

## Bijlage 4 – score systemen

### The Sequential Organ Failure Assessment (SOFA) score

SOFA score	1	2	3	4
<b>Respiration<sup>a</sup></b>				
<b>PaO<sub>2</sub>/FIO<sub>2</sub> (mm Hg)</b>	<400	<300	<220	<100
<b>SaO<sub>2</sub>/FIO<sub>2</sub></b>	221-301	142-220	67-141	<67
<b>Coagulation</b>				
<b>Platelets ×10<sup>3</sup>/mm<sup>3</sup></b>	<150	<100	<50	<20
<b>Liver</b>				
<b>Bilirubin (mg/dL)</b>	1.2-1.9	2.0-5.9	6.0-11.9	>12.0
<b>Cardiovascular<sup>b</sup></b>				
<b>Hypotension</b>	MAP <70	Dopamine ≤5 or dobutamine (any)	Dopamine >5 or norepinephrine ≤0.1	Dopamine >15 or norepinephrine >0.1
<b>CNS</b>				
<b>Glasgow Coma Score</b>	13-14	10-12	6-9	<6
<b>Renal</b>				
<b>Creatinine (mg/dL) or urine output (mL/d)</b>	1.2-1.9	2.0-3.4	3.5-4.9 or <500	>5.0 or <200

MAP, mean arterial pressure; CNS, central nervous system; SaO<sub>2</sub>, peripheral arterial oxygen saturation. <sup>a</sup>PaO<sub>2</sub>/FIO<sub>2</sub> ratio was used preferentially. If not available, the SaO<sub>2</sub>/FIO<sub>2</sub> ratio was used

<sup>b</sup>vasoactive mediations administered for at least 1 hr (dopamine and norepinephrine µg/kg/min).

## ECOG score

### Karnofsky Performance Status

### ECOG Performance Status

100	Geen klachten, geen ziekteverschijnselen	0	Asymptomatisch
90	In staat tot normale activiteit; minimale verschijnselen van de ziekte	1	Symptomatisch, volledig ambulante
80	Met inspanning tot normale activiteit in staat		
70	In staat voor zichzelf te zorgen; onmogelijk om normale activiteiten te verrichten of om te werken	2	Symptomatisch, ligt minder dan 50% van de dag op bed
60	Heeft af en toe hulp nodig, maar is in staat grotendeels voor zichzelf te zorgen		
50	Heeft veel hulp en frequente medische zorg nodig	3	Symptomatisch, niet volledig bedlegerig, ligt meer dan 50% van de dag op bed
40	Grotendeels bedlegerig; heeft zorg en hulp nodig		
30	Geheel bedlegerig; heeft totale verzorging nodig; opname in ziekenhuis geïndiceerd; fatale afloop dreigt nog niet	4	Volledig bedlegerig
20	Ernstig ziek; opname in ziekenhuis is noodzakelijk; actieve ondersteuning vereist		
10	Moribund		
0	Overleden		

## Seattle Hematopoietic Cell Transplantation-Comorbidity Index (HCT-CI)

(Allogeneic stem cell transplantation non-relapse mortality risk score)

Comorbidity	Definitions of comorbidities included in the new HCT-CI	HCT-CI weighted scores	Score
<b>Arrhythmia</b>	Atrial fibrillation or flutter, sick sinus syndrome, or ventricular arrhythmias	1	
<b>Cardiac</b>	Coronary artery disease <sup>a</sup> , congestive heart failure, myocardial infarction, or EF ≤ 50%	1	
<b>Inflammatory bowel disease</b>	Crohn disease or ulcerative colitis	1	
<b>Diabetes</b>	Requiring treatment with insulin or oral hypoglycemics but not diet alone	1	
<b>Cerebrovascular disease</b>	Transient ischemic attack or cerebrovascular accident	1	
<b>Psychiatric disturbance</b>	Depression or anxiety requiring psychiatric consult or treatment	1	
<b>Hepatic, mild</b>	Chronic hepatitis, bilirubin > ULN to 1.5 x ULN, or AST/ALT > ULN to 2.5 x ULN	1	
<b>Obesity</b>	Patients with a body mass index > 35 kg/m <sup>2</sup>	1	
<b>Infection</b>	Requiring continuation of antimicrobial treatment after day 0	1	
<b>Rheumatologic</b>	SLE, RA, polymyositis, mixed CTD, or polymyalgia rheumatica	2	
<b>Peptic ulcer</b>	Requiring treatment	2	
<b>Moderate/severe renal</b>	Serum creatinine > 177 μmol/L, on dialysis, or prior renal transplantation	2	
<b>Moderate pulmonary</b>	DLco and/or FEV <sub>1</sub> 66%-80% or dyspnea on slight activity	2	
<b>Prior solid tumor</b>	Treated at any time point in the patient's past history, excluding nonmelanoma skin cancer	3	
<b>Heart valve disease</b>	Except mitral valve prolapse	3	
<b>Severe pulmonary</b>	DLco and/or FEV <sub>1</sub> ≤ 65% or dyspnea at rest or requiring oxygen	3	
<b>Moderate/severe hepatic</b>	Liver cirrhosis, bilirubin > 1.5 x ULN, or AST/ALT > 2.5 x ULN	3	
		<b>Total score:</b>	

## Charlson co-morbidity index

**Table 1. Charlson Comorbidity Index Scoring System**

Score	Condition
1	Myocardial infarction (history, not ECG changes only) Congestive heart failure Peripheral vascular disease (includes aortic aneurysm $\geq 6$ cm) Cerebrovascular disease: CVA with mild or no residua or TIA Dementia Chronic pulmonary disease Connective tissue disease Peptic ulcer disease Mild liver disease (without portal hypertension, includes chronic hepatitis) Diabetes without end-organ damage (excludes diet-controlled alone)
2	Hemiplegia Moderate or severe renal disease Diabetes with end-organ damage (retinopathy, neuropathy, nephropathy, or brittle diabetes) Tumor without metastases (exclude if $>5$ y from diagnosis) Leukemia (acute or chronic) Lymphoma
3	Moderate or severe liver disease
6	Metastatic solid tumor AIDS (not just HIV positive)

NOTE. For each decade  $> 40$  years of age, a score of 1 is added to the above score.

Abbreviations: ECG, electrocardiogram; CVA, cerebrovascular accident; TIA, transient ischemic attack; AIDS, acquired immunodeficiency syndrome; HIV, human immunodeficiency virus.

## GRAFT VERSUS HOST DISEASE (GVHD)

### Signs and symptoms of chronic GVHD

Organ or Site	Diagnostic (Sufficient to Establish the Diagnosis of Chronic GVHD)	Distinctive (Seen in Chronic GVHD, but Insufficient Alone to Establish a Diagnosis of Chronic GVHD)	Other Features*	Common (Seen with Both Acute and Chronic GVHD)
<b>Skin</b>	Poikiloderma Lichen planus-like features Sclerotic features Morphea-like features Lichen sclerosus-like features	Depigmentation	Sweat impairment Ichthyosis Keratosis pilaris Hypopigmentation Hyperpigmentation	Erythema Maculopapular rash Pruritus
<b>Nails</b>		Dystrophy Longitudinal ridging, splitting, or brittle features Onycholysis Pterygium unguis Nail loss (usually symmetric; affects most nails)†		
<b>Scalp and body hair</b>		New onset of scarring or nonscarring scalp alopecia (after recovery from chemoradiotherapy) Scaling, papulosquamous lesions	Thinning scalp hair, typically patchy, coarse, or dull (not explained by endocrine or other causes) Premature gray hair	
<b>Mouth</b>	Lichen-type features Hyperkeratotic plaques Restriction of mouth opening from sclerosis	Xerostomia Mucocele Mucosal atrophy Pseudomembranes Ulcers		Gingivitis Mucositis Erythema Pain
<b>Eyes</b>		New onset dry, gritty, or painful eyes# Cicatricial conjunctivitis Keratoconjunctivitis	Photophobia Periorbital hyperpigmentation Blepharitis (erythema of the eyelids with edema)	

		sicca# Confluent areas of punctate keratopathy		
<b>Genitalia</b>	Lichen planus-like features Vaginal scarring or stenosis	Erosions Fissures Ulcers		
<b>GI tract</b>	Esophageal web Strictures or stenosis in the upper to mid third of the esophagus		Exocrine pancreatic insufficiency	Anorexia Nausea Vomiting Diarrhea Weight loss Failure to thrive (infants and children)
<b>Liver</b>				Total bilirubin, alkaline phosphatase >2 × ULN, ALT or AST >2 × ULN
<b>Lung</b>	Bronchiolitis obliterans diagnosed with lung biopsy	Bronchiolitis obliterans diagnosed with PFTs and radiology#		BOOP
<b>Muscles, fascia, joints</b>	Fasciitis Joint stiffness or contractures secondary to sclerosis	Myositis or polymyositis#	Edema Muscle cramps Arthralgia or arthritis	
<b>Hematopoietic and immune</b>			Thrombocytopenia Eosinophilia Lymphopenia Hypo- or hypergammaglobulinemia Autoantibodies (AIHA and ITP)	
<b>Other</b>			Pericardial or pleural effusions Ascites Peripheral neuropathy Nephrotic syndrome Myasthenia gravis Cardiac conduction abnormality or cardiomyopathy	

## Organ scoring of chronic GVHD

	SCORE 0	SCORE 1	SCORE 2	SCORE 3
<b>PERFORMANCE SCORE:</b>  <b>KPS / ECOG / LPS</b>	Asymptomatic and fully active  (ECOG 0; KPS or LPS 100%)	Symptomatic, fully ambulatory, restricted only in physically strenuous activity (ECOG 1, KPS or LPS 80-90%)	Symptomatic, ambulatory, capable of selfcare, >50% of waking hours out of bed (ECOG 2, KPS or LPS 60-70%)	Symptomatic, limited self-care, >50% of waking hours in bed  (ECOG 3-4, KPS or LPS <60%)
<b>SKIN</b> <b>Clinical features:</b> <b>Maculopapular rash</b> <b>Lichen planus-like features</b> <b>Papulosquamous lesions or ichthyosis</b> <b>Hyperpigmentation</b> <b>Hypopigmentation</b> <b>Keratosis pilaris</b> <b>Erythema</b> <b>Erythroderma</b> <b>Poikiloderma</b> <b>Sclerotic features</b> <b>Pruritus</b> <b>Hair involvement</b> <b>Nail involvement</b> <b>% BSA involved</b>	No Symptoms	<18% BSA with disease signs but <b>NO</b> sclerotic features	19-50% BSA <b>OR</b> involvement with superficial sclerotic features "not hidebound" (able to pinch)	>50% BSA <b>OR</b> deep sclerotic features "hidebound" (unable to pinch) <b>OR</b> impaired mobility, ulceration or severe pruritus
<b>MOUTH</b>	No symptoms	Mild symptoms with disease signs but not limiting oral intake significantly	Moderate symptoms with disease signs <b>with</b> partial limitation of oral intake	Severe symptoms with disease signs on examination <b>with</b> major limitation of oral intake
<b>EYES</b> <b>Mean tear test (mm):</b> <b>&gt;10</b> <b>6-10</b> <b>≤5</b> <b>Not done</b>	No symptoms	Mild dry eye symptoms not affecting ADL (requiring eyedrops ≤ 3 x per day) <b>OR</b> asymptomatic signs of keratoconjunctivitis	Moderate dry eye symptoms partially affecting ADL (requiring drops > 3 x per day or punctal	Severe dry eye symptoms significantly affecting ADL (special eyewear to relieve pain) <b>OR</b> unable to work

		sicca	plugs), <b>WITHOUT</b> vision impairment	because of ocular symptoms <b>OR</b> loss of vision caused by keratoconjunctivitis sicca
<b>GI TRACT</b>	No symptoms	Symptoms such as dysphagia, anorexia, nausea, vomiting, abdominal pain or diarrhea without significant weight loss (<5%)	Symptoms associated with mild to moderate weight loss (5- 15%)	Symptoms associated with significant weight loss >15%, requires nutritional supplement for most calorie needs <b>OR</b> esophageal dilation
<b>LIVER</b>	Normal LFT	Elevated Bilirubin, AP, AST or ALT <2 x ULN	Bilirubin >3 mg/dl (> 50 µmol/L) or Bilirubin, enzymes 2-5 x ULN	Bilirubin or enzymes > 5 x ULN
<b>LUNGS†</b>	No symptoms  FEV1 > 80% <b>OR</b> LFS=2	Mild symptoms (shortness of breath after climbing one flight of steps)  FEV1 60-79% <b>OR</b> LFS 3-5	Moderate symptoms (shortness of breath after walking on flat ground)  FEV1 40-59% <b>OR</b> LFS 6-9	Severe symptoms (shortness of breath at rest; requiring O <sub>2</sub> )  FEV1 ≤39% <b>OR</b> LFS 10-12
<b>JOINTS AND FASCIA</b>	No symptoms	Mild tightness of arms or legs, normal or mild decreased range of motion (ROM) <b>AND</b> not affecting ADL	Tightness of arms or legs <b>OR</b> joint contractures, erythema thought due to fasciitis, moderate decrease ROM <b>AND</b> mild to moderate limitation of ADL	Contractures <b>WITH</b> significant decrease of ROM <b>AND</b> significant limitation of ADL (unable to tie shoes, button shirts, dress self etc.)
<b>GENITAL TRACT</b>	No symptoms	Symptomatic with mild signs on exam <b>AND</b> no effect on coitus and minimal discomfort with gynecologic exam	Symptomatic with moderate signs on exam <b>AND</b> with mild dyspareunia or discomfort with gynecologic exam	Symptomatic <b>WITH</b> advanced signs (stricture, labial agglutination or severe ulceration) <b>AND</b> severe pain with coitus or inability to insert



				vaginal speculum
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Other indicators, clinical manifestations or complications related to chronic GVHD  
 (check all that apply and assign a score to its severity (0-3) based on its functional impact where applicable (none – 0, mild -1, moderate -2, severe -3)

<b>Esophageal stricture or web</b> ___	Pericardial Effusion___	Pleural Effusion(s)___
<b>Ascites (serositis)</b> ___	Nephrotic syndrome___	Peripheral Neuropathy___
<b>Myasthenia Gravis</b> ___	Cardiomyopathy___	Eosinophilia > 500μl ___
<b>Polymyositis</b> ___	Cardiac conduction defects___	Coronary artery involvement___
<b>Platelets &lt;100,000/μl</b> ___	Progressive onset___	Other___

†Pulmonary scoring should be performed using both the symptom and pulmonary function testing (PFT) scale whenever possible. When discrepancy exists between pulmonary symptom or PFT scores the higher value should be used for final scoring. Scoring using the Lung Function Score (LFS) is preferred, but if DLCO is not available, grading using FEV1 should be used. The LFS is a global assessment of lung function after the diagnosis of bronchiolitis obliterans has already been established. The percent predicted FEV1 and DLCO (adjusted for hematocrit but not alveolar volume) should be converted to a numeric score as follows: >80% = 1; 70-79% = 2; 60-69% = 3; 50-59% = 4; 40-49% = 5; <40% = 6. The LFS = FEV1 score + DLCO score, with a possible range of 2-12.