

<b>Record of decision making regarding the initiation of new OR the escalation of existing, antimicrobials in ICU</b>	Patient's Name			
	Date of birth		Gender (circle)	M / F
	St George's Hospital No.			
	NHS number			
Version - September 2017		Author: Jonathan Ball <a href="mailto:jonathan.ball2@nhs.net">jonathan.ball2@nhs.net</a>		PLEASE affix a patient's sticker if available

**1. What signs are there of either (a) new infection OR (b) inadequate response to current antimicrobial therapy?**

Any focal signs? <input type="checkbox"/>		Details →			
→					
Systemic signs?					
New pyrexia (>38°C for >4hours) <input type="checkbox"/>		New / deteriorating distributive shock <input type="checkbox"/>		Other →	
→					
SOFA score →		1 <sup>st</sup> SOFA ≥2 <b>or</b> ΔSOFA ≥2 in 24 hours <input type="checkbox"/>			
Could there be a non-infective explanation? Details →					
→					
Clinical probability of new <b>OR</b> unresponsive infection [PLEASE CIRCLE]		VERY LOW	LOW	INTERMEDIATE	HIGH
Explanation including most likely site / source →					
→					
→					
→					

**2. Recent antimicrobial history**

If the patient is receiving OR has recently received (in the last 5 days), a TREATMENT course of antimicrobial therapy THEN PLEASE briefly document the following: IF NOT, PLEASE GOTO no. 3	
Diagnosis (Dx) →	Time and date of Dx →
Based upon? →	
Antimicrobial(s): name / dose / frequency / start time and date →	
→	
Source control interventions? →	

**3. Predisposing factors to new infection OR failure of current antimicrobial therapy - PLEASE tick all that apply**

Known to be immunocompromised <input type="checkbox"/>	Diagnosis →
Critically ill or injured for >48 hours <input type="checkbox"/>	Time since onset →
Endotracheal or tracheostomy tube in situ <input type="checkbox"/>	No. of days →
Central venous access (or other high risk invasive item) <input type="checkbox"/>	Details →
Other(s) →	
→	

<b>Record of decision making regarding the initiation of new OR the escalation of existing, antimicrobials in ICU</b>	Patient's Name		
	Date of birth	Gender (circle)	M / F
	St George's Hospital No.		
	NHS number		
Version - September 2017    Author: Jonathan Ball <a href="mailto:jonathan.ball2@nhs.net">jonathan.ball2@nhs.net</a>		PLEASE affix a patient's sticker if available	

<b>ACTIONS - PLEASE include the date and time that any positive OR negative results were received by the clinical team</b>	
Peripheral blood cultures taken? <input type="checkbox"/>	Result →
Other investigations (e.g. other cultures; imaging) <input type="checkbox"/>	Brief details →
→	
→	

<b>4. Biomarkers (If available at time of decision <input type="checkbox"/> OR retrospectively <input type="checkbox"/>)</b>							
CRP		$\Delta$ CRP <sub>24</sub>		$\Delta$ CRP <sub>48</sub>			
NØ		LØ		ratio		$\Delta$ ratio <sub>24</sub>	
Alb		Fib		ratio		$\Delta$ ratio <sub>24</sub>	
<b>Probability of infection</b> [PLEASE CIRCLE]		VERY LOW		LOW		INTERMEDIATE	
CRP (mg/L)		<25		25-50		51-100	
↑ in CRP (mg/L) over 24 - 48 hours				<50		≥50	
<b>Decision support / advice</b>							
<b>Initiation or escalating of therapy?</b>		STRONG NO		NO		CONSIDER	
Supporting biomarkers							
<b>Probability of infection</b> [PLEASE CIRCLE]		VERY LOW to LOW				INTERMEDIATE to HIGH	
Neutrophil to Lymphocyte ratio		<10 (or ↓by ≥2 over 24 hours)				≥10 (or ↑by ≥2 over 24 hours)	
Albumin (g/L) to Fibrinogen (g/L) ratio		>8 (or ↑by ≥2 over 24 hours)				≤8 (or ↓by ≥2 over 24 hours)	

<b>5. Record of decision</b>	
Observe closely <input type="checkbox"/> <b>OR</b> Start empirical antimicrobials <input type="checkbox"/> <b>OR</b> Escalate existing antimicrobial therapy <input type="checkbox"/>	
Principle reason →	
If started or escalated; details of therapy →	
Decision made by →	Time and date →
1 <sup>st</sup> dose give at: Time and date →	
<b>IF</b> invasive candidiasis or candidaemia are suspected, PLEASE complete the <a href="#">risk score</a> AND send serum for beta-glucan assay	

<b>Record of decision making regarding the initiation of new OR the escalation of existing, antimicrobials in ICU</b>	Patient's Name			
	Date of birth		Gender (circle)	M / F
	St George's Hospital No.			
	NHS number			
Version - September 2017 Author: Jonathan Ball <a href="mailto:jonathan.ball2@nhs.net">jonathan.ball2@nhs.net</a>			PLEASE affix a patient's sticker if available	

**Biomarkers - trends and values to support decisions to STOP, CONTINUE or START / ESCALATE antimicrobial therapy**

Decision support	STOP?	CONTINUE	START / ESCALATE?
CRP (mg/L)	72 hour peak <100 OR <50% of peak value	Peak >100 AND level falling but still ≥50% of peak value	Peak >100 AND no fall after ≥48 hours

**6. Daily review of antimicrobial therapy**

Baseline values	SOFA <sub>day1</sub>	CRP <sub>day1</sub>	Peak CRP			
Next day (2)	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 3	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 4	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 5	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 6	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 7	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 8	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					

Key:  $\Delta$ CRP<sub>24/48</sub> = change in CRP in 24 and 48 hours respectively; NØ = neutrophil count; LØ = lymphocyte count;  $\Delta$ ratio<sub>24</sub> = change in ratio in 24 hours; Alb = albumin; Fib = fibrinogen

<b>Record of decision making regarding the initiation of new OR the escalation of existing, antimicrobials in ICU</b>	Patient's Name			
	Date of birth		Gender (circle)	M / F
	St George's Hospital No.			
	NHS number			
Version - September 2017 Author: Jonathan Ball <a href="mailto:jonathan.ball2@nhs.net">jonathan.ball2@nhs.net</a>			PLEASE affix a patient's sticker if available	

**Biomarkers - trends and values to support decisions to STOP, CONTINUE or START / ESCALATE antimicrobial therapy**

Decision support	STOP?	CONTINUE	START / ESCALATE?
CRP (mg/L)	72 hour peak <100 OR <50% of peak value	Peak >100 AND level falling but still ≥50% of peak value	Peak >100 AND no fall after ≥48 hours

**6. Daily review of antimicrobial therapy - continued**

Baseline values	SOFA <sub>day1</sub>	CRP <sub>day1</sub>	Peak CRP			
Day 9	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 10	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 11	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 12	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 13	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 14	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					
Day 15	Clinical condition	Better <input type="checkbox"/>	Same <input type="checkbox"/>	Worse <input type="checkbox"/>	SOFA	
Markers	$\Delta$ SOFA <sub>24</sub>		CRP		% of peak CRP	
Decision	Observe closely <input type="checkbox"/> Start antimicrobials <input type="checkbox"/> Continue <input type="checkbox"/> Escalate <input type="checkbox"/> Stop <input type="checkbox"/>					