Online Supplement
Outcomes of Patients with COPD Hospitalized for Coronavirus Disease 2019

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Table S1. Logical Observation Identifiers Names and Codes for positive COVID-19 laboratory test.

| Codes    | Logical Observation Identifiers Names                                      |
|----------|---------------------------------------------------------------------------|
| 94306-8  | SARS coronavirus 2 RNA panel, unspecified specimen                        |
| 94307-6  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94308-4  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94309-2  | SARS-CoV-2 RNA, unspecified specimen                                       |
| 94311-8  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94312-6  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94314-2  | SARS-CoV-2 RdRp gene, unspecified specimen                                 |
| 94316-7  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94500-6  | SARS-CoV-2 RNA, respiratory specimen                                       |
| 94510-5  | SARS-CoV-2 N gene, unspecified specimen                                    |
| 94511-3  | SARS-CoV-2 ORF1ab region, unspecified specimen                             |
| 94531-1  | SARS coronavirus 2 RNA panel, respiratory specimen                        |
| 94533-7  | SARS-CoV-2 N gene, respiratory specimen                                    |
| 94534-5  | SARS-CoV-2 RdRp gene, respiratory specimen                                 |
| 94558-4  | SARS-CoV-2 Ag, respiratory specimen                                        |
| 94559-2  | SARS-CoV-2 ORF1ab region, respiratory specimen                             |
| 94565-9  | SARS-CoV-2 RNA, nasopharyngeal specimen                                    |
| 94639-2  | SARS-CoV-2 ORF1ab region, unspecified specimen                             |
| 94640-0  | SARS-CoV-2 S gene, respiratory specimen                                    |
| 94641-8  | SARS-CoV-2 S gene, unspecified specimen                                    |
| 94642-6  | SARS-CoV-2 S gene, respiratory specimen                                    |
| 94643-4  | SARS-CoV-2 S gene, unspecified specimen                                    |
| 94644-2  | SARS-CoV-2 ORF1ab region, respiratory specimen                             |
| 94645-9  | SARS-CoV-2 RdRp gene, unspecified specimen                                 |
| 94646-7  | SARS-CoV-2 RdRp gene, respiratory specimen                                 |
| 94660-8  | SARS-CoV-2 RNA, serum/plasma                                               |
Definition of abbreviations: COVID-19 = Coronavirus Disease 2019; SARS-CoV-2 = Severe Acute Respiratory Syndrome Coronavirus-2.
### Table S2. ICD-10-CM codes for Chronic Obstructive Pulmonary Disease

| ICD-10-CM Codes | Description                                                                                       |
|-----------------|---------------------------------------------------------------------------------------------------|
| J41.8           | Mixed simple and mucopurulent chronic bronchitis                                                  |
| J42             | Unspecified chronic bronchitis                                                                   |
| J43.0           | Unilateral pulmonary emphysema [MacLeod's syndrome]                                              |
| J43.1           | Panlobular emphysema                                                                             |
| J43.2           | Centrilobular emphysema                                                                          |
| J43.8           | Other emphysema                                                                                  |
| J43.9           | Emphysema, unspecified                                                                           |
| J44.0           | Chronic obstructive pulmonary disease with acute lower respiratory infection                     |
| J44.1           | Chronic obstructive pulmonary disease with (acute) exacerbation                                  |
| J44.9           | Chronic obstructive pulmonary disease, unspecified                                                |

*Definition of abbreviations:* ICD-10-CM= International Classification of Diseases, tenth revision, clinical modification.
Table S3. Disposition of patients discharged alive with and without COPD<sup>a</sup> who were hospitalized due to COVID-19<sup>b</sup> between February 10, 2020, and November 10, 2020, in the United States.

| Disposition              | Patients with COPD<sup>a</sup> N (%) 4,091(100) | Patients without COPD<sup>a</sup> N (%) 24,405(100) |
|--------------------------|--------------------------------------------------|------------------------------------------------------|
| Home                     | 2,231 (54.5)                                     | 16,699 (68.4)                                       |
| Non-Home discharge       | 1,860(45.5)                                      | 7,706(31.6)                                         |
| Skilled nursing facility | 744 (18.2)                                       | 2,570 (10.5)                                        |
| Hospice                  | 188 (4.6)                                        | 617 (2.5)                                           |
| Long-term care           | 102 (2.5)                                        | 324 (1.3)                                           |
| Inpatient Rehabilitation | 75 (1.8)                                         | 528 (2.1)                                           |
| Another Hospital         | 97 (2.4)                                         | 574 (2.4)                                           |
| Other disposition        | 145 (3.5)                                        | 495 (2.0)                                           |
| Other facility           | 77 (1.9)                                         | 309 (1.3)                                           |
| Unknown/others           | 432 (10.6)                                       | 2,289 (9.4)                                         |

<sup>a</sup>Presence of COPD was defined as having at least 1 inpatient or 2 outpatient diagnoses in the 1 year before COVID-19 diagnosis (See Table S2 in the online data supplement).

<sup>b</sup>COVID-19 was identified by a positive laboratory test for SARS-CoV-2 or by ICD-10-CM diagnosis code U07.1.

Definition of abbreviations: SARS-CoV-2 = Severe Acute Respiratory Syndrome Coronavirus-2; COVID-19= Coronavirus Disease 2019; COPD= Chronic Obstructive Pulmonary Disease; ICS= Inhaled Corticosteroids; ICD-10-CM= International Classification of Diseases, tenth revision, clinical modification.
**Figure S1.** Flow diagram of our cohort selection process. Cohort included patients who were diagnosed with COVID-19 between February 10, 2020 and November 10, 2020 and were hospitalized within 14 days from COVID-19 diagnosis or positive SARS-CoV-2 laboratory test. Infection with COVID-19 was identified by a positive laboratory test or by the ICD-10-CM diagnosis code U07.1 (See Table S1 in the online data supplement). Patients were excluded if they were less than 40 years of age at time of diagnosis.

*Definition of abbreviations:* SARS-CoV-2 = Severe Acute Respiratory Syndrome Coronavirus-2; COVID-19= Coronavirus Disease 2019; EHR= Electronic Health Record; COPD= Chronic Obstructive Pulmonary Disease; ICD-10-CM= International Classification of Diseases, tenth revision, clinical modification.