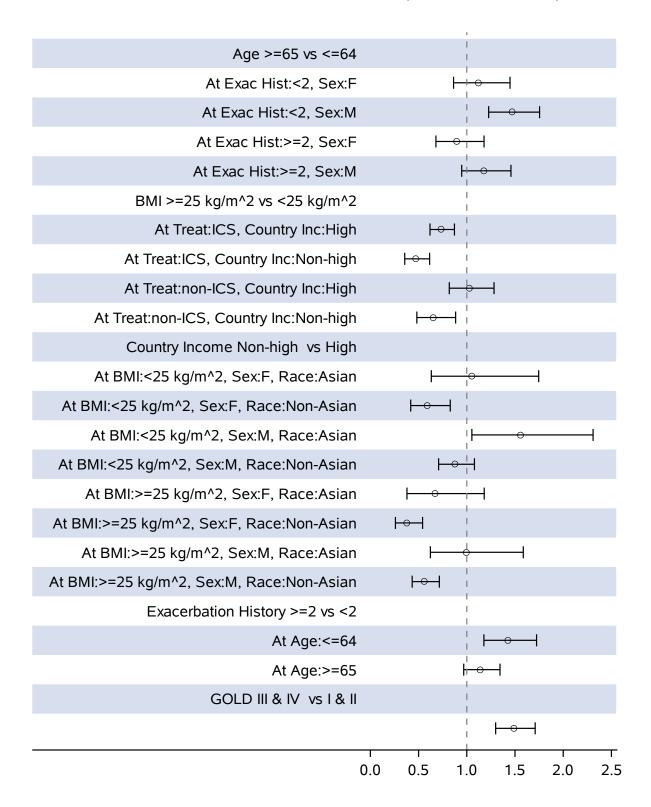
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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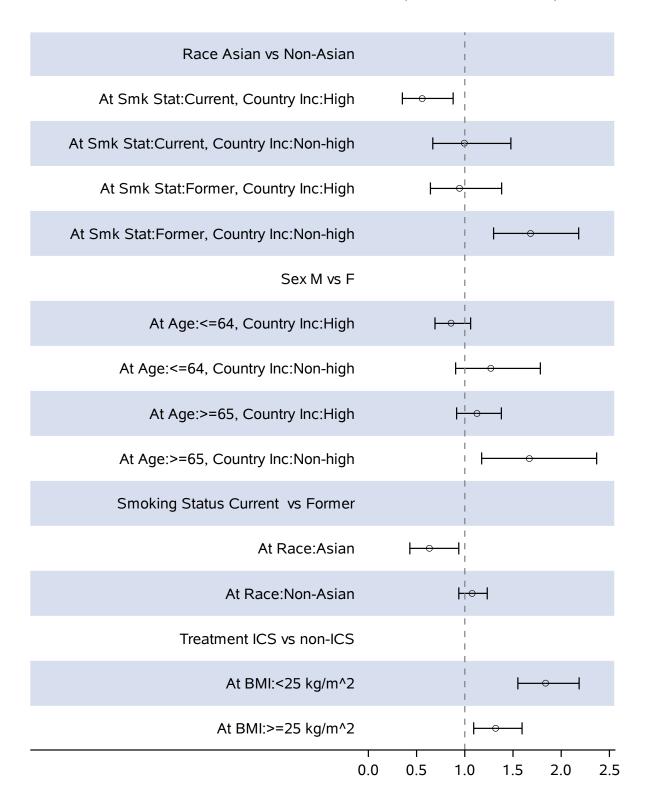
Figure 2.6
Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)



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Figure 2.6
Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)

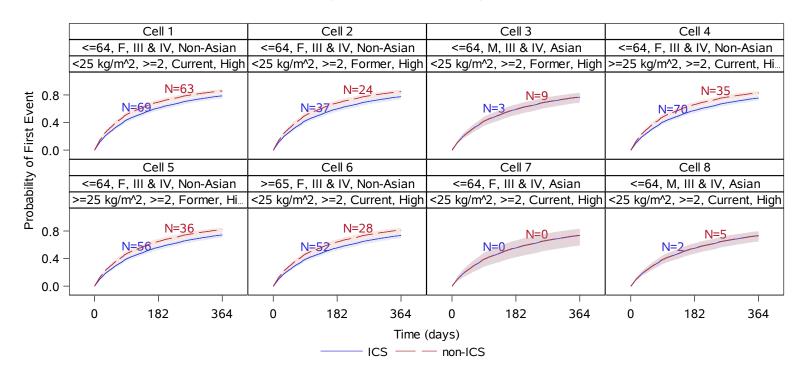


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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)

Cell 9 Cell 10 Cell 11 Cell 12 >=65, F, III & IV, Non-Asian <=64, F. III & IV. Asian <=64. M. III & IV. Non-Asian >=65. M. III & IV. Asian $<25 \text{ kg/m}^2$, >=2, Former, High $<25 \text{ kg/m}^2$, >=2, Former, High $<25 \text{ kg/m}^2$, >=2, Former, High $<25 \text{ kg/m}^2$, >=2, Former, High 8.0 Probability of First Event 0.4 0.0 Cell 13 Cell 14 Cell 15 Cell 16 >=65, F, III & IV, Non-Asian <=64, M, III & IV, Non-Asian >=65, F, III & IV, Non-Asian <=64. M. III & IV. Non-Asian >=25 kg/m^2, >=2, Current, Hi... >=25 kg/m^2, >=2, Former, Hi. >=25 kg/m^2, >=2, Former, Hi. <25 kg/m^2, >=2, Current, High 0.8 0.4 0.0 0 182 364 0 182 364 0 182 364 0 182 364 Time (days) ICS — non-ICS

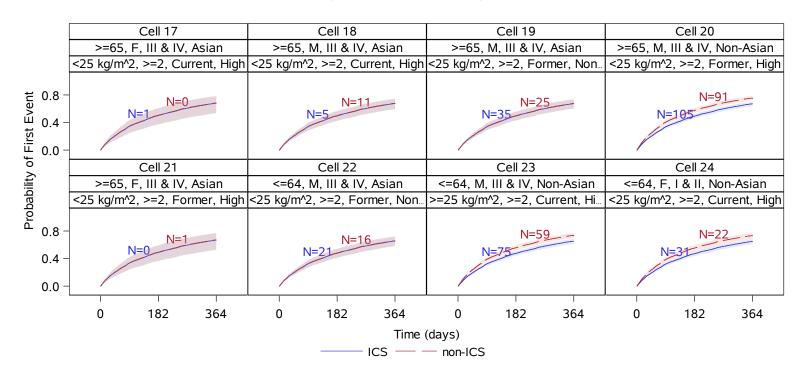
Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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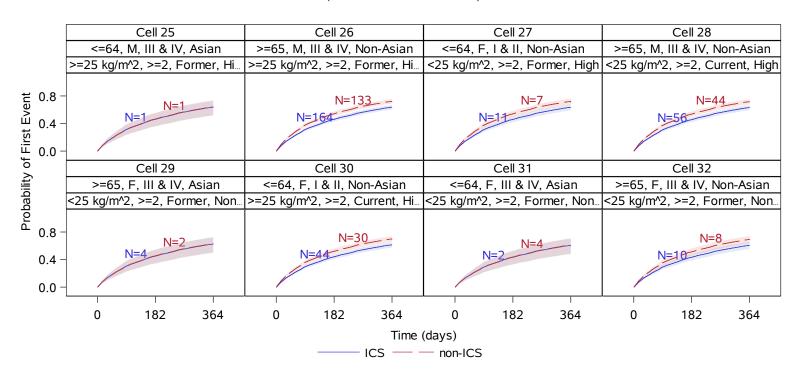
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

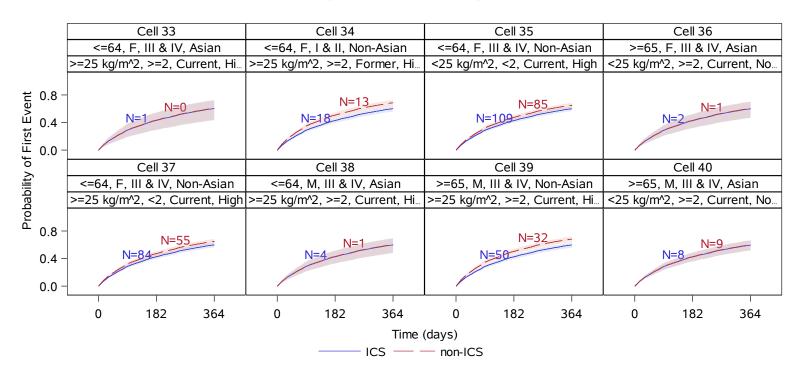
Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



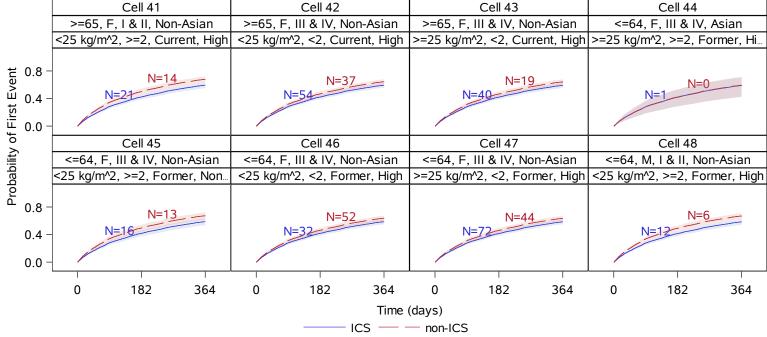
Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves

(Based on Nine Covariates) Cell 41 Cell 42 Cell 43 >=65, F, I & II, Non-Asian >=65, F, III & IV, Non-Asian >=65, F, III & IV, Non-Asian



Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

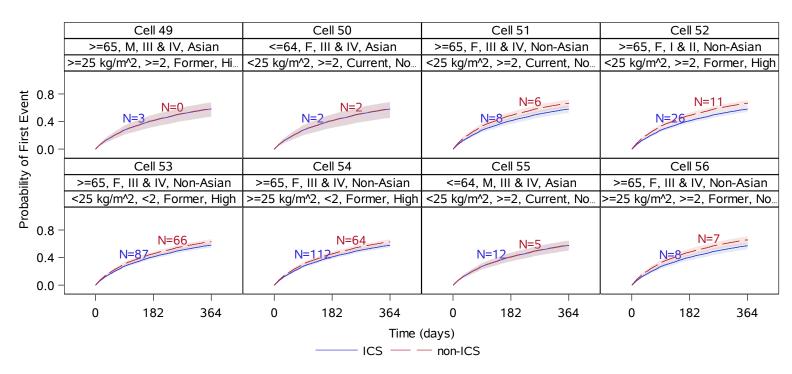
Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



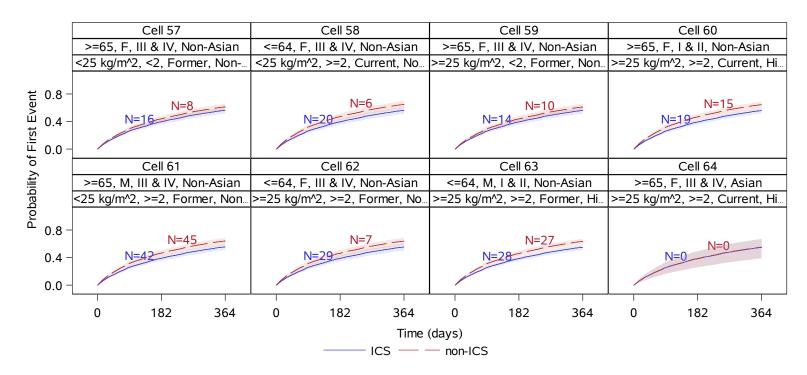
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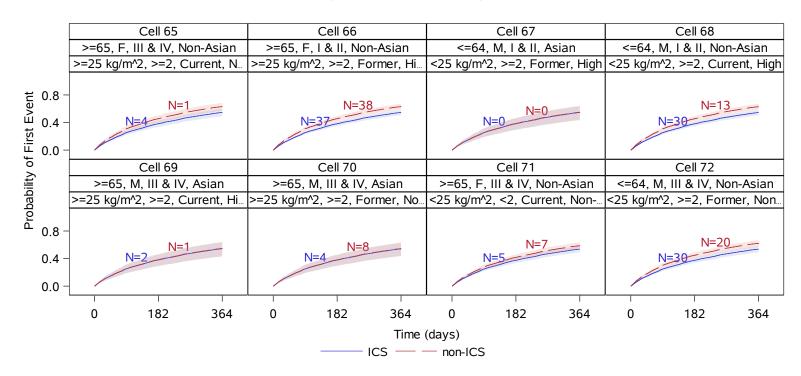
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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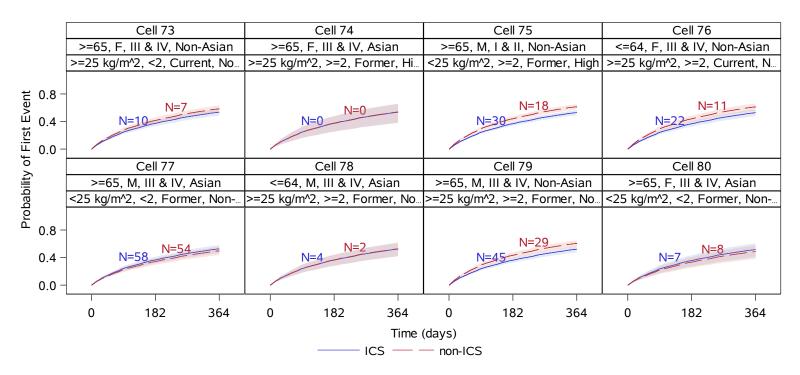
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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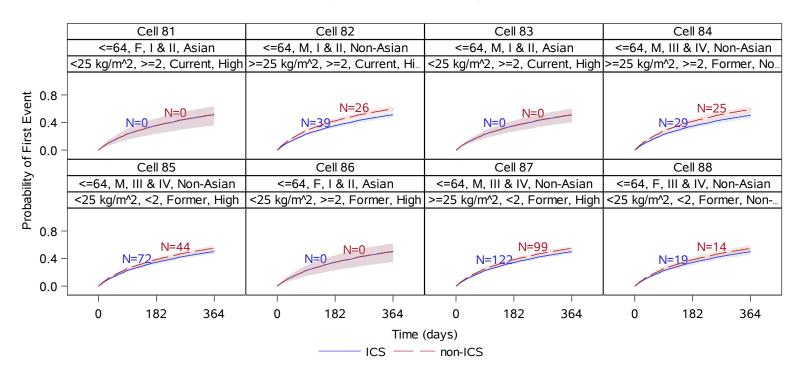
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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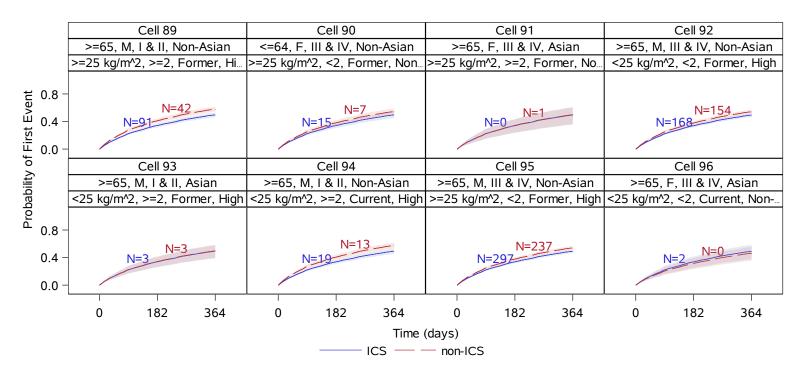
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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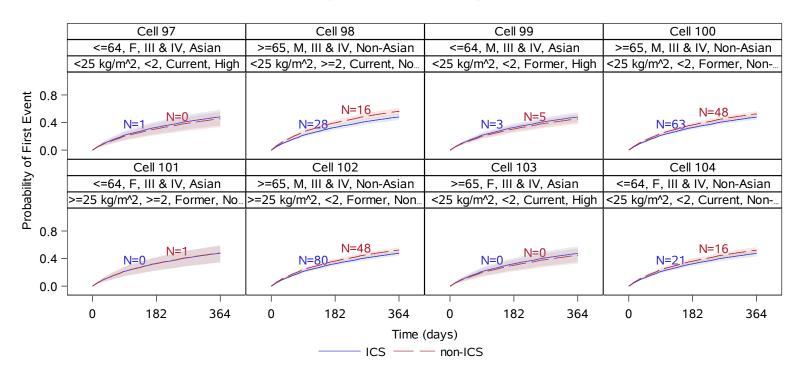
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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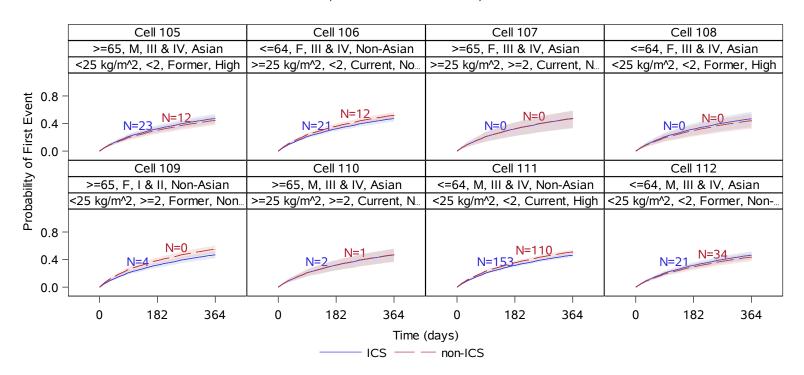
Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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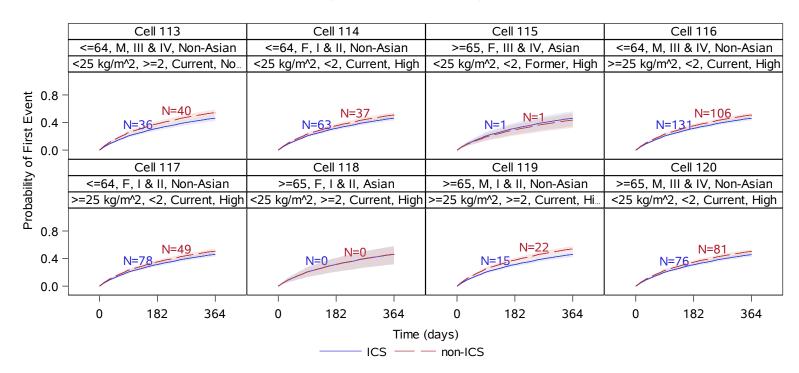
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



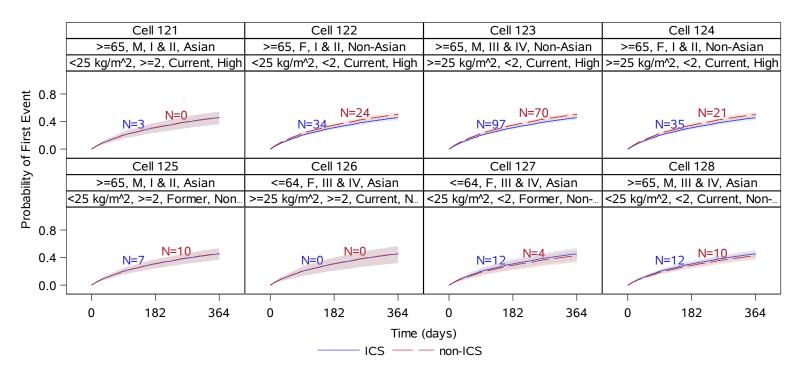
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Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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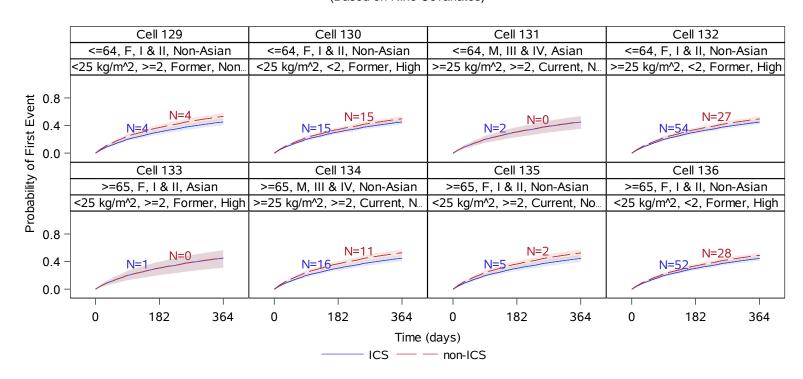
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



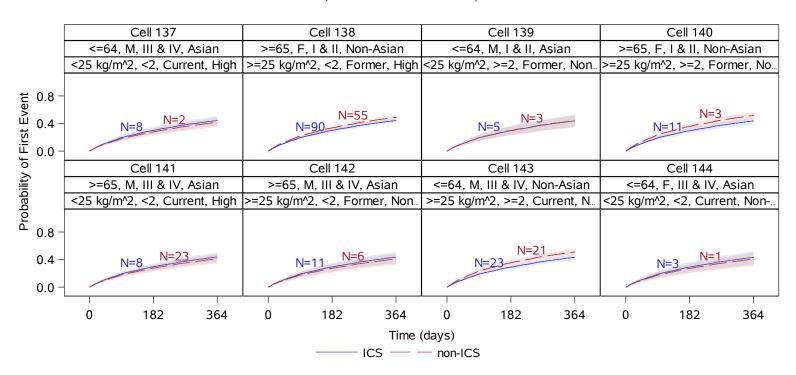
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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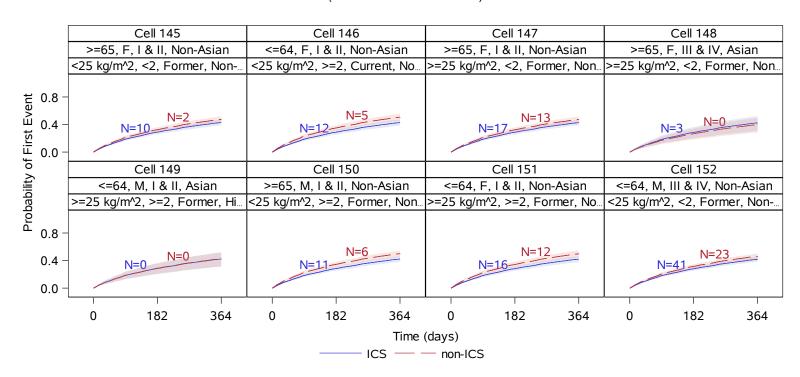
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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



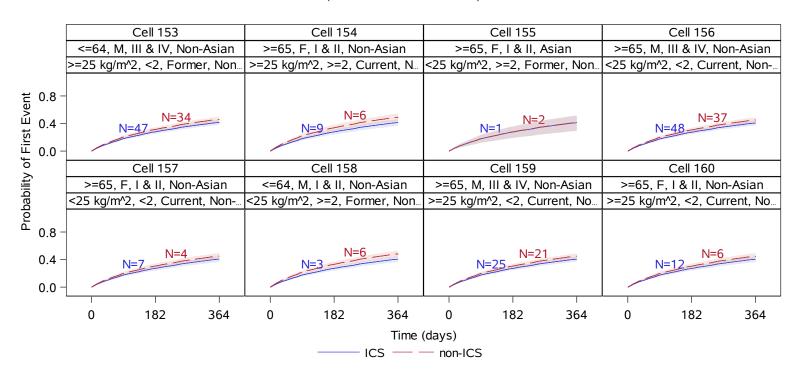
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Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

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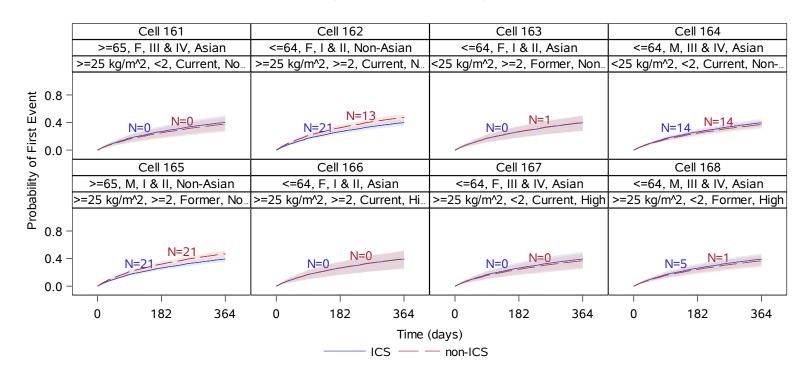
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Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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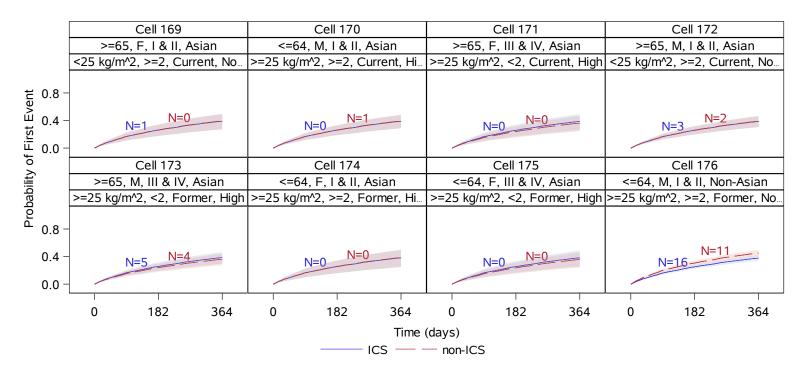
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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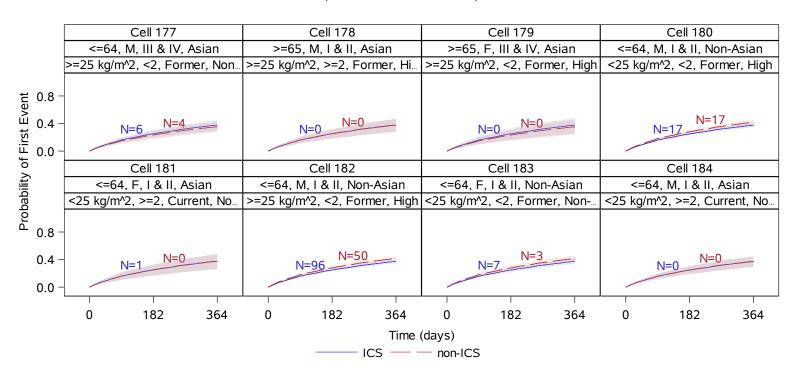
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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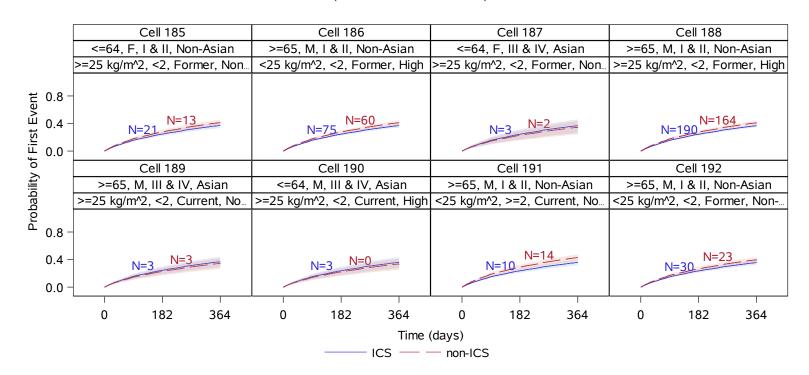
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



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Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



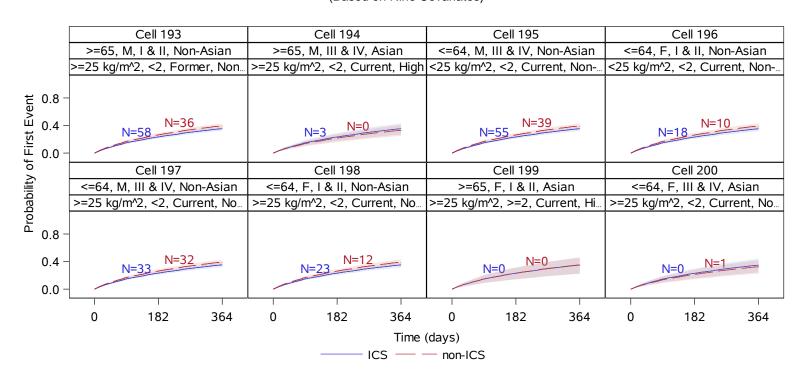
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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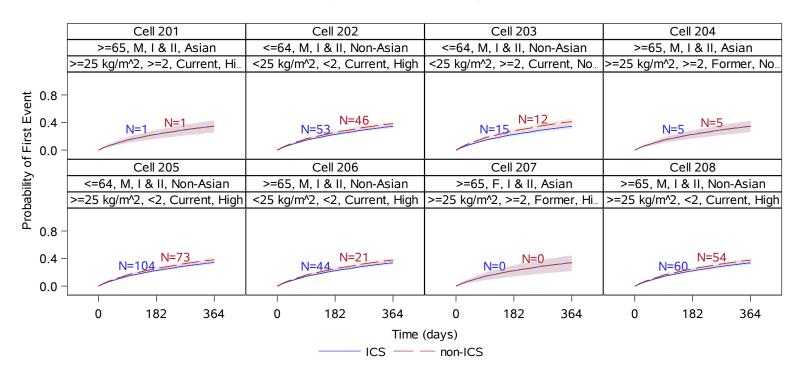
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



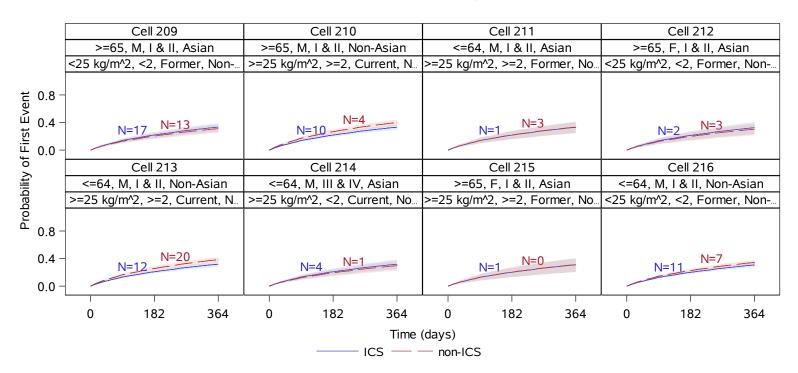
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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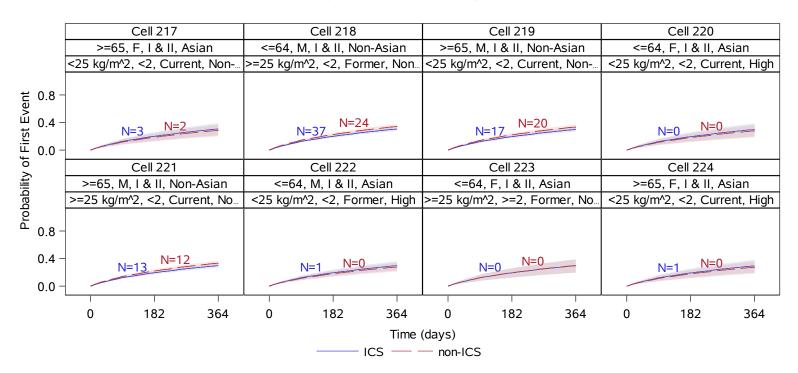
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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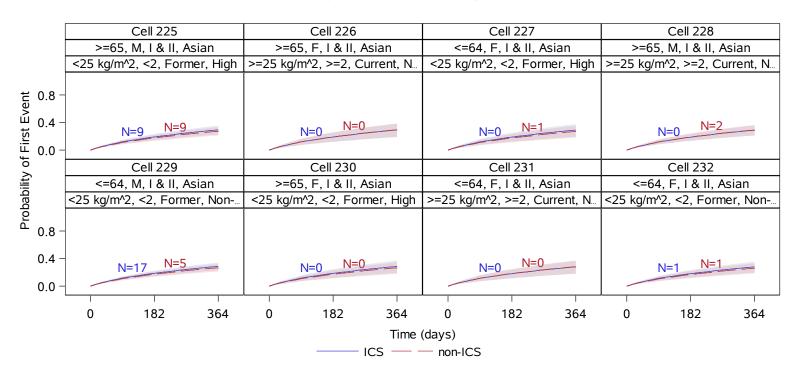
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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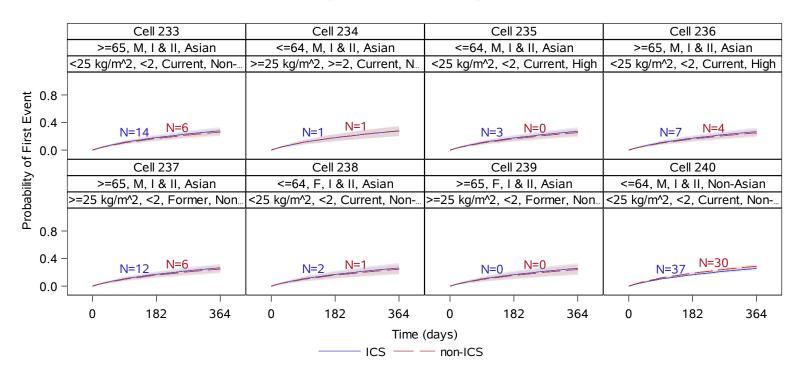
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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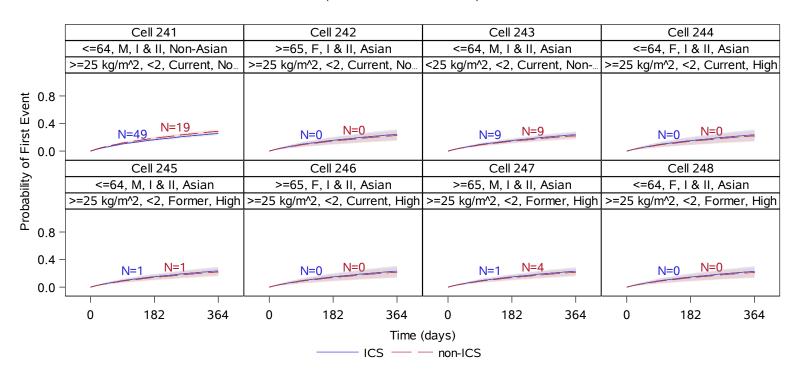
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



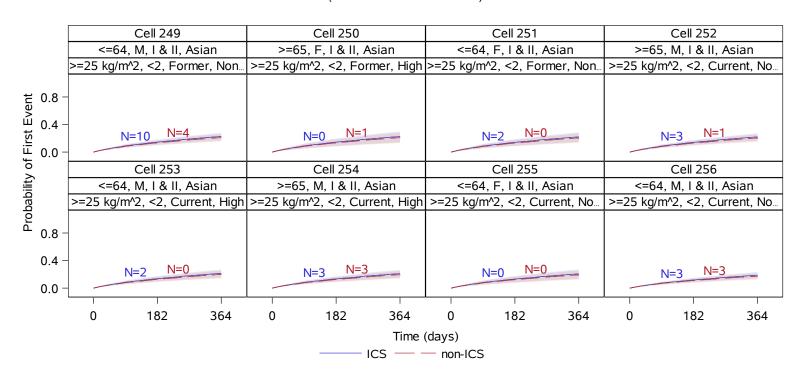
Cell Header Line 1: Age, Sex, GOLD, Race

Cell Header Line 2: BMI, Exac., Smoking Status, Country Income

Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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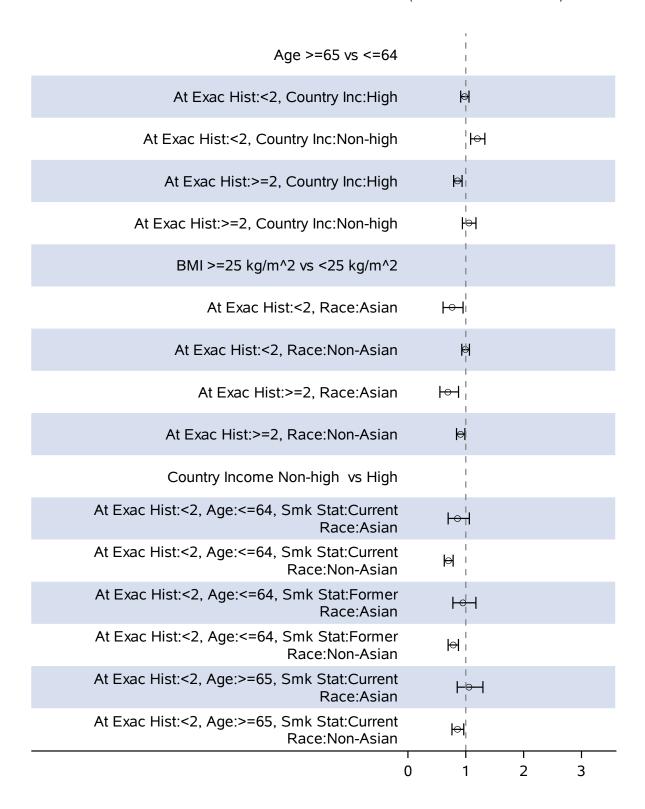
> Figure 2.40 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Nine Covariates)



Cell Header Line 1: Age, Sex, GOLD, Race Cell Header Line 2: BMI, Exac., Smoking Status, Country Income Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

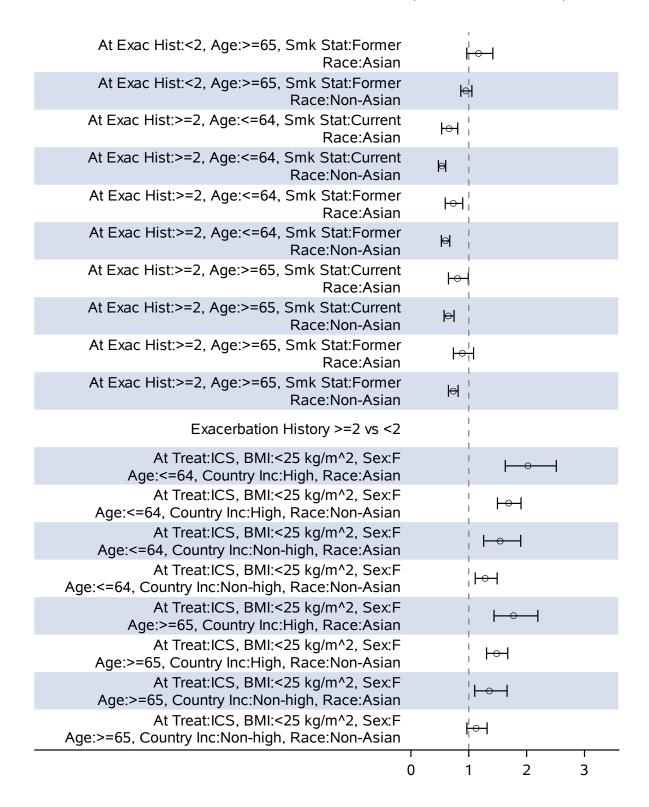
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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Asian	<u> </u>
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Non-Asian	;
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Asian	 •
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Non-Asian	 •
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Asian	
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Non-Asian	
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Asian	
At Treat:ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Non-Asian	;
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Asian	 •
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Non-Asian	 0
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Non-Asian	 •
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Non-Asian	;
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Non-Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Non-Asian	
	0 1 2 3

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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Asian	├ ── ┤
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Non-Asian	 0
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Asian	 •
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Non-Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Asian	
At Treat:ICS, BMI:>=25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Non-Asian	 •
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Asian	 • • •
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Non-Asian	 0
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Asian	
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Non-Asian	
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Asian	 •
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Non-Asian	¦
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Asian	 •
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Non-Asian	 0
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Asian	 •
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Non-Asian	
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Asian	
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Non-Asian	
	0 1 2 3

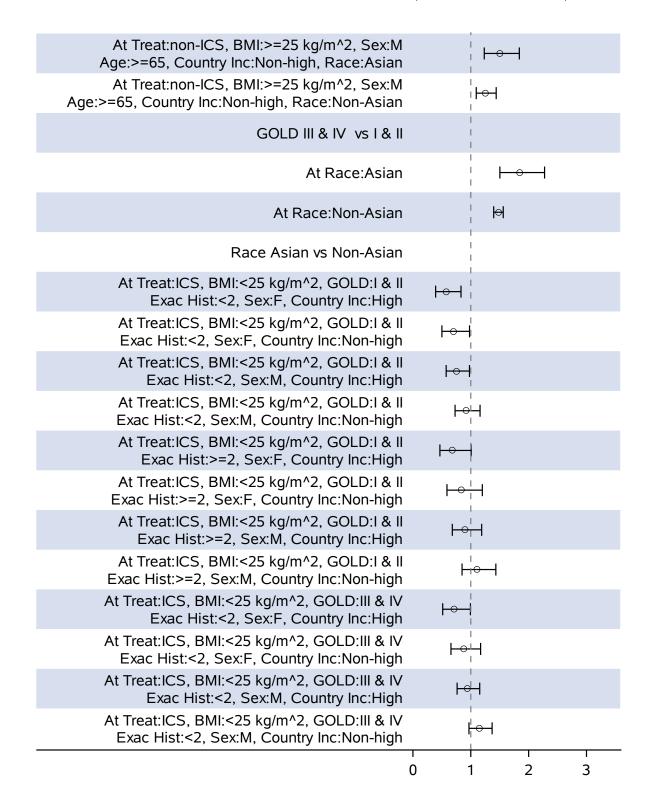
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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

At Treat:non-ICS, BMI:<25 kg/m ² , Sex:M Age:>=65, Country Inc:High, Race:Asian	<u></u>
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Non-Asian	;
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Asian	 0
At Treat:non-ICS, BMI:<25 kg/m^2, Sex:M Age:>=65, Country Inc:Non-high, Race:Non-Asian	 0
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:High, Race:Non-Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:<=64, Country Inc:Non-high, Race:Non-Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Asian	 •
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:High, Race:Non-Asian	 0
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:F Age:>=65, Country Inc:Non-high, Race:Non-Asian	 0
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Asian	
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:High, Race:Non-Asian	 0
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Asian	 •
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:M Age:<=64, Country Inc:Non-high, Race:Non-Asian	 -
At Treat:non-ICS, BMI:>=25 kg/m ² , Sex:M Age:>=65, Country Inc:High, Race:Asian	 •
At Treat:non-ICS, BMI:>=25 kg/m^2, Sex:M Age:>=65, Country Inc:High, Race:Non-Asian	
	0 1 2 3

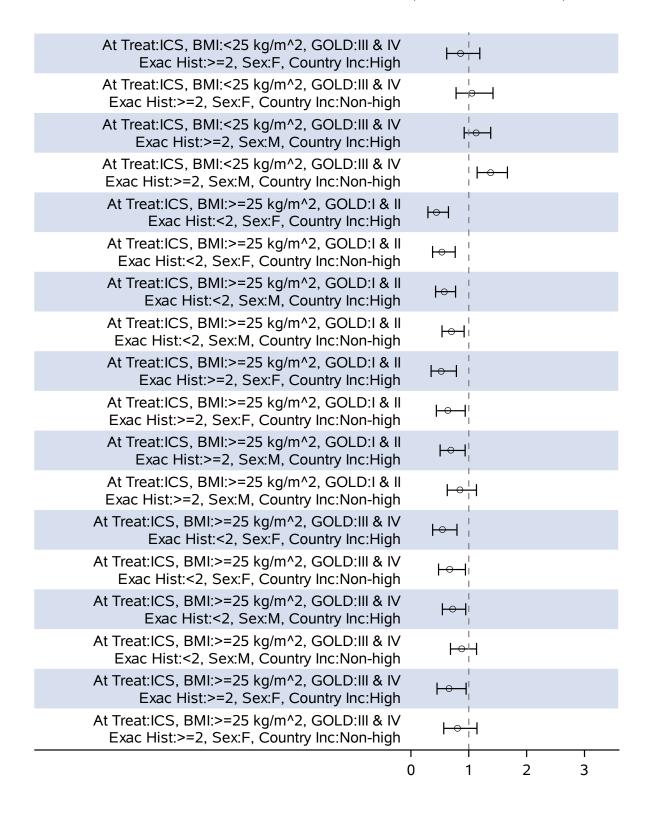
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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



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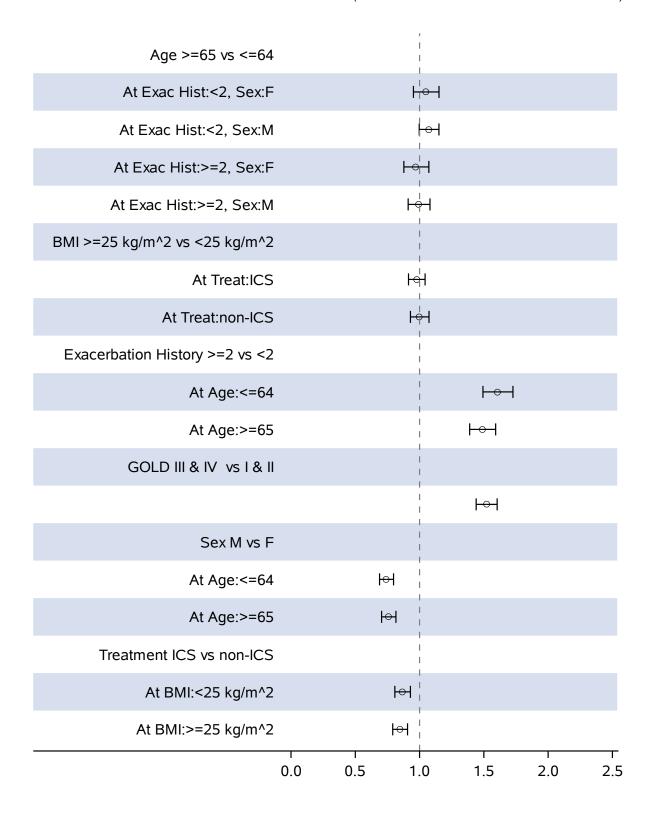
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Figure 2.50
Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)



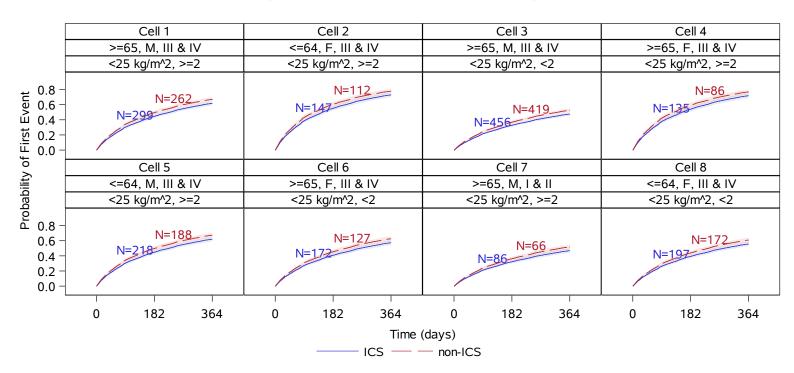
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Figure 9.3
Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates Pneumonia Model)



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Figure 9.4 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates Pneumonia Model)



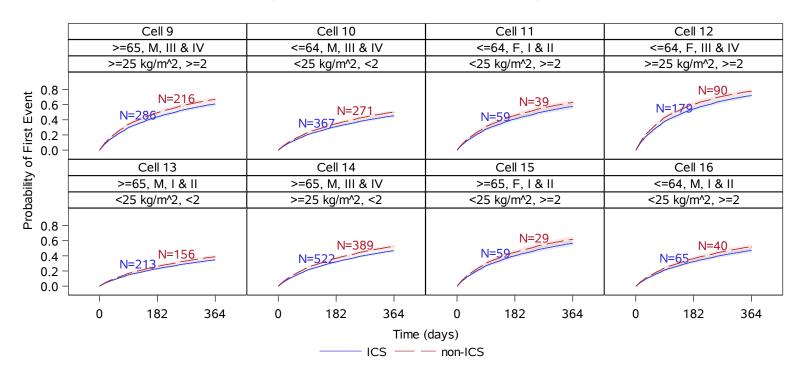
Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

Note: Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 9.4
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates Pneumonia Model)



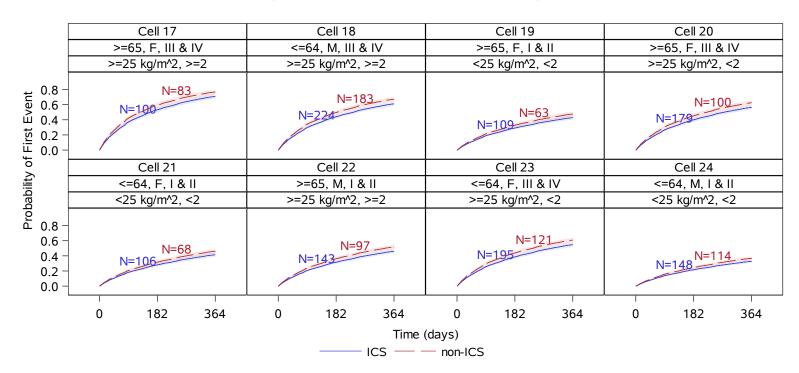
Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

Note: Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 9.4
Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates Pneumonia Model)

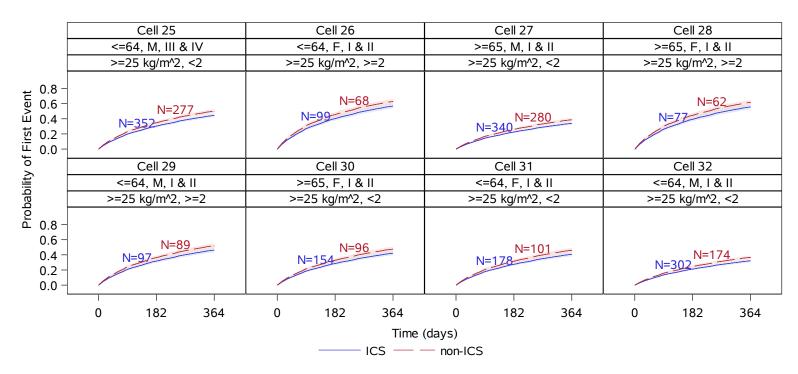


Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

Note: Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Figure 9.4 Probability of First Exacerbation During Year on Study Treatment Survival Curves (Based on Seven Covariates Pneumonia Model)



Cell Header Line 1: Age, Sex, GOLD Cell Header Line 2: BMI, Exac.

Note: Ns presented are subgroup numbers, subjects without covariates will not contribute to the model.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 1	AIC	18469.0	
Iteration 1 Iteration 1		SUSMHS*TREAT EBHIS2*GOLDGR SUSMHS SEX BMIGRP*GOLDGR BMIGRP*SUSMHS AGEGRP1*BMIGRP GOLDGR*SUSMHS AGEGRP1*TREAT AGEGRP1*GOLDGR AGEGRP1*SUSMHS GOLDGR*SEX BMIGRP*EBHIS2 GOLDGR*TREAT SEX*TREAT SEX*TREAT SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2	0.981 0.936 0.920 0.857 0.850 0.847 0.809 0.793 0.775 0.633 0.609 0.581 0.451 0.449 0.357 0.343 0.277 0.228 0.154 0.144 0.136 0.101 0.041* 0.013* 0.004* 0.001*
		GOLDGR TREAT	<0.001* <0.001*

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Description Iteration Iteration 1 Removed Effect SUSMHS*TREAT 0.981

Iteration 1 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 2	AIC	18467.0	
Iteration 2	Type 3 Wald p-values	EBHIS2*GOLDGR SUSMHS SEX BMIGRP*GOLDGR BMIGRP*SUSMHS AGEGRP1*BMIGRP GOLDGR*SUSMHS AGEGRP1*TREAT AGEGRP1*TREAT AGEGRP1*SUSMHS GOLDGR*SEX BMIGRP*EBHIS2 GOLDGR*TREAT SEX*TREAT SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.936 0.922 0.857 0.850 0.848 0.810 0.793 0.763 0.633 0.609 0.581 0.451 0.447 0.356 0.343 0.277 0.228 0.154 0.144 0.136 0.101 0.040* 0.012* 0.001* <0.001*
Iteration 2	Removed Effect	EBHIS2*GOLDGR	0.936

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration Description

Iteration 2 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 3	AIC	18465.0		
Iteration 3	Type 3 Wald p-values	SUSMHS SEX BMIGRP*GOLDGR BMIGRP*SUSMHS AGEGRP1*BMIGRP GOLDGR*SUSMHS AGEGRP1*TREAT AGEGRP1*GOLDGR AGEGRP1*SUSMHS GOLDGR*SEX GOLDGR*SEX GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX AGEGRP1*SEX BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.923 0.853 0.851 0.848 0.808 0.794 0.762 0.629 0.609 0.584 0.449 0.442 0.356 0.342 0.273 0.229 0.154 0.144 0.136 0.100* 0.040* 0.0012* 0.001* <0.001*	
Iteration 3	Removed Effect	BMIGRP*GOLDGR	0.851	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat Table 1.1

Summary of Pneumonia Cox Model Backwards Selection

(Based on Seven Covariates)

Iteration Description

Iteration 3 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 4	AIC	18463.0		
Iteration 4	Type 3 Wald p-values	SUSMHS SEX BMIGRP*SUSMHS GOLDGR*SUSMHS AGEGRP1*BMIGRP AGEGRP1*TREAT AGEGRP1*GOLDGR AGEGRP1*SUSMHS GOLDGR*SEX GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*SEX AGEGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.913 0.851 0.837 0.815 0.801 0.761 0.620 0.607 0.587 0.455 0.449 0.355 0.345 0.274 0.230 0.153 0.153 0.153 0.153 0.153 0.153 0.1013* 0.099* 0.099* 0.090* 0.001* <0.001*	
Iteration 4	Removed Effect	BMIGRP*SUSMHS	0.837	
Iteration 4	Replaced Effect(s)	NONE		

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 5	AIC	18461.1	
Iteration 5	Type 3 Wald p-values	SUSMHS SEX AGEGRP1*BMIGRP GOLDGR*SUSMHS AGEGRP1*TREAT AGEGRP1*GOLDGR AGEGRP1*SUSMHS GOLDGR*SEX GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.902 0.848 0.837 0.794 0.761 0.625 0.617 0.588 0.457 0.452 0.354 0.348 0.277 0.229 0.153 0.144 0.142 0.100* 0.039* 0.002* <0.001* <0.001*
Iteration 5	Removed Effect	AGEGRP1*BMIGRP	0.837
Iteration 5	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 6	AIC	18459.1	
Iteration 6	Type 3 Wald p-values	SUSMHS SEX GOLDGR*SUSMHS AGEGRP1*TREAT AGEGRP1*GOLDGR AGEGRP1*SUSMHS GOLDGR*SEX BMIGRP*EBHIS2 GOLDGR*TREAT SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.903 0.849 0.793 0.751 0.641 0.633 0.592 0.460 0.458 0.351 0.345 0.278 0.228 0.151 0.144 0.129 0.101 0.038* 0.002* <0.001* <0.001*
Iteration 6	Removed Effect	GOLDGR*SUSMHS	0.793
Iteration 6	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 7	AIC	18457.2	
Iteration 7	Type 3 Wald p-values	SEX SUSMHS AGEGRP1*TREAT AGEGRP1*SUSMHS GOLDGR*SEX AGEGRP1*GOLDGR BMIGRP*EBHIS2 GOLDGR*TREAT SEX*SUSMHS SEX*TREAT EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.840 0.804 0.750 0.623 0.604 0.576 0.459 0.457 0.354 0.351 0.286 0.228 0.149 0.145 0.130 0.102 0.035* 0.013* 0.002* <0.001* <0.001*
Iteration 7	Removed Effect	AGEGRP1*TREAT	0.750
Iteration 7	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 8	AIC	18455.3	
Iteration 8	Type 3 Wald p-values	SEX SUSMHS AGEGRP1*SUSMHS GOLDGR*SEX AGEGRP1*GOLDGR GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.851 0.804 0.624 0.607 0.583 0.463 0.459 0.372 0.354 0.287 0.231 0.154 0.140 0.131 0.100* 0.023* 0.002* <0.001* <0.001*
Iteration 8	Removed Effect	AGEGRP1*SUSMHS	0.624
Iteration 8	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 9	AIC	18453.5	
Iteration 9	Type 3 Wald p-values	SEX SUSMHS GOLDGR*SEX AGEGRP1*GOLDGR GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.851 0.822 0.612 0.601 0.464 0.461 0.373 0.322 0.299 0.234 0.145 0.138 0.131 0.102 0.022* 0.022* 0.001* <0.001*
Iteration 9	Removed Effect	GOLDGR*SEX	0.612
Iteration 9	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 10	AIC	18451.8		
Iteration 10	Type 3 Wald p-values	SUSMHS SEX AGEGRP1*GOLDGR GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 TREAT GOLDGR	0.806 0.690 0.652 0.483 0.465 0.382 0.302 0.298 0.247 0.153 0.137 0.113 0.100 0.023* 0.012* 0.002* <0.001* <0.001*	
Iteration 10	Removed Effect	AGEGRP1*GOLDGR	0.652	
Iteration 10	Replaced Effect(s)	NONE		

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 11	AIC	18450.0		
Iteration 11	Type 3 Wald p-values	SUSMHS SEX GOLDGR*TREAT BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1 *EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 TREAT GOLDGR	0.812 0.688 0.479 0.469 0.382 0.303 0.297 0.248 0.160 0.137 0.115 0.092* 0.022* 0.012* 0.002* <0.001* <0.001*	
Iteration 11	Removed Effect	GOLDGR*TREAT	0.479	
Iteration 11	Replaced Effect(s)	NONE		

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 12	AIC	18448.5	
Iteration 12	Type 3 Wald p-values	SUSMHS SEX BMIGRP*EBHIS2 SEX*TREAT SEX*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.816 0.703 0.472 0.405 0.306 0.302 0.245 0.160 0.151 0.113 0.093* 0.022* 0.009* 0.003* <0.001* <0.001*
Iteration 12	Removed Effect	BMIGRP*EBHIS2	0.472
Iteration 12	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 13	AIC	18447.0	
Iteration 13	Type 3 Wald p-values	SUSMHS SEX SEX*TREAT EBHIS2*SUSMHS SEX*SUSMHS EBHIS2*SEX EBHIS2*TREAT AGEGRP1*SEX BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.803 0.690 0.407 0.339 0.306 0.259 0.163 0.162 0.126 0.099* 0.0021* 0.009* 0.003* <0.001* <0.001*
Iteration 13	Removed Effect	SEX*TREAT	0.407
Iteration 13	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 14	AIC	18445.7	
Iteration 14	Type 3 Wald p-values	SEX SUSMHS EBHIS2*SUSMHS SEX*SUSMHS EBHIS2*SEX EBHIS2*TREAT AGEGRP1*SEX BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.904 0.797 0.339 0.304 0.270 0.181 0.166 0.136 0.095* 0.021* 0.010* 0.0010* 0.003* <0.001* <0.001*
Iteration 14	Removed Effect	EBHIS2*SUSMHS	0.339
Iteration 14	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 15	AIC	18444.6	
Iteration 15	Type 3 Wald p-values	SEX SUSMHS SEX*SUSMHS EBHIS2*SEX EBHIS2*TREAT AGEGRP1*SEX AGEGRP1*EBHIS2 BMIGRP*SEX AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.888 0.680 0.342 0.304 0.176 0.156 0.138 0.134 0.020* 0.010* 0.003* <0.001* <0.001*
Iteration 15	Removed Effect	SEX*SUSMHS	0.342
Iteration 15	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 16	AIC	18443.5	
Iteration 16	Type 3 Wald p-values	SUSMHS SEX EBHIS2*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.994 0.852 0.301 0.177 0.163 0.142 0.089* 0.025* 0.009* 0.002* <0.001* <0.001*
Iteration 16	Removed Effect	SUSMHS	0.994
Iteration 16	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 17	AIC	18441.6	
Iteration 17	Type 3 Wald p-values	SEX EBHIS2*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1*SEX AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.853 0.302 0.177 0.163 0.141 0.089* 0.021* 0.009* 0.002* <0.001* <0.001*
Iteration 17	Removed Effect	EBHIS2*SEX	0.302
Iteration 17	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 18	AIC	18440.7	
Iteration 18	Type 3 Wald p-values	SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1*SEX AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.712 0.191 0.167 0.098* 0.075* 0.026* 0.009* 0.002* <0.001* <0.001*
Iteration 18	Removed Effect	EBHIS2*TREAT	0.191
Iteration 18	Replaced Effect(s)	NONE	

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 19	AIC	18440.4		
Iteration 19	Type 3 Wald p-values	SEX BMIGRP*SEX AGEGRP1*EBHIS2 AGEGRP1*SEX AGEGRP1 BMIGRP*TREAT BMIGRP EBHIS2 GOLDGR TREAT	0.705 0.166 0.099* 0.079* 0.026* 0.010* 0.002* <0.001* <0.001*	
Iteration 19	Removed Effect	BMIGRP*SEX	0.166	
Iteration 19	Replaced Effect(s)	NONE		

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Population: Intent-to-Treat

Table 1.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 20	AIC	18440.3	
Iteration 20	Type 3 Wald p-values	SEX AGEGRP1*EBHIS2 AGEGRP1*SEX AGEGRP1 BMIGRP*TREAT EBHIS2 BMIGRP GOLDGR TREAT	0.583 0.096* 0.078* 0.027* 0.012* <0.001* <0.001* <0.001*

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		Probability st Event non-ICS
<=64/I & II/ F	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.06 (0.04,0.07)	0.03 (0.02,0.04)	0.02 (2 / 106) 0.00 (0 / 68)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.08 (0.06,0.09)	0.04 (0.03,0.05)	0.05 (3 / 59) 0.03 (1 / 39)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.04 (7 / 178) 0.06 (6 / 101)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.05 (5 / 99) 0.09 (6 / 68)

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS	Modelled of Fir	Probability sst Event non-ICS	Observed Probabilityof First Event ICS non-ICS
<=64/I & II/ M	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.05 (0.04,0.06)	0.03 (0.02,0.04)	0.05 (7 / 148) 0.03 (3 / 114)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.03 (2 / 65) 0.00 (0 / 40)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.03 (0.03,0.04)	0.03 (0.02,0.03)	0.02 (5 / 302) 0.02 (3 / 174)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.04)	0.03 (3 / 97) 0.04 (4 / 89)

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS			Observed I of Firs	
<=64/III & IV/ F	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.08 (0.07,0.10)	0.05 (0.04,0.06)	0.09 (18/ 197)	0.03 (5 / 172)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.11 (0.09,0.14)	0.06 (0.05,0.08)	0.07 (11/ 147)	0.06 (7 / 112)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.05)	0.06 (12/ 195)	0.05 (6 / 121)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.08 (0.06,0.09)	0.06 (0.04,0.07)	0.07 (12/ 179)	0.00 (0 / 90)

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		-	Observed ICS	Probability st Event non-ICS
<=64/III & IV/	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.08 (0.06,0.09)	0.04 (0.03,0.05)	0.07 (27/ 367)	0.04 (10/ 271)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.11 (0.09,0.12)	0.06 (0.05,0.07)	0.13 (28/ 218)	0.07 (13/ 188)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.05 (19/ 352)	0.03 (8 / 277)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.07 (0.06,0.08)	0.05 (0.04,0.07)	0.04 (9 / 224)	0.04 (8 / 183)

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Table 1.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability sst Event non-ICS		
>=65/I & II/ F	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.06 (0.05,0.08)	0.04 (0.03,0.04)	0.02 (2 / 109) 0.02	2 (1 / 63)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.15 (9 / 59) 0.03	3 (1 / 29)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.03 (5 / 154) 0.03	3 (3 / 96)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.04 (3 / 77) 0.00	0 (0 / 62)

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS	Modelled of Fir			Probability st Event non-ICS
>=65/I & II/ M	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.08 (0.06,0.09)	0.04 (0.03,0.05)	0.07 (14/ 213) 0.02 (3 / 156)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.08 (0.07,0.10)	0.05 (0.04,0.06)	0.05 (4 / 86) 0.08 (5 / 66)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.05 (17/ 340) 0.04 (11/ 280)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.05)	0.04 (6 / 143) 0.03 (3 / 97)

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Table 1.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS				Probability st Event non-ICS
>=65/III & IV/ F	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.10 (0.08,0.11)	0.05 (0.04,0.07)	0.08 (14/ 172)	0.02 (3 / 127)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.11 (0.09,0.13)	0.06 (0.05,0.07)	0.11 (15/ 135)	0.03 (3 / 86)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.06 (0.05,0.08)	0.05 (0.04,0.06)	0.04 (7 / 179)	0.05 (5 / 100)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.07 (0.06,0.09)	0.05 (0.04,0.07)	0.09 (9 / 100)	0.06 (5 / 83)

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Table 1.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_	Observed ICS	Probability st Event non-ICS
>=65/III & IV/ M	<25 kg/m^2/ <2	1.83 (1.54,2.17)	0.11 (0.10,0.13)	0.06 (0.05,0.07)	0.11 (49/ 456)	0.05 (19/ 419)
	<25 kg/m^2/ >=2	1.83 (1.54,2.17)	0.12 (0.11,0.14)	0.07 (0.06,0.08)	0.11 (34/ 299)	0.06 (17/ 262)
	>=25 kg/m^2/ <2	1.32 (1.09,1.59)	0.07 (0.06,0.09)	0.06 (0.05,0.07)	0.06 (33/ 522)	0.04 (14/ 389)
	>=25 kg/m^2/ >=2	1.32 (1.09,1.59)	0.08 (0.07,0.10)	0.06 (0.05,0.08)	0.07 (19/ 286)	0.05 (11/ 216)

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Table 1.3

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Seven Covariates)

Statistic	Level		
Type 3 Wald p-values	Sex	0.583	
-	Exacerbation History by Age	0.096	
	Sex by Age	0.078	
	Age	0.027	
	Treatment by BMI	0.012	
	Exacerbation History	<0.001	
	BMI	<0.001	
	GOLD	<0.001	
	Treatment	<0.001	

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Table 1.3

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Seven Covariates)

Statistic	Level		
Hazard Ration 95% CI	Age >=65 vs <=64		
	At Exacerbation History:<2 Sex:F	1.15 (0.89,	1.49)
	At Exacerbation History:<2 Sex:M	1.47 (1.24,	1.75)
	At Exacerbation History:>=2 Sex:F	0.93 (0.71,	1.22)
	At Exacerbation History:>=2 Sex:M BMI >=25 kg/m^2 vs <25 kg/m^2	1.19 (0.96,	1.47)
	At Treatment:ICS	0.65 (0.56,	0.76)
	At Treatment:non-ICS	0.90 (0.73,	•
	Exacerbation History >=2 vs <2		_,_,
	At Age:<=64	1.39 (1.15,	1.68)
	At Age:>=65	1.12 (0.95,	•
	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted	(_,,
		1.51 (1.32,	1.73)
	Sex M vs F		
	At Age:<=64	0.92 (0.75,	1.12)
	At Age:>=65	1.18 (0.97,	1.43)
	Treatment ICS vs non-ICS		
	At BMI:<25 kg/m^2	1.83 (1.54,	2.17)
	At BMI:>=25 kg/m^2	1.32 (1.09,	1.59)

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Table 1.5

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model

(Based on Seven Covariates)
Expanded BMI Category

Statistic	Level	
Type 3 Wald p-values	Sex	0.360
-	Exacerbation History by Age	0.082
	Sex by Age	0.054
	Age	0.028
	Treatment by BMI	0.026
	Exacerbation History	0.001
	BMI	<0.001
	GOLD	<0.001
	Treatment	<0.001

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Table 1.5

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Seven Covariates)

Expanded BMI Category

Statistic	Level		
Hazard Rati	Lo Age >=65 vs <=64		
	At Exacerbation History:<2 Sex:F	1.14 (0.88,	1.48)
	At Exacerbation History:<2 Sex:M	1.50 (1.26,	1.78)
	At Exacerbation History:>=2 Sex:F	0.91 (0.70,	1.20)
	At Exacerbation History:>=2 Sex:M	1.20 (0.97,	1.48)
	BMI $\geq 20 - \langle 22 \text{ kg/m}^2 \text{ vs } \langle 20 \text{ kg/m}^2 \rangle$		
	At Treatment:ICS	0.73 (0.56,	0.96)
	At Treatment:non-ICS	0.70 (0.49,	1.02)
	BMI $\geq =22 - \langle 23 \text{ kg/m}^2 \text{ vs } \langle 20 \text{ kg/m}^2 \rangle$		
	At Treatment:ICS	0.80 (0.60,	1.07)
	At Treatment:non-ICS	0.56 (0.35,	0.91)
	BMI $>=23 - <24 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
	At Treatment:ICS	0.74 (0.55,	
	At Treatment:non-ICS	0.51 (0.32,	0.82)
	BMI $>=24 - <25 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
	At Treatment:ICS	0.58 (0.42,	
	At Treatment:non-ICS	0.56 (0.37,	0.87)
	BMI $>=25 - <26 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
	At Treatment:ICS	0.69 (0.51,	,
	At Treatment:non-ICS	0.62 (0.40,	0.98)
	BMI >=26 - $<28 \text{ kg/m}^2 \text{ vs} <20 \text{ kg/m}^2$		
	At Treatment: ICS	0.56 (0.43,	,
	At Treatment:non-ICS	0.55 (0.37,	0.80)
	BMI $>=28 - <30 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
	At Treatment:ICS	0.39 (0.27,	,
	At Treatment:non-ICS	0.68 (0.45,	1.01)
	BMI $>=30 - <33 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
	At Treatment:ICS	0.43 (0.30,	
	At Treatment:non-ICS	0.50 (0.33,	0.78)
	$BMI >= 33 \text{ kg/m}^2 \text{ vs } < 20 \text{ kg/m}^2$	0.40 :	0
	At Treatment:ICS	0.49 (0.36,	0.68)

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Table 1.5

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Seven Covariates)

Expanded BMI Category

Statistic	Level	
Hazard Ratio	At Treatment:non-ICS	0.90 (0.61, 1.32)
	Exacerbation History >=2 vs <2	
	At Age:<=64	1.37 (1.14, 1.66)
	At Age:>=65	1.10 (0.93, 1.30)
	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted	(,,
	The second secon	1.47 (1.28, 1.69)
	Sex M vs F	
	At Age:<=64	0.93 (0.76, 1.14)
	At Age:>=65	1.22 (1.01, 1.48)
	Treatment ICS vs non-ICS	1.22 (1.01, 1.10)
	At BMI:<20 kg/m^2	1.64 (1.23, 2.19)
	At BMI:>=20 - <22 kg/m^2	1.70 (1.19, 2.44)
	At BMI:>=22 - $<23 \text{ kg/m}^2$	2.34 (1.45, 3.77)
	At BMI:>=23 - $<24 \text{ kg/m}^2$	2.36 (1.47, 3.78)
	At BMI:>=24 - $<25 \text{ kg/m}^2$	1.68 (1.07, 2.64)
	At BMI:>=25 - $<26 \text{ kg/m}^2$	1.83 (1.16, 2.89)
	At BMI:>=26 - $<28 \text{ kg/m}^2$	1.68 (1.16, 2.43)
	At BMI:>=28 - <30 kg/m^2	0.94 (0.61, 1.45)
	At BMI:>=30 - <33 kg/m^2	1.39 (0.87, 2.21)
	At BMI:>=33 kg/m ²	0.90 (0.59, 1.37)
	110 Drii - > 55 kg/iii 2	0.30 (0.33, 1.37)

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Table 1.6
Pneumonia Probabilities by BMI Decile (Direct Adjusted Probabilities)
Based on Seven Covariate Selected Model with Expanded BMI Category

BMI Decile Group	ICS (N=6292)	non-ICS (N=4654)
<pre><20 kg/m^2 >=20 - <22 kg/m^2 >=22 - <23 kg/m^2 >=23 - <24 kg/m^2 >=24 - <25 kg/m^2 >=25 - <26 kg/m^2 >=26 - <28 kg/m^2 >=28 - <30 kg/m^2</pre>	0.114 (0.095, 0.134) 0.085 (0.067, 0.103) 0.093 (0.071, 0.114) 0.086 (0.065, 0.106) 0.068 (0.050, 0.086) 0.081 (0.061, 0.100) 0.066 (0.052, 0.080) 0.046 (0.033, 0.059)	0.071 (0.055, 0.088) 0.051 (0.036, 0.065) 0.041 (0.024, 0.058) 0.037 (0.022, 0.052) 0.041 (0.026, 0.056) 0.045 (0.028, 0.062) 0.040 (0.028, 0.052) 0.049 (0.033, 0.064)
>=30 - <33 kg/m^2 >=33 kg/m^2	0.051 (0.036, 0.065) 0.058 (0.042, 0.074)	0.037 (0.023, 0.050) 0.064 (0.044, 0.084)

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 1	AIC	112198.8	
Iteration 1	Type 3 Wald p-values	BMIGRP*SUSMHS SUSMHS*TREAT AGEGRP1 AGEGRP1*SEX EBHIS2*GOLDGR BMIGRP*TREAT GOLDGR*SUSMHS EBHIS2*SUSMHS AGEGRP1*TREAT GOLDGR*TREAT BMIGRP*GOLDGR AGEGRP1*BMIGRP GOLDGR*SEX BMIGRP AGEGRP1*BMIGRP GOLDGR*SEX BMIGRP AGEGRP1*GOLDGR SUSMHS BMIGRP*SEX EBHIS2*TREAT EBHIS2*TREAT EBHIS2*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.791 0.724 0.701 0.700 0.641 0.635 0.616 0.583 0.560 0.534 0.509 0.443 0.408 0.293 0.274 0.172 0.151 0.145 0.145 0.143 0.069* 0.052* 0.035* 0.021* 0.002* <0.001* <0.001* <0.001*

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration Description Iteration 1 Removed Effect BMIGRP*SUSMHS 0.791

Iteration 1 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 2	AIC	112196.9	
Iteration 2		SUSMHS*TREAT AGEGRP1*SEX AGEGRP1 EBHIS2*GOLDGR BMIGRP*TREAT GOLDGR*SUSMHS EBHIS2*SUSMHS AGEGRP1*TREAT GOLDGR*TREAT BMIGRP*GOLDGR GOLDGR*SEX AGEGRP1*BMIGRP BMIGRP AGEGRP1*SOLDGR SUSMHS BMIGRP*SEX EBHIS2*TREAT EBHIS2*TREAT EBHIS2*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.728 0.700 0.698 0.638 0.636 0.583 0.580 0.561 0.536 0.492 0.407 0.380 0.287 0.268 0.176 0.156 0.146 0.142 0.068* 0.051* 0.035* 0.019* 0.002* <0.001* <0.001*
Iteration 2	Removed Effect	SUSMHS*TREAT	0.728

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Table 1.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration Description

Iteration 2 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 3	AIC	112195.0	
Iteration 3	Type 3 Wald p-values	AGEGRP1 AGEGRP1*SEX BMIGRP*TREAT EBHIS2*GOLDGR AGEGRP1*TREAT GOLDGR*SUSMHS EBHIS2*SUSMHS GOLDGR*TREAT BMIGRP*GOLDGR GOLDGR*SEX AGEGRP1*BMIGRP BMIGRP AGEGRP1*GOLDGR SUSMHS BMIGRP*SEX EBHIS2*TREAT EBHIS2*TREAT EBHIS2*TREAT EBHIS2*SEX AGEGRP1*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.704 0.702 0.666 0.634 0.614 0.581 0.577 0.551 0.491 0.407 0.380 0.285 0.266 0.165 0.165 0.156 0.147 0.147 0.1442 0.067* 0.051* 0.032* 0.019* 0.002* <0.001* <0.001*
Iteration 3	Removed Effect	AGEGRP1*SEX	0.702

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Table 1.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration Description

Iteration 3 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10. Note: Main effects were not removed from the model if significant interactions were still present.

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 4	AIC	112193.2	
Iteration 4	Type 3 Wald p-values	AGEGRP1 BMIGRP*TREAT EBHIS2*GOLDGR AGEGRP1*TREAT EBHIS2*SUSMHS GOLDGR*SUSMHS GOLDGR*TREAT BMIGRP*GOLDGR GOLDGR*SEX AGEGRP1*BMIGRP BMIGRP AGEGRP1*GOLDGR SUSMHS BMIGRP*SEX EBHIS2*TREAT EBHIS2*TREAT EBHIS2*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.768 0.661 0.636 0.622 0.585 0.573 0.552 0.488 0.396 0.376 0.281 0.253 0.158 0.149 0.145 0.149 0.145 0.139 0.070* 0.050* 0.050* 0.032* 0.002* <0.001* <0.001* <0.001*
Iteration 4	Removed Effect	BMIGRP*TREAT	0.661
Iteration 4	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 5	AIC	112191.4	
Iteration 5	Type 3 Wald p-values	AGEGRP1 EBHIS2*GOLDGR AGEGRP1*TREAT GOLDGR*TREAT EBHIS2*SUSMHS GOLDGR*SUSMHS BMIGRP*GOLDGR GOLDGR*SEX AGEGRP1*BMIGRP BMIGRP AGEGRP1*GOLDGR SUSMHS EBHIS2*TREAT BMIGRP*SEX EBHIS2*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.765 0.631 0.626 0.591 0.581 0.571 0.488 0.392 0.376 0.261 0.250 0.158 0.146 0.144 0.141 0.071* 0.050* 0.033* 0.020* 0.002* <0.001* <0.001*
Iteration 5	Removed Effect	EBHIS2*GOLDGR	0.631
Iteration 5	Replaced Effect(s)	NONE	

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Table 1.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 6	AIC	112189.6		
Iteration 6	Type 3 Wald p-values	AGEGRP1 AGEGRP1*TREAT EBHIS2*SUSMHS GOLDGR*TREAT GOLDGR*SUSMHS BMIGRP*GOLDGR AGEGRP1*BMIGRP GOLDGR*SEX BMIGRP AGEGRP1*GOLDGR SUSMHS EBHIS2*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT AGEGRP1*SUSMHS TREAT SEX GOLDGR EBHIS2	0.763 0.631 0.605 0.594 0.567 0.485 0.382 0.377 0.269 0.253 0.163 0.150 0.146 0.144 0.073* 0.057* 0.057* 0.033* 0.020* 0.002* <0.001* <0.001*	
Iteration 6	Removed Effect	AGEGRP1*TREAT	0.631	
Iteration 6	Replaced Effect(s)	NONE		

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 7	AIC	112187.8	
Iteration 7	Type 3 Wald p-values	AGEGRP1 EBHIS2*SUSMHS GOLDGR*TREAT GOLDGR*SUSMHS BMIGRP*GOLDGR AGEGRP1*BMIGRP GOLDGR*SEX BMIGRP AGEGRP1*GOLDGR SUSMHS EBHIS2*SEX EBHIS2*TREAT BMIGRP*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.789 0.600 0.599 0.564 0.480 0.376 0.273 0.253 0.163 0.153 0.149 0.146 0.074* 0.057* 0.036* 0.020* 0.002* <0.001* <0.001*
Iteration 7	Removed Effect	EBHIS2*SUSMHS	0.600
Iteration 7	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 8	AIC	112186.1	
Iteration 8	Type 3 Wald p-values	AGEGRP1 GOLDGR*TREAT GOLDGR*SUSMHS BMIGRP*GOLDGR GOLDGR*SEX AGEGRP1*BMIGRP BMIGRP AGEGRP1*GOLDGR SUSMHS EBHIS2*TREAT BMIGRP*SEX EBHIS2*SEX AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.771 0.593 0.537 0.481 0.379 0.378 0.277 0.247 0.186 0.147 0.147 0.139 0.088* 0.064* 0.036* 0.021* 0.002* <0.001* <0.001* <0.001*
Iteration 8	Removed Effect	GOLDGR*TREAT	0.593
Iteration 8	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 9	AIC	112184.4	
Iteration 9	Type 3 Wald p-values	AGEGRP1 GOLDGR*SUSMHS BMIGRP*GOLDGR AGEGRP1*BMIGRP GOLDGR*SEX BMIGRP AGEGRP1*GOLDGR SUSMHS BMIGRP*SEX EBHIS2*SEX EBHIS2*TREAT AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.774 0.539 0.481 0.373 0.368 0.270 0.247 0.184 0.145 0.139 0.135 0.089* 0.063* 0.039* 0.0020* 0.0020* 0.002* <0.001* <0.001*
Iteration 9	Removed Effect	GOLDGR*SUSMHS	0.539
Iteration 9	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 10	AIC	112182.8	
Iteration 10	Type 3 Wald p-values	AGEGRP1 BMIGRP*GOLDGR AGEGRP1*BMIGRP GOLDGR*SEX AGEGRP1*GOLDGR BMIGRP BMIGRP*SEX EBHIS2*SEX EBHIS2*TREAT SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.830 0.532 0.374 0.339 0.305 0.255 0.149 0.139 0.132 0.093* 0.088* 0.064* 0.039* 0.021* 0.0021* 0.002* <0.001* <0.001*
Iteration 10	Removed Effect	BMIGRP*GOLDGR	0.532
Iteration 10	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description			
Iteration 11	AIC	112181.2		
Iteration 11	Type 3 Wald p-values	AGEGRP1 AGEGRP1*BMIGRP GOLDGR*SEX AGEGRP1*GOLDGR BMIGRP*SEX EBHIS2*SEX BMIGRP EBHIS2*TREAT SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.842 0.381 0.350 0.312 0.161 0.139 0.132 0.130 0.092* 0.0990* 0.057* 0.039* 0.021* 0.002* <0.001* <0.001*	
Iteration 11	Removed Effect	AGEGRP1*BMIGRP	0.381	
Iteration 11	Replaced Effect(s)	NONE		

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 12	AIC	112179.9	
Iteration 12	Type 3 Wald p-values	AGEGRP1 AGEGRP1*GOLDGR GOLDGR*SEX BMIGRP*SEX EBHIS2*SEX EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.888 0.371 0.359 0.192 0.141 0.133 0.125 0.093* 0.092* 0.060* 0.040* 0.028* 0.002* <0.001* <0.001* <0.001*
Iteration 12	Removed Effect	AGEGRP1*GOLDGR	0.371
Iteration 12	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 13	AIC	112178.7	
Iteration 13	Type 3 Wald p-values	AGEGRP1 GOLDGR*SEX BMIGRP*SEX EBHIS2*SEX EBHIS2*TREAT BMIGRP SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.823 0.413 0.191 0.136 0.135 0.122 0.090* 0.079* 0.062* 0.040* 0.031* 0.002* <0.001* <0.001*
Iteration 13	Removed Effect	GOLDGR*SEX	0.413
Iteration 13	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 14	AIC	112177.4	
Iteration 14	Type 3 Wald p-values	AGEGRP1 BMIGRP*SEX EBHIS2*TREAT BMIGRP EBHIS2*SEX SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.833 0.229 0.133 0.131 0.121 0.096* 0.078* 0.063* 0.039* 0.031* 0.001* <0.001* <0.001* <0.001*
Iteration 14	Removed Effect	BMIGRP*SEX	0.229
Iteration 14	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 15	AIC	112176.9	
Iteration 15	Type 3 Wald p-values	AGEGRP1 BMIGRP EBHIS2*TREAT EBHIS2*SEX SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.844 0.233 0.138 0.123 0.108 0.080* 0.057* 0.037* 0.031* <0.001* <0.001* <0.001* <0.001*
Iteration 15	Removed Effect	EBHIS2*TREAT	0.138
Iteration 15	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 16	AIC	112177.1	
Iteration 16	Type 3 Wald p-values	AGEGRP1 BMIGRP EBHIS2*SEX SUSMHS AGEGRP1*EBHIS2 BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.837 0.235 0.110 0.100 0.080* 0.053* 0.032* 0.029* <0.001* <0.001* <0.001* <0.001* <0.001*
Iteration 16	Removed Effect	EBHIS2*SEX	0.110
Iteration 16	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 17	AIC	112177.6	
Iteration 17	Type 3 Wald p-values	AGEGRP1 BMIGRP AGEGRP1*EBHIS2 SUSMHS BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.873 0.219 0.118 0.099* 0.050* 0.031* 0.028* <0.001* <0.001* <0.001*
Iteration 17	Removed Effect	AGEGRP1*EBHIS2	0.118
Iteration 17	Replaced Effect(s)	NONE	

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Table 1.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Seven Covariates)

Iteration	Description		
Iteration 18	AIC	112178.1	
Iteration 18	Type 3 Wald p-values	AGEGRP1 BMIGRP SUSMHS BMIGRP*EBHIS2 SEX*TREAT AGEGRP1*SUSMHS SEX*SUSMHS TREAT SEX GOLDGR EBHIS2	0.915 0.232 0.095* 0.052* 0.033* 0.028* <0.001* <0.001* <0.001* <0.001*

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	azard RatioModelled Probability CS vsof First Event		Observed Probabilityof First Event ICS non-ICS		
<=64/I & II/ F	<25 kg/m^2/ Current/<2	0.79 (0.73,0.86)		0.50 (0.46,0.53)	•	0.50 (24 / 48)	
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.59 (0.55,0.62)	0.67 (0.63,0.71)		0.74 (20 / 27)	
	<25 kg/m^2/ Former/<2	0.79 (0.73,0.86)	0.39 (0.36,0.42)	0.46 (0.43,0.50)	0.26 (6 / 23)	0.35 (7 / 20)	
	$<25 \text{ kg/m}^2/$ Former/>=2	0.79 (0.73,0.86)	0.55 (0.51,0.59)	0.63 (0.59,0.67)	0.53 (8 / 15)	0.92 (11 / 12)	
	>=25 kg/m^2/ Current/<2	0.79 (0.73,0.86)	0.43 (0.40,0.45)	0.50 (0.47,0.53)	0.42 (42 / 101)	0.51 (31 / 61)	
	>=25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.56 (0.52,0.59)	0.64 (0.60,0.68)	0.52 (34 / 65)	0.58 (25 / 43)	
	>=25 kg/m^2/ Former/<2	0.79 (0.73,0.86)	0.39 (0.37,0.42)	0.47 (0.43,0.50)	0.36 (28 / 77)	0.40 (16 / 40)	
		0.79 (0.73,0.86)		0.61 (0.57,0.64)	0.32 (11 / 34)	0.44 (11 / 25)	

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	Modelled Probabilityof First Event ICS non-ICS		of Fir	
<=64/I & II/ M	<25 kg/m^2/ Current/<2	0.89 (0.84,0.94)		0.35 (0.33,0.38)	•	0.25 (21 / 85)
	<25 kg/m^2/	0.89	0.47	0.51	0.47 (21 /	0.44 (11 /
	Current/>=2	(0.84,0.94)	(0.43,0.50)	(0.47,0.54)	45)	25)
	<25 kg/m^2/	0.89	0.34	0.38	0.22 (10 /	0.21 (6 /
	Former/<2	(0.84,0.94)	(0.32,0.37)	(0.35,0.40)	46)	29)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.89 (0.84,0.94)	0.49 (0.46,0.53)	0.53 (0.50,0.57)	0.40 (8 / 20)	0.40 (6 / 15)
	>=25 kg/m^2/	0.89	0.33	0.36	0.26 (41 /	0.27 (26 /
	Current/<2	(0.84,0.94)	(0.30,0.35)	(0.33,0.38)	158)	95)
	>=25 kg/m^2/	0.89	0.44	0.48	0.42 (22 /	0.50 (24 /
	Current/>=2	(0.84,0.94)	(0.41,0.47)	(0.45,0.51)	52)	48)
	>=25 kg/m^2/	0.89	0.35	0.38	0.28 (41 /	0.24 (19 /
	Former/<2	(0.84,0.94)	(0.32,0.37)	(0.36,0.41)	144)	79)
	>=25 kg/m^2/ Former/>=2	0.89 (0.84,0.94)		0.51 (0.47,0.54)	0.53 (24 / 45)	0.59 (24 / 41)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event	of Fir	Probabilityst Eventnon-ICS
<=64/III & IV/ F		0.79 (0.73,0.86)		0.65 (0.61,0.68)	0.55 (74 / 134)	0.60 (61 / 102)
	<25 kg/m^2/	0.79	0.74	0.82	0.66 (60 /	0.77 (55 /
	Current/>=2	(0.73,0.86)	(0.71,0.77)	(0.78,0.84)	91)	71)
	<25 kg/m^2/	0.79	0.53	0.61	0.46 (29 /	0.66 (46 /
	Former/<2	(0.73,0.86)	(0.49,0.56)	(0.57,0.64)	63)	70)
	<25 kg/m^2/	0.79	0.70	0.78	0.68 (38 /	0.73 (30 /
	Former/>=2	(0.73,0.86)	(0.67,0.73)	(0.75,0.81)	56)	41)
	>=25 kg/m^2/	0.79	0.57	0.65	0.51 (54 /	0.62 (42 /
	Current/<2	(0.73,0.86)	(0.54,0.60)	(0.62,0.69)	105)	68)
	>=25 kg/m^2/	0.79	0.71	0.79	0.68 (63 /	0.72 (33 /
	Current/>=2	(0.73,0.86)	(0.68,0.74)	(0.76,0.82)	93)	46)
	>=25 kg/m^2/	0.79	0.53	0.62	0.42 (38 /	0.51 (27 /
	Former/<2	(0.73,0.86)	(0.50,0.56)	(0.58,0.65)	90)	53)
	>=25 kg/m^2/	0.79	0.67	0.76	0.56 (48 /	0.57 (25 /
	Former/>=2	(0.73,0.86)	(0.64,0.71)	(0.72,0.79)	86)	44)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		st Event	of Fir	Probability st Event non-ICS
<=64/III & IV/	<25 kg/m^2/ Current/<2	0.89 (0.84,0.94)		0.48 (0.46,0.51)	·	0.41 (68 / 165)
	<25 kg/m^2/	0.89	0.61	0.66	0.54 (63 /	0.67 (78 /
	Current/>=2	(0.84,0.94)	(0.58,0.64)	(0.63,0.69)	116)	117)
	<25 kg/m^2/	0.89	0.47	0.51	0.46 (63 /	0.41 (43 /
	Former/<2	(0.84,0.94)	(0.44,0.50)	(0.48,0.54)	137)	106)
	<25 kg/m^2/ Former/>=2	0.89 (0.84,0.94)	0.64 (0.61,0.67)	0.69 (0.65,0.72)	·	0.61 (43 / 71)
	>=25 kg/m^2/	0.89	0.45	0.49	0.49 (83 /	0.47 (65 /
	Current/<2	(0.84,0.94)	(0.42,0.48)	(0.46,0.52)	171)	139)
	>=25 kg/m^2/	0.89	0.59	0.63	0.48 (50 /	0.64 (52 /
	Current/>=2	(0.84,0.94)	(0.55,0.61)	(0.60,0.66)	104)	81)
	>=25 kg/m^2/	0.89	0.48	0.52	0.50 (90 /	0.43 (59 /
	Former/<2	(0.84,0.94)	(0.45,0.50)	(0.49,0.54)	180)	138)
	>=25 kg/m^2/ Former/>=2	0.89 (0.84,0.94)		0.66 (0.62,0.69)	0.63 (75 / 120)	0.66 (67 / 102)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	Modelled Probabilityof First Event ICS non-ICS		
>=65/I & II/ F		0.79 (0.73,0.86)	0.40	0.48 (0.44,0.51)	0.49 (22 /	
	<25 kg/m^2/	0.79	0.57	0.65	0.56 (15 /	0.75 (12 /
	Current/>=2	(0.73,0.86)	(0.53,0.60)	(0.61,0.69)	27)	16)
	<25 kg/m^2/	0.79	0.41	0.48	0.38 (24 /	0.55 (18 /
	Former/<2	(0.73,0.86)	(0.38,0.44)	(0.45,0.52)	64)	33)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.79 (0.73,0.86)	0.57 (0.53,0.61)	0.66 (0.62,0.69)	0.41 (13 / 32)	0.62 (8 / 13)
	>=25 kg/m^2/	0.79	0.41	0.48	0.40 (19 /	0.41 (11 /
	Current/<2	(0.73,0.86)	(0.38,0.44)	(0.45,0.52)	47)	27)
	>=25 kg/m^2/	0.79	0.54	0.62	0.54 (15 /	0.38 (8 /
	Current/>=2	(0.73,0.86)	(0.50,0.57)	(0.58,0.66)	28)	21)
	>=25 kg/m^2/	0.79	0.41	0.49	0.39 (42 /	0.48 (33 /
	Former/<2	(0.73,0.86)	(0.38,0.44)	(0.45,0.52)	107)	69)
	>=25 kg/m^2/	0.79	0.54	0.63	0.57 (28 /	0.61 (25 /
	Former/>=2	(0.73,0.86)	(0.51,0.58)	(0.59,0.66)	49)	41)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir		of Fir	Probabilityst Eventnon-ICS
>=65/I & II/ M	<25 kg/m^2/ Current/<2	0.89 (0.84,0.94)		0.34 (0.31,0.36)	0.27 (22 / 82)	0.27 (14 / 51)
	<25 kg/m^2/ Current/>=2	0.89 (0.84,0.94)	0.45 (0.42,0.48)	0.49 (0.45,0.52)	0.46 (16 / 35)	0.55 (16 / 29)
	<25 kg/m^2/ Former/<2	0.89 (0.84,0.94)	0.36 (0.34,0.38)	0.39 (0.37,0.42)	0.27 (36 / 131)	0.38 (40 / 105)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.89 (0.84,0.94)	0.51 (0.48,0.54)	0.56 (0.52,0.59)	0.35 (18 / 51)	0.59 (22 / 37)
	>=25 kg/m^2/ Current/<2	0.89 (0.84,0.94)	0.31 (0.29,0.33)		0.32 (25 / 79)	0.29 (20 / 70)
	>=25 kg/m^2/ Current/>=2	0.89 (0.84,0.94)		0.46 (0.43,0.49)	0.27 (7 / 26)	0.48 (14 / 29)
	>=25 kg/m^2/ Former/<2	0.89 (0.84,0.94)	0.36 (0.34,0.38)		0.35 (91 / 261)	0.40 (85 / 210)
	>=25 kg/m^2/ Former/>=2			0.53 (0.50,0.56)	0.48 (56 / 117)	0.53 (36 / 68)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event	of Fir	Probability st Event non-ICS
>=65/III & IV/ F		0.79 (0.73,0.86)			0.52 (32 / 61)	0.45 (20 / 44)
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.72 (0.68,0.75)	0.80 (0.76,0.83)	0.70 (44 / 63)	0.66 (23 / 35)
	<25 kg/m^2/ Former/<2	0.79 (0.73,0.86)	0.55 (0.52,0.58)	0.63 (0.60,0.66)	0.55 (61 / 111)	0.49 (41 / 83)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.79 (0.73,0.86)	0.72 (0.69,0.75)	0.80 (0.77,0.83)	0.64 (46 / 72)	0.65 (33 / 51)
	>=25 kg/m^2/ Current/<2	0.79 (0.73,0.86)			0.56 (28 / 50)	0.54 (14 / 26)
	>=25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)		0.77 (0.73,0.81)	0.73 (22 / 30)	0.54 (7 / 13)
	>=25 kg/m^2/ Former/<2	0.79 (0.73,0.86)	0.55 (0.52,0.58)		0.50 (65 / 129)	0.61 (45 / 74)
	>=25 kg/m^2/ Former/>=2		0.70 (0.66,0.73)	0.78 (0.74,0.81)	0.53 (37 / 70)	0.69 (48 / 70)

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Table 1.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates)

Age/GOLD/ Sex	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event	of Fir	Probability st Event non-ICS
			0.43	0.47	0.40 (57 /	
		0.89 (0.84,0.94)	0.59 (0.56,0.62)	0.64 (0.60,0.67)	·	0.63 (50 / 80)
	<25 kg/m^2/ Former/<2	0.89 (0.84,0.94)	0.49 (0.47,0.51)			0.50 (135/ 268)
	<25 kg/m^2/ Former/>=2	0.89 (0.84,0.94)	0.67 (0.64,0.69)	0.71 (0.68,0.73)		0.64 (116/ 182)
	>=25 kg/m^2/ Current/<2	0.89 (0.84,0.94)	0.43 (0.40,0.46)	0.47 (0.44,0.50)		0.44 (41 / 94)
	>=25 kg/m^2/ Current/>=2	0.89 (0.84,0.94)	0.57 (0.53,0.60)	0.61 (0.57,0.64)		0.64 (29 / 45)
	>=25 kg/m^2/ Former/<2	0.89 (0.84,0.94)		0.54 (0.51,0.56)		0.44 (130/ 295)
	>=25 kg/m^2/ Former/>=2	0.89 (0.84,0.94)		0.68 (0.65,0.71)		0.66 (113/ 171)

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Table 1.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates)

Statistic	Level		
Type 3 Wald p-values	Age	0.915	_
-	BMI	0.232	
	Smoking Status	0.095	
	Exacerbation History by BMI	0.052	
	Treatment by Sex	0.033	
	Smoking Status by Age	0.028	
	Sex by Smoking Status	<0.001	
	Treatment	<0.001	
	Sex	<0.001	
	GOLD	<0.001	
	Exacerbation History	<0.001	

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Table 1.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates)

Statistic	Level		
Hazard Ration	o Age >=65 vs <=64		
	At Smoking Status:Current smoker	0.95 (0.88,	1.02)
	At Smoking Status:Former smoker	1.06 (0.99,	1.14)
	BMI $>=25 \text{ kg/m}^2 \text{ vs } <25 \text{ kg/m}^2$		
	At Exacerbation History:<2	1.02 (0.96,	1.09)
	At Exacerbation History:>=2	0.92 (0.86,	1.00)
	Exacerbation History >=2 vs <2		
	At BMI:<25 kg/m^2	1.62 (1.51,	1.74)
	At BMI:>=25 kg/m^2	1.47 (1.37,	1.58)
	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted		
		1.52 (1.44,	1.60)
	Sex M vs F		
	At Treatment:ICS Smoking Status:Current smoker	0.71 (0.65,	0.78)
	At Treatment:ICS Smoking Status:Former smoker	0.85 (0.78,	0.93)
	At Treatment:non-ICS Smoking Status:Current smoker	0.64 (0.58,	0.70)
	At Treatment:non-ICS Smoking Status:Former smoker	0.76 (0.69,	0.83)
	Smoking Status Former smoker vs Current smoker		
	At Sex:F Age:<=64	0.90 (0.82,	0.99)
	At Sex:F Age:>=65	1.01 (0.92,	
	At Sex:M Age:<=64	1.08 (0.99,	1.18)
	At Sex:M Age:>=65	1.21 (1.12,	1.31)
	Treatment ICS vs non-ICS	,	,
	At Sex:F	0.79 (0.73,	0.86)
	At Sex:M	0.89 (0.84,	0.94)

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 1	AIC	18438.0	
Iteration 1	Type 3 Wald p-values	EBHIS2*GOLDGR AGEGRP1*TREAT BMIGRP*GOLDGR GOLDGR*RACEGRP2 SEX AGEGRP1 GOLDGR*SUSMHS SUSMHS*TREAT SEX*SUSMHS AGEGRP1*GOLDGR AGEGRP1*GOLDGR AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS AGEGRP1*BMIGRP SEX*TREAT AGEGRP1*RACEGRP2 RACEGRP2*TREAT EBHIS2*SUSMHS EBHIS2*SEX GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2	0.949 0.803 0.801 0.782 0.781 0.747 0.747 0.738 0.723 0.684 0.622 0.611 0.576 0.488 0.480 0.455 0.412 0.395 0.395 0.390 0.367 0.357 0.346 0.335 0.311 0.309 0.241 0.202 0.191 0.185

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 1	Type 3 Wald p-values	RACEGRP2 EBHIS2*TREAT BMIGRP SUSMHS AGEGRP1*EBHIS2 AGEGRP1*SEX INCGRP1*SEX EBHIS2*INCGRP1 RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 EBHIS2 BMIGRP*INCGRP1 GOLDGR TREAT	0.177 0.137 0.113 0.092* 0.057* 0.052* 0.049* 0.041* 0.028* 0.014* 0.012* 0.007* 0.007* 0.004* 0.002* 0.002*	
Iteration 1	Removed Effect	EBHIS2*GOLDGR	0.949	
Iteration 1	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 2	AIC	18436.0	
Iteration 2	Type 3 Wald p-values	AGEGRP1*TREAT BMIGRP*GOLDGR GOLDGR*RACEGRP2 SEX AGEGRP1 GOLDGR*SUSMHS SUSMHS*TREAT SEX*SUSMHS AGEGRP1*GOLDGR AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS AGEGRP1*BMIGRP SEX*TREAT AGEGRP1*BMIGRP SEX*TREAT EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SUSMHS GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 RACEGRP2 RACEGRP2 RACEGRP2 RACEGRP2 RACEGRP2 RACEGRP2 RACEGRP2	0.803 0.802 0.783 0.779 0.748 0.747 0.738 0.722 0.681 0.621 0.613 0.575 0.482 0.479 0.456 0.412 0.395 0.395 0.395 0.390 0.365 0.357 0.345 0.335 0.309 0.308 0.242 0.202 0.191 0.185 0.177

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 2	Type 3 Wald p-values	EBHIS2*TREAT BMIGRP SUSMHS AGEGRP1*EBHIS2 AGEGRP1*SEX INCGRP1*SEX EBHIS2*INCGRP1 RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.137 0.113 0.092* 0.057* 0.052* 0.048* 0.041* 0.028* 0.014* 0.012* 0.007* 0.002* 0.002* 0.002*	
Iteration 2	Removed Effect	AGEGRP1*TREAT	0.803	
Iteration 2	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 3	AIC	18434.0	
Iteration 3	Type 3 Wald p-values	BMIGRP*GOLDGR GOLDGR*RACEGRP2 SEX GOLDGR*SUSMHS SEX*SUSMHS AGEGRP1 AGEGRP1*GOLDGR SUSMHS*TREAT AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*SUSMHS INCGRP1*TREAT BMIGRP*EBHIS2 GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS SEX*TREAT AGEGRP1*BMIGRP AGEGRP1*BMIGRP AGEGRP1*RACEGRP2 RACEGRP2*TREAT EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT	0.801 0.783 0.783 0.745 0.719 0.715 0.685 0.679 0.624 0.615 0.573 0.491 0.480 0.462 0.412 0.396 0.387 0.371 0.355 0.338 0.337 0.311 0.308 0.242 0.204 0.192 0.186 0.177 0.132

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 3	Type 3 Wald p-values	BMIGRP SUSMHS AGEGRP1*EBHIS2 AGEGRP1*SEX INCGRP1*SEX EBHIS2*INCGRP1 RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.113 0.093* 0.055* 0.053* 0.048* 0.041* 0.028* 0.014* 0.011* 0.007* 0.002* 0.002* 0.002* <0.001*	
Iteration 3	Removed Effect	BMIGRP*GOLDGR	0.801	
Iteration 3	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 4	AIC	18432.1	
Iteration 4	Type 3 Wald p-values	SEX GOLDGR*SUSMHS GOLDGR*RACEGRP2 SEX*SUSMHS AGEGRP1 SUSMHS*TREAT AGEGRP1*GOLDGR AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*SUSMHS INCGRP1*TREAT BMIGRP*EBHIS2 GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS SEX*TREAT AGEGRP1*BMIGRP RACEGRP2*TREAT AGEGRP1*BMIGRP RACEGRP2*TREAT AGEGRP1*RACEGRP2 EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP	0.784 0.777 0.752 0.726 0.713 0.681 0.670 0.622 0.609 0.570 0.492 0.491 0.472 0.413 0.395 0.377 0.371 0.349 0.338 0.337 0.313 0.310 0.251 0.210 0.195 0.183 0.174 0.134 0.118

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 4	Type 3 Wald p-values	SUSMHS	0.095*	
		AGEGRP1*EBHIS2	0.055*	
		AGEGRP1*SEX	0.053*	
		INCGRP1*SEX	0.048*	
		EBHIS2*INCGRP1	0.041*	
		RACEGRP2*SUSMHS	0.028*	
		INCGRP1*RACEGRP2	0.014*	
		BMIGRP*TREAT	0.012*	
		INCGRP1	0.007*	
		BMIGRP*INCGRP1	0.002*	
		EBHIS2	0.002*	
		GOLDGR	0.002*	
		TREAT	<0.001*	
Iteration 4	Removed Effect	GOLDGR*SUSMHS	0.777	
Iteration 4	Replaced Effect(s)	NONE		

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 5	AIC	18430.2	
Iteration 5	Type 3 Wald p-values	SEX SEX*SUSMHS GOLDGR*RACEGRP2 AGEGRP1 SUSMHS*TREAT AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*GOLDGR AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX SEX*TREAT BMIGRP*SUSMHS AGEGRP1*BMIGRP RACEGRP2*TREAT AGEGRP1*RACEGRP2 EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP SUSMHS	0.775 0.740 0.727 0.698 0.686 0.624 0.620 0.602 0.558 0.491 0.490 0.472 0.416 0.398 0.372 0.357 0.343 0.337 0.334 0.319 0.312 0.251 0.212 0.196 0.180 0.172 0.134 0.117 0.098*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 5	Type 3 Wald p-values	AGEGRP1*EBHIS2 AGEGRP1*SEX INCGRP1*SEX EBHIS2*INCGRP1 RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.055* 0.052* 0.048* 0.041* 0.027* 0.014* 0.012* 0.007* 0.002* 0.002* 0.002* <0.002*	
Iteration 5	Removed Effect	SEX*SUSMHS	0.740	
Iteration 5	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 6	AIC	18428.3	
Iteration 6	Type 3 Wald p-values	SEX AGEGRP1 GOLDGR*RACEGRP2 SUSMHS*TREAT AGEGRP1*INCGRP1 GOLDGR*SEX AGEGRP1*GOLDGR AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT RACEGRP2*SEX INCGRP1*SUSMHS SEX*TREAT BMIGRP*SUSMHS RACEGRP2*TREAT AGEGRP1*BMIGRP EBHIS2*SUSMHS RACEGRP2*TREAT AGEGRP1*BMIGRP EBHIS2*SUSMHS AGEGRP1*RACEGRP2 EBHIS2*SEX GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS	0.735 0.726 0.724 0.702 0.614 0.602 0.599 0.527 0.493 0.492 0.472 0.420 0.383 0.374 0.355 0.340 0.336 0.331 0.326 0.315 0.252 0.227 0.199 0.181 0.178 0.135 0.111 0.056* 0.055*

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 6	Type 3 Wald p-values	INCGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.046* 0.041* 0.035* 0.025* 0.015* 0.012* 0.007* 0.002* 0.002* 0.002* <0.001*	
Iteration 6	Removed Effect	GOLDGR*RACEGRP2	0.724	
Iteration 6	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 7	AIC	18426.4	
Iteration 7	Type 3 Wald p-values	SEX SUSMHS*TREAT AGEGRP1 GOLDGR*SEX AGEGRP1*INCGRP1 AGEGRP1*GOLDGR AGEGRP1*SUSMHS INCGRP1*TREAT BMIGRP*EBHIS2 GOLDGR*TREAT RACEGRP2*SEX INCGRP1*SUSMHS SEX*TREAT BMIGRP*SUSMHS RACEGRP2*TREAT AGEGRP1*RACEGRP2 AGEGRP1*RACEGRP2 AGEGRP1*BMIGRP EBHIS2*SUSMHS EBHIS2*SUSMHS EBHIS2*SEX GOLDGR*INCGRP1 BMIGRP*SEX RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*BHIS2 SUSMHS INCGRP1*SEX	0.729 0.706 0.705 0.619 0.609 0.578 0.531 0.491 0.488 0.467 0.417 0.380 0.374 0.357 0.338 0.337 0.335 0.326 0.313 0.273 0.227 0.197 0.187 0.177 0.183 0.117 0.056* 0.045*

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 7	Type 3 Wald p-values	EBHIS2*INCGRP1 AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2	0.042* 0.035* 0.026* 0.014* 0.012* 0.008* 0.002*	
Iteration 7	Removed Effect	TREAT GOLDGR SUSMHS*TREAT	<0.001* <0.001* 0.706	
Iteration 7	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 8	AIC	18424.5	
Iteration 8	Type 3 Wald p-values	SEX AGEGRP1 GOLDGR*SEX AGEGRP1*INCGRP1 AGEGRP1*GOLDGR AGEGRP1*SUSMHS INCGRP1*TREAT BMIGRP*EBHIS2 GOLDGR*TREAT RACEGRP2*SEX SEX*TREAT INCGRP1*SUSMHS BMIGRP*SUSMHS RACEGRP2*TREAT AGEGRP1*RACEGRP2 AGEGRP1*BMIGRP EBHIS2*SUSMHS EBHIS2*SEX GOLDGR*INCGRP1 BMIGRP*SEX RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP*SEX RACEGRP2 EBHIS2*TREAT BMIGRP*BACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS INCGRP1*SEX EBHIS2*INCGRP1	0.728 0.699 0.621 0.609 0.578 0.536 0.488 0.486 0.456 0.419 0.388 0.379 0.368 0.364 0.341 0.337 0.328 0.316 0.274 0.228 0.202 0.187 0.178 0.178 0.178 0.178 0.135 0.115 0.057* 0.046* 0.042*

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 8	Type 3 Wald p-values	AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.035* 0.027* 0.014* 0.013* 0.008* 0.002* 0.002* <0.001*	
Iteration 8	Removed Effect	GOLDGR*SEX	0.621	
Iteration 8	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration De	escription		
Iteration 9 AI		18422.8	
Iteration 9 Ty		AGEGRP1 SEX AGEGRP1*GOLDGR AGEGRP1*INCGRP1 AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT RACEGRP2*SEX SEX*TREAT INCGRP1*SUSMHS BMIGRP*SUSMHS RACEGRP2*TREAT AGEGRP1*BMIGRP AGEGRP1*BMIGRP AGEGRP1*RACEGRP2 EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*TREAT BMIGRP*SEX EBHIS2*TREAT BMIGRP*SEX EBHIS2*TREAT BMIGRP*ACEGRP2 EBHIS2*TREAT BMIGRP*ACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS INCGRP1*SEX EBHIS2*INCGRP1	0.710 0.631 0.630 0.616 0.538 0.493 0.487 0.474 0.432 0.397 0.379 0.373 0.364 0.345 0.339 0.331 0.329 0.225 0.208 0.207 0.185 0.180 0.133 0.117 0.056* 0.046* 0.045* 0.042*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description				
Iteration 9	Type 3 Wald p-values	RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.027* 0.015* 0.012* 0.007* 0.002* 0.002* <0.001* <0.001*		
Iteration 9	Removed Effect	AGEGRP1*GOLDGR	0.630		
Iteration 9	Replaced Effect(s)	NONE			

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 10	AIC	18421.0	
Iteration 10	Type 3 Wald p-values	AGEGRP1 SEX AGEGRP1*INCGRP1 AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT RACEGRP2*SEX SEX*TREAT INCGRP1*SUSMHS BMIGRP*SUSMHS AGEGRP1*BMIGRP RACEGRP2*TREAT AGEGRP1*RACEGRP2 EBHIS2*SEX EBHIS2*SEX EBHIS2*SEX EBHIS2*SUSMHS GOLDGR*INCGRP1 BMIGRP*SEX RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS INCGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX RACEGRP2*SUSMHS	0.807 0.634 0.617 0.558 0.501 0.486 0.469 0.431 0.396 0.378 0.372 0.363 0.372 0.363 0.335 0.330 0.219 0.206 0.204 0.182 0.179 0.133 0.116 0.051* 0.046* 0.046* 0.042* 0.039* 0.027*

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 10	Type 3 Wald p-values	INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.015* 0.012* 0.007* 0.002* 0.002* <0.001* <0.001*	
Iteration 10	Removed Effect	AGEGRP1*INCGRP1	0.617	
Iteration 10	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 11	AIC	18419.3	
Iteration 11	Type 3 Wald p-values	AGEGRP1 SEX AGEGRP1*SUSMHS BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT RACEGRP2*SEX INCGRP1*SUSMHS AGEGRP1*BMIGRP SEX*TREAT BMIGRP*SUSMHS RACEGRP2*TREAT EBHIS2*SUSMHS EBHIS2*SEX GOLDGR*INCGRP1 AGEGRP1*RACEGRP2 BMIGRP*SEX RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP*ACEGRP2 INCGRP1*SEX RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 INCGRP1*SEX SUSMHS EBHIS2*INCGRP1 AGEGRP1*SEX SUSMHS EBHIS2*INCGRP1 AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2	0.781 0.635 0.575 0.502 0.485 0.469 0.448 0.429 0.411 0.395 0.387 0.364 0.333 0.326 0.215 0.213 0.203 0.203 0.187 0.186 0.133 0.113 0.053* 0.052* 0.046* 0.045* 0.046* 0.025* 0.016*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 11	Type 3 Wald p-values	BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.012* 0.007* 0.003* 0.002* <0.001* <0.001*	
Iteration 11	Removed Effect	AGEGRP1*SUSMHS	0.575	
Iteration 11	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 12	AIC	18417.6	
Iteration 12	Type 3 Wald p-values	AGEGRP1 SEX BMIGRP*EBHIS2 INCGRP1*TREAT GOLDGR*TREAT AGEGRP1*BMIGRP INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS SEX*TREAT RACEGRP2*TREAT EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*RACEGRP2 GOLDGR*INCGRP1 RACEGRP2 BMIGRP*SEX BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 INCGRP1*SEX EBHIS2*INCGRP1 SUSMHS AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT	0.700 0.631 0.511 0.485 0.473 0.462 0.450 0.448 0.414 0.395 0.370 0.354 0.330 0.247 0.216 0.212 0.201 0.186 0.184 0.132 0.113 0.055* 0.051* 0.041* 0.041* 0.024* 0.015* 0.012*
		DMIGRETINEAL	0.012

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 12	Type 3 Wald p-values	INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.007* 0.003* 0.002* <0.001* <0.001*	
Iteration 12	Removed Effect	BMIGRP*EBHIS2	0.511	
Iteration 12	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 13	AIC	18416.0	
Iteration 13	Type 3 Wald p-values	AGEGRP1 SEX AGEGRP1*BMIGRP INCGRP1*TREAT GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX BMIGRP*SUSMHS EBHIS2*SUSMHS SEX*TREAT RACEGRP2*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 RACEGRP2 BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 EBHIS2*INCGRP1 INCGRP1*SEX SUSMHS AGEGRP1*SEX SUSMHS AGEGRP1*SEX RACEGRP2 BMIGRP*RACEGRP2 EBHIS2*INCGRP1 INCGRP1*SEX SUSMHS AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1	0.690 0.626 0.486 0.481 0.477 0.452 0.449 0.422 0.406 0.395 0.373 0.327 0.246 0.218 0.214 0.211 0.194 0.143 0.122 0.059* 0.053* 0.049* 0.042* 0.041* 0.023* 0.016* 0.013* 0.006*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 13	Type 3 Wald p-values	BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.003* <0.001* <0.001* <0.001*
Iteration 13	Removed Effect	AGEGRP1*BMIGRP	0.486
Iteration 13	Replaced Effect(s)	NONE	

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 14	AIC	18414.5	
Iteration 14	Type 3 Wald p-values	SEX AGEGRP1 BMIGRP*SUSMHS INCGRP1*TREAT GOLDGR*TREAT INCGRP1*SUSMHS RACEGRP2*SEX EBHIS2*SUSMHS SEX*TREAT RACEGRP2*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 GOLDGR*INCGRP1 RACEGRP2 BMIGRP*RACEGRP2 BMIGRP*SEX EBHIS2*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 EBHIS2*TREAT INCGRP1 INCGRP1*SEX SUSMHS AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1	0.640 0.571 0.516 0.484 0.483 0.460 0.436 0.408 0.388 0.376 0.326 0.298 0.215 0.209 0.194 0.179 0.146 0.143 0.119 0.060* 0.052* 0.048* 0.046* 0.041* 0.025* 0.013* 0.006* 0.013* 0.006* 0.013* 0.006* 0.013* 0.006* 0.013*

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

-	Iteration	Description			
-	Iteration 14	Type 3 Wald p-values	EBHIS2 TREAT GOLDGR	<0.001* <0.001* <0.001*	
	Iteration 14	Removed Effect	BMIGRP*SUSMHS	0.516	
-	Iteration 14	Replaced Effect(s)	NONE		

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 15	AIC	18412.9	
Iteration 15	Type 3 Wald p-values	SEX AGEGRP1 INCGRP1*SUSMHS GOLDGR*TREAT INCGRP1*TREAT RACEGRP2*SEX EBHIS2*SUSMHS SEX*TREAT RACEGRP2*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 GOLDGR*INCGRP1 RACEGRP2 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP AGEGRP1*EBHIS2 SUSMHS EBHIS2*INCGRP1 INCGRP1*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2	0.638 0.569 0.518 0.487 0.478 0.431 0.414 0.388 0.371 0.326 0.299 0.219 0.200 0.169 0.169 0.148 0.140 0.138 0.061* 0.057* 0.052* 0.045* 0.041* 0.029* 0.013* 0.007* 0.013* 0.007* 0.003* 0.003*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 15	Type 3 Wald p-values	TREAT GOLDGR	<0.001* <0.001*	
Iteration 15	Removed Effect	INCGRP1*SUSMHS	0.518	
Iteration 15	Replaced Effect(s)	NONE		

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 16	AIC	18411.3	
Iteration 16	Type 3 Wald p-values	SEX AGEGRP1 GOLDGR*TREAT INCGRP1*TREAT RACEGRP2*SEX EBHIS2*SUSMHS SEX*TREAT RACEGRP2*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 GOLDGR*INCGRP1 BMIGRP*SEX RACEGRP2 BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2 BMIGRP EBHIS2*TREAT AGEGRP1*EBHIS2 SUSMHS EBHIS2*INCGRP1 INCGRP1*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*SEX AGEGRP1*SEX BMIGRP*TREAT RACEGRP2*SUSMHS INCGRP1*RACEGRP2 INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT	0.643 0.580 0.490 0.474 0.422 0.420 0.386 0.367 0.327 0.304 0.205 0.202 0.202 0.172 0.150 0.141 0.140 0.062* 0.060* 0.053* 0.041* 0.039* 0.011* 0.001* 0.0004* 0.0004* 0.0008* 0.001* 0.001*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 16	Type 3 Wald p-values	GOLDGR	<0.001*
Iteration 16	Removed Effect	GOLDGR*TREAT	0.490
Iteration 16	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration 17 AIC 18409.8 Iteration 17 Type 3 Wald p-values SEX	Iteration	Description		
AGEGRP1 0.575 INCGRP1*TREAT 0.470 EBHIS2*SUSMHS 0.425 RACEGRP2*SEX 0.421	Iteration 17	AIC	18409.8	
SEX*TREAT 0.406 RACEGRP2*TREAT 0.377 EBHIS2*SEX 0.320 AGEGRP1*RACEGRP2 0.305 GOLDGR*INCGRP1 0.208 RACEGRP2 0.200 BMIGRP*SEX 0.200 BMIGRP*RACEGRP2 0.171 EBHIS2*TREAT 0.154 EBHIS2*TREAT 0.154 EBHIS2*RACEGRP2 0.148 BMIGRP 0.147 AGEGRP1*EBHIS2 0.063* SUSMHS 0.060* EBHIS2*INCGRP1 0.055* INCGRP1*SEX 0.041* AGEGRP1*SEX 0.041* AGEGRP1*SEX 0.041* AGEGRP1*SEX 0.011* INCGRP1*SEX 0.011* INCGRP1*RACEGRP2 0.011* BMIGRP*TREAT 0.010* INCGRP1 0.008* BMIGRP*INCGRP1 0.008* BMIGRP*INCGRP1 0.008* BMIGRP*INCGRP1 0.008* BMIGRP*INCGRP1 0.008* BMIGRP*INCGRP1 0.008* BMIGRP*INCGRP1 0.004* EBHIS2 (0.001* EBHIS2 (0.001*	Iteration 17	Type 3 Wald p-values	AGEGRP1 INCGRP1*TREAT EBHIS2*SUSMHS RACEGRP2*SEX SEX*TREAT RACEGRP2*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 GOLDGR*INCGRP1 RACEGRP2 BMIGRP*SEX BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*TREAT EBHIS2*TREAT EBHIS2*RACEGRP2 BMIGRP AGEGRP1*EBHIS2 SUSMHS EBHIS2*INCGRP1 INCGRP1*SEX AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1 BMIGRP*INCGRP1 EBHIS2 TREAT	0.575 0.470 0.425 0.421 0.406 0.377 0.320 0.305 0.208 0.202 0.200 0.171 0.154 0.148 0.147 0.063* 0.060* 0.055* 0.041* 0.039* 0.011* 0.008* 0.004* <0.001*

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description Iteration 17 Removed Effect INCGRP1*TREAT 0.470

Iteration 17 Replaced Effect(s) NONE

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	±		
Iteration 18	AIC	18408.3	
Iteration 18	Type 3 Wald p-values	SEX AGEGRP1 RACEGRP2*TREAT SEX*TREAT RACEGRP2*SEX EBHIS2*SUSMHS EBHIS2*SEX AGEGRP1*RACEGRP2 RACEGRP2 GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP EBHIS2*TREAT BMIGRP EBHIS2*RACEGRP2 AGEGRP1*EBHIS2 SUSMHS EBHIS2*INCGRP1 INCGRP1*SEX AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 INCGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP*TREAT BMIGRP*INCGRP1 EBHIS2 TREAT GOLDGR	0.657 0.582 0.509 0.457 0.434 0.429 0.320 0.320 0.220 0.208 0.202 0.173 0.151 0.147 0.144 0.063* 0.061* 0.051* 0.045* 0.039* 0.012* 0.011* 0.0007* 0.0001* <0.001* <0.001* <0.001*

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Iteration 18 Replaced Effect(s) NONE

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description Iteration 18 Removed Effect RACEGRP2*TREAT 0.509

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 19	AIC	18406.8	
	Type 3 Wald p-values	SEX AGEGRP1 RACEGRP2*SEX EBHIS2*SUSMHS SEX*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 RACEGRP2 GOLDGR*INCGRP1 BMIGRP*SEX BMIGRP*RACEGRP2 BMIGRP EBHIS2*TREAT EBHIS2*TREAT EBHIS2*RACEGRP2 AGEGRP1*EBHIS2 SUSMHS EBHIS2*INCGRP1 INCGRP1*SEX AGEGRP1*SEX RACEGRP2*SUSMHS INCGRP1*RACEGRP2 INCGRP1 BMIGRP*TREAT BMIGRP*TREAT BMIGRP*TREAT BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.641 0.579 0.441 0.429 0.393 0.313 0.304 0.254 0.206 0.201 0.168 0.143 0.142 0.131 0.064* 0.057* 0.051* 0.045* 0.039* 0.011* 0.010* 0.008* 0.001* <0.001* <0.001*
Iteration 19	Removed Effect	RACEGRP2*SEX	0.441

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description

Iteration 19 Replaced Effect(s) NONE

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 20	AIC	18405.3		
Iteration 20		AGEGRP1 EBHIS2*SUSMHS RACEGRP2 SEX*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP EBHIS2*TREAT BMIGRP EBHIS2*RACEGRP2 SEX AGEGRP1*EBHIS2 INCGRP1*SEX SUSMHS EBHIS2*INCGRP1 AGEGRP1*SEX INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.605 0.435 0.406 0.400 0.315 0.272 0.227 0.200 0.169 0.137 0.135 0.129 0.090* 0.066* 0.061* 0.057* 0.048* 0.042* 0.014* 0.011* 0.008* 0.008* 0.003* <0.001* <0.001*	
Iteration 20	Removed Effect	EBHIS2*SUSMHS	0.435	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description

Iteration 20 Replaced Effect(s) NONE

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 21	AIC	18404.0	
		AGEGRP1 RACEGRP2 SEX*TREAT EBHIS2*SEX AGEGRP1*RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 BMIGRP*RACEGRP2 BMIGRP EBHIS2*TREAT EBHIS2*TREAT EBHIS2*RACEGRP2 AGEGRP1*EBHIS2 SEX SUSMHS INCGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX INCGRP1 RACEGRP2*SUSMHS INCGRP1*RACEGRP2 BMIGRP*TREAT BMIGRP*TREAT BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.595 0.405 0.400 0.333 0.271 0.222 0.202 0.171 0.135 0.134 0.101 0.089* 0.089* 0.067* 0.061* 0.047* 0.041* 0.014* 0.010* 0.008* 0.008* 0.008* 0.0010*
Iteration 21	Removed Effect	SEX*TREAT	0.400
Iteration 21	Replaced Effect(s)	NONE	

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Population: Intent-to-Treat

Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 22	AIC	18402.7	
Iteration 22	Type 3 Wald p-values	AGEGRP1 RACEGRP2 EBHIS2*SEX AGEGRP1*RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP SEX EBHIS2*RACEGRP2 AGEGRP1*EBHIS2 SUSMHS INCGRP1*SEX EBHIS2*INCGRP1 AGEGRP1*SEX INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.589 0.406 0.349 0.272 0.238 0.204 0.173 0.151 0.130 0.124 0.102 0.086* 0.068* 0.059* 0.047* 0.047* 0.042* 0.014* 0.010* 0.009* 0.009* 0.008* 0.003* <0.001*
Iteration 22	Removed Effect	EBHIS2*SEX	0.349
Iteration 22	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration			
Iteration 23		18401.5	
Iteration 23	Type 3 Wald p-values	AGEGRP1 RACEGRP2 AGEGRP1*RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 BMIGRP*RACEGRP2 EBHIS2*TREAT BMIGRP EBHIS2*RACEGRP2 SEX SUSMHS AGEGRP1*EBHIS2 INCGRP1*SEX AGEGRP1*SEX EBHIS2*INCGRP1 INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.619 0.425 0.274 0.243 0.207 0.173 0.160 0.129 0.122 0.088* 0.069* 0.059* 0.056* 0.036* 0.032* 0.013* 0.010* 0.009* 0.009* 0.009*
Iteration 23	Removed Effect	AGEGRP1*RACEGRP2	0.274
Iteration 23	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 24	AIC	18400.7		
Iteration 24	Type 3 Wald p-values	RACEGRP2 BMIGRP*SEX GOLDGR*INCGRP1 EBHIS2*TREAT BMIGRP*RACEGRP2 BMIGRP EBHIS2*RACEGRP2 SEX SUSMHS AGEGRP1 INCGRP1*SEX AGEGRP1*EBHIS2 AGEGRP1*SEX EBHIS2*INCGRP1 INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.557 0.249 0.201 0.164 0.161 0.134 0.111 0.088* 0.081* 0.066* 0.062* 0.054* 0.051* 0.031* 0.017* 0.014* 0.009* 0.009* 0.005* 0.003* <0.001* <0.001* <0.001*	
Iteration 24	Removed Effect	BMIGRP*SEX	0.249	
Iteration 24	Replaced Effect(s)	NONE		

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 25	AIC	18400.0	
Iteration 25	Type 3 Wald p-values	RACEGRP2 GOLDGR*INCGRP1 BMIGRP*RACEGRP2 EBHIS2*TREAT EBHIS2*RACEGRP2 SUSMHS AGEGRP1 SEX AGEGRP1*EBHIS2 AGEGRP1*SEX BMIGRP INCGRP1*SEX EBHIS2*INCGRP1 RACEGRP2*SUSMHS INCGRP1 BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.555 0.205 0.193 0.163 0.111 0.079* 0.067* 0.055* 0.055* 0.051* 0.041* 0.041* 0.032* 0.014* 0.013* 0.010* 0.0006* 0.002* <0.001* <0.001*
Iteration 25	Removed Effect	GOLDGR*INCGRP1	0.205
Iteration 25	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 26	AIC	18399.7	
Iteration 26	Type 3 Wald p-values	RACEGRP2 BMIGRP*RACEGRP2 EBHIS2*TREAT EBHIS2*RACEGRP2 SUSMHS AGEGRP1 SEX AGEGRP1*EBHIS2 AGEGRP1*SEX EBHIS2*INCGRP1 INCGRP1*SEX BMIGRP INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 GOLDGR TREAT	0.574 0.209 0.172 0.117 0.074* 0.068* 0.056* 0.052* 0.050* 0.040* 0.033* 0.026* 0.013* 0.009* 0.006* <0.001* <0.001* <0.001*
Iteration 26	Removed Effect	BMIGRP*RACEGRP2	0.209
Iteration 26	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description					
Iteration 27	AIC	18399.2				
Iteration 27	Type 3 Wald p-values	RACEGRP2 EBHIS2*TREAT EBHIS2*RACEGRP2 SUSMHS AGEGRP1 AGEGRP1*EBHIS2 SEX AGEGRP1*SEX EBHIS2*INCGRP1 INCGRP1*SEX INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 BMIGRP GOLDGR TREAT	0.867 0.167 0.119 0.078* 0.069* 0.054* 0.053* 0.050* 0.042* 0.034* 0.033* 0.013* 0.009* 0.006* 0.002* <0.001* <0.001*			
Iteration 27	Removed Effect	EBHIS2*TREAT	0.167			
Iteration 27	Replaced Effect(s)	NONE				

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 28	AIC	18399.1		
Iteration 28	Type 3 Wald p-values	RACEGRP2 EBHIS2*RACEGRP2 SUSMHS AGEGRP1 AGEGRP1*EBHIS2 AGEGRP1*SEX SEX EBHIS2*INCGRP1 INCGRP1*SEX INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 BMIGRP GOLDGR TREAT	0.884 0.115 0.074* 0.069* 0.054* 0.053* 0.053* 0.044* 0.034* 0.012* 0.010* 0.006* 0.002* 0.001* <0.001*	
Iteration 28	Removed Effect	EBHIS2*RACEGRP2	0.115	
Iteration 28	Replaced Effect(s)	NONE		

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 29	AIC	18399.6	
Iteration 29	Type 3 Wald p-values	RACEGRP2 EBHIS2*INCGRP1 AGEGRP1*EBHIS2 SUSMHS AGEGRP1 AGEGRP1*SEX SEX INCGRP1*SEX INCGRP1 RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 EBHIS2 BMIGRP*INCGRP1 BMIGRP GOLDGR TREAT	0.751 0.132 0.078* 0.076* 0.062* 0.055* 0.049* 0.031* 0.028* 0.013* 0.010* 0.009* 0.009* 0.004* 0.003* <0.001* <0.001*
Iteration 29	Removed Effect	EBHIS2*INCGRP1	0.132
Iteration 29	Replaced Effect(s)	NONE	

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Table 2.1 Summary of Pneumonia Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 30	AIC	18399.9	
Iteration 30	Type 3 Wald p-values	RACEGRP2 AGEGRP1*EBHIS2 SUSMHS AGEGRP1 AGEGRP1*SEX SEX INCGRP1 INCGRP1*SEX RACEGRP2*SUSMHS BMIGRP*TREAT INCGRP1*RACEGRP2 BMIGRP*INCGRP1 EBHIS2 BMIGRP GOLDGR TREAT	0.789 0.083* 0.071* 0.063* 0.053* 0.049* 0.039* 0.028* 0.012* 0.011* 0.009* 0.003* <0.001* <0.001*

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/	Modelled Hazard Ratio		of First Event		Observed Probabilityof First Event	
Country Income	Smoking/Exac.	non-ICS	ICS	non-ICS	1CS	non-ICS
<=64/I & II/ F/Asian/ High	J	1.84 (1.55,2.19)		0.02 (0.01,0.03)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.08)	0.03 (0.01,0.04)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.03,0.08)	0.03 (0.02,0.04)		0.00 (0/ 1)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.08 (0.04,0.11)	0.04 (0.02,0.06)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.01,0.04)	0.02 (0.01,0.03)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.01,0.04)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.02,0.05)		
	>=25 kg/m^2/ Former/>=2		0.06 (0.03,0.08)	0.04 (0.02,0.07)		

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event	of F	d Probability irst Event non-ICS
<=64/I & II/ F/Asian/ Non-high		1.84 (1.55,2.19)		0.02 (0.01,0.03)	0.00 (0 /	2) 0.00 (0/ 1)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.08)	0.03 (0.01,0.04)	0.00 (0 /	1)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.04,0.08)	0.03 (0.02,0.05)	0.00 (0 /	1) 0.00 (0/ 1)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.08 (0.05,0.11)	0.05 (0.03,0.06)		0.00 (0/ 1)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.01 (0.01,0.02)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.01,0.04)	0.02 (0.01,0.03)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.00 (0 /	2)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.06)			

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			Observed Probabil of First Event ICS non-IC	
<=64/I & II/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.06 (0.05,0.08)		0.03 (2 / 63) 0.00 (0/ 37)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.09 (0.07,0.11)	0.05 (0.04,0.06)	0.00 (0 / 31) 0.05 (1/ 22)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.04,0.07)	0.03 (0.02,0.04)	0.00 (0 / 15) 0.00 (0/ 15)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.08 (0.06,0.10)	0.05 (0.03,0.06)	0.00 (0 / 11) 0.00 (7)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.05 (4 / 78) 0.06 ((3/ 49)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.07 (0.05,0.08)	0.05 (0.04,0.06)	0.07 (3 / 44) 0.17 ((5/ 30)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.02 (1 / 54) 0.11 ((3/ 27)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.05,0.08)	0.05 (0.03,0.06)	0.11 (2 / 18) 0.00 ((0/ 13)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		Probability st Event non-ICS
<=64/I & II/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.04 (0.02,0.05)	0.02 (0.01,0.03)	0.00 (0 / 18) 0.00 (0/ 10)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.25 (3 / 12) 0.00 (0/ 5)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.04 (0.02,0.05)	0.02 (0.01,0.03)	0.00 (0 / 7) 0.00 (0/ 3)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.00 (0 / 4) 0.00 (0/ 4)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.02)	0.01 (0.01,0.02)	0.04 (1 / 23) 0.00 (0/ 12)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.00 (0 / 21) 0.08 (1/ 13)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.02 (0.01,0.02)	0.01 (0.01,0.02)	0.05 (1 / 21) 0.00 (0/ 13)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.03)	0.00 (0 / 16) 0.00 (0/ 12)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir			ed Probability First Event non-ICS
<=64/I & II/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.02 (0.01,0.03)	0.00 (0 /	3)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.04 (0.02,0.06)	0.02 (0.01,0.04)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.00 (0 /	1)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.05)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.03)	0.00 (0 /	2)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.02 (0.01,0.04)		1.00 (1/ 1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.02,0.04)	0.00 (0 /	1) 0.00 (0/ 1)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.06)		

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				ed Probability First Event non-ICS
<=64/I & II/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.11 (1 /	9) 0.00 (0/ 9)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.07 (0.04,0.09)	0.04 (0.02,0.05)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.05,0.09)	0.04 (0.03,0.05)	0.00 (0 /	17) 0.00 (0/ 5)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.10 (0.07,0.13)	0.06 (0.04,0.08)	0.00 (0 /	5) 0.00 (0/ 3)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.03)	0.00 (0 /	3) 0.00 (0/ 3)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.02 (0.01,0.04)	0.00 (0 /	1) 0.00 (0/ 1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.02,0.04)	0.00 (0 /	10) 0.00 (0/ 4)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.05)	0.00 (0 /	1) 0.00 (0/ 3)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of Fi	Probability rst Event non-ICS
<=64/I & II/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.05 (0.04,0.07)	0.03 (0.02,0.04)	0.04 (2 / 5	3) 0.07 (3/ 46)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.06,0.09)	0.04 (0.03,0.05)	0.03 (1 / 3	0) 0.00 (0/ 13)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.05 (0.04,0.06)	0.03 (0.02,0.04)	0.06 (1 / 1	7) 0.00 (0/ 17)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.07 (0.05,0.09)	0.04 (0.03,0.05)	0.08 (1 / 1	2) 0.00 (0/ 6)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.02 (2 / 10	4) 0.03 (2/ 73)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.05)	0.00 (0 / 3	9) 0.08 (2/ 26)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.02 (2 / 9	6) 0.02 (1/ 50)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.04,0.07)	0.04 (0.03,0.05)	0.07 (2 / 2	8) 0.04 (1/ 27)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				ed Probability First Event non-ICS
<=64/I & II/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.05 (0.04,0.06)	0.03 (0.02,0.03)	0.05 (2 /	37) 0.00 (0/ 30)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.07 (0.05,0.08)	0.04 (0.03,0.05)	0.00 (0 /	15) 0.00 (0/ 12)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.04 (0.03,0.06)	0.02 (0.02,0.03)	0.09 (1 /	11) 0.00 (0/ 7)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.06 (0.05,0.08)	0.03 (0.02,0.04)	0.00 (0 /	3) 0.00 (0/ 6)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.02,0.03)	0.02 (0.01,0.02)	0.02 (1 /	49) 0.00 (0/ 19)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.02,0.03)	0.00 (0 /	12) 0.00 (0/ 20)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.02)	0.00 (0 /	37) 0.00 (0/ 24)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.02,0.03)	0.06 (1 /	16) 0.00 (0/ 11)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event	of 1	ed Probability First Event non-ICS
<=64/III & IV/ F/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)			0.00 (0 /	1)
		1.84 (1.55,2.19)				
		1.84 (1.55,2.19)	0.08 (0.05,0.12)	0.05 (0.03,0.06)		
		1.84 (1.55,2.19)	0.12 (0.07,0.16)	0.06 (0.04,0.09)	0.00 (0 /	1)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.01,0.05)		
	٠	1.32 (1.09,1.59)	0.06 (0.03,0.08)		0.00 (0 /	1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.06 (0.03,0.09)			
	>=25 kg/m^2/ Former/>=2		0.09 (0.05,0.12)		0.00 (0 /	1)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir			Probability st Event non-ICS
<=64/III & IV/ F/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.06 (0.03,0.08)	0.03 (0.02,0.05)	0.33 (1 / 3) 0.00 (0/ 1)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.04,0.11)	0.04 (0.02,0.06)	0.00 (0 / 2) 0.00 (0/ 2)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.09 (0.05,0.12)	0.05 (0.03,0.07)	0.25 (3 / 12) 0.00 (0/ 4)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.12 (0.08,0.16)	0.07 (0.04,0.09)	0.50 (1 / 2) 0.00 (0/ 4)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.01,0.04)	0.02 (0.01,0.03)		0.00 (0/ 1)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.01,0.04)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.02,0.05)	0.00 (0 / 3) 0.00 (0/ 2)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.03,0.08)	0.04 (0.02,0.06)		0.00 (0/ 1)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probabilityst Event non-ICS			
<=64/III & IV/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.05 (0.04,0.06)	0.10 (11/ 109) 0.04 (3/ 85	 5)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.13 (0.10,0.16)	0.07 (0.06,0.09)	0.10 (7 / 69) 0.06 (4/ 63	3)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.09 (0.07,0.11)	0.05 (0.04,0.06)	0.03 (1 / 32) 0.04 (2/ 52	2)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.12 (0.09,0.15)	0.07 (0.05,0.09)	0.03 (1 / 37) 0.04 (1/ 24	4)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.07 (0.05,0.08)	0.05 (0.04,0.07)	0.05 (4 / 84) 0.05 (3/ 55	5)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.10 (0.08,0.12)	0.07 (0.06,0.09)	0.09 (6 / 70) 0.00 (0/ 35	5)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.06 (0.05,0.08)	0.05 (0.04,0.06)	0.08 (6 / 72) 0.07 (3/ 44	4)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.09 (0.07,0.11)	0.07 (0.05,0.09)	0.09 (5 / 56) 0.00 (0/ 36	6)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				ed Probability First Event non-ICS
<=64/III & IV/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.06 (0.04,0.07)	0.03 (0.02,0.04)	0.10 (2 /	21) 0.00 (0/ 16)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.05,0.10)	0.04 (0.03,0.06)	0.05 (1 /	20) 0.17 (1/ 6)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.00 (0 /	19) 0.00 (0/ 14)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.07 (0.05,0.10)	0.04 (0.03,0.06)	0.06 (1 /	16) 0.08 (1/ 13)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.05 (1 /	21) 0.00 (0/ 12)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.02,0.04)	0.05 (1 /	22) 0.00 (0/ 11)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.02 (0.02,0.03)	0.02 (0.01,0.03)	0.07 (1 /	15) 0.00 (0/ 7)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.02,0.04)	0.00 (0 /	29) 0.00 (0/ 7)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		ed Probability First Event non-ICS
<=64/III & IV/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.05 (0.02,0.07)	0.03 (0.01,0.04)	0.13 (1 /	8) 0.00 (0/ 2)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.06 (0.03,0.09)	0.04 (0.02,0.05)	0.00 (0 /	2) 0.00 (0/ 5)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.05)	0.00 (0 /	3) 0.00 (0/ 5)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.10 (0.06,0.14)	0.06 (0.03,0.08)	0.33 (1 /	3) 0.11 (1/ 9)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)	0.33 (1 /	3)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.05 (0.02,0.07)	0.04 (0.02,0.05)	0.25 (1 /	4) 0.00 (0/ 1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.06)	0.00 (0 /	5) 0.00 (0/ 1)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.07 (0.04,0.10)	0.06 (0.03,0.08)	0.00 (0 /	1) 0.00 (0/ 1)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of 1	ed Probability First Event non-ICS	
<=64/III & IV/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.05)	0.07 (1 /	14) 0.00 (0/ 1	4)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.10 (0.06,0.13)	0.05 (0.03,0.08)	0.08 (1 /	12) 0.00 (0/	5)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.11 (0.08,0.13)	0.06 (0.04,0.08)	0.10 (2 /	21) 0.06 (2/ 3	4)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.15 (0.11,0.19)	0.08 (0.06,0.11)	0.14 (3 /	21) 0.31 (5/ 1	6)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)	0.00 (0 /	4) 0.00 (0/	1)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.05)	0.00 (0 /	2)	
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.03,0.05)	0.50 (3 /	6) 0.00 (0/	4)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.07 (0.05,0.10)	0.06 (0.04,0.08)	0.00 (0 /	4) 0.00 (0/	2)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			Observed Probabilityof First Event ICS non-ICS
<=64/III & IV/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.08 (0.07,0.10)	0.04 (0.03,0.05)	0.09 (14/ 153) 0.05 (5/ 110)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.11 (0.09,0.13)	0.06 (0.05,0.08)	0.09 (6 / 66) 0.03 (2/ 67)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.06 (4 / 72) 0.07 (3/ 44)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.11 (0.08,0.13)	0.06 (0.04,0.07)	0.23 (11/ 48) 0.04 (1/ 26)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.06 (0.05,0.07)	0.05 (0.04,0.06)	0.04 (5 / 131) 0.03 (3/ 106)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.08 (0.07,0.10)	0.06 (0.05,0.08)	0.04 (3 / 75) 0.05 (3/ 59)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.05)	0.06 (7 / 122) 0.03 (3/ 99)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.08 (0.06,0.09)	0.06 (0.05,0.07)	0.06 (5 / 86) 0.01 (1/ 74)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				ed Probability First Event non-ICS
<=64/III & IV/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.04 (0.03,0.05)	0.04 (2 /	55) 0.00 (0/ 39)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.10 (0.08,0.12)	0.06 (0.04,0.07)	0.11 (4 /	36) 0.08 (3/ 40)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.05,0.08)	0.04 (0.03,0.05)	0.07 (3 /	41) 0.00 (0/ 23)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.09 (0.07,0.11)	0.05 (0.04,0.06)	0.07 (2 /	30) 0.05 (1/ 20)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.03 (0.02,0.03)	0.06 (2 /	33) 0.06 (2/ 32)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.06)	0.04 (0.03,0.05)	0.00 (0 /	23) 0.05 (1/ 21)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.02,0.03)	0.02 (1 /	47) 0.00 (0/ 34)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.04 (0.03,0.06)	0.03 (0.02,0.04)	0.00 (0 /	29) 0.12 (3/ 25)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event non-ICS	of F ICS	d Probability irst Event non-ICS
>=65/I & II/ F/Asian/ High	<25 kg/m^2/ Current/<2		0.04	0.02 (0.01,0.03)	0.00 (0 /	1)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.02,0.07)			
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.04,0.09)	0.03 (0.02,0.05)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)			1.00 (1 /	1)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.01,0.04)	0.02 (0.01,0.03)		
		1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)			0.00 (0/ 1)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.08)			

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of First Event		Observed Probabilityof First Event ICS non-ICS			
>=65/I & II/ F/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.04 (0.02,0.06)	0.02 (0.01,0.03)	0.00 (0 /	3) 0.00 (0/ 2)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.02,0.07)	0.03 (0.01,0.04)	0.00 (0 /	1)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.04,0.09)	0.04 (0.02,0.05)	0.00 (0 /	2) 0.00 (0/ 3)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.06)	0.00 (0 /	1) 0.50 (1/ 2)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.02)				
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.03)				
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)				
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.01,0.04)	0.00 (0 /	1)		

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of First Event		Observed Probabilityof First Event ICS non-ICS			
>=65/I & II/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.07 (0.05,0.09)	0.04 (0.03,0.05)	0.00 (0 /	34) 0.00 (0/ 24)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.06,0.10)	0.04 (0.03,0.06)	0.24 (5 /	21) 0.00 (0/ 14)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.05,0.08)	0.04 (0.03,0.05)	0.04 (2 /	52) 0.04 (1/ 28)		
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.12 (3 /	26) 0.00 (0/ 11)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.05 (0.04,0.07)	0.04 (0.03,0.05)	0.03 (1 /	35) 0.00 (0/ 21)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.05 (0.03,0.06)	0.05 (1 /	19) 0.00 (0/ 15)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.04 (4 /	90) 0.05 (3/ 55)		
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.05)	0.05 (2 /	37) 0.00 (0/ 38)		

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			Observed Probabilityof First Event ICS non-ICS			
>=65/I & II/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.04 (0.03,0.06)	0.02 (0.01,0.03)	0.00 (0 /	7) 0.00 (0/ 4)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.02,0.04)	0.00 (0 /	5) 0.00 (0/ 2)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.04 (0.02,0.05)	0.02 (0.01,0.03)	0.00 (0 /	10) 0.00 (0/ 2)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.04 (0.03,0.06)	0.02 (0.01,0.03)	0.00 (0 /	4)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.02)	0.00 (0 /	12) 0.00 (0/ 6)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.02)	0.00 (0 /	9) 0.00 (0/ 6)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.01 (0.01,0.02)	0.00 (0 /	17) 0.00 (0/ 13)		
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.02 (0.01,0.03)	0.02 (0.01,0.02)	0.00 (0 /	11) 0.00 (0/ 3)		

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			Observed Probabilityof First Event ICS non-ICS			
>=65/I & II/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.04 (0.02,0.07)	0.02 (0.01,0.04)	0.00 (0 /	7) 0.00 (0/ 4)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.05 (0.03,0.07)	0.03 (0.01,0.04)	0.00 (0 /	3)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.05)	0.11 (1 /	9) 0.11 (1/ 9)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.08 (0.05,0.11)	0.04 (0.03,0.06)	0.00 (0 /	3) 0.00 (0/ 3)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)	0.00 (0 /	3) 0.00 (0/ 3)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.06)	0.03 (0.01,0.04)	0.00 (0 /	1) 0.00 (0/ 1)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.06)	0.00 (0 /	1) 0.00 (0/ 4)		
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.03,0.08)	0.04 (0.03,0.06)				

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				Probability st Event non-ICS
>=65/I & II/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.05)	0.14 (2 / 14)	0.00 (0/ 6)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.05,0.11)	0.04 (0.03,0.06)	0.00 (0 / 3)	0.00 (0/ 2)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.11 (0.08,0.13)	0.06 (0.04,0.08)	0.18 (3 / 17)	0.08 (1/ 13)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.12 (0.09,0.15)	0.07 (0.05,0.09)	0.14 (1 / 7)	0.10 (1/ 10)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)	0.00 (0 / 3)	0.00 (0/ 1)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.02,0.05)	0.03 (0.02,0.04)		0.00 (0/ 2)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.03,0.05)	0.17 (2 / 12)	0.00 (0/ 6)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.04,0.08)	0.04 (0.03,0.06)	0.00 (0 / 5)	0.00 (0/ 5)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of Fir:	Probability st Event non-ICS
>=65/I & II/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.04 (0.03,0.05)	0.14 (6 / 44)	0.00 (0/ 21)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.09 (0.07,0.11)	0.05 (0.04,0.06)	0.00 (0 / 19)	0.08 (1/ 13)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.03 (2 / 75)	0.00 (0/ 60)
	$<25 \text{ kg/m}^2/$ Former/>=2	1.84 (1.55,2.19)	0.08 (0.07,0.10)	0.05 (0.03,0.06)	0.03 (1 / 30)	0.11 (2/ 18)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.06 (0.05,0.07)	0.04 (0.03,0.05)	0.07 (4 / 60)	0.02 (1/ 54)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.07 (0.05,0.08)	0.05 (0.04,0.06)	0.00 (0 / 15)	0.05 (1/ 22)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.05 (10/ 190)	0.05 (8/ 164)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.06 (0.05,0.08)	0.05 (0.04,0.06)	0.07 (6 / 91)	0.05 (2/ 42)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of First Event		Observed Probability of First Event ICS non-ICS			
>=65/I & II/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.07 (0.05,0.09)	0.04 (0.03,0.05)	0.00 (0 /	17) 0.05 (1/ 20)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.06,0.10)	0.04 (0.03,0.06)	0.00 (0 /	10) 0.07 (1/ 14)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.05,0.08)	0.04 (0.03,0.05)	0.00 (0 /	30) 0.00 (0/ 23)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.07 (0.06,0.09)	0.04 (0.03,0.05)	0.18 (2 /	11) 0.00 (0/ 6)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.03 (0.02,0.03)	0.00 (0 /	13) 0.00 (0/ 12)		
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.04)	0.00 (0 /	10) 0.00 (0/ 4)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.02,0.03)	0.02 (1 /	58) 0.06 (2/ 36)		
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.04 (0.03,0.05)	0.03 (0.02,0.03)	0.00 (0 /	21) 0.00 (0/ 21)		

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of 1	ed Probability First Event non-ICS
>=65/III & IV/ F/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)				
		1.84 (1.55,2.19)			0.00 (0 /	1)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)		0.05 (0.03,0.07)	0.00 (0 /	1) 0.00 (0/ 1)
	_	1.84 (1.55,2.19)	0.10 (0.06,0.14)	0.06 (0.03,0.08)		0.00 (0/ 1)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.04 (0.02,0.07)	0.03 (0.02,0.05)		
		1.32 (1.09,1.59)	0.05 (0.02,0.07)	0.04 (0.02,0.06)		
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.07 (0.04,0.10)	0.05 (0.03,0.08)		
	>=25 kg/m^2/ Former/>=2		0.08 (0.04,0.11)			

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of First Event		Observed Probabilityof First Event ICS non-ICS			
>=65/III & IV/ F/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.03 (0.02,0.05)	0.00 (0 / 2)		
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.07 (0.04,0.10)	0.04 (0.02,0.06)	0.00 (0 / 2) 0.00 (0/ 1)		
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.10 (0.06,0.13)	0.05 (0.03,0.07)	0.00 (0 / 7) 0.00 (0/ 8)		
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.11 (0.07,0.15)	0.06 (0.04,0.08)	0.50 (2 / 4) 0.00 (0/ 2)		
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.01,0.05)	0.02 (0.01,0.03)				
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.01,0.04)				
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.05)	0.00 (0 / 3)		
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.03,0.08)	0.04 (0.02,0.06)		0.00 (0/ 1)		

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				Probability st Event non-ICS
>=65/III & IV/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.10 (0.08,0.13)	0.06 (0.04,0.07)	0.11 (6 / 54)	0.05 (2/ 37)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.12 (0.09,0.14)	0.07 (0.05,0.08)	0.10 (5 / 52)	0.04 (1/ 28)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.10 (0.08,0.12)	0.05 (0.04,0.07)	0.07 (6 / 87)	0.02 (1/ 66)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.11 (0.09,0.13)	0.06 (0.05,0.08)	0.09 (5 / 58)	0.05 (2/ 40)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.08 (0.06,0.10)	0.06 (0.04,0.07)	0.03 (1 / 40)	0.11 (2/ 19)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.09 (0.07,0.11)	0.07 (0.05,0.08)	0.19 (5 / 26)	0.00 (0/ 12)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.07 (0.06,0.09)	0.06 (0.04,0.07)	0.05 (6 / 112)	0.05 (3/ 64)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.08 (0.06,0.10)	0.06 (0.05,0.08)	0.06 (4 / 62)	0.08 (5/ 62)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS			nt	
>=65/III & IV/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.06 (0.04,0.08)	0.03 (0.02,0.05)	0.20 (1 /	5) 0.00	(0/	7)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.07 (0.05,0.10)	0.04 (0.02,0.05)	0.13 (1 /	8) 0.00	(0/	6)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.06 (0.04,0.08)	0.03 (0.02,0.04)	0.06 (1 /	16) 0.00	(0/	8)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.07 (0.04,0.09)	0.04 (0.02,0.05)	0.20 (2 /	10) 0.00	(0/	8)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.00 (0 /	10) 0.00	(0/	7)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.05)	0.03 (0.02,0.04)	0.00 (0 /	4) 0.00	(0/	1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.00 (0 /	14) 0.00	(0/	10)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.03 (0.02,0.04)	0.02 (0.01,0.03)	0.00 (0 /	8) 0.00	(0/	7)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				red Probability First Event non-ICS
>=65/III & IV/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.04 (0.02,0.05)	0.00 (0 /	8) 0.00 (0/ 23)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.08 (0.04,0.11)	0.04 (0.02,0.06)	0.20 (1 /	5) 0.09 (1/ 11)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.10 (0.06,0.14)	0.06 (0.03,0.08)	0.13 (3 /	23) 0.00 (0/ 12)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.12 (0.07,0.16)	0.06 (0.04,0.09)	0.05 (1 /	20) 0.05 (1/ 21)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.06)	0.33 (1 /	3)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.06 (0.03,0.08)	0.04 (0.02,0.06)	0.00 (0 /	2) 0.00 (0/ 1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.08 (0.05,0.10)	0.06 (0.03,0.08)	0.20 (1 /	5) 0.00 (0/ 4)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.09 (0.05,0.12)	0.07 (0.04,0.09)	0.00 (0 /	3)

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Table 2.2
Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		First Ev		
>=65/III & IV/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.10 (0.06,0.14)		0.08 (1 /	12) 0.1	0 (1/	10)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.11 (0.07,0.16)	0.06 (0.04,0.09)	0.13 (1 /	8) 0.0	0 (0/	9)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.15 (0.12,0.19)	0.09 (0.07,0.11)	0.21 (12/	58) 0.0	9 (5/	54)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.17 (0.13,0.21)	0.10 (0.07,0.12)	0.11 (4 /	35) 0.1	2 (3/	25)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.05 (0.03,0.07)	0.04 (0.02,0.05)	0.00 (0 /	3) 0.3	3 (1/	3)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.06 (0.03,0.08)	0.04 (0.02,0.06)	0.00 (0 /	2) 0.0	0 (0/	1)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.08 (0.05,0.10)	0.06 (0.04,0.08)	0.00 (0 /	11) 0.0	0 (0/	6)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.09 (0.06,0.11)	0.07 (0.04,0.09)	0.00 (0 /	4) 0.0	0 (0/	8)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probabilityst Event non-ICS		First 3		
>=65/III & IV/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)	0.12 (0.10,0.14)	0.06 (0.05,0.08)	0.07 (5 /	76) 0	.05 (4/	81)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.13 (0.11,0.16)	0.07 (0.06,0.09)	0.14 (8 /	56) 0	.05 (2/	44)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.11 (0.09,0.13)	0.06 (0.05,0.07)	0.08 (13/	168) 0	.03 (5/	154)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.12 (0.10,0.14)	0.07 (0.05,0.08)	0.11 (12/	105) 0	.10 (9/	91)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.09 (0.07,0.10)	0.07 (0.05,0.08)	0.04 (4 /	97) 0	.01 (1/	70)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.10 (0.08,0.12)	0.08 (0.06,0.09)	0.10 (5 /	50) 0	.06 (2/	32)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.08 (0.07,0.09)	0.06 (0.05,0.07)	0.07 (21/	297) 0	.04 (9/	237)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.09 (0.07,0.11)	0.07 (0.06,0.08)	0.06 (10/	164) 0	.07 (9/	133)

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Table 2.2

Probability of Pneumonia During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				ed Probability First Event non-ICS
>=65/III & IV/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	1.84 (1.55,2.19)		0.06 (0.04,0.07)	0.13 (6 /	48) 0.05 (2/ 37)
	<25 kg/m^2/ Current/>=2	1.84 (1.55,2.19)	0.12 (0.09,0.14)	0.06 (0.05,0.08)	0.07 (2 /	28) 0.00 (0/ 16)
	<25 kg/m^2/ Former/<2	1.84 (1.55,2.19)	0.10 (0.07,0.11)	0.05 (0.04,0.07)	0.14 (9 /	63) 0.04 (2/ 48)
	<25 kg/m^2/ Former/>=2	1.84 (1.55,2.19)	0.11 (0.08,0.13)	0.06 (0.05,0.07)	0.12 (5 /	42) 0.02 (1/ 45)
	>=25 kg/m^2/ Current/<2	1.32 (1.09,1.59)	0.05 (0.04,0.06)	0.04 (0.03,0.05)	0.00 (0 /	25) 0.00 (0/ 21)
	>=25 kg/m^2/ Current/>=2	1.32 (1.09,1.59)	0.06 (0.04,0.07)	0.04 (0.03,0.06)	0.06 (1 /	16) 0.00 (0/ 11)
	>=25 kg/m^2/ Former/<2	1.32 (1.09,1.59)	0.05 (0.03,0.06)	0.03 (0.03,0.04)	0.08 (6 /	80) 0.06 (3/ 48)
	>=25 kg/m^2/ Former/>=2	1.32 (1.09,1.59)	0.05 (0.04,0.07)	0.04 (0.03,0.05)	0.07 (3 /	45) 0.00 (0/ 29)

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Table 2.3 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)

Statistic	Level	
Type 3 Wald p-values	Race	0.789
	Exacerbation History by Age	0.083
	Smoking Status	0.071
	Age	0.063
	Sex by Age	0.053
	Sex	0.049
	Country Income	0.039
	Sex by Country Income	0.028
	Smoking Status by Race	0.012
	Treatment by BMI	0.011
	Country Income by Race	0.009
	BMI by Country Income	0.003
	Exacerbation History	<0.001
	BMI	<0.001
	GOLD	<0.001
	Treatment	<0.001

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Table 2.3 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ration	o Age >=65 vs <=64		
300 01	At Exacerbation History:<2 Sex:F	1.12 (0.86,	1.45)
	At Exacerbation History:<2 Sex:M	1.47 (1.23,	
	At Exacerbation History:>=2 Sex:F	0.90 (0.68,	•
	At Exacerbation History:>=2 Sex:M	1.18 (0.95,	
	BMI >=25 kg/m ² vs <25 kg/m ²	,	,
	At Treatment:ICS Country Income:High income	0.73 (0.62,	0.87)
	At Treatment:ICS Country Income:Non-high income	0.47 (0.36,	
	At Treatment:non-ICS Country Income:High income	1.02 (0.82,	
	At Treatment:non-ICS Country Income:Non-high income	0.65 (0.48,	
	Country Income Non-high income vs High income	,	•
	At BMI:<25 kg/m^2 Sex:F Race:Asian	1.05 (0.63,	1.75)
	At BMI:<25 kg/m^2 Sex:F Race:Non-Asian	0.59 (0.42,	
	At BMI:<25 kg/m^2 Sex:M Race:Asian	1.56 (1.05,	
	At BMI:<25 kg/m^2 Sex:M Race:Non-Asian	0.87 (0.71,	
	At BMI:>=25 kg/m^2 Sex:F Race:Asian	0.67 (0.38,	
	At BMI:>=25 kg/m^2 Sex:F Race:Non-Asian	0.38 (0.26,	
	At BMI:>=25 kg/m^2 Sex:M Race:Asian	0.99 (0.62,	
	At BMI:>=25 kg/m^2 Sex:M Race:Non-Asian	0.56 (0.43,	
	Exacerbation History >=2 vs <2	,	•
	At Age:<=64	1.42 (1.18,	1.72)
	At Age:>=65	1.14 (0.97,	
	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted	,	•
		1.49 (1.30,	1.71)
	Race Asian vs Non-Asian	,	•
	At Smoking Status:Current smoker Country Income:High income	0.56 (0.35,	0.88)
	At Smoking Status: Current smoker Country Income: Non-high income	0.99 (0.67,	
	At Smoking Status:Former smoker Country Income: High income	0.94 (0.64,	
	At Smoking Status:Former smoker Country Income:Non-high income	1.68 (1.30,	
	Sex M vs F	,,	•
	At Age: <= 64 Country Income: High income	0.86 (0.69,	1.06)
	At Age: <= 64 Country Income: Non-high income	1.27 (0.91,	
		· ,	_

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Table 2.3 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Age:>=65 Country Income:High income	1.12 (0.92,	1.38)
	At Age:>=65 Country Income:Non-high income Smoking Status Current smoker vs Former smoker	1.67 (1.17,	2.37)
	At Race:Asian	0.63 (0.43,	0.94)
	At Race:Non-Asian	1.08 (0.94,	1.23)
	Treatment ICS vs non-ICS		
	At BMI:<25 kg/m^2	1.84 (1.55,	2.19)
	At BMI:>=25 kg/m^2	1.32 (1.09,	1.59)

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Table 2.5

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model

(Based on Nine Covariates)
Expanded BMI Category

Statistic	Level	
Type 3 Wald p-values	Race	0.222
	BMI by Country Income	0.209
	Exacerbation History by Age	0.087
	Age	0.066
	Country Income	0.047
	Smoking Status	0.044
	Sex by Age	0.033
	Sex by Country Income	0.025
	Treatment by BMI	0.023
	Sex	0.019
	Smoking Status by Race	0.016
	Country Income by Race	0.009
	Exacerbation History	<0.001
	GOLD	<0.001
	BMI	<0.001
	Treatment	<0.001

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Table 2.5

Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates)
Expanded BMI Category

Statistic	Level		
Hazard Rati	o Age >=65 vs <=64		
	At Exacerbation History:<2 Sex:F	1.10 (0.85,	1.43)
	At Exacerbation History:<2 Sex:M	1.48 (1.24,	1.78)
	At Exacerbation History:>=2 Sex:F	0.88 (0.67,	
	At Exacerbation History:>=2 Sex:M	1.19 (0.96,	1.48)
	BMI >=20 - <22 kg/m^2 vs <20 kg/m^2		
	At Treatment:ICS Country Income:High income	0.75 (0.54,	
	At Treatment:ICS Country Income:Non-high income	0.72 (0.49,	1.06)
	At Treatment:non-ICS Country Income:High income	0.70 (0.46,	1.06)
	At Treatment:non-ICS Country Income:Non-high income	0.67 (0.43,	1.06)
	BMI >=22 - <23 kg/m^2 vs <20 kg/m^2		
	At Treatment:ICS Country Income:High income	0.74 (0.52,	1.05)
	At Treatment:ICS Country Income:Non-high income	0.92 (0.60,	
	At Treatment:non-ICS Country Income:High income	0.51 (0.30,	0.86)
	At Treatment:non-ICS Country Income:Non-high income	0.63 (0.36,	1.10)
	BMI >=23 - <24 kg/m^2 vs <20 kg/m^2		
	At Treatment:ICS Country Income:High income	0.80 (0.57,	
	At Treatment:ICS Country Income:Non-high income	0.60 (0.36,	
	At Treatment:non-ICS Country Income:High income	0.56 (0.34,	
	At Treatment:non-ICS Country Income:Non-high income	0.42 (0.23,	0.76)
	BMI >=24 - <25 kg/m^2 vs <20 kg/m^2		
	At Treatment:ICS Country Income:High income	0.59 (0.40,	
	At Treatment:ICS Country Income:Non-high income	0.58 (0.37,	0.93)
	At Treatment:non-ICS Country Income:High income	0.56 (0.34,	0.91)
	At Treatment:non-ICS Country Income:Non-high income	0.55 (0.32,	0.94)
	BMI >=25 - <26 kg/m^2 vs <20 kg/m^2		
	At Treatment:ICS Country Income:High income	0.79 (0.55,	1.11)
	At Treatment:ICS Country Income:Non-high income	0.52 (0.31,	0.88)
	At Treatment:non-ICS Country Income:High income	0.68 (0.42,	
	At Treatment:non-ICS Country Income:Non-high income	0.45 (0.25,	0.83)
	BMI $>=26 - <28 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		

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Table 2.5 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates) Expanded BMI Category

Statistic	Level		
Hazard Ratio	At Treatment:ICS Country Income:High income	0.64 (0.47,	0.88)
300 01	At Treatment:ICS Country Income:Non-high income	0.40 (0.25,	0.64)
		0.61 (0.40,	
	At Treatment:non-ICS Country Income:Non-high income	0.38 (0.22,	
	BMI >= $28 - 30 \text{ kg/m}^2 \text{ vs } < 20 \text{ kg/m}^2$		
	At Treatment:ICS Country Income:High income	0.44 (0.30,	0.65)
		0.25 (0.13,	
	At Treatment:non-ICS Country Income:High income	0.76 (0.49,	1.17)
	At Treatment:non-ICS Country Income:Non-high income	0.42 (0.22,	0.81)
	BMI $>=30 - <33 \text{ kg/m}^2 \text{ vs } <20 \text{ kg/m}^2$		
		0.45 (0.31,	
	<u> </u>	0.37 (0.21,	,
	At Treatment:non-ICS Country Income:High income	0.54 (0.33,	,
	At Treatment:non-ICS Country Income:Non-high income	0.44 (0.23,	0.82)
	BMI $\geq 33 \text{ kg/m}^2 \text{ vs } < 20 \text{ kg/m}^2$		
		0.53 (0.37,	
	1	0.28 (0.13,	,
	<u> </u>	0.97 (0.63,	,
	At Treatment:non-ICS Country Income:Non-high income	0.51 (0.24,	1.08)
	Country Income Non-high income vs High income	1 00 / 0 60	1 01)
	At BMI:<20 kg/m^2 Sex:F Race:Asian	1.07 (0.63,	
	At BMI:<20 kg/m^2 Sex:F Race:Non-Asian	0.59 (0.39,	
	At BMI:<20 kg/m^2 Sex:M Race:Asian	1.60 (1.04,	
	At BMI:<20 kg/m^2 Sex:M Race:Non-Asian	0.89 (0.64,	
	At BMI:>=20 - <22 kg/m^2 Sex:F Race:Asian	1.03 (0.56,	,
	At BMI:>=20 - <22 kg/m^2 Sex:F Race:Non-Asian	0.57 (0.36,	,
	At BMI:>=20 - <22 kg/m^2 Sex:M Race:Asian	1.54 (0.92,	
	At BMI:>=20 - <22 kg/m^2 Sex:M Race:Non-Asian	0.86 (0.59,	
	At BMI:>=22 - <23 kg/m^2 Sex:F Race:Asian	1.33 (0.69,	
	At BMI:>=22 - <23 kg/m^2 Sex:F Race:Non-Asian	0.74 (0.44,	
	At BMI:>=22 - <23 kg/m^2 Sex:M Race:Asian	1.99 (1.13,	3.49)

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Table 2.5 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates) Expanded BMI Category

Statistic Level	
Hazard Ratio At BMI:>=22 - <23 kg/m^2 Sex:M Race:Non-Asian 95% CI	1.11 (0.71, 1.71)
At BMI:>=23 - <24 kg/m^2 Sex:F Race:Asian	0.79 (0.39, 1.59)
At BMI:>=23 - <24 kg/m^2 Sex:F Race:Non-Asian	0.44 (0.25, 0.77)
At BMI:>=23 - $\langle 24 \text{ kg/m}^2 \rangle$ Sex:M Race:Asian	1.19 (0.64, 2.19)
At BMI:>=23 - <24 kg/m^2 Sex:M Race:Non-Asian	0.66 (0.40, 1.08)
At BMI:>=24 - <25 kg/m^2 Sex:F Race:Asian	1.06 (0.53, 2.12)
At BMI:>=24 - <25 kg/m^2 Sex:F Race:Non-Asian	0.59 (0.34, 1.01)
At BMI:>=24 - $<25 \text{ kg/m}^2 \text{ Sex:M Race:Asian}$	1.59 (0.87, 2.88)
At BMI:>=24 - <25 kg/m^2 Sex:M Race:Non-Asian	0.88 (0.56, 1.39)
At BMI:>=25 - <26 kg/m^2 Sex:F Race:Asian	0.71 (0.35, 1.47)
At BMI:>=25 - <26 kg/m^2 Sex:F Race:Non-Asian	0.40 (0.22, 0.71)
At BMI:>=25 - <26 kg/m^2 Sex:M Race:Asian	1.07 (0.56, 2.02)
At BMI:>=25 - <26 kg/m^2 Sex:M Race:Non-Asian	0.59 (0.36, 0.99)
At BMI:>=26 - $<28 \text{ kg/m}^2 \text{ Sex:F Race:Asian}$	0.67 (0.34, 1.32)
At BMI:>=26 - $\langle 28 \text{ kg/m}^2 \text{ Sex:F Race:Non-Asian}$	0.37 (0.22, 0.62)
At BMI:>=26 - $<28 \text{ kg/m}^2$ Sex:M Race:Asian	1.00 (0.55, 1.81)
At BMI:>=26 - <28 kg/m^2 Sex:M Race:Non-Asian	0.55 (0.36, 0.86)
At BMI:>=28 - <30 kg/m^2 Sex:F Race:Asian	0.59 (0.27, 1.31)
At BMI:>=28 - <30 kg/m^2 Sex:F Race:Non-Asian	0.33 (0.17, 0.63)
At BMI:>=28 - $<30 \text{ kg/m}^2 \text{ Sex:M Race:Asian}$	0.89 (0.44, 1.81)
At BMI:>=28 - <30 kg/m^2 Sex:M Race:Non-Asian	0.49 (0.28, 0.88)
At BMI:>=30 - <33 kg/m^2 Sex:F Race:Asian	0.87 (0.40, 1.86)
At BMI:>=30 - <33 kg/m^2 Sex:F Race:Non-Asian	0.48 (0.26, 0.89)
At BMI:>=30 - <33 kg/m^2 Sex:M Race:Asian	1.30 (0.65, 2.59)
At BMI:>=30 - <33 kg/m^2 Sex:M Race:Non-Asian	0.72 (0.42, 1.25)
At BMI:>=33 kg/m^2 Sex:F Race:Asian	0.56 (0.24, 1.33)
At BMI:>=33 kg/m^2 Sex:F Race:Non-Asian	0.31 (0.15, 0.65)
At BMI:>=33 kg/m^2 Sex:M Race:Asian	0.84 (0.37, 1.89)
At BMI:>=33 kg/m^2 Sex:M Race:Non-Asian Exacerbation History >=2 vs <2	0.47 (0.23, 0.94)
At Age:<=64	1.41 (1.16, 1.70)

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Table 2.5 Type 3 p-values and Hazard Ratios from Selected Pneumonia Cox Model (Based on Nine Covariates) Expanded BMI Category

Statistic	Level		
Hazard Ratio	At Age:>=65	1.13 (0.96,	1.33)
300 01	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted	1.45 (1.26,	1.67)
	Race Asian vs Non-Asian At Smoking Status:Current smoker Country Income:High income At Smoking Status:Current smoker Country Income:Non-high income At Smoking Status:Former smoker Country Income:High income At Smoking Status:Former smoker Country Income:Non-high income	0.83 (0.56,	1.34) 1.22)
	<pre>Sex M vs F At Age:<=64 Country Income:High income At Age:<=64 Country Income:Non-high income At Age:>=65 Country Income:High income</pre>	0.87 (0.70, 1.30 (0.93, 1.17 (0.96,	1.83)
	At Age:>=65 Country Income:Non-high income Smoking Status Current smoker vs Former smoker At Race:Asian	1.76 (1.24, 0.63 (0.42,	
	At Race:Non-Asian Treatment ICS vs non-ICS At BMI:<20 kg/m^2	1.04 (0.91, 1.62 (1.22,	
	At BMI:>=20 - <22 kg/m^2 At BMI:>=22 - <23 kg/m^2 At BMI:>=23 - <24 kg/m^2 At BMI:>=24 - <25 kg/m^2 At BMI:>=25 - <26 kg/m^2 At BMI:>=26 - <28 kg/m^2	1.74 (1.22, 2.35 (1.46, 2.32 (1.45, 1.71 (1.09, 1.88 (1.19, 1.70 (1.17,	2.49) 3.80) 3.71) 2.68) 2.97) 2.46)
	At BMI:>=28 - <30 kg/m^2 At BMI:>=30 - <33 kg/m^2 At BMI:>=33 kg/m^2	0.94 (0.61, 1.36 (0.86, 0.89 (0.59,	2.17)

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 1	AIC	112019.7	
Iteration 1	Type 3 Wald p-values	SUSMHS*TREAT GOLDGR*INCGRP1 BMIGRP*TREAT AGEGRP1*BMIGRP GOLDGR*SEX INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR BMIGRP*SUSMHS AGEGRP1*TREAT EBHIS2*GOLDGR BMIGRP*SUSMHS AGEGRP1 RACEGRP2*SUSMHS SUSMHS AGEGRP1*GOLDGR BMIGRP*SEX INCGRP1*SEX AGEGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT TREAT SEX	0.967 0.892 0.823 0.789 0.773 0.718 0.709 0.685 0.662 0.576 0.572 0.558 0.505 0.424 0.419 0.385 0.351 0.343 0.326 0.279 0.190 0.127 0.121 0.109 0.103 0.098* 0.097* 0.067*

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 1	Type 3 Wald p-values	BMIGRP*EBHIS2 EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 GOLDGR*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.067* 0.064* 0.058* 0.056* 0.055* 0.043* 0.037* 0.013* 0.009* 0.004* 0.002* <0.001* <0.001* <0.001* <0.001*	
Iteration 1	Removed Effect	SUSMHS*TREAT	0.967	
Iteration 1	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 2	AIC	112017.7	
Iteration 2	Type 3 Wald p-values	GOLDGR*INCGRP1 BMIGRP*TREAT AGEGRP1*BMIGRP GOLDGR*SEX INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR BMIGRP*SUSMHS AGEGRP1 RACEGRP2*SUSMHS AGEGRP1 RACEGRP2*SUSMHS SUSMHS AGEGRP1*GOLDGR BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*TREAT EBHIS2*TREAT EBHIS2*TREAT TREAT SEX BMIGRP*EBHIS2	0.892 0.816 0.789 0.773 0.717 0.708 0.685 0.662 0.575 0.571 0.559 0.496 0.423 0.419 0.385 0.352 0.341 0.325 0.279 0.190 0.127 0.121 0.109 0.103 0.097* 0.087* 0.067* 0.067*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 2	Type 3 Wald p-values	EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 GOLDGR*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.064* 0.058* 0.056* 0.055* 0.043* 0.036* 0.013* 0.009* 0.004* 0.002* <0.001* <0.001* <0.001*	
Iteration 2	Removed Effect	GOLDGR*INCGRP1	0.892	
Iteration 2	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 3	AIC	112015.7	
Iteration 3	Type 3 Wald p-values	BMIGRP*TREAT AGEGRP1*BMIGRP GOLDGR*SEX INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR BMIGRP*SUSMHS AGEGRP1 RACEGRP2*SUSMHS SUSMHS AGEGRP1*GOLDGR BMIGRP*SEX INCGRP1*SEX INCGRP1*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX SEST INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT TREAT SEX BMIGRP*EBHIS2 EBHIS2*SEX	0.814 0.791 0.783 0.717 0.709 0.690 0.659 0.577 0.573 0.561 0.496 0.422 0.420 0.387 0.353 0.341 0.329 0.281 0.193 0.127 0.123 0.110 0.102 0.098* 0.086* 0.067* 0.067* 0.066*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 3	Type 3 Wald p-values	BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 GOLDGR*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP	0.058* 0.055* 0.052* 0.043* 0.036* 0.013* 0.009* 0.004* 0.002*	
		RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	<0.001* <0.001* <0.001* <0.001* <0.001*	
Iteration 3	Removed Effect	BMIGRP*TREAT	0.814	
Iteration 3	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 4	AIC	112013.8	
Iteration 4	Type 3 Wald p-values	AGEGRP1*BMIGRP GOLDGR*SEX INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR BMIGRP*SUSMHS AGEGRP1 RACEGRP2*SUSMHS SUSMHS AGEGRP1*GOLDGR BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 EBHIS2*SEX TREAT	0.790 0.785 0.727 0.711 0.690 0.664 0.579 0.575 0.536 0.496 0.424 0.421 0.389 0.353 0.341 0.331 0.284 0.191 0.126 0.124 0.109 0.102 0.094* 0.086* 0.067* 0.063* 0.062*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 4	Type 3 Wald p-values	EBHIS2*RACEGRP2 GOLDGR*RACEGRP2 INCGRP1*SUSMHS	0.055* 0.052* 0.043*	
		RACEGRP2*TREAT SEX*SUSMHS	0.036* 0.013*	
		AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP	0.009* 0.004* 0.002*	
		RACEGRP2 EBHIS2*INCGRP1 INCGRP1	<0.001* <0.001* <0.001*	
		GOLDGR EBHIS2	<0.001* <0.001* <0.001*	
Iteration 4	Removed Effect	AGEGRP1*BMIGRP	0.790	
Iteration 4	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 5	AIC	112011.9	
Iteration 5	Type 3 Wald p-values	GOLDGR*SEX INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS GOLDGR*TREAT AGEGRP1*RACEGRP2 AGEGRP1*TREAT EBHIS2*GOLDGR AGEGRP1 BMIGRP*SUSMHS SUSMHS AGEGRP1*GOLDGR RACEGRP2*SUSMHS BMIGRP*SEX INCGRP1*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT BMIGRP*EBHIS2 SEX EBHIS2*SEX TREAT BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 EBHIS2*RACEGRP2	0.790 0.727 0.712 0.699 0.652 0.586 0.532 0.531 0.494 0.429 0.363 0.355 0.346 0.346 0.344 0.294 0.191 0.132 0.124 0.112 0.103 0.095* 0.086* 0.066* 0.066* 0.066* 0.057* 0.056*

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 5	Type 3 Wald p-values	GOLDGR*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.052* 0.044* 0.036* 0.013* 0.009* 0.004* 0.002* <0.001* <0.001* <0.001*	
Iteration 5	Removed Effect	GOLDGR*SEX	0.790	
Iteration 5	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 6	AIC	112009.9	
Iteration 6	Type 3 Wald p-values	INCGRP1*TREAT EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR AGEGRP1 AGEGRP1*GOLDGR BMIGRP*SUSMHS SUSMHS RACEGRP2*SUSMHS BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 TREAT EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 GOLDGR*RACEGRP2	0.725 0.713 0.710 0.642 0.572 0.532 0.526 0.494 0.419 0.363 0.355 0.355 0.354 0.352 0.342 0.306 0.195 0.1133 0.124 0.113 0.100* 0.095* 0.086* 0.069* 0.060* 0.060* 0.057* 0.056* 0.045*

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Population: Intent-to-Treat

Table 2.10
Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 6	Type 3 Wald p-values	INCGRP1*SUSMHS RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.044* 0.036* 0.012* 0.009* 0.003* 0.002* <0.001* <0.001* <0.001* <0.001*	
Iteration 6	Removed Effect	INCGRP1*TREAT	0.725	
Iteration 6	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 7	AIC	112008.1	
Iteration 7	Type 3 Wald p-values	EBHIS2*SUSMHS BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR AGEGRP1 AGEGRP1*GOLDGR BMIGRP*SUSMHS SUSMHS RACEGRP2*SUSMHS BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 EBHIS2*SEX TREAT BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 GOLDGR*RACEGRP2 INCGRP1*SUSMHS	0.716 0.706 0.644 0.574 0.534 0.520 0.480 0.423 0.365 0.356 0.354 0.352 0.340 0.303 0.200 0.133 0.124 0.114 0.097* 0.086* 0.070* 0.068* 0.060* 0.056* 0.045* 0.043*

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 7	Type 3 Wald p-values	RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.022* 0.012* 0.009* 0.004* 0.002* <0.001* <0.001* <0.001* <0.001* <0.001*	
Iteration 7	Removed Effect	EBHIS2*SUSMHS	0.716	
Iteration 7	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 8	AIC	112006.2	
Iteration 8	Type 3 Wald p-values	BMIGRP*GOLDGR AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR SUSMHS AGEGRP1 BMIGRP*SUSMHS AGEGRP1*BMIGRP*SUSMHS BMIGRP*SEX INCGRP1*SEX INCGRP1*SEX INCGRP1*SEX INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT BMIGRP*EBHIS2 SEX TREAT EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*SEX BMIGRP*RACEGRP2 INCGRP1*SUSMHS BMIGRP*RACEGRP2 INCGRP1*SUSMHS BMIGRP*RACEGRP2 INCGRP1*SUSMHS BMIGRP*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*TREAT	0.706 0.651 0.556 0.536 0.516 0.477 0.438 0.367 0.362 0.353 0.351 0.343 0.303 0.202 0.135 0.124 0.114 0.096* 0.087* 0.087* 0.085* 0.071* 0.060* 0.058* 0.052* 0.046* 0.043* 0.022*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Iteration 8	Description				
	Type 3 Wald p-values	SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.012* 0.009* 0.004* 0.002* <0.001* <0.001* <0.001* <0.001* <0.001*		
Iteration 8	Removed Effect	BMIGRP*GOLDGR	0.706		
Iteration 8	Replaced Effect(s)	NONE			

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 9	AIC	112004.3	
Iteration 9	Type 3 Wald p-values	AGEGRP1*SEX GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR AGEGRP1 SUSMHS AGEGRP1*GOLDGR RACEGRP2*SUSMHS BMIGRP*SUSMHS BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 TREAT EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX*SUSMHS	0.648 0.592 0.535 0.518 0.472 0.437 0.364 0.361 0.360 0.341 0.337 0.313 0.204 0.135 0.123 0.116 0.095* 0.086* 0.084* 0.071* 0.068* 0.059* 0.059* 0.058* 0.056* 0.052* 0.042* 0.035* 0.022* 0.012*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 9	Type 3 Wald p-values	AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.009* 0.003* 0.001* <0.001* <0.001* <0.001* <0.001*	
Iteration 9	Removed Effect	AGEGRP1*SEX	0.648	
Iteration 9	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 10	AIC	112002.5	
Iteration 10	Type 3 Wald p-values	GOLDGR*SUSMHS AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1*TREAT EBHIS2*GOLDGR AGEGRP1 RACEGRP2*SUSMHS AGEGRP1*GOLDGR SUSMHS BMIGRP*SUSMHS BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 TREAT EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX BMIGRP*RACEGRP2 EBHIS2*TREAT SEX BMIGRP*RACEGRP2 EBHIS2*SEX BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2	0.584 0.564 0.519 0.481 0.438 0.415 0.350 0.345 0.344 0.337 0.305 0.190 0.141 0.121 0.117 0.097* 0.086* 0.082* 0.072* 0.068* 0.055* 0.055* 0.055* 0.055* 0.052* 0.042* 0.042* 0.042* 0.023* 0.013* 0.013* 0.010*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 10	Type 3 Wald p-values	AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.004* 0.001* <0.001* <0.001* <0.001* <0.001*	
Iteration 10	Removed Effect	GOLDGR*SUSMHS	0.584	
Iteration 10	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 11	AIC	112000.8	
Iteration 11	Type 3 Wald p-values	AGEGRP1*RACEGRP2 GOLDGR*TREAT AGEGRP1 AGEGRP1 EBHIS2*GOLDGR AGEGRP1*GOLDGR RACEGRP2*SUSMHS BMIGRP*SEX BMIGRP*SUSMHS SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 TREAT EBHIS2*SEX BMIGRP*RACEGRP2 EBHIS2*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*EBHIS2 AGEGRP1*EBHIS2 AGEGRP1*INCGRP1	0.565 0.520 0.477 0.436 0.434 0.410 0.358 0.308 0.299 0.273 0.190 0.148 0.121 0.114 0.098* 0.086* 0.086* 0.070* 0.070* 0.058* 0.056* 0.056* 0.056* 0.053* 0.043* 0.043* 0.023* 0.012* 0.010* 0.004*

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection

(Based on Nine Covariates)

Iteration	Description			
Iteration 11	Type 3 Wald p-values	BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.001* <0.001* <0.001* <0.001* <0.001* <0.001*	
Iteration 11	Removed Effect	AGEGRP1*RACEGRP2	0.565	
Iteration 11	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 12	AIC	111999.2	
Iteration 12	Type 3 Wald p-values	AGEGRP1 GOLDGR*TREAT AGEGRP1*TREAT AGEGRP1*GOLDGR EBHIS2*GOLDGR RACEGRP2*SUSMHS BMIGRP*SEX BMIGRP*SEX BMIGRP*SUSMHS SUSMHS INCGRP1*SEX INCGRP1*RACEGRP2 AGEGRP1*SUSMHS BMIGRP*INCGRP1 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT SEX BMIGRP*EBHIS2 TREAT EBHIS2*SEX EBHIS2*SEX EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 BMIGRP AGEGRP1*INCGRP1	0.598 0.522 0.475 0.433 0.431 0.392 0.307 0.304 0.252 0.199 0.138 0.137 0.117 0.089* 0.085* 0.082* 0.071* 0.071* 0.057* 0.057* 0.055* 0.055* 0.055* 0.051* 0.046* 0.035* 0.023* 0.012* 0.010* 0.010* 0.001*

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 12	Type 3 Wald p-values	RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	<0.001* <0.001* <0.001* <0.001* <0.001*
Iteration 12	Removed Effect	GOLDGR*TREAT	0.522
Iteration 12	Replaced Effect(s)	NONE	

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 13	AIC	111997.6	
Iteration 13	Type 3 Wald p-values	AGEGRP1 AGEGRP1*TREAT AGEGRP1*GOLDGR EBHIS2*GOLDGR RACEGRP2*SUSMHS BMIGRP*SUSMHS BMIGRP*SEX SUSMHS INCGRP1*SEX INCGRP1*RACEGRP2 AGEGRP1*SUSMHS BMIGRP*INCGRP1 SEX*TREAT RACEGRP2*SEX SEX EBHIS2*TREAT BMIGRP*EBHIS2 EBHIS2*RACEGRP2 EBHIS2*SEX BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT SEX*SUSMHS GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 AGEGRP1*INCGRP1 BMIGRP	0.604 0.482 0.437 0.433 0.391 0.306 0.252 0.202 0.138 0.135 0.119 0.091* 0.090* 0.074* 0.074* 0.069* 0.056* 0.055* 0.055* 0.055* 0.045* 0.035* 0.031* 0.025* 0.010* 0.001*
		RACEGRP2	<0.001*

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection

(Based on Nine Covariates)

Iteration	Description		
Iteration 13	Type 3 Wald p-values	EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	<0.001* <0.001* <0.001* <0.001*
Iteration 13	Removed Effect	AGEGRP1*TREAT	0.482
Iteration 13	Replaced Effect(s)	NONE	

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description	
Iteration 14 AIC 111996.1	
Titeration 14	

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection

(Based on Nine Covariates)

Iteration	Description			
Iteration 14	Type 3 Wald p-values	INCGRP1 GOLDGR EBHIS2	<0.001* <0.001* <0.001*	
Iteration 14	Removed Effect	EBHIS2*GOLDGR	0.437	
Iteration 14	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 15	AIC	111994.7	
Iteration 15	Type 3 Wald p-values	AGEGRP1 AGEGRP1*GOLDGR RACEGRP2*SUSMHS BMIGRP*SEX BMIGRP*SUSMHS SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 SEX*TREAT RACEGRP2*SEX BMIGRP*EBHIS2 EBHIS2*TREAT SEX EBHIS2*TREAT SEX EBHIS2*SEX EBHIS2*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT TREAT SEX*SUSMHS AGEGRP1*EBHIS2 BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 INCGRP1 INCGRP1	0.631 0.447 0.389 0.319 0.301 0.258 0.204 0.134 0.132 0.102 0.092* 0.084* 0.075* 0.071* 0.063* 0.061* 0.052* 0.046* 0.034* 0.028* 0.027* 0.012* 0.001* 0.001* 0.001* 0.001* 0.001* 0.001* 0.001*

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 15	Type 3 Wald p-values	GOLDGR EBHIS2	<0.001* <0.001*	
Iteration 15	Removed Effect	AGEGRP1*GOLDGR	0.447	
Iteration 15	Replaced Effect(s)	NONE		

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 16	AIC	111993.3	
Iteration 16	Type 3 Wald p-values	AGEGRP1 RACEGRP2*SUSMHS BMIGRP*SEX BMIGRP*SUSMHS SUSMHS INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 SEX*TREAT RACEGRP2*SEX BMIGRP*EBHIS2 EBHIS2*TREAT SEX EBHIS2*SEX EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 RACEGRP2*TREAT TREAT SEX*SUSMHS AGEGRP1*EBHIS2 BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR	0.823 0.385 0.316 0.315 0.256 0.207 0.142 0.131 0.123 0.102 0.093* 0.087* 0.077* 0.070* 0.062* 0.059* 0.052* 0.044* 0.038* 0.028* 0.026* 0.012* 0.0012* 0.001* <0.001* <0.001* <0.001* <0.001*

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 16	Type 3 Wald p-values	EBHIS2	<0.001*
Iteration 16	Removed Effect	RACEGRP2*SUSMHS	0.385
Iteration 16	Replaced Effect(s)	NONE	

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 17	AIC	111992.0	
Iteration 17	Type 3 Wald p-values	AGEGRP1 BMIGRP*SUSMHS BMIGRP*SEX INCGRP1*SEX AGEGRP1*SUSMHS INCGRP1*RACEGRP2 BMIGRP*INCGRP1 SEX*TREAT RACEGRP2*SEX BMIGRP*EBHIS2 EBHIS2*TREAT SEX EBHIS2*SEX INCGRP1*SUSMHS EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2 EBHIS2	0.793 0.390 0.312 0.205 0.156 0.149 0.124 0.104 0.089* 0.077* 0.075* 0.063* 0.061* 0.061* 0.049* 0.049* 0.029* 0.025* 0.015* 0.009* 0.0001* <0.001* <0.001* <0.001*

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Population: Intent-to-Treat

Iteration 17 Replaced Effect(s) NONE

Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description Iteration 17 Removed Effect BMIGRP*SUSMHS 0.390

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10.

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 18	AIC	111990.7	
Iteration 18	Type 3 Wald p-values	AGEGRP1 BMIGRP*SEX INCGRP1*SEX INCGRP1*RACEGRP2 AGEGRP1*SUSMHS BMIGRP*INCGRP1 SEX*TREAT RACEGRP2*SEX BMIGRP*EBHIS2 EBHIS2*TREAT SEX EBHIS2*SEX EBHIS2*RACEGRP2 INCGRP1*SUSMHS BMIGRP*RACEGRP2 GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 SUSMHS AGEGRP1*INCGRP1 BMIGRP RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2*	0.797 0.351 0.215 0.151 0.144 0.119 0.105 0.090* 0.089* 0.079* 0.074* 0.062* 0.059* 0.048* 0.043* 0.042* 0.029* 0.026* 0.029* 0.026* 0.016* 0.001* <0.001* <0.001* <0.001* <0.001*

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Population: Intent-to-Treat

Iteration 18 Replaced Effect(s) NONE

Table 2.10

Summary of Exacerbation Cox Model Backwards Selection

(Based on Nine Covariates)

Iteration Description Iteration 18 Removed Effect BMIGRP*SEX 0.351

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10.

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 19	AIC	111989.6	
Iteration 19	Type 3 Wald p-values	AGEGRP1 INCGRP1*SEX AGEGRP1*SUSMHS BMIGRP*INCGRP1 INCGRP1*RACEGRP2 RACEGRP2*SEX SEX*TREAT EBHIS2*TREAT BMIGRP*EBHIS2 EBHIS2*SEX EBHIS2*RACEGRP2 SEX BMIGRP*RACEGRP2 INCGRP1*SUSMHS GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 INCGRP1 GOLDGR EBHIS2 EBHIS2	0.795 0.218 0.146 0.142 0.140 0.116 0.102 0.082* 0.082* 0.059* 0.054* 0.052* 0.047* 0.043* 0.029* 0.026* 0.010* 0.001* <0.001* <0.001* <0.001* <0.001* <0.001* <0.001* <0.001* <0.001*
Iteration 19	Removed Effect	INCGRP1*SEX	0.218

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection

(Based on Nine Covariates)

Iteration Description

Iteration 19 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10.

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Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 20	AIC	111989.1		
Iteration 20	Type 3 Wald p-values	AGEGRP1 AGEGRP1*SUSMHS BMIGRP*INCGRP1 SEX*TREAT INCGRP1*RACEGRP2 BMIGRP*EBHIS2 EBHIS2*TREAT EBHIS2*SEX SEX EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 GOLDGR*RACEGRP2 RACEGRP2*SEX INCGRP1*SUSMHS TREAT RACEGRP2*TREAT SEX*SUSMHS AGEGRP1*EBHIS2 SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.725 0.144 0.126 0.103 0.095* 0.076* 0.062* 0.059* 0.057* 0.054* 0.045* 0.042* 0.041* 0.029* 0.025* 0.010* 0.009* 0.001* <0.001* <0.001* <0.001*	
Iteration 20	Removed Effect	AGEGRP1*SUSMHS	0.144	

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Table 2.10

Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration Description

Iteration 20 Replaced Effect(s) NONE

Note: Model selected using backwards selection with a Wald p-value cut-off of 0.10.

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description			
Iteration 21	AIC	111989.3		
Iteration 21	Type 3 Wald p-values	AGEGRP1 BMIGRP*INCGRP1 SEX*TREAT INCGRP1*RACEGRP2 BMIGRP*EBHIS2 EBHIS2*TREAT EBHIS2*SEX SEX EBHIS2*RACEGRP2 BMIGRP*RACEGRP2 INCGRP1*SUSMHS RACEGRP2*SEX GOLDGR*RACEGRP2 TREAT RACEGRP2*TREAT AGEGRP1*EBHIS2 SEX*SUSMHS SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.593 0.129 0.104 0.090* 0.078* 0.072* 0.060* 0.059* 0.058* 0.057* 0.046* 0.042* 0.030* 0.024* 0.009* 0.006* 0.0006* 0.001* <0.001* <0.001* <0.001*	
Iteration 21	Removed Effect	BMIGRP*INCGRP1	0.129	
Iteration 21	Replaced Effect(s)	NONE		

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 22	AIC	111989.6	
Iteration 22	Type 3 Wald p-values	AGEGRP1 SEX*TREAT BMIGRP*EBHIS2 EBHIS2*TREAT INCGRP1*SUSMHS SEX EBHIS2*RACEGRP2 EBHIS2*SEX RACEGRP2*SEX GOLDGR*RACEGRP2 INCGRP1*RACEGRP2 TREAT RACEGRP2*TREAT BMIGRP*RACEGRP2 AGEGRP1*EBHIS2 SEX*SUSMHS SUSMHS SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.592 0.110 0.077* 0.071* 0.067* 0.063* 0.060* 0.058* 0.044* 0.040* 0.032* 0.022* 0.022* 0.021* 0.009* 0.007* 0.004* 0.0004* 0.0001* <0.001* <0.001*
	Removed Effect	SEX*TREAT	0.110
Iteration 22	Replaced Effect(s)	NONE	

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Population: Intent-to-Treat

Table 2.10 Summary of Exacerbation Cox Model Backwards Selection (Based on Nine Covariates)

Iteration	Description		
Iteration 23	AIC	111990.1	
Iteration 23	Type 3 Wald p-values	AGEGRP1 TREAT BMIGRP*EBHIS2 INCGRP1*SUSMHS SEX EBHIS2*SEX EBHIS2*TREAT EBHIS2*RACEGRP2 RACEGRP2*SEX GOLDGR*RACEGRP2 INCGRP1*RACEGRP2 BMIGRP*RACEGRP2 RACEGRP2*TREAT AGEGRP1*EBHIS2 SEX*SUSMHS SUSMHS BMIGRP AGEGRP1*INCGRP1 RACEGRP2 EBHIS2*INCGRP1 INCGRP1 GOLDGR EBHIS2	0.585 0.083* 0.082* 0.066* 0.061* 0.061* 0.055* 0.049* 0.040* 0.035* 0.021* 0.010* 0.010* 0.010* 0.007* 0.004* 0.002* <0.001* <0.001* <0.001* <0.001*

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	of	red Probability First Event non-ICS
<=64/I & II/ F/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)			
		0.99 (0.83,1.17)			
		1.09 (0.92,1.28)	0.29 (0.19,0.38)		0.00 (0 / 1)
		0.99 (0.83,1.17)			
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)			
		0.99 (0.83,1.17)	0.39 (0.25,0.51)		
		1.09 (0.92,1.28)	0.23 (0.15,0.31)		
	_	0.99 (0.83,1.17)			

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Firs	st Event	of Fir:	Probability st Event non-ICS
	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)				1.00 (1 /
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)			0.00 (0 / 1)	
		1.09 (0.92,1.28)		0.26 (0.18,0.33)	0.00 (0 / 1)	0.00 (0 / 1)
	_	0.99 (0.83,1.17)	0.40 (0.28,0.50)	0.40 (0.28,0.50)		1.00 (1 / 1)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.21 (0.14,0.27)			
		0.99 (0.83,1.17)		0.28 (0.18,0.37)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)		0.20 (0.14,0.27)	0.00 (0 / 2)	
	_	0.99 (0.83,1.17)				

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	Probability st Event non-ICS	Observed I of Firs	Probability st Event non-ICS
<=64/I & II/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.46 (0.43,0.49)	0.51 (0.47,0.54)	0.29 (18 / 63)	0.54 (20 / 37)
	<25 kg/m^2/	0.79	0.65	0.73	0.68 (21 /	0.73 (16 /
	Current/>=2	(0.73,0.86)	(0.61,0.69)	(0.69,0.77)	31)	22)
	<25 kg/m^2/	0.87	0.45	0.50	0.33 (5 /	0.33 (5 /
	Former/<2	(0.82,0.93)	(0.42,0.49)	(0.46,0.53)	15)	15)
	<25 kg/m^2/	0.79	0.64	0.72	0.73 (8 /	0.86 (6 /
	Former/>=2	(0.73,0.86)	(0.59,0.68)	(0.67,0.76)	11)	7)
	>=25 kg/m^2/	0.87	0.46	0.51	0.47 (37 /	0.51 (25 /
	Current/<2	(0.82,0.93)	(0.43,0.49)	(0.47,0.54)	78)	49)
	>=25 kg/m^2/	0.79	0.62	0.70	0.61 (27 /	0.63 (19 /
	Current/>=2	(0.73,0.86)	(0.57,0.65)	(0.66,0.74)	44)	30)
	>=25 kg/m^2/	0.87	0.45	0.50	0.43 (23 /	0.37 (10 /
	Former/<2	(0.82,0.93)	(0.42,0.48)	(0.46,0.53)	54)	27)
	>=25 kg/m^2/	0.79	0.60	0.69	0.33 (6 /	0.54 (7 /
	Former/>=2	(0.73,0.86)	(0.56,0.64)	(0.64,0.73)	18)	13)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event		Probability st Event non-ICS
<=64/I & II/ F/Non-Asian/ Non-high		0.87 (0.82,0.93)		0.39 (0.35,0.43)	0.44 (8 / 18)	0.30 (3 /
	<25 kg/m^2/	0.79	0.43	0.51	0.25 (3 /	0.80 (4 /
	Current/>=2	(0.73,0.86)	(0.38,0.47)	(0.46,0.55)	12)	5)
	<25 kg/m^2/	0.87	0.37	0.42	0.14 (1 /	0.67 (2 /
	Former/<2	(0.82,0.93)	(0.33,0.41)	(0.37,0.46)	7)	3)
	<25 kg/m^2/	0.79	0.45	0.53	0.00 (0 /	1.00 (4 /
	Former/>=2	(0.73,0.86)	(0.40,0.50)	(0.48,0.58)	4)	4)
	>=25 kg/m^2/	0.87	0.35	0.39	0.22 (5 /	0.50 (6 /
	Current/<2	(0.82,0.93)	(0.32,0.39)	(0.35,0.43)	23)	12)
	>=25 kg/m^2/	0.79	0.40	0.47	0.33 (7 /	0.46 (6 /
	Current/>=2	(0.73,0.86)	(0.36,0.44)	(0.43,0.52)	21)	13)
	>=25 kg/m^2/	0.87	0.37	0.41	0.24 (5 /	0.46 (6 /
	Former/<2	(0.82,0.93)	(0.33,0.41)	(0.37,0.45)	21)	13)
	>=25 kg/m^2/	0.79	0.42	0.50	0.31 (5 /	0.33 (4 /
	Former/>=2	(0.73,0.86)	(0.38,0.46)	(0.45,0.55)	16)	12)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income		Modelled Hazard Ratio ICS vs. non-ICS	of Firs	st Event non-ICS	of Firs ICS	Probability st Event non-ICS
<=64/I & II/ M/Asian/ High	<25 kg/m^2/ Current/<2				0.33 (1 /	
	<25 kg/m^2/ Current/>=2		0.51 (0.40,0.60)			
	-)		0.30 (0.23,0.36)			
	<25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.55 (0.43,0.64)	0.55 (0.44,0.64)		
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)			0.00 (0 / 2)	
			0.39 (0.29,0.48)			1.00 (1 / 1)
		1.09 (0.92,1.28)		0.22 (0.16,0.28)	0.00 (0 / 1)	0.00 (0 / 1)
	>=25 kg/m^2/ Former/>=2		0.42 (0.31,0.52)			

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		Probability st Event non-ICS
<=64/I & II/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.24 (0.19,0.29)	0.22 (0.17,0.27)	0.22 (2 / 9)	0.00 (0 / 9)
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.37 (0.29,0.44)	0.38 (0.29,0.45)		
	<25 kg/m^2/	1.09	0.29	0.27	0.00 (0 /	0.20 (1 /
	Former/<2	(0.92,1.28)	(0.23,0.34)	(0.21,0.32)	17)	5)
	<25 kg/m^2/	0.99	0.44	0.44	0.20 (1 /	0.00 (0 /
	Former/>=2	(0.83,1.17)	(0.35,0.52)	(0.35,0.52)	5)	3)
	>=25 kg/m^2/	1.09	0.19	0.17	0.00 (0 /	0.00 (0 /
	Current/<2	(0.92,1.28)	(0.14,0.23)	(0.13,0.22)	3)	3)
	>=25 kg/m^2/	0.99	0.28	0.28	0.00 (0 /	0.00 (0 /
	Current/>=2	(0.83,1.17)	(0.20,0.34)	(0.20,0.35)	1)	1)
	>=25 kg/m^2/	1.09	0.23	0.21	0.00 (0 /	0.25 (1 /
	Former/<2	(0.92,1.28)	(0.17,0.28)	(0.16,0.26)	10)	4)
	>=25 kg/m^2/	0.99	0.33	0.33	0.00 (0 /	0.67 (2 /
	Former/>=2	(0.83,1.17)	(0.25,0.41)	(0.25,0.41)	1)	3)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	Probability st Event non-ICS	Observed I of Firs	Probability st Event non-ICS
<=64/I & II/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.34 (0.32,0.37)	0.38 (0.36,0.41)	0.30 (16 / 53)	0.37 (17 / 46)
	<25 kg/m^2/	0.79	0.55	0.63	0.50 (15 /	0.54 (7 /
	Current/>=2	(0.73,0.86)	(0.50,0.58)	(0.59,0.67)	30)	13)
	<25 kg/m^2/	0.87	0.38	0.42	0.41 (7 /	0.24 (4 /
	Former/<2	(0.82,0.93)	(0.35,0.41)	(0.39,0.45)	17)	17)
	<25 kg/m^2/	0.79	0.59	0.67	0.58 (7 /	0.67 (4 /
	Former/>=2	(0.73,0.86)	(0.54,0.63)	(0.63,0.71)	12)	6)
	>=25 kg/m^2/	0.87	0.34	0.38	0.25 (26 /	0.27 (20 /
	Current/<2	(0.82,0.93)	(0.32,0.37)	(0.36,0.41)	104)	73)
	>=25 kg/m^2/	0.79	0.51	0.60	0.49 (19 /	0.69 (18 /
	Current/>=2	(0.73,0.86)	(0.47,0.55)	(0.56,0.63)	39)	26)
	>=25 kg/m^2/	0.87	0.37	0.42	0.33 (32 /	0.22 (11 /
	Former/<2	(0.82,0.93)	(0.35,0.40)	(0.39,0.45)	96)	50)
	>=25 kg/m^2/	0.79	0.55	0.64	0.64 (18 /	0.59 (16 /
	Former/>=2	(0.73,0.86)	(0.51,0.59)	(0.59,0.67)	28)	27)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				Probability st Event non-ICS
<=64/I & II/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)			0.35 (13 / 37)	0.13 (4 / 30)
	<25 kg/m^2/	0.79	0.34	0.41	0.40 (6 /	0.33 (4 /
	Current/>=2	(0.73,0.86)	(0.31,0.38)	(0.37,0.45)	15)	12)
	<25 kg/m^2/	0.87	0.31	0.34	0.27 (3 /	0.14 (1 /
	Former/<2	(0.82,0.93)	(0.28,0.34)	(0.31,0.38)	11)	7)
	<25 kg/m^2/	0.79	0.41	0.48	0.00 (0 /	0.33 (2 /
	Former/>=2	(0.73,0.86)	(0.36,0.45)	(0.44,0.53)	3)	6)
	>=25 kg/m^2/	0.87	0.26	0.29	0.31 (15 /	0.32 (6 /
	Current/<2	(0.82,0.93)	(0.23,0.28)	(0.26,0.32)	49)	19)
	>=25 kg/m^2/	0.79	0.32	0.38	0.25 (3 /	0.25 (5 /
	Current/>=2	(0.73,0.86)	(0.28,0.35)	(0.34,0.42)	12)	20)
	>=25 kg/m^2/	0.87	0.31	0.34	0.24 (9 /	0.29 (7 /
	Former/<2	(0.82,0.93)	(0.28,0.34)	(0.31,0.37)	37)	24)
	>=25 kg/m^2/	0.79	0.38	0.45	0.38 (6 /	0.55 (6 /
	Former/>=2	(0.73,0.86)	(0.34,0.42)	(0.41,0.49)	16)	11)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event		Probability st Event non-ICS
<=64/III & IV/ F/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)				
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.74 (0.59,0.83)	0.74 (0.59,0.83)		
		1.09 (0.92,1.28)	0.47 (0.35,0.57)			
		0.99 (0.83,1.17)	0.72 (0.58,0.82)		• •	
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.39 (0.27,0.50)			
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.60 (0.43,0.72)	0.61 (0.44,0.73)	•	
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.38 (0.26,0.49)	0.36 (0.24,0.46)		
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)		0.59 (0.43,0.71)		

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir		of Fir	Probability st Event non-ICS
<=64/III & IV/ F/Asian/ Non-high	_	1.09 (0.92,1.28)	0.43 (0.33,0.52)	0.41 (0.31,0.49)	0.33 (1 / 3)	0.00 (0 /
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.58 (0.45,0.68)	0.59 (0.46,0.68)	1.00 (2 / 2)	1.00 (2 / 2)
	<25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.45 (0.35,0.54)	0.43 (0.33,0.51)	0.50 (6 / 12)	0.25 (1 / 4)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.99 (0.83,1.17)	0.61 (0.48,0.70)	0.61 (0.49,0.71)	1.00 (2 / 2)	0.00 (0 / 4)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.35 (0.24,0.44)	0.33 (0.22,0.41)		0.00 (0 / 1)
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.45 (0.32,0.56)	0.46 (0.32,0.57)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.37 (0.26,0.46)	0.35 (0.24,0.43)	0.00 (0 / 3)	0.00 (0 / 2)
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.48 (0.34,0.59)	0.48 (0.34,0.59)		0.00 (0 / 1)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.		of Fir	st Event non-ICS	of Fir	Probability st Event non-ICS
<=64/III & IV/ F/Non-Asian/ High		0.87 (0.82,0.93)	0.60		0.58 (63 / 109)	
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.79 (0.75,0.82)		0.67 (46 / 69)	0.76 (48 / 63)
	<25 kg/m^2/ Former/<2	0.87 (0.82,0.93)	0.59 (0.55,0.62)	0.64 (0.60,0.67)	0.47 (15 / 32)	0.67 (35 / 52)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.79 (0.73,0.86)	0.78 (0.74,0.81)	0.85 (0.81,0.88)	0.76 (28 / 37)	0.79 (19 / 24)
	>=25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.60 (0.56,0.63)	0.65 (0.61,0.68)	0.49 (41 / 84)	0.67 (37 / 55)
	>=25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.76 (0.72,0.79)	0.83 (0.80,0.86)	0.74 (52 / 70)	0.80 (28 / 35)
	>=25 kg/m^2/ Former/<2	0.87 (0.82,0.93)	0.59 (0.55,0.62)		0.43 (31 / 72)	0.52 (23 / 44)
	>=25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)		0.82 (0.78,0.85)	0.70 (39 / 56)	0.69 (25 / 36)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		st Event	of Fir	Probability st Event non-ICS
<=64/III & IV/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)		0.52 (0.48,0.57)	0.43 (9 / 21)	0.50 (8 / 16)
	<25 kg/m^2/	0.79	0.56	0.65	0.60 (12 /	0.83 (5 /
	Current/>=2	(0.73,0.86)	(0.51,0.61)	(0.59,0.70)	20)	6)
	<25 kg/m^2/	0.87	0.50	0.55	0.42 (8 /	0.71 (10 /
	Former/<2	(0.82,0.93)	(0.45,0.54)	(0.50,0.59)	19)	14)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.79 (0.73,0.86)	0.59 (0.54,0.64)	0.67 (0.62,0.72)	0.44 (7 / 16)	0.85 (11 / 13)
	>=25 kg/m^2/	0.87	0.47	0.52	0.62 (13 /	0.42 (5 /
	Current/<2	(0.82,0.93)	(0.43,0.51)	(0.47,0.56)	21)	12)
	>=25 kg/m^2/	0.79	0.53	0.61	0.45 (10 /	0.45 (5 /
	Current/>=2	(0.73,0.86)	(0.48,0.57)	(0.56,0.66)	22)	11)
	>=25 kg/m^2/	0.87	0.50	0.55	0.47 (7 /	0.57 (4 /
	Former/<2	(0.82,0.93)	(0.45,0.54)	(0.50,0.59)	15)	7)
	>=25 kg/m^2/	0.79	0.55	0.64	0.31 (9 /	0.00 (0 /
	Former/>=2	(0.73,0.86)	(0.50,0.60)	(0.59,0.69)	29)	7)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS	of Firs	Probability st Event non-ICS
<=64/III & IV/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.44 (0.37,0.51)	0.42 (0.35,0.48)	0.75 (6 / 8)	0.50 (1 / 2)
	<25 kg/m^2/	0.99	0.73	0.74	1.00 (2 /	0.80 (4 /
	Current/>=2	(0.83,1.17)	(0.65,0.80)	(0.65,0.80)	2)	5)
	<25 kg/m^2/	1.09	0.48	0.45	0.67 (2 /	0.00 (0 /
	Former/<2	(0.92,1.28)	(0.40,0.55)	(0.38,0.52)	3)	5)
	<25 kg/m^2/	0.99	0.77	0.77	1.00 (3 /	0.56 (5 /
	Former/>=2	(0.83,1.17)	(0.69,0.83)	(0.69,0.83)	3)	9)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.36 (0.27,0.44)	0.34 (0.25,0.41)	0.33 (1 / 3)	
	>=25 kg/m^2/	0.99	0.60	0.60	0.75 (3 /	0.00 (0 /
	Current/>=2	(0.83,1.17)	(0.48,0.69)	(0.48,0.70)	4)	1)
	>=25 kg/m^2/	1.09	0.39	0.37	0.40 (2 /	0.00 (0 /
	Former/<2	(0.92,1.28)	(0.30,0.47)	(0.28,0.45)	5)	1)
	>=25 kg/m^2/	0.99	0.64	0.64	1.00 (1 /	1.00 (1 /
	Former/>=2	(0.83,1.17)	(0.52,0.73)	(0.52,0.74)	1)	1)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probabilityst Event non-ICS		Probability st Event non-ICS
<=64/III & IV/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)			0.29 (4 / 14)	0.14 (2 / 14)
	<25 kg/m^2/	0.99	0.58	0.58	0.50 (6 /	0.80 (4 /
	Current/>=2	(0.83,1.17)	(0.50,0.64)	(0.50,0.65)	12)	5)
	<25 kg/m^2/	1.09	0.46	0.44	0.43 (9 /	0.44 (15 /
	Former/<2	(0.92,1.28)	(0.40,0.52)	(0.38,0.49)	21)	34)
	<25 kg/m^2/	0.99	0.66	0.66	0.67 (14 /	0.63 (10 /
	Former/>=2	(0.83,1.17)	(0.58,0.72)	(0.58,0.72)	21)	16)
	>=25 kg/m^2/	1.09	0.32	0.30	0.50 (2 /	0.00 (0 /
	Current/<2	(0.92,1.28)	(0.25,0.38)	(0.23,0.36)	4)	1)
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.45 (0.35,0.53)	0.45 (0.35,0.54)	0.50 (1 / 2)	
	>=25 kg/m^2/	1.09	0.38	0.35	0.50 (3 /	0.50 (2 /
	Former/<2	(0.92,1.28)	(0.30,0.45)	(0.27,0.43)	6)	4)
	>=25 kg/m^2/	0.99	0.52	0.53	0.75 (3 /	0.50 (1 /
	Former/>=2	(0.83,1.17)	(0.42,0.61)	(0.42,0.62)	4)	2)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		st Event non-ICS	of Firs	Probability st Event non-ICS
<=64/III & IV/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)			0.42 (64 / 153)	
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)			0.61 (40 / 66)	0.73 (49 / 67)
	<25 kg/m^2/ Former/<2	0.87 (0.82,0.93)	0.50 (0.47,0.53)	0.55 (0.52,0.58)	0.49 (35 / 72)	0.41 (18 / 44)
	<25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)	0.73 (0.69,0.76)	0.81 (0.77,0.84)	0.65 (31 / 48)	0.69 (18 / 26)
	>=25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.46 (0.43,0.49)	0.51 (0.48,0.54)	0.49 (64 / 131)	0.47 (50 / 106)
	>=25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.65 (0.62,0.69)	0.74 (0.70,0.77)	0.52 (39 / 75)	0.63 (37 / 59)
	>=25 kg/m^2/ Former/<2	0.87 (0.82,0.93)		0.55 (0.52,0.58)	0.50 (61 / 122)	0.44 (44 / 99)
	>=25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)	0.69 (0.66,0.73)		0.64 (55 / 86)	0.69 (51 / 74)

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Table 2.20

Probability of Exacerbation During Year on Study Treatment from Cox Model

(Based on Nine Covariates)

Age/GOLD/ Sex/Race/	Modelled Hazard Rat BMI/ ICS vs.				Observed Probability of First Event		
Country Income	Smoking/Exac.	non-ICS	ICS	non-ICS	ICS	non-ICS	
<=64/III & IV/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.35 (0.32,0.39)	0.40 (0.36,0.43)	0.42 (23 / 55)	0.46 (18 / 39)	
	<25 kg/m^2/	0.79	0.46	0.54	0.42 (15 /	0.53 (21 /	
	Current/>=2	(0.73,0.86)	(0.42,0.50)	(0.50,0.59)	36)	40)	
	<25 kg/m^2/	0.87	0.42	0.46	0.41 (17 /	0.43 (10 /	
	Former/<2	(0.82,0.93)	(0.38,0.45)	(0.42,0.50)	41)	23)	
	<25 kg/m^2/	0.79	0.54	0.62	0.67 (20 /	0.50 (10 /	
	Former/>=2	(0.73,0.86)	(0.49,0.58)	(0.57,0.67)	30)	20)	
	>=25 kg/m^2/	0.87	0.35	0.39	0.48 (16 /	0.47 (15 /	
	Current/<2	(0.82,0.93)	(0.32,0.38)	(0.36,0.43)	33)	32)	
	>=25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.43 (0.39,0.47)	0.51 (0.47,0.55)		0.71 (15 / 21)	
	>=25 kg/m^2/	0.87	0.42	0.46	0.51 (24 /	0.38 (13 /	
	Former/<2	(0.82,0.93)	(0.38,0.45)	(0.42,0.50)	47)	34)	
	>=25 kg/m^2/	0.79	0.50	0.59	0.55 (16 /	0.56 (14 /	
	Former/>=2	(0.73,0.86)	(0.46,0.55)	(0.54,0.63)	29)	25)	

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event		Probability st Event non-ICS
>=65/I & II/ F/Asian/ High	<25 kg/m^2/ Current/<2			0.27 (0.18,0.36)	1.00 (1 / 1)	
		0.99 (0.83,1.17)				
		1.09 (0.92,1.28)	0.29 (0.19,0.37)	0.27 (0.18,0.35)		
		0.99 (0.83,1.17)	0.45 (0.31,0.56)	0.45 (0.31,0.57)	1.00 (1 / 1)	
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.23 (0.15,0.31)			
		0.99 (0.83,1.17)	0.35 (0.22,0.46)	0.35 (0.22,0.46)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.23 (0.14,0.30)	0.21 (0.13,0.28)		0.00 (0 / 1)
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.34 (0.22,0.44)			

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Firs	st Event non-ICS	of Fir	Probability st Event non-ICS
>=65/I & II/ F/Asian/ Non-high		1.09 (0.92,1.28)	0.31	0.29	1.00 (3 /	
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)			1.00 (1 / 1)	
		1.09 (0.92,1.28)	0.33 (0.23,0.41)		0.50 (1 / 2)	0.33 (1 / 3)
	_	0.99 (0.83,1.17)	0.41 (0.29,0.51)	0.42 (0.29,0.52)	0.00 (0 / 1)	0.50 (1 / 2)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.24 (0.16,0.32)			
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.29 (0.19,0.38)	0.29 (0.19,0.39)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.26 (0.18,0.33)			
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.31 (0.20,0.40)	0.31 (0.21,0.40)	1.00 (1 / 1)	

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event non-ICS	of Fir ICS	Probability st Event non-ICS
>=65/I & II/ F/Non-Asian/ High	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)				
	<25 kg/m^2/ Current/>=2		0.59 (0.55,0.63)		·	0.79 (11 / 14)
	<25 kg/m^2/	0.87	0.45	0.49	0.38 (20 /	0.57 (16 /
	Former/<2	(0.82,0.93)	(0.41,0.48)	(0.45,0.53)	52)	28)
	<25 kg/m^2/	0.79	0.58	0.67	0.38 (10 /	0.64 (7 /
	Former/>=2	(0.73,0.86)	(0.54,0.62)	(0.62,0.71)	26)	11)
	>=25 kg/m^2/	0.87	0.46	0.50	0.43 (15 /	0.48 (10 /
	Current/<2	(0.82,0.93)	(0.42,0.49)	(0.46,0.54)	35)	21)
	>=25 kg/m^2/	0.79	0.56	0.65	0.63 (12 /	0.40 (6 /
	Current/>=2	(0.73,0.86)	(0.52,0.60)	(0.60,0.69)	19)	15)
	>=25 kg/m^2/	0.87	0.44	0.49	0.38 (34 /	0.51 (28 /
	Former/<2	(0.82,0.93)	(0.41,0.47)	(0.45,0.52)	90)	55)
	>=25 kg/m^2/	0.79	0.55	0.63	0.54 (20 /	0.63 (24 /
	Former/>=2	(0.73,0.86)	(0.51,0.58)	(0.59,0.67)	37)	38)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of Fir	Probability st Event non-ICS
>=65/I & II/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.41 (0.36,0.45)	0.45 (0.41,0.49)	0.71 (5 / 7)	0.00 (0 /
	<25 kg/m^2/	0.79	0.45	0.53	0.40 (2 /	0.50 (1 /
	Current/>=2	(0.73,0.86)	(0.39,0.49)	(0.47,0.58)	5)	2)
	<25 kg/m^2/	0.87	0.43	0.48	0.30 (3 /	0.50 (1 /
	Former/<2	(0.82,0.93)	(0.39,0.47)	(0.43,0.52)	10)	2)
	<25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)	0.47 (0.42,0.52)	0.55 (0.49,0.60)	0.50 (2 / 4)	
	>=25 kg/m^2/	0.87	0.41	0.45	0.33 (4 /	0.17 (1 /
	Current/<2	(0.82,0.93)	(0.36,0.45)	(0.40,0.49)	12)	6)
	>=25 kg/m^2/	0.79	0.42	0.49	0.33 (3 /	0.33 (2 /
	Current/>=2	(0.73,0.86)	(0.37,0.46)	(0.44,0.54)	9)	6)
	>=25 kg/m^2/	0.87	0.43	0.47	0.47 (8 /	0.38 (5 /
	Former/<2	(0.82,0.93)	(0.39,0.47)	(0.43,0.52)	17)	13)
	>=25 kg/m^2/	0.79	0.44	0.52	0.64 (7 /	0.33 (1 /
	Former/>=2	(0.73,0.86)	(0.39,0.48)	(0.46,0.57)	11)	3)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS			of Fir	Probability st Event non-ICS
>=65/I & II/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)		0.25 (0.19,0.30)	•	0.00 (0 /
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.46 (0.36,0.54)		0.67 (2 / 3)	
	<25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.29 (0.23,0.35)	0.27 (0.21,0.33)	0.44 (4 / 9)	0.11 (1 / 9)
	$<25 \text{ kg/m}^2/$ Former/>=2	0.99 (0.83,1.17)	0.49 (0.39,0.58)	0.50 (0.39,0.58)	0.33 (1 / 3)	0.67 (2 / 3)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.21 (0.15,0.26)	0.20 (0.14,0.25)	0.33 (1 / 3)	0.00 (0 / 3)
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.35 (0.25,0.43)	0.35 (0.25,0.43)	0.00 (0 / 1)	1.00 (1 / 1)
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.23 (0.17,0.29)	0.22 (0.16,0.27)	0.00 (0 / 1)	0.00 (0 / 4)
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.38 (0.28,0.46)	0.38 (0.28,0.47)		

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS	of Fir	Probability st Event non-ICS
>=65/I & II/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.28 (0.22,0.33)	0.26 (0.20,0.31)	0.21 (3 / 14)	0.00 (0 /
	<25 kg/m^2/	0.99	0.39	0.39	0.33 (1 /	0.00 (0 /
	Current/>=2	(0.83,1.17)	(0.30,0.46)	(0.30,0.47)	3)	2)
	<25 kg/m^2/	1.09	0.33	0.31	0.29 (5 /	0.38 (5 /
	Former/<2	(0.92,1.28)	(0.27,0.39)	(0.25,0.37)	17)	13)
	<25 kg/m^2/	0.99	0.46	0.46	0.43 (3 /	0.80 (8 /
	Former/>=2	(0.83,1.17)	(0.37,0.53)	(0.37,0.54)	7)	10)
	>=25 kg/m^2/	1.09	0.22	0.20	0.67 (2 /	0.00 (0 /
	Current/<2	(0.92,1.28)	(0.17,0.27)	(0.15,0.26)	3)	1)
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.29 (0.21,0.36)	0.29 (0.21,0.36)		0.00 (0 / 2)
	>=25 kg/m^2/	1.09	0.27	0.25	0.33 (4 /	0.17 (1 /
	Former/<2	(0.92,1.28)	(0.20,0.32)	(0.19,0.30)	12)	6)
	>=25 kg/m^2/	0.99	0.34	0.35	0.20 (1 /	0.60 (3 /
	Former/>=2	(0.83,1.17)	(0.26,0.42)	(0.26,0.43)	5)	5)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of First Event		Observed Probabilityof First Event ICS non-ICS		
>=65/I & II/ M/Non-Asian/ High	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)				0.38 (8 / 21)	
	<25 kg/m^2/	0.79	0.49	0.58	0.37 (7 /	0.54 (7 /	
	Current/>=2	(0.73,0.86)	(0.45,0.53)	(0.53,0.61)	19)	13)	
	<25 kg/m^2/	0.87	0.37	0.41	0.28 (21 /	0.42 (25 /	
	Former/<2	(0.82,0.93)	(0.34,0.40)	(0.38,0.44)	75)	60)	
	<25 kg/m^2/	0.79	0.53	0.62	0.30 (9 /	0.56 (10 /	
	Former/>=2	(0.73,0.86)	(0.49,0.57)	(0.58,0.65)	30)	18)	
	>=25 kg/m^2/	0.87	0.34	0.38	0.27 (16 /	0.33 (18 /	
	Current/<2	(0.82,0.93)	(0.31,0.36)	(0.35,0.41)	60)	54)	
	>=25 kg/m^2/	0.79	0.46	0.54	0.33 (5 /	0.50 (11 /	
	Current/>=2	(0.73,0.86)	(0.42,0.50)	(0.50,0.58)	15)	22)	
	>=25 kg/m^2/	0.87	0.37	0.41	0.36 (69 /	0.41 (68 /	
	Former/<2	(0.82,0.93)	(0.34,0.39)	(0.38,0.44)	190)	164)	
	>=25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)		0.58 (0.54,0.62)	0.51 (46 / 91)	0.55 (23 / 42)	

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS				Probability st Event non-ICS
>=65/I & II/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)		0.34 (0.30,0.37)	0.12 (2 / 17)	0.30 (6 / 20)
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.36 (0.32,0.40)		0.60 (6 / 10)	0.64 (9 / 14)
	<25 kg/m^2/	0.87	0.36	0.40	0.20 (6 /	0.39 (9 /
	Former/<2	(0.82,0.93)	(0.32,0.39)	(0.36,0.43)	30)	23)
	<25 kg/m^2/	0.79	0.42	0.50	0.45 (5 /	0.33 (2 /
	Former/>=2	(0.73,0.86)	(0.38,0.46)	(0.45,0.54)	11)	6)
	>=25 kg/m^2/	0.87	0.30	0.33	0.46 (6 /	0.17 (2 /
	Current/<2	(0.82,0.93)	(0.27,0.33)	(0.30,0.37)	13)	12)
	>=25 kg/m^2/	0.79	0.33	0.40	0.20 (2 /	0.50 (2 /
	Current/>=2	(0.73,0.86)	(0.29,0.37)	(0.36,0.44)	10)	4)
	>=25 kg/m^2/	0.87	0.36	0.40	0.31 (18 /	0.44 (16 /
	Former/<2	(0.82,0.93)	(0.32,0.38)	(0.36,0.43)	58)	36)
	>=25 kg/m^2/	0.79	0.39	0.47	0.43 (9 /	0.48 (10 /
	Former/>=2	(0.73,0.86)	(0.35,0.43)	(0.42,0.51)	21)	21)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Firs	Probabilityst Event non-ICS	of Firs	Probability st Event non-ICS
>=65/III & IV/ F/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)				
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)			1.00 (1 / 1)	
		1.09 (0.92,1.28)	0.46 (0.34,0.56)		0.00 (0 / 1)	0.00 (0 / 1)
	- ,, ,	0.99 (0.83,1.17)		0.67 (0.53,0.77)		0.00 (0 / 1)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)		0.36 (0.24,0.46)		
		0.99 (0.83,1.17)		0.55 (0.39,0.67)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.38 (0.26,0.48)	0.35 (0.24,0.45)		
		0.99 (0.83,1.17)				

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir		of Fir	Probability st Event non-ICS
>=65/III & IV/ F/Asian/ Non-high		1.09 (0.92,1.28)			0.50 (1 / 2)	
	<25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.60 (0.47,0.70)	0.60 (0.47,0.70)	1.00 (2 / 2)	0.00 (0 / 1)
	<25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.52 (0.41,0.61)	0.49 (0.38,0.58)	0.71 (5 / 7)	0.25 (2 / 8)
	<25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.63 (0.50,0.72)	0.63 (0.50,0.72)	1.00 (4 / 4)	0.00 (0 / 2)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.40 (0.28,0.50)	0.38 (0.26,0.47)		
	>=25 kg/m^2/ Current/>=2	0.99 (0.83,1.17)	0.47 (0.33,0.58)	0.48 (0.33,0.59)		
	>=25 kg/m^2/ Former/<2	1.09 (0.92,1.28)	0.42 (0.31,0.52)	0.40 (0.28,0.49)	0.00 (0 / 3)	
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.50 (0.36,0.60)			0.00 (0 / 1)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.		of Fir	st Event non-ICS	of Fir ICS	Probability st Event non-ICS
>=65/III & IV/ F/Non-Asian/ High			0.59	0.64 (0.61,0.68)		
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)			0.69 (36 / 52)	0.68 (19 / 28)
	<25 kg/m^2/ Former/<2	0.87 (0.82,0.93)	0.58 (0.55,0.61)	0.63 (0.59,0.67)	0.53 (46 / 87)	0.55 (36 / 66)
	<25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)	0.72 (0.68,0.76)	0.80 (0.76,0.84)	0.60 (35 / 58)	0.70 (28 / 40)
	>=25 kg/m^2/ Current/<2	0.87 (0.82,0.93)	0.59 (0.55,0.63)	0.64 (0.60,0.68)	0.53 (21 / 40)	0.53 (10 / 19)
		0.79 (0.73,0.86)	0.70 (0.66,0.74)	0.78 (0.74,0.82)	0.73 (19 / 26)	0.58 (7 / 12)
	>=25 kg/m^2/ Former/<2	0.87 (0.82,0.93)	0.58 (0.54,0.61)		0.54 (60 / 112)	0.61 (39 / 64)
	>=25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)		0.77 (0.73,0.81)	0.55 (34 / 62)	0.68 (42 / 62)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model (Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability st Event non-ICS		Probability st Event non-ICS
>=65/III & IV/ F/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2	0.87 (0.82,0.93)		0.59 (0.54,0.63)	0.40 (2 / 5)	0.57 (4 / 7)
	<25 kg/m^2/	0.79	0.58	0.67	0.63 (5 /	0.67 (4 /
	Current/>=2	(0.73,0.86)	(0.52,0.63)	(0.61,0.72)	8)	6)
	<25 kg/m^2/	0.87	0.56	0.61	0.63 (10 /	0.38 (3 /
	Former/<2	(0.82,0.93)	(0.52,0.61)	(0.57,0.66)	16)	8)
	<25 kg/m^2/	0.79	0.61	0.69	0.70 (7 /	0.63 (5 /
	Former/>=2	(0.73,0.86)	(0.55,0.66)	(0.64,0.74)	10)	8)
	>=25 kg/m^2/	0.87	0.54	0.59	0.70 (7 /	0.57 (4 /
	Current/<2	(0.82,0.93)	(0.49,0.58)	(0.53,0.63)	10)	7)
	>=25 kg/m^2/	0.79	0.55	0.63	0.75 (3 /	0.00 (0 /
	Current/>=2	(0.73,0.86)	(0.49,0.60)	(0.57,0.68)	4)	1)
	>=25 kg/m^2/	0.87	0.56	0.61	0.36 (5 /	0.60 (6 /
	Former/<2	(0.82,0.93)	(0.52,0.60)	(0.56,0.66)	14)	10)
	>=25 kg/m^2/	0.79	0.57	0.66	0.38 (3 /	0.86 (6 /
	Former/>=2	(0.73,0.86)	(0.52,0.62)	(0.60,0.71)	8)	7)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir			Probability st Event non-ICS
>=65/III & IV/ M/Asian/ High	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.44 (0.37,0.50)	0.41 (0.34,0.47)	0.13 (1 / 8)	0.48 (11 / 23)
	<25 kg/m^2/	0.99	0.68	0.68	0.60 (3 /	0.55 (6 /
	Current/>=2	(0.83,1.17)	(0.59,0.74)	(0.60,0.75)	5)	11)
	<25 kg/m^2/	1.09	0.47	0.45	0.57 (13 /	0.42 (5 /
	Former/<2	(0.92,1.28)	(0.40,0.54)	(0.37,0.51)	23)	12)
	<25 kg/m^2/	0.99	0.72	0.72	0.45 (9 /	0.62 (13 /
	Former/>=2	(0.83,1.17)	(0.64,0.78)	(0.64,0.78)	20)	21)
	>=25 kg/m^2/ Current/<2	1.09 (0.92,1.28)	0.35 (0.27,0.43)	0.33 (0.25,0.40)	0.33 (1 / 3)	
	>=25 kg/m^2/	0.99	0.54	0.55	1.00 (2 /	0.00 (0 /
	Current/>=2	(0.83,1.17)	(0.43,0.63)	(0.43,0.64)	2)	1)
	>=25 kg/m^2/	1.09	0.39	0.36	0.80 (4 /	0.25 (1 /
	Former/<2	(0.92,1.28)	(0.30,0.46)	(0.27,0.44)	5)	4)
	>=25 kg/m^2/ Former/>=2	0.99 (0.83,1.17)	0.58 (0.47,0.67)	0.59 (0.47,0.68)	0.33 (1 / 3)	

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS		st Event	of Fir	Probability st Event non-ICS
>=65/III & IV/ M/Asian/ Non-high	<25 kg/m^2/ Current/<2	1.09 (0.92,1.28)		0.43 (0.36,0.48)	0.42 (5 / 12)	0.30 (3 / 10)
	<25 kg/m^2/	0.99	0.60	0.60	0.25 (2 /	0.67 (6 /
	Current/>=2	(0.83,1.17)	(0.52,0.66)	(0.52,0.67)	8)	9)
	<25 kg/m^2/	1.09	0.53	0.50	0.53 (31 /	0.59 (32 /
	Former/<2	(0.92,1.28)	(0.47,0.58)	(0.44,0.55)	58)	54)
	<25 kg/m^2/	0.99	0.67	0.68	0.51 (18 /	0.76 (19 /
	Former/>=2	(0.83,1.17)	(0.60,0.73)	(0.60,0.74)	35)	25)
	>=25 kg/m^2/	1.09	0.37	0.35	0.33 (1 /	0.67 (2 /
	Current/<2	(0.92,1.28)	(0.29,0.44)	(0.26,0.42)	3)	3)
	>=25 kg/m^2/	0.99	0.47	0.47	1.00 (2 /	1.00 (1 /
	Current/>=2	(0.83,1.17)	(0.37,0.55)	(0.37,0.56)	2)	1)
	>=25 kg/m^2/	1.09	0.43	0.41	0.27 (3 /	0.33 (2 /
	Former/<2	(0.92,1.28)	(0.35,0.51)	(0.32,0.48)	11)	6)
	>=25 kg/m^2/	0.99	0.54	0.55	0.75 (3 /	0.63 (5 /
	Former/>=2	(0.83,1.17)	(0.44,0.63)	(0.44,0.63)	4)	8)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.		of Fir	st Event non-ICS	of Fir ICS	Probability st Event non-ICS
>=65/III & IV/ M/Non-Asian/ High		0.87 (0.82,0.93)	0.46	0.51 (0.47,0.54)		
	<25 kg/m^2/	0.79	0.63	0.72	0.59 (33 /	0.66 (29 /
	Current/>=2	(0.73,0.86)	(0.59,0.67)	(0.68,0.75)	56)	44)
	<25 kg/m^2/	0.87	0.49	0.54	0.44 (74 /	0.48 (74 /
	Former/<2	(0.82,0.93)	(0.47,0.52)	(0.51,0.57)	168)	154)
	<25 kg/m^2/ Former/>=2	0.79 (0.73,0.86)		0.76 (0.72,0.79)	0.62 (65 / 105)	0.58 (53 / 91)
	>=25 kg/m^2/	0.87	0.46	0.50	0.43 (42 /	0.46 (32 /
	Current/<2	(0.82,0.93)	(0.43,0.49)	(0.47,0.53)	97)	70)
	>=25 kg/m^2/	0.79	0.60	0.68	0.44 (22 /	0.69 (22 /
	Current/>=2	(0.73,0.86)	(0.56,0.63)	(0.64,0.72)	50)	32)
	>=25 kg/m^2/ Former/<2	0.87 (0.82,0.93)			0.42 (124/ 297)	0.45 (107/ 237)
	>=25 kg/m^2/	0.79	0.64	0.72	0.60 (99 /	0.68 (90 /
	Former/>=2	(0.73 , 0.86)	(0.60,0.67)	(0.69,0.75)	164)	133)

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Table 2.20
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Nine Covariates)

Age/GOLD/ Sex/Race/ Country Income	BMI/ Smoking/Exac.	Modelled Hazard Ratio ICS vs. non-ICS	of Fir	st Event non-ICS	of Fir	Probability st Event non-ICS
>=65/III & IV/ M/Non-Asian/ Non-high	<25 kg/m^2/ Current/<2			0.45 (0.41,0.49)	0.40 (19 /	0.35 (13 / 37)
	<25 kg/m^2/ Current/>=2	0.79 (0.73,0.86)	0.48 (0.43,0.52)		0.39 (11 / 28)	0.56 (9 / 16)
	<25 kg/m^2/	0.87	0.48	0.53	0.49 (31 /	0.50 (24 /
	Former/<2	(0.82,0.93)	(0.44,0.51)	(0.49,0.56)	63)	48)
	<25 kg/m^2/	0.79	0.56	0.64	0.57 (24 /	0.69 (31 /
	Former/>=2	(0.73,0.86)	(0.51,0.60)	(0.59,0.68)	42)	45)
	>=25 kg/m^2/	0.87	0.41	0.45	0.04 (1 /	0.33 (7 /
	Current/<2	(0.82,0.93)	(0.37,0.44)	(0.41,0.49)	25)	21)
	>=25 kg/m^2/	0.79	0.45	0.53	0.19 (3 /	0.55 (6 /
	Current/>=2	(0.73,0.86)	(0.40,0.49)	(0.48,0.57)	16)	11)
	>=25 kg/m^2/	0.87	0.48	0.52	0.49 (39 /	0.42 (20 /
	Former/<2	(0.82,0.93)	(0.44,0.51)	(0.49,0.56)	80)	48)
	>=25 kg/m^2/	0.79	0.52	0.61	0.56 (25 /	0.59 (17 /
	Former/>=2	(0.73,0.86)	(0.48,0.56)	(0.56,0.65)	45)	29)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level	
Type 3 Wald p-values	Age	0.585
_	Treatment	0.083
	BMI by Exacerbation History	0.082
	Smoking Status by Country Income	0.068
	Sex	0.067
	Exacerbation History by Sex	0.061
	Treatment by Exacerbation History	0.061
	Exacerbation History by Race	0.055
	Sex by Race	0.049
	GOLD by Race	0.040
	Country Income by Race	0.035
	BMI by Race	0.021
	Treatment by Race	0.010
	Exacerbation History by Age	0.010
	Sex by Smoking Status	0.007
	Smoking Status	0.004
	BMI	0.002
	Age by Country Income	<0.001
	Race	<0.001
	Exacerbation History by Country Income	<0.001
	Country Income	<0.001
	GOLD	<0.001
	Exacerbation History	<0.001

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Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Rati	o Age >=65 vs <=64		
331 01	At Exacerbation History:<2 Country Income:Non-high income At Exacerbation History:>=2 Country Income:High income At Exacerbation History:>=2 Country Income:Non-high income BMI >=25 kg/m^2 vs <25 kg/m^2 At Exacerbation History:<2 Race:Asian At Exacerbation History:<2 Race:Non-Asian At Exacerbation History:>=2 Race:Asian	0.86 (0.79, 1.05 (0.94, 0.76 (0.61, 0.99 (0.93, 0.70 (0.55,	1.33) 0.94) 1.18) 0.95) 1.06) 0.87)
	At Exacerbation History:>=2 Race:Non-Asian Country Income Non-high income vs High income At Exacerbation History:<2 Age:<=64 Smoking Status:Current smoker Race:Asian At Exacerbation History:<2 Age:<=64 Smoking Status:Current smoker	0.91 (0.84, 0.86 (0.70, 0.70 (0.63,	1.06)
	Race:Non-Asian At Exacerbation History:<2 Age:<=64 Smoking Status:Current Smoker Race:Non-Asian At Exacerbation History:<2 Age:<=64 Smoking Status:Former smoker Race:Asian At Exacerbation History:<2 Age:<=64 Smoking Status:Former smoker	0.96 (0.78,	1.17)
	Race:Non-Asian At Exacerbation History:<2 Age:>=65 Smoking Status:Current smoker Race:Asian	1.05 (0.85,	1.30)
	At Exacerbation History:<2 Age:>=65 Smoking Status:Current smoker Race:Non-Asian At Exacerbation History:<2 Age:>=65 Smoking Status:Former smoker Race:Asian	0.86 (0.76, 1.17 (0.97,	1.42)
	At Exacerbation History:<2 Age:>=65 Smoking Status:Former smoker Race:Non-Asian At Exacerbation History:>=2 Age:<=64 Smoking Status:Current smoker Race:Asian	0.95 (0.86, 0.66 (0.53,	,
	At Exacerbation History:>=2 Age:<=64 Smoking Status:Current smoker Race:Non-Asian	0.53 (0.48,	0.60)

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Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Exacerbation History:>=2 Age:<=64 Smoking Status:Former smoker Race:Asian	0.73 (0.59,	0.90)
93% CI	At Exacerbation History:>=2 Age:<=64 Smoking Status:Former smoker Race:Non-Asian	0.59 (0.53,	0.67)
	At Exacerbation History:>=2 Age:>=65 Smoking Status:Current smoker Race:Asian	0.80 (0.65,	0.99)
	At Exacerbation History:>=2 Age:>=65 Smoking Status:Current smoker Race:Non-Asian	0.65 (0.57,	0.75)
	At Exacerbation History:>=2 Age:>=65 Smoking Status:Former smoker Race:Asian	0.89 (0.73,	1.08)
	At Exacerbation History:>=2 Age:>=65 Smoking Status:Former smoker Race:Non-Asian	0.73 (0.65,	0.82)
	<pre>Exacerbation History >=2 vs <2 At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Asian</pre>	2.02 (1.63,	2.51)
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Non-Asian	1.69 (1.50,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Asian	1.54 (1.26,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Non-Asian	1.29 (1.11,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Asian	1.77 (1.44,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Non-Asian	1.48 (1.31,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Asian	1.35 (1.10,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Non-Asian	1.13 (0.97,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Asian	2.24 (1.83,	
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Non-Asian	1.87 (1.66,	2.11)

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Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country	1.71 (1.42,	2.06)
95% CI	<pre>Income:Non-high income Race:Asian At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country</pre>	1.42 (1.24,	1.64)
	Income:Non-high income Race:Non-Asian		
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:High	1.96 (1.62,	2.38)
	income Race: Asian	1 (4 / 1 4 (1 02)
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Non-Asian	1.64 (1.46,	1.83)
	At Treatment:ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country	1.50 (1.25,	1.79)
	Income: Non-high income Race: Asian	,	_ , , ,
	At Treatment: ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country	1.25 (1.09,	1.43)
	Income:Non-high income Race:Non-Asian		
	At Treatment: ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country Income: High	1.85 (1.47,	2.33)
	income Race:Asian		
		1.54 (1.37,	1.73)
	income Race:Non-Asian		
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country	1.41 (1.13,	1.77)
	Income: Non-high income Race: Asian	1 10 / 1 00	1 26
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country	1.18 (1.02,	1.36)
	<pre>Income:Non-high income Race:Non-Asian At Treatment:ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:High</pre>	1 62 / 1 20	2 04)
	income Race: Asian	1.62 (1.29,	2.04)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:High	1 35 / 1 20	1 52)
	income Race:Non-Asian	1.33 (1.20)	1.02)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country	1.24 (0.99,	1.55)
	Income: Non-high income Race: Asian	,	_,,,
	At Treatment: ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country	1.03 (0.88,	1.20)
	Income: Non-high income Race: Non-Asian		
	At Treatment: ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income: High	2.05 (1.65,	2.55)
	income Race:Asian		
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Non-Asian	1.71 (1.53,	1.91)

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Population: Intent-to-Treat

Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country	1.56 (1.27,	1.92)
95% CI	<pre>Income:Non-high income Race:Asian At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:Non-high income Race:Non-Asian</pre>	1.30 (1.14,	1.49)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Asian	1.80 (1.46,	2.21)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Non-Asian	1.50 (1.35,	1.66)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Asian	1.37 (1.12,	1.67)
	At Treatment:ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Non-Asian	1.14 (1.00,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Asian	2.23 (1.79,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Non-Asian	1.85 (1.63,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Asian	1.70 (1.38,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Non-Asian	1.41 (1.22,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Asian	1.95 (1.57,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Non-Asian	1.63 (1.43,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Asian	1.49 (1.21,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Non-Asian	1.24 (1.06,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Asian	2.46 (2.01,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Non-Asian	2.05 (1.82,	2.32)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:Non-high income Race:Asian	1.88 (1.56,	2.27)
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:<=64 Country Income:Non-high income Race:Non-Asian	1.57 (1.36,	1.80)
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Asian	2.16 (1.78,	2.62)
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Non-Asian	1.80 (1.61,	2.02)
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Asian	1.65 (1.38,	
	At Treatment:non-ICS BMI:<25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Non-Asian	1.37 (1.20,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Asian	2.03 (1.61,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country Income:High income Race:Non-Asian	1.70 (1.50,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Asian	1.55 (1.24,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:<=64 Country Income:Non-high income Race:Non-Asian	1.29 (1.11,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Asian	1.78 (1.41,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:High income Race:Non-Asian	1.49 (1.31,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Asian	1.36 (1.08,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:F Age:>=65 Country Income:Non-high income Race:Non-Asian	1.13 (0.97,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Asian	2.25 (1.81,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:High income Race:Non-Asian	1.88 (1.67,	∠.⊥⊥)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:Non-high income Race:Asian	1.72 (1.40,	2.11)
J	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:<=64 Country Income:Non-high income Race:Non-Asian	1.43 (1.25,	1.64)
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Asian	1.97 (1.60,	2.44)
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:High income Race:Non-Asian	1.65 (1.48,	1.83)
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Asian	1.51 (1.23,	
	At Treatment:non-ICS BMI:>=25 kg/m^2 Sex:M Age:>=65 Country Income:Non-high income Race:Non-Asian GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted	1.25 (1.09,	1.44)
	At Race: Asian	1.85 (1.50,	2.28)
	At Race:Non-Asian	1.48 (1.40,	
	Race Asian vs Non-Asian		
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.57 (0.39,	
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.70 (0.50,	
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.75 (0.57,	
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.92 (0.73,	1.16)
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.68 (0.47,	,
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.84 (0.59,	1.20)
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.90 (0.68,	1.19)
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	1.10 (0.85,	1.43)

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Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.72 (0.51,	0.99)
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.88 (0.66,	1.17)
	At Treatment:ICS BMT:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.94 (0.76,	1.15)
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	1.15 (0.97,	
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.86 (0.62,	
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	1.05 (0.78,	•
	At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:High income At Treatment:ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted	1.13 (0.92, 1.38 (1.14,	·
	Exacerbation History:>=2 Sex:M Country Income:Non-high income At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted	0.44 (0.29,	
	Exacerbation History: <2 Sex: F Country Income: High income At Treatment: ICS BMI: >= 25 kg/m^2 GOLD: I & II: FEV1>= 50% predicted	0.54 (0.37,	·
	Exacerbation History:<2 Sex:F Country Income:Non-high income At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted	0.57 (0.43,	
	Exacerbation History:<2 Sex:M Country Income: High income At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.70 (0.54,	·
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.52 (0.35,	0.79)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.64 (0.44,	0.94)
	At Treatment:ICS BMĪ:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.69 (0.50,	0.94)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	0.84 (0.63,	1.13)

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Table 2.30 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.55 (0.38,	0.80)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.67 (0.48,	0.94)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEVI<50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.72 (0.54,	0.95)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.88 (0.68,	1.13)
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.66 (0.45,	
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.80 (0.57,	
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.86 (0.65,	•
	At Treatment:ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	1.06 (0.81,	
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:High income		
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	,	·
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:High income		
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income		
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:High income		
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted		
	Exacerbation History:>=2 Sex:M Country Income:High income At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:I & II: FEV1>=50% predicted		
	Exacerbation History:>=2 Sex:M Country Income:Non-high income	0.00 (0.08,	1.10)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.57 (0.41,	0.79)
30 0 01	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.70 (0.53,	0.94)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.75 (0.61,	0.93)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.92 (0.77,	1.10)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.69 (0.50,	0.95)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.84 (0.63,	1.13)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.90 (0.74,	1.10)
	At Treatment:non-ICS BMI:<25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	1.11 (0.91,	1.34)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.35 (0.23,	0.52)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.43 (0.30,	0.62)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.46 (0.34,	0.62)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.56 (0.42,	0.75)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.42 (0.28,	0.63)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic :	Level		
Hazard Ratio 95% CI	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.51 (0.35,	0.76)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.55 (0.40,	0.76)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:I & II: FEV1>=50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	0.68 (0.50,	0.92)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:High income	0.44 (0.30,	0.64)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:F Country Income:Non-high income	0.54 (0.38,	0.76)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:High income	0.58 (0.43,	0.77)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:<2 Sex:M Country Income:Non-high income	0.71 (0.54,	0.92)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:High income	0.53 (0.36,	0.77)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:F Country Income:Non-high income	0.64 (0.45,	0.92)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:High income	0.69 (0.52,	0.91)
	At Treatment:non-ICS BMI:>=25 kg/m^2 GOLD:III & IV: FEV1<50% predicted Exacerbation History:>=2 Sex:M Country Income:Non-high income	0.85 (0.64,	1.12)
ì	Sex M vs F At Exacerbation History:<2 Smoking Status:Current smoker Race:Asian	0.89 (0.68,	1 18)
	At Exacerbation History:<2 Smoking Status:Current smoker Race:Non-Asian	0.68 (0.62,	,
	At Exacerbation History:<2 Smoking Status:Former smoker Race:Asian	1.03 (0.79,	1.35)

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Table 2.30

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Nine Covariates)

Statistic	Level		
Hazard Ratio	At Exacerbation History:<2 Smoking Status:Former smoker Race:Non-Asian	0.78 (0.72,	0.86)
	At Exacerbation History:>=2 Smoking Status:Current smoker Race:Asian At Exacerbation History:>=2 Smoking Status:Current smoker Race:Non-Asian	0.99 (0.74, 0.75 (0.68,	
	At Exacerbation History:>=2 Smoking Status:Former smoker Race:Asian At Exacerbation History:>=2 Smoking Status:Former smoker Race:Non-Asian	1.14 (0.87, 0.87 (0.79,	
	Smoking Status Current smoker vs Former smoker		
	At Sex:F Country Income:High income	1.04 (0.95,	1.13)
	At Sex:F Country Income:Non-high income	0.93 (0.82,	1.05)
	At Sex:M Country Income:High income	0.90 (0.83,	0.97)
	At Sex:M Country Income:Non-high income	0.81 (0.73,	0.89)
	Treatment ICS vs non-ICS		
	At Exacerbation History:<2 Race:Asian At Exacerbation History:<2 Race:Non-Asian At Exacerbation History:>=2 Race:Asian At Exacerbation History:>=2 Race:Non-Asian	1.09 (0.92, 0.87 (0.82, 0.99 (0.83, 0.79 (0.73,	0.93) 1.17)
	<u> -</u>	,	,

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		Probability sst Event non-ICS		Probability rst Event non-ICS
<=64/I & II/	<25 kg/m^2/	0.87	0.42	0.46	0.30 (32 /	0.46 (31 /
F	<2	(0.81,0.93)	(0.39,0.44)	(0.43,0.49)	106)	68)
	<25 kg/m^2/	0.87	0.58	0.63	0.54 (32 /	0.79 (31 /
	>=2	(0.81,0.93)	(0.54,0.61)	(0.59,0.66)	59)	39)
	>=25 kg/m^2/	0.85	0.41	0.46	0.39 (70 /	0.47 (47 /
	<2	(0.79,0.91)	(0.38,0.43)	(0.43,0.49)	178)	101)
	>=25 kg/m^2/	0.85	0.57	0.63	0.45 (45 /	0.53 (36 /
	>=2	(0.79,0.91)	(0.54,0.60)	(0.60,0.66)	99)	68)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		-		Probability rst Event non-ICS
	<25 kg/m^2/ <2	0.87 (0.81,0.93)	0.33 (0.31,0.35)	0.37 (0.34,0.39)	0.28 (42 / 148)	0.24 (27 / 114)
	<25 kg/m^2/	0.87	0.47	0.52	0.45 (29 /	0.43 (17 /
	>=2	(0.81,0.93)	(0.44,0.50)	(0.49,0.55)	65)	40)
	>=25 kg/m^2/	0.85	0.32	0.37	0.27 (82 /	0.26 (45 /
	<2	(0.79,0.91)	(0.30,0.34)	(0.34,0.39)	302)	174)
	>=25 kg/m^2/	0.85	0.46	0.52	0.47 (46 /	0.54 (48 /
	>=2	(0.79,0.91)	(0.44,0.49)	(0.49,0.55)	97)	89)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_		Probability rst Event non-ICS
<=64/III & IV/	<25 kg/m^2/	0.87	0.56	0.61	0.52 (103/	0.62 (107/
F	<2	(0.81,0.93)	(0.53,0.59)	(0.58,0.64)	197)	172)
	<25 kg/m^2/	0.87	0.73	0.78	0.67 (98 /	0.76 (85 /
	>=2	(0.81,0.93)	(0.70,0.76)	(0.75,0.81)	147)	112)
	>=25 kg/m^2/	0.85	0.55	0.61	0.47 (92 /	0.57 (69 /
	<2	(0.79,0.91)	(0.52,0.58)	(0.58,0.64)	195)	121)
	>=25 kg/m^2/	0.85	0.72	0.78	0.62 (111/	0.64 (58 /
	>=2	(0.79,0.91)	(0.69,0.75)	(0.75,0.81)	179)	90)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_		Probability rst Event non-ICS
<=64/III & IV/	<25 kg/m^2/	0.87	0.45	0.50	0.44 (160/	0.41 (111/
	<2	(0.81,0.93)	(0.43,0.48)	(0.48,0.53)	367)	271)
	<25 kg/m^2/	0.87	0.62	0.67	0.60 (131/	0.64 (121/
	>=2	(0.81,0.93)	(0.59,0.65)	(0.64,0.70)	218)	188)
	>=25 kg/m^2/	0.85	0.45	0.50	0.49 (173/	0.45 (124/
	<2	(0.79,0.91)	(0.42,0.47)	(0.48,0.53)	352)	277)
	>=25 kg/m^2/	0.85	0.61	0.67	0.56 (125/	0.65 (119/
	>=2	(0.79,0.91)	(0.58,0.64)	(0.64,0.70)	224)	183)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_		Probability rst Event non-ICS
>=65/I & II/	<25 kg/m^2/	0.87	0.43 (0.40,0.46)	0.48	0.42 (46 /	0.46 (29 /
F	<2	(0.81,0.93)		(0.45,0.51)	109)	63)
	<25 kg/m^2/	0.87	0.57	0.62	0.47 (28 /	0.69 (20 /
	>=2	(0.81,0.93)	(0.53,0.60)	(0.58,0.65)	59)	29)
	>=25 kg/m^2/	0.85	0.42	0.48	0.40 (61 /	0.46 (44 /
	<2	(0.79,0.91)	(0.40,0.45)	(0.45,0.51)	154)	96)
	>=25 kg/m^2/	0.85	0.56	0.62	0.56 (43 /	0.53 (33 /
	>=2	(0.79,0.91)	(0.52,0.59)	(0.58,0.65)	77)	62)

Protocol: 207941 Page 6 of 8 Population: Intent-to-Treat

Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		-		Probability rst Event non-ICS
>=65/I & II/	<25 kg/m^2/	0.87	0.35	0.39	0.27 (58 /	0.35 (54 /
M	<2	(0.81,0.93)	(0.33,0.37)	(0.36,0.41)	213)	156)
	<25 kg/m^2/	0.87	0.47	0.52	0.40 (34 /	0.58 (38 /
	>=2	(0.81,0.93)	(0.44,0.50)	(0.49,0.55)	86)	66)
	>=25 kg/m^2/	0.85	0.34	0.39	0.34 (116/	0.38 (105/
	<2	(0.79,0.91)	(0.32,0.36)	(0.37,0.41)	340)	280)
	>=25 kg/m^2/	0.85	0.46	0.52	0.44 (63 /	0.52 (50 /
	>=2	(0.79,0.91)	(0.43,0.49)	(0.49,0.55)	143)	97)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_		Probability st Event non-ICS
>=65/III & IV/	<25 kg/m^2/	0.87	0.57	0.63	0.54 (93 /	0.48 (61 /
F	<2	(0.81,0.93)	(0.54,0.60)	(0.59,0.66)	172)	127)
	<25 kg/m^2/	0.87	0.72	0.77	0.67 (90 /	0.65 (56 /
	>=2	(0.81,0.93)	(0.69,0.75)	(0.74,0.80)	135)	86)
	>=25 kg/m^2/	0.85	0.57	0.63	0.52 (93 /	0.59 (59 /
	<2	(0.79,0.91)	(0.54,0.59)	(0.59,0.66)	179)	100)
	>=25 kg/m^2/	0.85	0.71	0.77	0.59 (59 /	0.66 (55 /
	>=2	(0.79,0.91)	(0.68,0.74)	(0.74,0.80)	100)	83)

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Table 9.1
Probability of Exacerbation During Year on Study Treatment from Cox Model
(Based on Seven Covariates Pneumonia Model)

Age/GOLD/ Sex	BMI/ Exac.	Modelled Hazard Ratio ICS vs. non-ICS		_		Probability rst Event non-ICS
>=65/III & IV/	<25 kg/m^2/ <2	0.87 (0.81,0.93)	0.48 (0.45,0.50)	0.53 (0.50,0.55)	0.45 (206/ 456)	0.48 (200/ 419)
	<25 kg/m^2/	0.87	0.62	0.67	0.55 (165/	0.63 (166/
	>=2	(0.81,0.93)	(0.59,0.64)	(0.64,0.70)	299)	262)
	>=25 kg/m^2/	0.85	0.47	0.53	0.41 (215/	0.44 (171/
	<2	(0.79,0.91)	(0.45,0.49)	(0.50,0.55)	522)	389)
	>=25 kg/m^2/	0.85	0.61	0.67	0.55 (157/	0.66 (142/
	>=2	(0.79,0.91)	(0.58,0.64)	(0.64,0.70)	286)	216)

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Population: Intent-to-Treat

Table 9.2

Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates Pneumonia Model)

Level	
Sex by Age	0.665
Treatment by BMI	0.650
BMI	0.613
Age	0.471
Exacerbation History by Age	0.131
Treatment	<0.001
Sex	<0.001
GOLD	<0.001
Exacerbation History	<0.001
	Sex by Age Treatment by BMI BMI Age Exacerbation History by Age Treatment Sex GOLD

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Population: Intent-to-Treat

Table 9.2 Type 3 p-values and Hazard Ratios from Selected Exacerbation Cox Model (Based on Seven Covariates Pneumonia Model)

Statistic	Level		
Hazard Rati 95% CI	o Age >=65 vs <=64	acerbation History:<2 Sex:F acerbation History:<2 Sex:M acerbation History:>2 Sex:M acerbation History:>2 Sex:F acerbation History:>2 Sex:F acerbation History:>2 Sex:F acerbation History:>2 Sex:M ac	
	At Exacerbation History:<2 Sex:F	1.05 (0.95, 1.15)	
	At Exacerbation History:<2 Sex:M	1.07 (1.00, 1.15)	
	At Exacerbation History:>=2 Sex:F	0.97 (0.88, 1.07)	
	At Exacerbation History:>=2 Sex:M	0.99 (0.91, 1.08)	
		0.00.4.0.01	
	At Treatment:ICS	·	
	At Treatment:non-ICS	1.00 (0.93, 1.07)	
	Exacerbation History >=2 vs <2		
	At Age:<=64	1.61 (1.49, 1.73)	
	At Age:>=65	1.49 (1.39, 1.59)	
	GOLD III & IV: FEV1<50% predicted vs I & II: FEV1>=50% predicted		
		1.52 (1.44, 1.60)	
	Sex M vs F		
	At Age:<=64	0.74 (0.69, 0.80)	
	At Age:>=65	0.76 (0.70, 0.82)	
	Treatment ICS vs non-ICS		
	At BMI:<25 kg/m^2	0.87 (0.81, 0.93)	
	At BMI:>=25 kg/m^2	0.85 (0.79, 0.91)	

Division: Worldwide Development **Retention Category:** GRS019

Information Type: Meta-Analysis Plan

Title:

Meta-Analysis Plan for MID207941: A Study to Evaluate Risk Factors for Pneumonia and Chronic Obstructive Pulmonary Disease (COPD) Exacerbations in a COPD Population of Patients Treated with GW685698 + GW642444 (Fluticasone Furoate + Vilanterol); GW642444 (Vilanterol); CCI18781 (Fluticasone Propionate); GR33343 (Salmeterol); CCI18781+ GR33343 (Fluticasone Propionate + Salmeterol) and Placebo.

Compound Number: GW685698, GW642444, CCI18781, GR33343

Effective Date: 15-MAY-2017

Description:

This document describes the reporting and analysis planned for the MID207941 metaanalysis.

The study is designed to evaluate risk factors for pneumonia and COPD exacerbations in the COPD population of the five contributing studies: HZC102870, HZC102970, SCO100250, SCO40043, and SCO30003.

Subject: COPD, pneumonia, COPD exacerbations, inhaled corticosteroids

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ABBREVIATIONS

Body Mass Index

COPD Chronic Obstructive Pulmonary Disease

FF Fluticasone Furoate
FP Fluticasone Propionate

GOLD Global Initiative for Chronic Obstructive Lung Disease

ICS Inhaled Corticosteroid

ITT Intent-to-Treat SAL Salmeterol VI Vilanterol

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1. INTRODUCTION

The purpose of this meta-analysis is to evaluate the most important risk factors, alone and in combination for pneumonia and chronic obstructive pulmonary disease (COPD) exacerbations in patients with COPD.

The analysis will indentify the subgroups of COPD patients which are most at risk for these events and quantify the probability of patients having those events.

Previous analyses of the separate studies [not yet published] have identified some similarities in risk factors for pneumonias and COPD exacerbations in this population and this meta-analysis is intended to provide a more definitive list of risk factors using a larger sample size, and hence additionally more events of interest.

2. OBJECTIVE(S) AND ENDPOINT(S)

2.1. Objective(s)

2.1.1. Primary Objectives

The primary objectives of this study are to evaluate

- Risk factors for pneumonia in the COPD population of the contributing studies
- Risk factors for moderate/severe exacerbations in the COPD patient population of the contributing studies

2.1.2. Exploratory Objective

Based on previous analyses of the separate studies [not yet published] we anticipate that body mass index (BMI) will be an important factor in understanding the risk of pneumonia, both as a main effect and in interaction with treatment (inhaled corticosteroid [ICS] vs. non inhaled-corticosteroid [non-ICS]). In these previous analyses, a single cutoff for BMI subgroups was used: (BMI < 25kg/m^2 vs. BMI $\geq 25 \text{kg/m}^2$), this was chosen because the median BMI value in the studies was often close to 25kg/m^2 . However, there exists literature suggesting that a BMI $\leq 21 \text{ kg/m}^2$ may be an important cut-off for examining the effect of BMI on the risk of a subsequent pneumonia. Therefore the secondary objective for this study is to fully characterise the effect of BMI on risk for pneumonia.

2.2. Endpoint(s)

- Time to first pneumonia
- Time to first moderate/severe exacerbation

3. DATA SOURCES/STUDIES INCLUDED

The following criteria will be used to select studies:

- Randomised, parallel-group, double-blind clinical trials in COPD with FF/VI or FP/SAL as a randomized study drug not in combination with another study drug
- Inclusion of a VI or SAL alone treatment arm
- Constant dose of FP or FF
- At least 52 weeks duration
- Minimum 100 subjects per treatment arm to ensure sufficient events
- Not conducted earlier than TORCH (as this was first study where pneumonia was noted)
- Not solely in moderate COPD patients

The following table lists all studies conducted with FF/VI or FP/SAL of at least 52 weeks duration and the reason for exclusion if excluded.

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Study	SFC	Comparators	Duration	Reason for Exclusion
	or FF/VI			Exclusion
SCO30003 (TORCH)	SFC 50/500	Placebo, Salmeterol, FP	156 weeks	
SCO40043	SFC 50/250	Salmeterol	52 weeks	
SCO100250	SFC 50/250	Salmeterol	52 weeks	
HZC102972	FF/VI 50/25, 100/25, 200/25	Vilanterol	52 weeks	
HZC102871	FF/VI 50/25, 100/25, 200/25	Vilanterol	52 weeks	
SCO40036 (INSPIRE)	50/500	Tiotropium	104 weeks	No VI or SAL arm
SFCB3024 (TRISTAN)	SFC 50/500	Placebo, Salmeterol, FP	52 weeks	Pre TORCH
SCO40002 (COSMIC)	SFC 50/500	Salmeterol	52 weeks	FP withdrawn
SCO40041	SFC 50/250	Salmeterol	104 weeks	<100 subjects
(Bone Mineral Density Study)				per arm
SUMMIT	FF/VI 100/25	Placebo, Vilanterol, FP	Mean Treatment Exposure 1.6-1.7 years	Moderate COPD only

This is therefore a meta-analysis of five randomised double blind parallel group studies. Treatment assignments will be pooled into two groups "ICS treated" and "non-ICS treated" based on whether the patient was randomised to an inhaled corticosteroid (ICS) treatment alone or in combination: FF in the HZC studies, or FP in the SCO studies.

All available on-treatment data will be used from each study.

The numbers in the intent-to-treat (ITT) population and assigned treatment arms in each of the contributing studies is given in Table 1.

Table 1

Study	ITT	FF/VI	FF/VI	FF/VI	VI 25	FP/SAL	SAL 50	FP 500	Placebo	Total	Total
		200/25	100/25	50/25		250/50				ICS	non-ICS

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										treated	treated
HZC102871	1622	402	403	408	409					1213	409
HZC102970	1633	409	403	412	409					1224	409
SCO100250	797					394	403			394	403
SCO40043	782					394	388			394	388
SCO30003	6112					1533	1521	1534	1524	3067	3045
Meta-analysis	10946	811	806	820	818	2321	2312	1534	1524	6392	4654

Further details can be found in the protocols and reporting analysis plans (RAPs) of the contributing studies.

4. PLANNED ANALYSES

4.1. Analysis Methods

The analyses will be based on a backwards selection process for covariates. A starting Cox model will be fitted to the data using all relevant covariates and covariates will be removed iteratively until the selected model is found.

4.2. Statistical Hypotheses

The comparisons of interest will all be tests of significance of the type III Wald statistic of covariates in a Cox model. The hypothesis tested is:

H₀: The estimated beta coefficient of the covariate is equal to zero (i.e. the covariate has no effect on the outcome)

H₁: The estimated beta coefficient of the covariate is non-zero (i.e. the covariate has an effect on the outcome)

5. ANALYSIS POPULATIONS

The intent-to-treat (ITT) population will be used, and will consist of the ITT populations from each of the contributing studies.

6. TREATMENT COMPARISONS

Treatment comparisons will be made by pooling patients into two groups "ICS treated" and "non-ICS treated" based on whether the patient was randomised to an FF/VI arm in the HZC studies, or either FP alone, or in combination with salmeterol: FP/SAL in the SCO studies.

7. GENERAL CONSIDERATIONS FOR DATA ANALYSES

In using the backward selection process to select the most significant model covariates, inevitably concerns about multiple testing will arise. The purpose of this analysis is not confirmatory and so the control of the type I error level is not paramount. Any conclusions drawn from the final model will take into account the nature of the selection process in performing multiple hypothesis tests on model covariates.

In the final publication of results, reference will be made to the previous analyses of risk factors for pneumonia and COPD exacerbation which were performed separately on each study [not yet published]. These "by study" results will be used to assess the heterogeneity of studies used in this meta-analysis.

8. DATA HANDLING CONVENTIONS

8.1. Premature Withdrawal and Missing Data

No imputation of missing data will be performed for the purposes of this study.

8.2. Derived and Transformed Data

No additional derivations will be used.

8.3. Assessment Windows

Not applicable

8.4. Subgroup and Covariate Definitions

The covariates to be used in the primary analyses are all binary categorical variables measured at baseline: treatment assignment (ICS, non-ICS) age (\leq 64, \geq 65), sex, BMI (\leq 25kg/m², \geq 25kg/m²), GOLD status (I & II, III & IV), smoking status (current smoker, former smoker), exacerbation history in the previous year (\leq 2, \geq 2). Only covariates which are measured in all contributing studies are included.

In additional analyses two more binary covariates will be used: race (Asian, non-Asian), and the World Bank categorisation of country income group from the year in which the contributing study started (2000 for SCO30003, 2004 for the SCO exacerbation studies, and 2009 for the HZC exacerbation studies). The World Bank categorises countries into four groups: high income, upper-middle income, lower-middle income and low income, which for the purposes of this analysis will be regrouped further into high income and non-high income countries to give more reasonable sample sizes in the categories.

Note, that neither study nor region will be used as a covariate in the analyses. Study will not be used because the variable has no predictive value for the wider COPD population and this analysis is intended to provide useful indicators of risk in the wider COPD population. Region will not be used because of colinearity issues with the race covariate.

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It is hoped that race and income group will account for some aspects which the study and region covariates would traditionally adjust for, namely differences in the standards of care in different countries.

8.5. Other Data Handling Conventions

Only on-treatment moderate/severe exacerbations and pneumonias will be considered for this analysis, and follow up time will be censored at the end of the on-treatment period (see individual study RAPs for definitions of the on-treatment period in each study).

9. ANALYSES

9.1. Study Population

Disposition, demography, baseline characteristics and exposure tables will be produced.

9.2. Efficacy and Safety Analyses

The analyses of risk factors for i) pneumonia and ii) exacerbations will be based on a) selecting the best fitting Cox models using a backwards selection procedure, and then b) presenting the hazard ratios and probabilities from the selected model.

9.2.1. Analysis of risk of pneumonia event based on seven common covariates

9.2.1.1. Backwards selection

The starting Cox model will contain covariates for treatment, age, BMI, exacerbation history, GOLD, sex, and smoking status and all possible (21) pairwise interactions of those main effects. Covariates will be iteratively removed from the model based on the type III Wald statistics of the covariate. The covariate with the largest statistic will be removed until in the final model all remaining covariates have a p-value > 0.1. However, main effects will not be eligible for removal during the selection procedure if there is an interaction term involving that main effect still remaining in the covariate list. (Thus the finally selected model may contain main effects with associated p-values > 0.1.)

9.2.1.2. Subgroup probabilities and hazard ratios

Once the final model has been selected, the model estimated probability of pneumonia during the first year will be presented together with a figure of the survival function for each subgroup combination of the covariates remaining in the final model. Hazard ratios for each of the covariates in the final model will also be presented. Although data from the full three years of the SCO30003 (TORCH) study will be used in the model, survival estimates from the Cox model will be presented up to one year only.

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9.2.2. Analysis of risk of pneumonia event based on nine common covariates

This analysis will be as for the analysis of pneumonia based on seven common covariates, but will additionally include race, and the World Bank country income groups and all their interactions in the starting model for the backwards selection process.

9.2.3. Analysis of risk of exacerbation event based on seven common covariates

This analysis will be as for the analysis of pneumonia based on seven common covariates replacing the analysis variables of time to pneumonia with time to moderate/severe exacerbation

9.2.4. Analysis of risk of exacerbation event based on nine common covariates

This analysis will be as for the analysis of pneumonia based on nine common covariates replacing the analysis variables of time to pneumonia with time to moderate/severe exacerbation

9.3. Exploratory analyses

Examination of BMI effect and BMI by treatment effect in risk of pneumonia

In the primary analysis for risk of pneumonia, the BMI subgroup variable will be "cut" at 25kg/m^2 ($<25 \text{kg/m}^2$, $>=25 \text{kg/m}^2$), and based on previous analyses of pneumonia risk in the individual studies, it is anticipated that BMI and/or treatment*BMI, will be significant explanatory covariates of the risk of pneumonia. If this is indeed the case, in order to better understand the risk profile for patients with different BMIs, the following two models (or one model if the selected models are identical) will be rerun, using a BMI covariate with more than two modalities.

- 1. The final pneumonia Cox model selected based on seven common covariates
- 2. The final pneumonia Cox model selected based on nine common covariates

The BMI covariate will be "cut" as follows into groups which are roughly deciles of the data: (0, 20), [20, 22), [22, 23), [23, 24), [24, 25), [25, 26), [26, 28), [28, 30), [30, 33), 33+

Using these two models the effect (hazard ratios vs. BMI reference level) of BMI on pneumonia, using the lowest (0, 20) kg/m² group as the reference level, will be presented and plotted in any subgroups which interact with BMI

Additionally assuming an interaction between BMI and treatment is present, the treatment effect (hazard ratio for ICS vs. non-ICS) at each of the BMI subgroup levels.

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10. REFERENCES

11. ATTACHMENTS

11.1. List of Trials

Data from the following trials will be used in this study: HZC102870, HZC102970, SCO100250, SCO40043, and SCO30003.