**Supplemental Table 1: Specific Criteria for Underlying Conditions**

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| **End Stage Renal Disease (ESRD)** | | | | |
|  | **Points Scored** | | **Criteria** | |
| **2** | | | ESRD on renal replacement therapy **and** > 75 years old | |
| **Cirrhosis** | | | | |
|  | **Points Scored** | | **Criteria** | |
| Patients need to be formally determined "ineligible for transplant" | **2** | | **One or more** of the following baseline/outpatient lab values, | |
| - Albumin < lower limit of normal | |
| - Bilirubin > higher limit of normal | |
| - INR > higher limit of normal | |
| **OR One or more** of the following clinical conditions | |
| - Any history of variceal bleed | |
| - Presence of ascites, increased abdominal girth | |
| - Presence of hepatic encephalopathy, on lactulose | |
| **4** | | MELD ≥ **20** | |
| **Cancer** | | | | |
|  | **Points Scored** | | **Criteria** | |
| **Active cancer with expected survival <1 year** | **4** | | - Metastatic small cell lung cancer | |
| - Metastatic pancreatic cancer | |
| - Metastatic gastric or esophageal cancer | |
| - Metastatic ovarian cancer | |
| - Metastatic head and neck cancer | |
| - Any patient with malignancy that is hospice appropriate | |
| **Active cancer with expected survival <5 years** | **2** | | - Metastatic non small cell lung cancer | |
| - Metastatic breast cancer | |
| - Metastatic prostate cancer | |
| - Metastatic renal cell carcinoma | |
| - Metastatic myeloma | |
| - Multiple myeloma | |
| - Metastatic colorectal cancer | |
| **Congestive Heart Failure** | | | | |
| **Points Scored** | | | **Criteria** | |
| **4** | | | NYHA Class IV HF with 1+ of the following: | |
| - Repeat hospitalizations (>2 admissions in the preceding 12 months) | |
| - Frailty | |
| - Cardiac cachexia (BMI < 20 kg/m2) | |
| - Recurrent ICD shocks | |
| - Inability to tolerate beta blocker or ACEI | |
|  | | | - NYHA Class III with repeat hospitalizations (>2) in the preceding 12 months. | |
| **2** | | | - NYHA Class IV HF without one of the above features | |
| **Neurodegenerative Conditions** | | | | |
| **Points scored** | | | **Criteria** | |
| **4** | | | **Definition**: Progressive cognitive impairment or neurobehavioral changes. Clinical interview may not be possible. Complete dependency due to severe functional impact on daily life with impairment in basic activities, including basic self-care. | |
| **Scoring in chart to consider:** | |
| - Global Clinical Dementia Rating 3.0 | |
| - MMSE <13 | |
| - MOCA <10 | |
| - FAST >7 | |
| **Key phrases for chart abstractors to consider:** | |
| - severe dementia, end-stage/late-stage dementia, total care, bedbound, non-ambulatory and nonverbal due to dementia | |
| **Associated conditions suggesting end-stage dementia** (6 mo survival): | |
| - Aspiration pneumonia in past 90 days, UTI in the past 30 days, septicemia, multiple stage 3 or 4 ulcers, recurrent fevers after antibiotics, insufficient oral intake or TF with impaired nutritional status (10% weight loss within prior 6 months or albumin <2.5 g/dL) | |
| **Examples:** | |
| - End-Stage Alzheimer’s disease, Vascular dementia, Frontotemporal dementia, or Dementia with Lewy Bodies | |
| - Prion diseases, e.g Creutzfeld-Jakob disease | |
| - Huntington’s disease - non-ambulatory, inability or minimal speech, inability to eat, progressive weight loss, or dementia | |
| - Parkinson’s disease >80 yo with dementia, non-ambulatory, dysphagia | |
| - ALS with bulbar and respiratory weakness | |
| **2** | | | **Definition**: Deteriorating progressive cognitive impairment or neurobehavioral changes. Extensive functional impact on daily life with impairment in basic activities. No longer independent and requires frequent assistance with daily life activities. | |
| **Scoring in chart to consider:** | |
| - Global Clinical Dementia Rating >2.0 | |
| - MMSE 13-20 | |
| - MOCA 10-17 | |
| - FAST >6 | |
| **Examples:** | |
| - Huntington’s Disease - Patients in long term care or requiring 24 hour supervision; dependent for all ADLs | |
| - Dementia with Lewy Bodies (DLB), Vascular Dementia - patients in long term care and/or require 24 hour supervision. | |
| - Parkinson’s Disease >75 yo with dementia, orthostatic hypotension, and falls | |
| - ALS without bulbar or respiratory weakness | |
| **Chronic Lung Disease** | | | | | |
|  | | **Points Scored** | | **Criteria** | |
| **ANY CHRONIC LUNG DISEASE** | | 4 | | - WHO Class IV symptoms | |
| - Chronically vented/NIPPV (not including NMD, sleep apnea) | |
| - Participating/Eligible for hospice | |
| 2 | | - WHO Class III symptoms or rapidly declining functional deterioration | |
| - Referral for lung transplant | |
| - Lung transplanted + bronchiolitis obliterans | |
| **COPD** | | 4 | | - PaO2 < 55 mm Hg **OR** SpO2 < 88% **OR** PaCO2 ⩾ 55 mmHg at rest on RA **(any one, NOT during exacerbation)** | |
| - PASP > 50 mm Hg **OR** PAMP > 25 mm Hg **OR** e/o cor pulmonale (e.g. RH dilation) **(any one, TTE or RHC)** | |
| - COPD-related ICU admission for NIPPV/intubation **AND** 3+ exacerbations requiring hospitalization in past year | |
| - Post-bronchodilator FEV1 < 20% predicted **OR** rapid decline in FEV1 > 100cc's / year  **(any one)** | |
| - Refractory/recurrent pneumothorax | |
| - BODE Index > 7 | |
| 2 | | - FEV1 20-30% predicted | |
| - PaO2 < 55 mm Hg OR SpO2 < 88% **OR** PaCO2 ⩾ 50 mmHg **with exertion** on RA **(any one)** | |
| - PASP 30-50 mmHg or PAMP 25-35 mmHg **(any one, TTE or RHC)** | |
| - BODE Index 5-6 | |
| **IPF/ILD/UIP DX** Any NSIP inc. associated w/ scleroderma, RA, overlap syndrome, mixed CTD, SLE, anti-synthetase syndrome, polymyositis, sarcoid, COP, DIP, LIP, and chronic HP REQUIRE SPECIALIST CONSULTATION | | 4 | | - FVC < 60% predicted, TLC/VC < 60% predicted, **OR** DLCO < 40% predicted **(need two)** | |
| - PaO2 < 55 mmHg **OR** SpO2 < 88% **OR** PaCO2 > 50 mmHg on RA **(any one, NOT during exacerbation)** | |
| - PASP > 40 mmHg **OR** PAMP > 25 mmHg **OR** e/o cor pulmonale (e.g. RH dilation) **(any one, TTE or RHC)** | |
| - Hamman Rich Syndrome (AKA acute interstitial pneumonitis) diagnosis | |
| - Decline in FVC > 10% **OR** DLCO > 15% in 6 months **(any one)** | |
| - 50 meter decline in 6MWD **OR** 6MWD < 250 meters **(any one)** | |
| - 3+ pulmonary-related exacerbations requiring hospitalizations **AND** 1+ hospitalizations in past 6 months | |
| - Refractory/recurrent pneumothorax | |
| 2 | | - FVC 60-70% **OR** TLC/VC 60-65%, **OR** DLCO 40-60% predicted **(any one)** | |
| - 6MWD 250 - 400 meters | |
| - PaO2 < 55 mmHg OR SpO2 < 88% **OR** PaCO2 ⩾ 50 mmHg **with exertion** on RA **(any one)** | |
| **DIFFUSE BRONCHIECTASIS** (INCLUDES Cystic Fibrosis) | | 4 | | - FEV1 < 30% predicted **OR** rapid decline in FEV1 > 100cc's / year  **(any one)** | |
| - PaO2 < 55 mmHg **OR** SpO2 < 88% **OR** PaCO2 > 50 mmHg **(any one)** | |
| - PASP > 40 mmHg **OR** PAMP > 25 mmHg **OR** e/o cor pulmonale **(any one, TTE or RHC)** | |
| - 50 meter decline in 6MWD **OR** 6MWD < 250 meters **(any one)** | |
| - 3+ exacerbations requiring hospitalizations **AND** 1+ hospitalizations in past 6 months | |
| - Massive hemoptysis not controlled by medical, interventional or surgical therapy | |
| - Worsening pulmonary cachexia (>5% weight loss, weight <90% IBW, **OR** BMI < 20) despite optimal management | |
| 2 | | - Co-infection w/ NTM (non-tuberculous mycobacterial disease), B cepacia, or pan resistant bacterial organism | |
| - Presence of diabetes | |
| - 6MWD 250 - 400 meters | |
| - PASP > 35 mmHg on TTE or RHC | |
| - Presence of pneumothorax | |
| **PULMONARY ARTERIAL HYPERTENSION / PULMONARY VASCULAR DISEASE (GROUP** Assumes use of **or** inability to take targeted parenteral therapy | | 4 | | - Failure of prostacyclin/other medical therapy | |
| - MRAP > 15cmmHg, MPAP > 50 mmHg, CI < 2, **OR** SvO2 < 60% **(need three on RHC)** | |
| - 6MWD < 350 meters | |
| - Hemoptysis, pericardial effusion, DLCO < 32% predicted, syncope, cor pulmonale on echo, renal insufficiency w/ GFR < 60 mL/min, (+) biluribin > 1.4 mg/dL, BNP > 180 pg/mL, **OR** recurrent ascites **(need 4)** | |
| 2 | | - Familial PAH | |
| - MRAP 10-15 mmHg, MPAP 25-50 mmHg, CI 2-2.5, **OR** SvO2 60-70% **(need three on RHC)** | |
| - Proven/suspected pulmonary veno-occlusive disease or pulmonary capillary hemangiomatosis | |