

## Supplemental Material

\* Encoding: UTF-8.

\*APACHE.

RECODE Ageyrs (SYSMIS=0) (Lowest thru 44=0) (45 thru 54=2) (55 thru 64=3) (65 thru 74=5) (75 thru Highest=6) INTO agepoints.

VARIABLE LABELS agepoints 'APACHE II points: age'.

EXECUTE.

RECODE Temperature°C (CONVERT) ('?41 (4)'=4) ('39-40.9 (3)'=3) ('38.5-38.9 (1)'=1) ('36-38.4 '+'(0)'=0) ('34-35.9 (1)'=1) ('32-33.9 (2)'=2) ('30-31.9 (3)'=3) ('?29.9 (4)'=4) ('missing (0)'=0) (MISSING=0) INTO tempoints.

VARIABLE LABELS tempoints 'APACHE II Temperature points'.

EXECUTE.

RECODE MeanArterialPressure (CONVERT) ('missing (0)'=0) (MISSING=0) ('?160 (4)'=4) ('130-159 '+'(3)'=3) ('110-129 (2)'=2) ('70-109 (0)'=0) ('50-69 (2)'=2) ('?49 (4)'=4) INTO mappoints.

VARIABLE LABELS mappoints 'APACHE II MAP points'.

EXECUTE.

RECODE Heartrate (CONVERT) ('missing (0)'=0) (MISSING=0) ('?180 (4)'=4) ('140-179 '+'(3)'=3) ('110-139 (2)'=2) ('70-109 (0)'=0) ('55-69 (2)'=2) ('40-54 (3)'=3) ('?39 (4)'=4) INTO hrpoints.

VARIABLE LABELS hrpoints 'APACHE II HR points'.

EXECUTE.

RECODE Respiratoryrate (CONVERT) ('missing (0)'=0) (MISSING=0) ('?50 (4)'=4) ('35-49 '+'(3)'=3) ('25-34 (1)'=1) ('12-24 (0)'=0) ('10-11 (1)'=1) ('6-9 (2)'=2) ('?5 (4)'=4) INTO rrpoints.

VARIABLE LABELS rrpoints 'APACHE II RR points'.

EXECUTE.

RECODE Oxygenation (CONVERT) ('missing (0)'=0) (MISSING=0) ('?500 (4)'=4) ('350-499 '+'(3)'=3) ('200-349 (2)'=2) ('71-199 (0)'=0) ('61-70 (1)'=1) ('55-60 (3)'=3) ('< 55 (4)'=4) INTO oxpoints.

VARIABLE LABELS oxpoints 'APACHE II Oxygenation points'.

EXECUTE.

RECODE ArterialpH (CONVERT) ('missing (0)'=0) (MISSING=0) ('?7.7 (4)'=4) ('7.6-7.69 '+'(3)'=3) ('7.5-7.59 (1)'=1) ('7.33-7.49 (0)'=0) ('7.25-7.32 (2)'=2) ('7.14-7.24 (3)'=3) ('< 7.15 (4)'=4) INTO aphpoints.

VARIABLE LABELS aphpoints 'APACHE II Art\_pH points'.

EXECUTE.

RECODE SerumSodiummMolL (CONVERT) ('missing (0)'=0) (MISSING=0) ('?180 (4)'=4) ('160-179 '+'(3)'=3) ('155-159 (2)'=2) ('150-154 (1)'=1) ('130-149 (0)'=0) ('120-129 (2)'=2) ('111-119 (3)'=3) ('?110 (4)'=4) INTO napoints.

VARIABLE LABELS napoints 'APACHE II Sodium points'.

EXECUTE.

RECODE SerumPotassiummMolL (CONVERT) ('missing (0)'=0) (MISSING=0) ('>7 (4)'=4) ('6-6.9 '+'(3)'=3) ('5.5-5.9 (1)'=1) ('3.5-5.4 (0)'=0) ('3-3.4 (1)'=1) ('2.5-2.9 (2)'=2) ('< 2.5 (4)'=4) INTO Kpoints.

VARIABLE LABELS Kpoints 'APACHE II Potassium points'.

EXECUTE.

RECODE SerumCreatinine (CONVERT) ('missing (0)'=0) (MISSING=0) ('?3.5 (4)'=4) ('2-3.4 '+'(3)'=3) ('1.5-1.9 (2)'=2) ('0.6-1.4 (0)'=0) ('< 0.6-1.4 (2)'=2) INTO scrpoints.

VARIABLE LABELS scrpoints 'APACHE II SCr points'.

EXECUTE.

DO IF (WasthisSCrduringanepisodeofacutekidneyinjury='Yes').

RECODE SerumCreatinine ('?3.5 (4)'=8) ('2-3.4 (3)'=6) ('1.5-1.9 (2)'=4) INTO scrpoints.

END IF.

VARIABLE LABELS scrpoints 'APACHE II points: serum creatinine'.

EXECUTE.

RECODE Hematocrit (CONVERT) ('missing (0)'=0) (MISSING=0) ('?60 (4)'=4) ('50-59.9 '+'(2)'=2) ('46-49.9 (1)'=1) ('30-45.9 (0)'=0) ('20-29.9 (2)'=2) ('< 20 (4)'=4) ('< 55 (4)'=4) INTO hctpoints.

VARIABLE LABELS hctpoints 'APACHE II Hematocrit points'.

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EXECUTE.

RECODE WhiteBloodCount (CONVERT) ('missing (0)'=0) (MISSING=0) ('?40 (4)'=4) ('20-39.9 '+'  
'(2)'=2) ('15-19.9 (1)'=1) ('3-14.9 (0)'=0) ('1-2.9 (2)'=2) ('< 1 (4)'=4) INTO wbcpoints.

VARIABLE LABELS wbcpoints 'APACHE II Art\_pH points'.

EXECUTE.

COMPUTE gcspoints=15-gcs\_all.

VARIABLE LABELS gcspoints 'APACHE II points: glasgow coma scale'.

EXECUTE.

RECODE SerumHCO3 (CONVERT) ('missing (0)'=0) (MISSING=0) ('?52 (4)'=4) ('41-51.9 '+'

'(3)'=3) ('32-40.9 (1)'=1) ('22-31.9 (0)'=0) ('18-21.9 (2)'=2) ('15-17.9 (3)'=3) ('< 15 (4)'=4) INTO hco3points.

VARIABLE LABELS hco3points 'APACHE II HCO3 points'.

EXECUTE.

COMPUTE Chronichealthpoints=APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatecho =  
'Checked' | APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec\_A = 'Checked' |  
APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec\_B = 'Checked' |  
APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec\_C = 'Checked' |  
APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec\_D = 'Checked'.

EXECUTE.

DO IF (TypeofAdmission='Nonoperative or emergency postoperative patient').

RECODE Chronichealthpoints (1=5).

END IF.

EXECUTE.

DO IF (TypeofAdmission='Elective postoperative patient').

RECODE Chronichealthpoints (1=2).

END IF.

EXECUTE.

RECODE tempoints (MISSING=0).

EXECUTE.

RECODE mappoints (MISSING=0).

EXECUTE.

RECODE hrpoints (MISSING=0).

EXECUTE.

RECODE rrpoints (MISSING=0).

EXECUTE.

RECODE oxpoints (MISSING=0).

EXECUTE.

RECODE aphpoints (MISSING=0).

EXECUTE.

RECODE napoints (MISSING=0).

EXECUTE.

RECODE Kpoints (MISSING=0).

EXECUTE.

RECODE scrpoints (MISSING=0).

EXECUTE.

RECODE hctpoints (MISSING=0).

EXECUTE.

RECODE wbcpoints (MISSING=0).

EXECUTE.

RECODE gcspoints (MISSING=0).

EXECUTE.

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```
RECODE hco3points (MISSING=0).  
EXECUTE.
```

```
COMPUTE  
apachell=APACHE_agepoints+temppoints+mappoints+hrpoints+rrpoints+oxpoints+aphpoints+napoints+Kpoints+s  
crpoints+hctpoints+wbcpoints+gcspoints+hco3points+Chronichealthpoints.  
VARIABLE LABELS apachell 'APACHE II score: calculated from components'.  
EXECUTE.
```

```
RECODE apachell (SYSMIS=1) INTO apachemissing.  
VARIABLE LABELS apachemissing 'APACHE II score missing'.  
EXECUTE.
```

```
AUTORECODE VARIABLES=MeanArterialPressure  
/INTO mappoints_1  
/PRINT.
```

```
RECODE mappoints_1 (8=0) (7=0) (2=4) (5=3)  
 (4=2) (1=0) (6=2) (3=4) INTO mappoints_.  
VARIABLE LABELS mappoints_ 'APACHE II MAP points'.  
EXECUTE.
```

```
RECODE PRE_9 (CONVERT) (8=0) (1=2) INTO testss.  
EXECUTE.
```

\*Days to death.

```
COMPUTE DaysAdmissiontoDeath=DATEDIFF(DateofDeath,DateofAdmissionHospital,"days").  
EXECUTE.
```

```
COMPUTE Mortality30Day=DaysAdmissiontoDeath <= 30.  
EXECUTE.
```

```
IF (DidpatientExpire = 'No' | DaysAdmissiontoDeath > 30) Mortality30Day=0.  
EXECUTE.
```

```
COMPUTE Mortality2Day=DaysAdmissiontoDeath <= 2.  
EXECUTE.
```

```
IF (DidpatientExpire = 'No' | DaysAdmissiontoDeath > 2) Mortality2Day=0.  
EXECUTE.
```

```
RECODE GlasgowComaScore (CONVERT) ('missing (15)'=15) (MISSING=SYSMIS) ('1'=1) ('2'=2) ('3'=3)  
 ('4'=4) ('5'=5) ('6'=6) ('7'=7) ('8'=8) ('9'=9) ('10'=10) ('11'=11) ('12'=12) ('13'=13)  
 ('14'=14) ('15'=15) INTO gcs_all.
```

```
VARIABLE LABELS gcs_all 'GCS - Analysis'.  
EXECUTE.
```

```
COMPUTE gcs_15=gcs_all >= 15.  
EXECUTE.
```

```
IF (gcs_all < 15) gcs_15=0.  
EXECUTE.
```

\*Pt history to numeric.

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```
RECODE PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli (CONVERT) ('Checked'=1)
('Unchecked'=0) (MISSING=SYSMIS) INTO dementia_num.
VARIABLE LABELS dementia_num 'Pt History: Dementia (numeric)'.
EXECUTE.
```

```
RECODE PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal (CONVERT) ('Checked'=1)
('Unchecked'=0) (MISSING=SYSMIS) INTO livermoderate_num.
VARIABLE LABELS livermoderate_num 'Pt History: Liver Disease - Moderate-Severe (numeric)'.
EXECUTE.
```

```
RECODE PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit (CONVERT) ('Checked'=1)
('Unchecked'=0) (MISSING=SYSMIS) INTO dialysis_num.
VARIABLE LABELS dialysis_num 'Pt History: Chronic Dialysis (numeric)'.
EXECUTE.
```

```
RECODE WhattreatmentwasgivenforCOVID19choiceSystemicSteroids (CONVERT) ('Checked'=1) ('Unchecked'=0)
(MISSING=SYSMIS) INTO systemicsteroid_num.
VARIABLE LABELS systemicsteroid_num 'COVID19 Treatment: Systemic Steroids (numeric)'.
EXECUTE.
```

\*Coding days.

```
COMPUTE DischargetoReadmissionDays=DATEDIFF(Readmissiondate,HospitalDateofDischarge,"days").
EXECUTE.
```

```
COMPUTE LOS_total = DATEDIFF(HospitalDateofDischarge,DateofAdmissionHospital,
"days") + 1.
IF (LOS_total = $SYSMIS) LOS_total = HospitalCalculatedLengthofStayDays.
IF (LOS_total = $SYSMIS) LOS_total = DATEDIFF(DateofDeath,DateofAdmissionHospital,
"days").
VARIABLE LABELS LOS_total 'Length of Stay'.
EXECUTE.
```

```
COMPUTE Comorbid_diabetes=PATIENTHISTORYCONDITIONSchoiceDiabeteswithoutendorgandamage = 'Checked'
|
PATIENTHISTORYCONDITIONSchoiceDiabeteswithendorgandamageretinopa = 'Checked'.
EXECUTE.
```

```
COMPUTE DaysAdmissiontoBacterialInfection=DATEDIFF(INDICATEDATEBACTERIALINFECTION,
DateofAdmissionHospital,"days").
EXECUTE.
```

```
RECODE DaysAdmissiontoBacterialInfection (MISSING=SYSMIS) (Lowest thru 2=1) (2.1 thru
Highest=0) INTO DaystoBacterialInf_48.
VARIABLE LABELS DaystoBacterialInf_48 'Days to Bacterial Infection - W/in 48 hours of Admission'.
EXECUTE.
```

```
COMPUTE DaystoCultureDrawn_min=MIN(DaysAdmissiontoBacterialInfection,DaysuntilCultureDrawn).
EXECUTE.
```

```
DATASET ACTIVATE DataSet2.
```

```
RECODE Contaminant (1=1) (0=SYSMIS) (ELSE=0) INTO Contaminant_all.
VARIABLE LABELS Contaminant_all 'All COVID-19 cases w/o Positive blood cultures compared to '+
'Contaminants'.
```

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EXECUTE.

```
RECODE Contaminant (MISSING=0) (0=1) (1=1) (ELSE=SYSMIS) INTO BSI.  
VARIABLE LABELS BSI 'Bloodstream Infections'.
```

EXECUTE.

```
RECODE Contaminant (MISSING=0) (1=SYSMIS) (0=1) (ELSE=SYSMIS) INTO BSI_true.  
VARIABLE LABELS BSI_true 'True Bloodstream Infections'.
```

EXECUTE.

```
COMPUTE Race_aa=Race = 'African American'.  
VARIABLE LABELS Race_aa 'Race: African-American'.
```

EXECUTE.

```
COMPUTE Race_ca=Race = 'Caucasian'.  
VARIABLE LABELS Race_ca 'Race: Caucasian'.
```

EXECUTE.

```
COMPUTE Race_MulOth=Race = 'Other' | Race = 'Multiple'.  
VARIABLE LABELS Race_MulOth 'Race: Multiple/Other'.
```

EXECUTE.

```
COMPUTE Race_unk=Race = 'Unknown'.  
VARIABLE LABELS Race_unk 'Race: Unknown'.
```

EXECUTE.

```
COMPUTE ReasonED_cough=ReasonforPresentingtoEDchoiceCough = 'Checked' |  
ReasonforPresentingtoEDchoiceCough_A = 'Checked'.
```

```
VARIABLE LABELS ReasonED_cough 'Reason presenting to ED - Cough - Full Results'.
```

EXECUTE.

```
COMPUTE ReasonED_sob=ReasonforPresentingtoEDchoiceShortnessofBreath = 'Checked' |  
ReasonforPresentingtoEDchoiceShortnessofBreath_A = 'Checked'.
```

```
VARIABLE LABELS ReasonED_sob 'Reason presenting to ED - SOB - Full Results'.
```

EXECUTE.

```
COMPUTE ReasonED_fever=ReasonforPresentingtoEDchoiceFeverTemp.gt38.0 = 'Checked' |  
ReasonforPresentingtoEDchoiceFeverTemp.gt38.0_A = 'Checked'.
```

```
VARIABLE LABELS ReasonED_fever 'Reason presenting to ED - Fever - Full Results'.
```

EXECUTE.

```
COMPUTE ReasonED_sore=ReasonforPresentingtoEDchoiceSorethroat = 'Checked' |  
ReasonforPresentingtoEDchoiceSorethroat_A = 'Checked'.
```

```
VARIABLE LABELS ReasonED_sore 'Reason presenting to ED - Sore Throat - Full Results'.
```

EXECUTE.

```
COMPUTE ReasonED_myal=ReasonforPresentingtoEDchoiceMyalgia = 'Checked' |  
ReasonforPresentingtoEDchoiceMyalgia_A = 'Checked'.
```

```
VARIABLE LABELS ReasonED_myal 'Reason presenting to ED - Myalgia - Full Results'.
```

EXECUTE.

```
COMPUTE ReasonED_abd=ReasonforPresentingtoEDchoiceAbdominalpain = 'Checked' |  
ReasonforPresentingtoEDchoiceAbdominalpain_A = 'Checked'.
```

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```
VARIABLE LABELS ReasonED_abd 'Reason presenting to ED - Abdominal Pain - Full Results'.  
EXECUTE.
```

```
COMPUTE ReasonED_diar=ReasonforPresentingtoEDchoiceDiarrhea = 'Checked' |  
ReasonforPresentingtoEDchoiceDiarrhea_A = 'Checked'.  
VARIABLE LABELS ReasonED_diar 'Reason presenting to ED - Diarrhea - Full Results'.  
EXECUTE.
```

```
COMPUTE ReasonED_neuro=ReasonforPresentingtoEDchoiceNeurological = 'Checked' |  
ReasonforPresentingtoEDchoiceNeurological_A = 'Checked'.  
VARIABLE LABELS ReasonED_neuro 'Reason presenting to ED - Neurological - Full Results'.  
EXECUTE.
```

```
COMPUTE WBC_lowest =WhiteBloodCount = '1-2.9 (2)'.  
VARIABLE LABELS WBC_lowest 'WBC: 1-2.9'.  
EXECUTE.
```

```
COMPUTE WBC_normal =WhiteBloodCount = '3-14.9 (0)'.  
VARIABLE LABELS WBC_normal 'WBC: 3-14.9'.  
EXECUTE.
```

```
COMPUTE WBC_high =WhiteBloodCount = '15-19.9 (1)'.  
VARIABLE LABELS WBC_high 'WBC: 15-19.9'.  
EXECUTE.
```

```
COMPUTE WBC_highest =WhiteBloodCount = '20-39.9 (2)'.  
VARIABLE LABELS WBC_highest 'WBC: 20-39.9'.  
EXECUTE.
```

```
COMPUTE WBC_low15 = WBC_lowest=1 | WBC_normal=1.  
VARIABLE LABELS WBC_low15 'WBC: <15'.  
EXECUTE.
```

```
COMPUTE WBC_high15 = WBC_high=1 | WBC_highest=1.  
VARIABLE LABELS WBC_high15 'WBC: ≥15'.  
EXECUTE.
```

```
RECODE WhiteBloodCount ('3-14.9 (0)'=0) ('1-2.9 (2)'=0) ('15-19.9 (1)'=1) ('20-39.9 (2)'=1)  
(MISSING=SYSMIS) (ELSE=SYSMIS) INTO WBC_15.  
VARIABLE LABELS WBC_15 'WBC 15 Cutoff (<15,≥15)'.  
EXECUTE.
```

```
RECODE WhiteBloodCount (CONVERT) ('1-2.9 (2)'=1) ('3-14.9 (0)'=2) ('15-19.9 (1)'=3) ('20-39.9 (2)'=4)  
(MISSING=SYSMIS) ('missing (0)'=SYSMIS) (ELSE=0) INTO  
WhiteBloodCount_ordinal.  
VARIABLE LABELS WhiteBloodCount_ordinal 'White Blood Count - Ordinal'.  
EXECUTE.
```

```
DATASET ACTIVATE DataSet2.  
RECODE DOSEGlucocorticoidtotalmgperday (MISSING=0) (ELSE=Copy) INTO DOSEGlucocorticoid_mg_rec.  
VARIABLE LABELS DOSEGlucocorticoid_mg_rec 'Dose of Glucocorticoids in total mg of '+  
'Hydrocortisone per day'.  
EXECUTE.
```

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```
COMPUTE pthistory_tumor=PATIENTHISTORYCONDITIONSchoiceTumorwithmetastasis = 'Checked' |  
PATIENTHISTORYCONDITIONSchoiceTumorwithoutmetastasisexcludeifgt5 = 'Checked'.  
EXECUTE.
```

```
COMPUTE CefepimeName=CHAR.INDEX(UPCASE(AntibioticUsedName),"CEFEPIME") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"CEFEPIME")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"CEFEPIME") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"CEFEPIME") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"CEFEPIME") + CHAR.INDEX(UPCASE(CommentsABX),"CEFEPIME")  
>0.  
EXECUTE.
```

```
COMPUTE AmpicillinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"AMPICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"AMPICILLIN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"AMPICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"AMPICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"AMPICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsedName),"UNASYN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"UNASYN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"UNASYN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"UNASYN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"UNASYN") >0.  
EXECUTE.
```

```
COMPUTE AmoxicillinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"AMOXICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"AMOXICILLIN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"AMOXICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"AMOXICILLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"AMOXICILLIN") +  
CHAR.INDEX(UPCASE(CommentsABX),"AMOXICILLIN") >0.  
EXECUTE.
```

```
COMPUTE AztreonamName=CHAR.INDEX(UPCASE(AntibioticUsedName),"AZTREONAM") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"AZTREONAM")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"AZTREONAM") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"AZTREONAM") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"AZTREONAM") +  
CHAR.INDEX(UPCASE(CommentsABX),"AZTREONAM") >0.  
EXECUTE.
```

```
COMPUTE CefazolinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"CEFAZOLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"CEFAZOLIN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"CEFAZOLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"CEFAZOLIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"CEFAZOLIN") +  
CHAR.INDEX(UPCASE(CommentsABX),"CEFAZOLIN") >0.  
EXECUTE.
```

```
COMPUTE CeftriaxoneName=CHAR.INDEX(UPCASE(AntibioticUsedName),"CEFTRIAZONE") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"CEFTRIAZONE")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"CEFTRIAZONE") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"CEFTRIAZONE") +
```

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```
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"CEFTRIAXONE") +  
CHAR.INDEX(UPCASE(CommentsABX),"CEFTRIAXONE") >0.  
EXECUTE.
```

```
COMPUTE CeftarolineName=CHAR.INDEX(UPCASE(AntibioticUsedName),"CEFTAROLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"CEFTAROLINE")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"CEFTAROLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"CEFTAROLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"CEFTAROLINE") +  
CHAR.INDEX(UPCASE(CommentsABX),"CEFTAROLINE") >0.  
EXECUTE.
```

```
COMPUTE ZerbaxaName=CHAR.INDEX(UPCASE(AntibioticUsedName),"ZERBAXA") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"ZERBAXA")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"ZERBAXA") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"ZERBAXA") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"ZERBAXA") +  
CHAR.INDEX(UPCASE(CommentsABX),"ZERBAXA") >0.  
EXECUTE.
```

```
COMPUTE AzithromycinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"AZITHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"AZITHROMYCIN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"AZITHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"AZITHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"AZITHROMYCIN") +  
CHAR.INDEX(UPCASE(CommentsABX),"AZITHROMYCIN") >0.  
EXECUTE.
```

```
COMPUTE ErythromycinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"ERYTHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"ERYTHROMYCIN")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"ERYTHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"ERYTHROMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"ERYTHROMYCIN") +  
CHAR.INDEX(UPCASE(CommentsABX),"ERYTHROMYCIN") >0.  
EXECUTE.
```

```
COMPUTE DoxycyclineName=CHAR.INDEX(UPCASE(AntibioticUsedName),"DOXYCYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"DOXYCYCLINE")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"DOXYCYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"DOXYCYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"DOXYCYCLINE") +  
CHAR.INDEX(UPCASE(CommentsABX),"DOXYCYCLINE") >0.  
EXECUTE.
```

```
COMPUTE TigecyclineName=CHAR.INDEX(UPCASE(AntibioticUsedName),"TIGECYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"TIGECYCLINE")  
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"TIGECYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"TIGECYCLINE") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"TIGECYCLINE") +  
CHAR.INDEX(UPCASE(CommentsABX),"TIGECYCLINE") >0.  
EXECUTE.
```

```
COMPUTE TetracyclineName=CHAR.INDEX(UPCASE(AntibioticUsedName),"TETRACYCLINE") +
```



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```
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"TETRACYCLINE")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"TETRACYCLINE") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"TETRACYCLINE") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"TETRACYCLINE") +
CHAR.INDEX(UPCASE(CommentsABX),"TETRACYCLINE") >0.
EXECUTE.

COMPUTE MoxifloxacinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"MOXIFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"MOXIFLOXACIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"MOXIFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"MOXIFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"MOXIFLOXACIN") +
CHAR.INDEX(UPCASE(CommentsABX),"MOXIFLOXACIN") >0.
EXECUTE.

COMPUTE LevofloxacinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"LEVOFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"LEVOFLOXACIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"LEVOFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"LEVOFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"LEVOFLOXACIN") +
CHAR.INDEX(UPCASE(CommentsABX),"LEVOFLOXACIN") >0.
EXECUTE.

COMPUTE CiprofloxacinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"CIPROFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"CIPROFLOXACIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"CIPROFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"CIPROFLOXACIN") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"CIPROFLOXACIN") +
CHAR.INDEX(UPCASE(CommentsABX),"CIPROFLOXACIN") >0.
EXECUTE.

COMPUTE MetronidazoleName=CHAR.INDEX(UPCASE(AntibioticUsedName),"METRONIDAZOLE") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"METRONIDAZOLE")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"METRONIDAZOLE") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"METRONIDAZOLE") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"METRONIDAZOLE") +
CHAR.INDEX(UPCASE(CommentsABX),"METRONIDAZOLE") >0.
EXECUTE.

COMPUTE MeropenemName=CHAR.INDEX(UPCASE(AntibioticUsedName),"MEROPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"MEROPENEM")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"MEROPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"MEROPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"MEROPENEM") +
CHAR.INDEX(UPCASE(CommentsABX),"MEROPENEM") >0.
EXECUTE.

COMPUTE ErtapenemName=CHAR.INDEX(UPCASE(AntibioticUsedName),"ERTAPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed2Name),"ERTAPENEM")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"ERTAPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"ERTAPENEM") +
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"ERTAPENEM") +
CHAR.INDEX(UPCASE(CommentsABX),"ERTAPENEM") >0.
```

## Supplemental Material

EXECUTE.

```
COMPUTE ImipenemName=CHAR.INDEX(UPCASE(AntibioticUsedName),"IMIPENEM") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"IMIPENEM")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"IMIPENEM") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"IMIPENEM") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"IMIPENEM") +
  CHAR.INDEX(UPCASE(CommentsABX),"IMIPENEM") >0.
```

EXECUTE.

```
COMPUTE TobramycinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"TOBRAMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"TOBRAMYCIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"TOBRAMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"TOBRAMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"TOBRAMYCIN") +
  CHAR.INDEX(UPCASE(CommentsABX),"TOBRAMYCIN") >0.
```

EXECUTE.

```
COMPUTE FluconazoleName=CHAR.INDEX(UPCASE(AntibioticUsedName),"FLUCONAZOLE") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"FLUCONAZOLE")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"FLUCONAZOLE") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"FLUCONAZOLE") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"FLUCONAZOLE") +
  CHAR.INDEX(UPCASE(CommentsABX),"FLUCONAZOLE") >0.
```

EXECUTE.

```
COMPUTE MicafunginName=CHAR.INDEX(UPCASE(AntibioticUsedName),"MICA FUNGIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"MICA FUNGIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"MICA FUNGIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"MICA FUNGIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"MICA FUNGIN") +
  CHAR.INDEX(UPCASE(CommentsABX),"MICA FUNGIN") >0.
```

EXECUTE.

```
COMPUTE LinezolidName=CHAR.INDEX(UPCASE(AntibioticUsedName),"LINEZOLID") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"LINEZOLID")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"LINEZOLID") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"LINEZOLID") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"LINEZOLID") +
  CHAR.INDEX(UPCASE(CommentsABX),"LINEZOLID") >0.
```

EXECUTE.

```
COMPUTE DaptomycinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"DAPTOMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"DAPTOMYCIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"DAPTOMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed4Name),"DAPTOMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed5Name),"DAPTOMYCIN") +
  CHAR.INDEX(UPCASE(CommentsABX),"DAPTOMYCIN") >0.
```

EXECUTE.

```
COMPUTE VancomycinName=CHAR.INDEX(UPCASE(AntibioticUsedName),"VANCOMYCIN") +
  CHAR.INDEX(UPCASE(AntibioticUsed2Name),"VANCOMYCIN")
+CHAR.INDEX(UPCASE(AntibioticUsed3Name),"VANCOMYCIN") +
```

## Supplemental Material

```
CHAR.INDEX(UPCASE(AntibioticUsed4Name),"VANCOMYCIN") +  
CHAR.INDEX(UPCASE(AntibioticUsed5Name),"VANCOMYCIN") +  
CHAR.INDEX(UPCASE(CommentsABX),"VANCOMYCIN") >0.  
EXECUTE.
```

```
COMPUTE BetaLactam_name=AmpicillinName +AmoxicillinName + AztreonamName + CefazolinName +  
CeftriaxoneName + CefepimeName + CeftarolineName + ZerbaxaName + MeropenemName +  
ErtapenemName + ImipenemName >0.  
EXECUTE.
```

```
COMPUTE Penicillins_name=AmpicillinName +AmoxicillinName >0.  
EXECUTE.
```

```
COMPUTE LowerCephalosporin_name=CefazolinName >0.  
EXECUTE.
```

```
COMPUTE ThirdCeph_name= CeftriaxoneName >0.  
EXECUTE.
```

```
COMPUTE FourthCeph_name=CefepimeName >0.  
EXECUTE.
```

```
COMPUTE Ceftaro_name=CeftarolineName >0.  
EXECUTE.
```

```
COMPUTE Carbapenems_name=ErtapenemName + ImipenemName + MeropenemName >0.  
EXECUTE.
```

```
COMPUTE AntiMRSA_name=CeftarolineName + LinezolidName + VancomycinName + DaptomycinName >0.  
EXECUTE.
```

```
COMPUTE OtherAntiMRSA_name=CeftarolineName + LinezolidName + DaptomycinName >0.  
EXECUTE.
```

```
COMPUTE Macrolide_name=AzithromycinName +ErythromycinName >0.  
EXECUTE.
```

```
COMPUTE Tetra_name=DoxycyclineName + TigecyclineName + TetracyclineName >0.  
EXECUTE.
```

```
COMPUTE Fluoro_name=LevofloxacinName + CiprofloxacinName + MoxifloxacinName >0.  
EXECUTE.
```

```
COMPUTE Antifungal_name=FluconazoleName +MicafunginName >0.  
EXECUTE.
```

```
COMPUTE AntibioticUsed3Duration = DATEDIFF(AntibioticUsed3DateEnd_date,AntibioticUsed3DateStart_date,  
"hours").  
IF (AntibioticUsed3Duration = 0) AntibioticUsed3Duration = 8.  
EXECUTE.
```

```
COMPUTE AntibioticUsed4Duration = DATEDIFF(AntibioticUsed4DateEnd_date,AntibioticUsed4DateStart_date,  
"hours").
```

## Supplemental Material

```
IF (AntibioticUsed4Duration = 0) AntibioticUsed4Duration = 8.  
EXECUTE.
```

```
COMPUTE AntibioticUsed5Duration = DATEDIFF(AntibioticUsed5DateEnd_date, AntibioticUsed5DateStart_date,  
"hours").
```

```
IF (AntibioticUsed5Duration = 0) AntibioticUsed5Duration = 8.  
EXECUTE.
```

```
*Total Days of Therapy for Antibiotics = .  
RECODE AntibioticUsedDuration (MISSING=0).  
EXECUTE.  
RECODE AntibioticUsed2Duration (MISSING=0).  
EXECUTE.  
RECODE AntibioticUsed3Duration (MISSING=0).  
EXECUTE.  
RECODE AntibioticUsed4Duration (MISSING=0).  
EXECUTE.  
RECODE AntibioticUsed5Duration (MISSING=0).  
EXECUTE.
```

```
COMPUTE AntibioticUsedTotal_hours = AntibioticUsedDuration + AntibioticUsed2Duration +  
AntibioticUsed3Duration + AntibioticUsed4Duration + AntibioticUsed5Duration.  
VARIABLE LABELS AntibioticUsedTotal_hours 'Total Hours of Antimicrobials Used'.  
EXECUTE.  
COMPUTE AntibioticUsedTotal = RND(AntibioticUsedTotal_hours/24).  
VARIABLE LABELS AntibioticUsedTotal 'Total DOT of Antimicrobials Used'.  
EXECUTE.
```

```
COMPUTE AntibioticUsedTotal_STD_LOS = (AntibioticUsedTotal / LOS_total) * 1000.  
VARIABLE LABELS AntibioticUsedTotal_STD_LOS 'Total DOT of Antimicrobials Used per 1000 Pt-Days'.  
EXECUTE.
```

```
*Total Antimicrobials Used = .  
COUNT AntimicrobialsTotal_raw= AntibioticUsedName AntibioticUsed2Name  
AntibioticUsed3Name AntibioticUsed4Name AntibioticUsed5Name (' ').  
EXECUTE.  
COMPUTE AntimicrobialsTotal_amountnocombo = 5 - AntimicrobialsTotal_raw.  
EXECUTE.  
COMPUTE AntimicrobialsTotal_amount = AntimicrobialsTotal_amountnocombo + AntimicrobialsTotal_add.  
VARIABLE LABELS AntimicrobialsTotal_amount 'Total # of Antimicrobials Used'.  
EXECUTE.
```

```
COMPUTE AntibioticUsed_DOTperAbx = AntibioticUsedTotal / AntimicrobialsTotal_amount.  
VARIABLE LABELS AntibioticUsed_DOTperAbx 'Total DOT per Antimicrobials Used'.  
EXECUTE.  
RECODE AntibioticUsed_DOTperAbx (0=0) (MISSING=0) INTO AntibioticUsed_DOTperAbx.  
EXECUTE.
```

```
RECODE AntimicrobialsTotal_amount (0=0) (MISSING=SYSMIS) (1 thru Highest=1) INTO AntibioticUsed_any.  
VARIABLE LABELS AntibioticUsed_any 'Any Antibiotic Used'.  
EXECUTE.
```

```
CROSSTABS
```

## Supplemental Material

```
/TABLES=Mortality30Day AnyPressorSupport CoNS Waspatientreadmittedforanyreasonwithin30days
  BY True_Bacteremia
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ PHI
/CELLS=COUNT ROW COLUMN TOTAL PROP
/COUNT ROUND CELL
/BARCHART.
```

### NPTESTS

```
/INDEPENDENT TEST (HospitalCalculatedLengthofStayDays) GROUP (True_Bacteremia)
/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
/CRITERIA ALPHA=0.05 CILEVEL=95.
```

### USE ALL.

```
COMPUTE filter_$=(External = 'No').
VARIABLE LABELS filter_$ "External = 'No' (FILTER)".
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

### USE ALL.

```
COMPUTE filter_$=(External = 'No' & Date_Mar8toApr4 = 1).
VARIABLE LABELS filter_$ "External = 'No' & Date_Mar8toApr4 = 1 (FILTER)".
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
```

### USE ALL.

```
COMPUTE filter_$$=(External = 'No' & Date_Mar8toApr4 = 1 & True_Bacteremia = 1 | True_Bacteremia = 0).
VARIABLE LABELS filter_$$ "External = 'No' & Date_Mar8toApr4 = 1 (FILTER)".
VALUE LABELS filter_$$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$$ (f1.0).
FILTER BY filter_$$$.
EXECUTE.
```

```
SORT CASES BY BSI_true_all.
```

```
SPLIT FILE LAYERED BY BSI_true_all.
```

```
FREQUENCIES VARIABLES=Date_Mar8toApr4 Ageyrs Gender Race Ethnicity Weight BMI apachell
CharlsoncomorbidityindexUseMDCALC
PATIENTHISTORYCONDITIONSchoiceMyocardialinfarction PATIENTHISTORYCONDITIONSchoiceHeartfailure
PATIENTHISTORYCONDITIONSchoiceChronicobstructivepulmonarydisease
PATIENTHISTORYCONDITIONSchoiceAsthma
PATIENTHISTORYCONDITIONSchoiceDiabeteswithoutendorgandamage
PATIENTHISTORYCONDITIONSchoiceDiabeteswithendorgandamageretinopa
Comorbid_diabetes ImmunosuppressionchoiceNeutropeniaANCorWBClt500 ImmunosuppressionchoiceNone
PATIENTHISTORYCONDITIONSchoiceAIDSCD4countlt200 PATIENTHISTORYCONDITIONSchoiceHIV
PATIENTHISTORYCONDITIONSchoiceIVdruguse PATIENTHISTORYCONDITIONSchoiceObesityBMIgt30
WhiteBloodCount WhiteBloodCount_ordinal ReasonforPresentingtoEDchoiceFeverTemp.gt38.0
ReasonforPresentingtoEDchoiceMyalgia_A
```

## Supplemental Material

CrCL PATIENTRECEIVEDMECHANICALVENTILATION BACTERIALCOINFECTION BACTERIALINFECTIONLOCATION  
DaysAdmissiontoBacterialInfection DaysuntilCultureDrawn DaystoCultureDrawn\_min  
INDICATETYPEBACTERIALPATHOGENCOINFECTION TREATMENTGROUPANTIVIRALSchoiRemdesivirGS5734  
TREATMENTGROUPANTIVIRALSchoiHydroxychloroquine  
TREATMENTGROUPImmunomodulatoryagentschoiGlucocorticoids TREATMENTGROUPANTIVIRALSchoiNONE  
TREATMENTGROUPImmunomodulatoryagentschoiTocilizumabActemra  
TREATMENTGROUPImmunomodulatoryagentschoiIL1agents  
TREATMENTGROUPImmunomodulatoryagentschoiIL6agentsotherthantoci  
IndicateGlucocorticoidschoimethylprednisolone IndicateGlucocorticoidschoihydrocortisone  
IndicateGlucocorticoidschoiother TypeofAdmission WaspatientadmittedtoICUafterCOVIDdiagnosis  
RECURRENCE READMISSION Complete State HOSPITALAFFILIATION Hospital SymptomsofCOVIDchoiNone  
SymptomsOfCOVIDchoiCough  
SymptomsOfCOVIDchoiShortnessOfBreath SymptomsOfCOVIDchoiFeverTemp.gt38.0  
HospitalCalculatedLengthofStayDays ICULOSDays  
HospitalDischargeDisposition DaysofsteroidtherapyforCOVID19 DidpatientExpire Mortality30Day  
DaysAdmissiontoDeath Mortality2Day  
Waspatientreadmittedforanyreasonwithin30days EDLoSCalculated  
/NTILES=4  
/STATISTICS=STDDEV MEAN MEDIAN SKEWNESS SESKEW  
/ORDER=ANALYSIS.

SPLIT FILE OFF.

CROSSTABS

/TABLES=Mortality30Day Readmission30Day Neutropenia\_A  
WhattreatmentwasgivenforCOVID19choiSystemicSteroids BY BSI\_true\_all  
/FORMAT=AVALUE TABLES  
/STATISTICS=CHISQ PHI CORR  
/CELLS=COUNT EXPECTED ROW COLUMN TOTAL PROP  
/COUNT ROUND CELL.

CROSSTABS

/TABLES=Race\_aa Race\_ca Race\_MulOth Race\_unk Gender BMIOver30  
PATIENTHISTORYCONDITIONSchoiMyocardialinfarction  
PATIENTHISTORYCONDITIONSchoiHeartfailure pthistory\_tumor  
PATIENTHISTORYCONDITIONSchoiDementiaonlycheckifpresentatbaseli  
PATIENTHISTORYCONDITIONSchoiChronicobstructivepulmonarydisease  
PATIENTHISTORYCONDITIONSchoiAsthma  
PATIENTHISTORYCONDITIONSchoiDementiaonlycheckifpresentatbaseli Comorbid\_diabetes  
PATIENTHISTORYCONDITIONSchoiDiabeteswithoutendorgandamage  
PATIENTHISTORYCONDITIONSchoiDiabeteswithendorgandamageretinopa  
PATIENTHISTORYCONDITIONSchoiAIDSCD4countlt200 PATIENTHISTORYCONDITIONSchoiHIV  
PATIENTHISTORYCONDITIONSchoiIVdruguse  
PATIENTHISTORYCONDITIONSchoiPriorsurgeryin30daysprecedingencou Priorhospitalizationinpast30days  
PATIENTHISTORYCONDITIONSchoiPriorhospitalization48hoursin90day  
PATIENTHISTORYCONDITIONSchoiPriorinfectionin365daysprecedingen  
PATIENTHISTORYCONDITIONSchoiPriorhospitalizationwithinthepasty  
PATIENTHISTORYCONDITIONSchoiPriorantimicrobials48hourswithinth  
PATIENTHISTORYCONDITIONSchoiObesityBMIgt30 PATIENTHISTORYCONDITIONSchoiNone  
PATIENTRECEIVEDMECHANICALVENTILATION BACTERIALCOINFECTION  
TREATMENTGROUPANTIVIRALSchoiLopinavirritonavir  
TREATMENTGROUPANTIVIRALSchoiRemdesivirGS5734  
TREATMENTGROUPANTIVIRALSchoiChloroquine TREATMENTGROUPANTIVIRALSchoiHydroxychloroquine

## Supplemental Material

```
TREATMENTGROUPImmunomodulatoryagentschoiceTocilizumabActemra
TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids
WhattreatmentwasgivenforCOVID19choiceSystemicSteroids
TREATMENTGROUPImmunomodulatoryagentschoiceIL1agents
TREATMENTGROUPImmunomodulatoryagentschoiceIL6agentsotherthantoci
APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec_D
WaspatientadmittedtoICUafterCOVIDdiagnosis RECURRENCE READMISSION
ReasonED_cough ReasonED_sob ReasonED_fever ReasonED_sore ReasonED_myal ReasonED_abd
ReasonED_diar ReasonED_neuro
SymptomsofCOVIDchoiceNone SymptomsofCOVIDchoiceCough
SymptomsofCOVIDchoiceShortnessofBreath SymptomsofCOVIDchoiceFeverTemp.gt38.0
SymptomsofCOVIDchoiceSorethroat SymptomsofCOVIDchoiceMyalgia SymptomsofCOVIDchoiceHeadache
SymptomsofCOVIDchoiceNausea SymptomsofCOVIDchoiceVomiting SymptomsofCOVIDchoiceAbdominalpain
SymptomsofCOVIDchoiceDiarrhea SymptomsofCOVIDchoiceChestPain SymptomsofCOVIDchoiceNeurological
SymptomsofCOVIDchoiceAnosmia SymptomsofCOVIDchoiceGeneralizedWeakness
Fevertemperaturelt36.0degreesonadmission WBC_lowest WBC_normal WBC_high WBC_highest
WasthepatientadmittedtotheICU
DidpatientExpire Waspatientreadmittedforanyreasonwithin30days
WhattreatmentwasgivenforCOVID19choiceSystemicSteroids
WhattreatmentwasgivenforCOVID19choiceNone WhattreatmentwasgivenforCOVID19choiceHydroxychloroquine
WhattreatmentwasgivenforCOVID19choiceTocilizumab WhattreatmentwasgivenforCOVID19choiceRemdesivir
AnyPressorSupport Mortality30Day Mortality2Day Readmission30Day
BY BSI_true_all
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ PHI CORR
/CELLS=COUNT EXPECTED ROW COLUMN TOTAL PROP
/COUNT ROUND CELL.

SORT CASES BY Contaminant_all.
SPLIT FILE LAYERED BY Contaminant_all.

FREQUENCIES VARIABLES=Date_Mar8toApr4 Ageyrs Gender Race Ethnicity Weight BMI apachell
CharlsoncomorbidityindexUseMDCALC
PATIENTHISTORYCONDITIONSchoiceMyocardialinfarction PATIENTHISTORYCONDITIONSchoiceHeartfailure
PATIENTHISTORYCONDITIONSchoiceChronicobstructivepulmonarydisease
PATIENTHISTORYCONDITIONSchoiceAsthma
PATIENTHISTORYCONDITIONSchoiceDiabeteswithoutendorgandamage
PATIENTHISTORYCONDITIONSchoiceDiabeteswithendorgandamageretinopa
Comorbid_diabetes ImmunosuppressionchoiceNeutropeniaANCOrWBClt500 ImmunosuppressionchoiceNone
PATIENTHISTORYCONDITIONSchoiceAIDSCD4countlt200 PATIENTHISTORYCONDITIONSchoiceHIV
PATIENTHISTORYCONDITIONSchoiceIVdruguse PATIENTHISTORYCONDITIONSchoiceObesityBMIgt30
WhiteBloodCount WhiteBloodCount_ordinal ReasonforPresentingtoEDchoiceFeverTemp.gt38.0
ReasonforPresentingtoEDchoiceMyalgia_A
CrCL PATIENTRECEIVEDMECHANICALVENTILATION BACTERIALCOINFECTION BACTERIALINFECTIONLOCATION
DaysAdmissiontoBacterialInfection
INDICATETYPEBACTERIALPATHOGENCOINFECTION TREATMENTGROUPANTIVIRALSchoiceRemdesivirGS5734
TREATMENTGROUPANTIVIRALSchoiceHydroxychloroquine
TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids TREATMENTGROUPANTIVIRALSchoiceNONE
TREATMENTGROUPImmunomodulatoryagentschoiceTocilizumabActemra
TREATMENTGROUPImmunomodulatoryagentschoiceIL1agents
TREATMENTGROUPImmunomodulatoryagentschoiceIL6agentsotherthantoci
IndicateGlucocorticoidschoicemethylprednisolone IndicateGlucocorticoidschoicehydrocortisone
IndicateGlucocorticoidschoiceother TypeofAdmission WaspatientadmittedtoICUafterCOVIDdiagnosis
```

## Supplemental Material

RECURRENCE READMISSION Complete State HOSPITALAFFILIATION Hospital SymptomsofCOVIDchoiceNone  
SymptomsofCOVIDchoiceCough  
SymptomsofCOVIDchoiceShortnessofBreath SymptomsofCOVIDchoiceFeverTemp.gt38.0  
HospitalCalculatedLengthofStayDays ICULOSDays  
HospitalDischargeDisposition LOS\_total DaysofsteroidtherapyforCOVID19 DidpatientExpire Mortality30Day  
Waspatientreadmittedforanyreasonwithin30days EDLoSCalculated  
/NTILES=4  
/STATISTICS=STDDEV MEAN MEDIAN SKEWNESS SESKEW  
/ORDER=ANALYSIS.

SPLIT FILE OFF.

CROSTABS

/TABLES=Race\_aa Race\_ca Race\_MulOth Race\_unk Gender BMIOver30  
PATIENTHISTORYCONDITIONSchoiceMyocardialinfarction  
PATIENTHISTORYCONDITIONSchoiceHeartfailure  
PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli  
PATIENTHISTORYCONDITIONSchoiceChronicobstructivepulmonarydisease  
PATIENTHISTORYCONDITIONSchoiceAsthma Comorbid\_diabetes  
PATIENTHISTORYCONDITIONSchoiceDiabeteswithoutendorgandamage  
PATIENTHISTORYCONDITIONSchoiceDiabeteswithendorgandamageretinopa  
PATIENTHISTORYCONDITIONSchoiceAIDSCD4countlt200 PATIENTHISTORYCONDITIONSchoiceHIV  
PATIENTHISTORYCONDITIONSchoiceIVdruguse  
PATIENTHISTORYCONDITIONSchoicePriorsurgeryin30daysprecedingencou  
PATIENTHISTORYCONDITIONSchoicePriorhospitalization48hoursin90day  
PATIENTHISTORYCONDITIONSchoicePriorinfectionin365daysprecedingen  
PATIENTHISTORYCONDITIONSchoicePriorhospitalizationwithinthepasty  
PATIENTHISTORYCONDITIONSchoicePriorantimicrobials48hourswithinth  
PATIENTHISTORYCONDITIONSchoiceObesityBMIgt30 PATIENTHISTORYCONDITIONSchoiceNone  
PATIENTRECEIVEDMECHANICALVENTILATION BACTERIALCOINFECTION  
TREATMENTGROUPANTIVIRALSchoiceLopinavirritonavir  
TREATMENTGROUPANTIVIRALSchoiceRemdesivirGS5734  
TREATMENTGROUPANTIVIRALSchoiceChloroquine TREATMENTGROUPANTIVIRALSchoiceHydroxychloroquine  
TREATMENTGROUPImmunomodulatoryagentschoiceTocilizumabActemra  
TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids  
TREATMENTGROUPImmunomodulatoryagentschoiceIL1agents  
TREATMENTGROUPImmunomodulatoryagentschoiceIL6agentsotherthantoci  
APACHEdefinedOrganSystemInsufficiencyorImmunoCompromisedStatec\_D  
WaspatientadmittedtoICUafterCOVIDdiagnosis RECURRENCE READMISSION  
ReasonED\_cough ReasonED\_sob ReasonED\_fever ReasonED\_sore ReasonED\_myal ReasonED\_abd  
ReasonED\_diar ReasonED\_neuro  
SymptomsofCOVIDchoiceNone SymptomsofCOVIDchoiceCough  
SymptomsofCOVIDchoiceShortnessofBreath SymptomsofCOVIDchoiceFeverTemp.gt38.0  
SymptomsofCOVIDchoiceSorethroat SymptomsofCOVIDchoiceMyalgia SymptomsofCOVIDchoiceHeadache  
SymptomsofCOVIDchoiceNausea SymptomsofCOVIDchoiceVomiting SymptomsofCOVIDchoiceAbdominalpain  
SymptomsofCOVIDchoiceDiarrhea SymptomsofCOVIDchoiceChestPain SymptomsofCOVIDchoiceNeurological  
SymptomsofCOVIDchoiceAnosmia SymptomsofCOVIDchoiceGeneralizedWeakness  
Fevertemperaturegt38.0degreesonadmission WBC\_lowest WBC\_normal WBC\_high WBC\_highest  
WasthepatientadmittedtotheICU  
DidpatientExpire Waspatientreadmittedforanyreasonwithin30days  
WhattreatmentwasgivenforCOVID19choiceNone WhattreatmentwasgivenforCOVID19choiceHydroxychloroquine  
WhattreatmentwasgivenforCOVID19choiceTocilizumab WhattreatmentwasgivenforCOVID19choiceRemdesivir  
WhattreatmentwasgivenforCOVID19choiceIvermectin AnyPressorSupport Mortality30Day Readmission30Day



## Supplemental Material

```
BY Contaminant_all
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ PHI CORR
/CELLS=COUNT EXPECTED ROW COLUMN TOTAL PROP
/COUNT ROUND CELL.
```

\*Median = HospitalCalculatedLengthofStayDays, BMI, DaysAdmissiontoBacterialInfection, WBCKCCUMcloseronadmission\_A.

```
DATASET ACTIVATE DataSet1.
T-TEST GROUPS=BSI(0 1)
/MISSING=ANALYSIS
/VARIABLES=Ageyrs apachel1 CharlsoncomorbidityindexUseMDCALC WBCKCCUMcloseronadmission_A
DaysAdmissiontoDeath gcs_all
/ES DISPLAY(TRUE)
/CRITERIA=CI(.95).
```

```
T-TEST GROUPS=BSI_true_all(0 1)
/MISSING=ANALYSIS
/VARIABLES=Ageyrs apachel1 CharlsoncomorbidityindexUseMDCALC WBCKCCUMcloseronadmission_A
DaysAdmissiontoDeath gcs_all
/ES DISPLAY(TRUE)
/CRITERIA=CI(.95).
```

\*Nonparametric Tests: Independent Samples.

```
NPTESTS
/INDEPENDENT TEST (BMI HospitalCalculatedLengthofStayDays DaysAdmissiontoBacterialInfection
WBCKCCUMcloseronadmission) GROUP (BSI_true_all) MANN_WHITNEY MEDIAN(TESTVALUE=SAMPLE
COMPARE=PAIRWISE)
/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
/CRITERIA ALPHA=0.05 CILEVEL=95.
```

```
SORT CASES BY True_Bacteremia.
SPLIT FILE LAYERED BY True_Bacteremia.
```

```
FREQUENCIES VARIABLES=DaysAdmissiontoBacterialInfection CoNS StaphAureus Enterococcus Enterobacterales
Pseudomonadales Candida
ReasonED_cough ReasonED_sob ReasonED_fever ReasonED_sore ReasonED_myal ReasonED_abd
ReasonED_diar ReasonED_neuro
SymptomsofCOVIDchoiceNone SymptomsofCOVIDchoiceCough
SymptomsofCOVIDchoiceShortnessofBreath SymptomsofCOVIDchoiceFeverTemp.gt38.0
SymptomsofCOVIDchoiceSorethroat SymptomsofCOVIDchoiceMyalgia SymptomsofCOVIDchoiceHeadache
SymptomsofCOVIDchoiceNausea SymptomsofCOVIDchoiceVomiting SymptomsofCOVIDchoiceAbdominalpain
SymptomsofCOVIDchoiceDiarrhea SymptomsofCOVIDchoiceChestPain SymptomsofCOVIDchoiceNeurological
SymptomsofCOVIDchoiceAnosmia SymptomsofCOVIDchoiceGeneralizedWeakness
RECURRENCE READMISSION Complete State HOSPITALAFFILIATION Hospital SymptomsofCOVIDchoiceNone
SymptomsofCOVIDchoiceCough
SymptomsofCOVIDchoiceShortnessofBreath SymptomsofCOVIDchoiceFeverTemp.gt38.0
HospitalCalculatedLengthofStayDays
HospitalDischargeDisposition DidpatientExpire Mortality30Day
Waspatientreadmittedforanyreasonwithin30days BetaLactam_name Penicillins_name CefazolinName
ThirdCeph_name FourthCeph_name
```

## Supplemental Material

Carbapenems\_name AntiMRSA\_name VancomycinName OtherAntiMRSA\_name Macrolide\_name Tetra\_name  
Fluoro\_name Antifungal\_name

AntibioticUsed\_any AntimicrobialsTotal\_amount AntibioticUsedTotal AntibioticUsed\_DOTperAbx  
AntibioticUsedTotal\_STD\_LOS

/NTILES=4

/STATISTICS=STDDEV MEAN MEDIAN SKEWNESS SESKEW

/ORDER=ANALYSIS.

### CROSSTABS

/TABLES=DidpatientExpire Mortality30Day Readmission30Day Waspatientreadmittedforanyreasonwithin30days

CoNS StaphAureus Enterococcus Enterobacterales Pseudomonadales Candida

WBC\_lowest WBC\_normal WBC\_high WBC\_highest

ReasonED\_fever SymptomsofCOVIDchoiceFeverTemp.gt38.0 ReasonED\_neuro

SymptomsofCOVIDchoiceNeurological AntibioticUsed\_any AntimicrobialsTotal\_amount

BetaLactam\_name Penicillins\_name CefazolinName ThirdCeph\_name FourthCeph\_name

Carbapenems\_name AntiMRSA\_name VancomycinName OtherAntiMRSA\_name Macrolide\_name

Tetra\_name Fluoro\_name Antifungal\_name BY BSI\_true\_all

/FORMAT=AVALUE TABLES

/STATISTICS=CHISQ PHI CORR

/CELLS=COUNT EXPECTED ROW COLUMN TOTAL PROP

/COUNT ROUND CELL.

### NPTESTS

/INDEPENDENT TEST (BMI HospitalCalculatedLengthofStayDays DaysAdmissiontoBacterialInfection

DaystoCultureDrawn\_min

AntibioticUsedTotal AntibioticUsed\_DOTperAbx AntibioticUsedTotal\_STD\_LOS) GROUP (True\_Bacteremia)

MANN\_WHITNEY MEDIAN(TESTVALUE=SAMPLE COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

FREQUENCIES VARIABLES=External Date\_Mar8toApr4

/NTILES=4

/STATISTICS=STDDEV MEAN MEDIAN SKEWNESS SESKEW

/ORDER=ANALYSIS.

### NPAR TESTS

/M-W= DaystoCultureDrawn\_min BY True\_Bacteremia(0 1)

/STATISTICS=DESCRIPTIVES

/MISSING ANALYSIS.

T-TEST GROUPS=BSI(0 1)

/MISSING=ANALYSIS

/VARIABLES=WhiteBloodCount\_ordinal

/ES DISPLAY(TRUE)

/CRITERIA=CI(.95).

### NPTESTS

/INDEPENDENT TEST (BMI HospitalCalculatedLengthofStayDays DaysAdmissiontoBacterialInfection

WBCCKCUMcloseronadmission) GROUP (BSI\_true\_all) MANN\_WHITNEY MEDIAN(TESTVALUE=SAMPLE

COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

## Supplemental Material

T-TEST GROUPS=Contaminant\_all(0 1)

/MISSING=ANALYSIS

/VARIABLES=WhiteBloodCount\_ordinal LOS\_total

/ES DISPLAY(TRUE)

/CRITERIA=CI(.95).

NPTESTS

/INDEPENDENT TEST (BMI HospitalCalculatedLengthofStayDays LOS\_total DaysAdmissiontoBacterialInfection  
WhiteBloodCount\_ordinal

WBCKCCUMcloseronadmission) GROUP (Contaminant\_all) MANN\_WHITNEY MEDIAN(TESTVALUE=SAMPLE  
COMPARE=PAIRWISE)

/MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE

/CRITERIA ALPHA=0.05 CILEVEL=95.

CROSSTABS

/TABLES=DidpatientExpire Mortality30Day Readmission30Day Waspatientreadmittedforanyreasonwithin30days

CoNS StaphAureus Enterococcus Enterobacterales Pseudomonadales Candida

WBC\_lowest WBC\_normal WBC\_high WBC\_highest

ReasonED\_fever SymptomsofCOVIDchoiceFeverTemp.gt38.0 BY BSI\_true\_all

/FORMAT=AVALUE TABLES

/STATISTICS=CHISQ PHI CORR

/CELLS=COUNT EXPECTED ROW COLUMN TOTAL PROP

/COUNT ROUND CELL.

SORT CASES BY BSI\_true\_all.

SPLIT FILE LAYERED BY BSI\_true\_all.

FREQUENCIES VARIABLES=HospitalCalculatedLengthofStayDays

HospitalDischargeDisposition Mortality30Day

/NTILES=4

/STATISTICS=STDDEV MEAN MEDIAN SKEWNESS SESKEW

/ORDER=ANALYSIS.

CORRELATIONS

/VARIABLES=WhiteBloodCount\_ordinal Ageyrs

/PRINT=TWOTAIL NOSIG FULL

/STATISTICS DESCRIPTIVES /CI CILEVEL(95)

/MISSING=PAIRWISE.

NONPAR CORR

/VARIABLES=WhiteBloodCount\_ordinal Ageyrs

/PRINT=SPEARMAN TWOTAIL NOSIG FULL

/CI METHOD(FHP) CILEVEL(95)

/MISSING=PAIRWISE.

\* Using Ordinal logistic regression.

DATASET ACTIVATE DataSet2.

PLUM WhiteBloodCount\_ordinal BY BSI\_true\_all

TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids WITH Ageyrs apachell

/CRITERIA=CIN(95) DELTA(0) LCONVERGE(0) MXITER(100) MXSTEP(5) PCONVERGE(1.0E-6) SINGULAR(1.0E-8)

/LINK=LOGIT

/PRINT=FIT PARAMETER SUMMARY TPARALLEL

## Supplemental Material

/SAVE=PCPROB ACPROB.

\* Generalized Linear Models - Using GLM.

```
GENLIN WhiteBloodCount_ordinal (ORDER=ASCENDING) BY BSI_true_all Gender
  TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids (ORDER=ASCENDING) WITH Ageyrs
/MODEL BSI_true_all Gender TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids Ageyrs
DISTRIBUTION=MULTINOMIAL LINK=CUMLOGIT
/CRITERIA METHOD=FISHER(1) SCALE=1 COVB=MODEL MAXITERATIONS=100 MAXSTEPHALVING=5
  PCONVERGE=1E-006(ABSOLUTE) SINGULAR=1E-012 ANALYSISTYPE=3(LR) CILEVEL=95 CITYPE=WALD
LIKELIHOOD=FULL
/MISSING CLASSMISSING=EXCLUDE
/PRINT CPS DESCRIPTIVES MODELINFO FIT SUMMARY SOLUTION (EXPONENTIATED).
```

\* Multinomial logistic regression - If proportional assumption violated.

```
NOMREG WhiteBloodCount_ordinal (BASE=FIRST ORDER=ASCENDING) BY BSI_true_all Gender
  TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids WITH Ageyrs apachell
/CRITERIA CIN(95) DELTA(0) MXITER(100) MXSTEP(5) CHKSEP(20) LCONVERGE(0) PCONVERGE(0.000001)
  SINGULAR(0.00000001)
/MODEL
/STEPWISE=PIN(.05) POUT(0.1) MINEFFECT(0) RULE(SINGLE) ENTRYMETHOD(LR) REMOVALMETHOD(LR)
/INTERCEPT=INCLUDE
/PRINT=CLASSTABLE FIT PARAMETER SUMMARY LRT CPS STEP MFI IC.
```

REGRESSION

```
/DESCRIPTIVES MEAN STDDEV CORR SIG N
/MISSING LISTWISE
/STATISTICS COEFF OUTS CI(95) R ANOVA CHANGE ZPP
/CRITERIA=PIN(.05) POUT(.10)
/NOORIGIN
/DEPENDENT WhiteBloodCount_ordinal
/METHOD=STEPWISE Ageyrs apachell BSI_true_all
/SCATTERPLOT=(*ZRESID,*ZPRED)
/RESIDUALS HISTOGRAM(ZRESID) NORMPROB(ZRESID)
/SAVE COOK SRESID.
```

CROSSTABS

```
/TABLES=WBC_high WhattreatmentwasgivenforCOVID19choiceSystemicSteroids BY BSI_true_all
/FORMAT=AVALUE TABLES
/STATISTICS=CHISQ CC PHI UC CORR RISK
/CELLS=COUNT ROW COLUMN TOTAL SRESID PROP
/COUNT ROUND CELL.
```

LOGISTIC REGRESSION VARIABLES BSI\_true\_all

```
/METHOD=BSTEP(LR) PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli apachell
ReasonED_neuro
PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal
PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit
  TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids apachell
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli)=Indicator(1)
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal)=Indicator(1)
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit)=Indicator(1)
/CONTRAST (TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids)=Indicator(1)
/CONTRAST (ReasonED_neuro)=Indicator(1)
```

## Supplemental Material

```
/SAVE=PRED  
/CLASSPLOT  
/PRINT=GOODFIT CI(95)  
/CRITERIA=PIN(0.05) POUT(0.1) ITERATE(20) CUT(0.5).
```

```
LOGISTIC REGRESSION VARIABLES BSI_true_all  
/METHOD=BSTEP(LR) PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli apachel  
SymptomsofCOVIDchoiceNeurological  
PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal  
PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit  
TREATMENTGROUImmunomodulatoryagentschoiceGlucocorticoids apachel  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli)=Indicator(1)  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal)=Indicator(1)  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit)=Indicator(1)  
/CONTRAST (TREATMENTGROUImmunomodulatoryagentschoiceGlucocorticoids)=Indicator(1)  
/CONTRAST (SymptomsofCOVIDchoiceNeurological)=Indicator(1)  
/SAVE=PRED  
/CLASSPLOT  
/PRINT=GOODFIT CI(95)  
/CRITERIA=PIN(0.05) POUT(0.1) ITERATE(20) CUT(0.5).
```

```
LOGISTIC REGRESSION VARIABLES BSI_true_all  
/METHOD=BSTEP(LR) apachel gcs_all  
/CONTRAST (WBC_high)=Indicator(1)  
/CONTRAST (WhattreatmentwasgivenforCOVID19choiceSystemicSteroids)=Indicator(1)  
/SAVE=PRED COOK SRESID  
/PRINT=GOODFIT CI(95)  
/CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).
```

\*VIF factors.

```
REGRESSION  
/MISSING LISTWISE  
/STATISTICS COEFF OUTS R ANOVA COLLIN TOL CHANGE  
/CRITERIA=PIN(.05) POUT(.10)  
/NOORIGIN  
/DEPENDENT BSI_true_all  
/METHOD=ENTER apachel ReasonED_neuro gcs_all  
dementia_num livermoderate_num dialysis_num systemicsteroid_num  
/RESIDUALS NORMPROB(ZRESID).
```

\*Logistic Regression entered.

```
LOGISTIC REGRESSION VARIABLES BSI_true_all  
/METHOD=ENTER gcs_all ReasonED_neuro WhattreatmentwasgivenforCOVID19choiceSystemicSteroids  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli)=Indicator(1)  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal)=Indicator(1)  
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit)=Indicator(1)  
/CONTRAST (WhattreatmentwasgivenforCOVID19choiceSystemicSteroids)=Indicator(1)  
/CONTRAST (ReasonED_neuro)=Indicator(1)  
/CONTRAST (WBC_high)=Indicator(1)  
/SAVE=PRED PGROUP  
/CLASSPLOT  
/PRINT=GOODFIT CORR CI(95)  
/CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).
```

## Supplemental Material

```
LOGISTIC REGRESSION VARIABLES BSI_true_all
/METHOD=BSTEP(LR) PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli
PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal
PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit
TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids SymptomsofCOVIDchoiceNeurological
apachell
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceDementiaonlycheckifpresentatbaseli)=Indicator(1)
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceModerateorsevereliverdiseaseportal)=Indicator(1)
/CONTRAST (PATIENTHISTORYCONDITIONSchoiceChronicdialysishemodialysisorperit)=Indicator(1)
/CONTRAST (TREATMENTGROUPImmunomodulatoryagentschoiceGlucocorticoids)=Indicator(1)
/CONTRAST (SymptomsofCOVIDchoiceNeurological)=Indicator(0)
/SAVE=PRED PGROUP
/CLASSPLOT
/PRINT=GOODFIT CI(95)
/CRITERIA=PIN(0.05) POUT(0.10) ITERATE(20) CUT(0.5).
```