WHEN TO START ANTIRETROVIRAL THERAPY

Table 1. Comparison of current HIV antiretroviral guidelines[a]

Indication		Antiretroviral Guideline[b]			
		US DHHS May 2014	IAS-USA July 2012	BHIVA July 2012	EACS Oct 2013
Early Infection[c]	Without additional indications	BII	BIII		Consider
	With additional indications			1A (AIDS) 1C (CD4 < 350) 1D (Neuro involved)	Recommend (AIDS or CD4 < 350, or Neuro involved or 'severe' illness)
Chronic Infection	CD4 < 350	AI	AIa	1A	Recommend
	CD4 350 - 500	AII	AIa		Consider
	CD4 > 500	BIII	BIII		Consider
Treatment as Prevention (by transmission risk group)	Perinatal	AI	AIa	1[d]	Recommend
	Heterosexual	AI	[e]	GPP (CD4 > 350)[f]	Consider
	Other groups	AIII		GPP (CD4 > 350)	Consider

NOTES: US DHHS, US Department of Health and Human Services; IAS-USA, International Antiviral Society–USA; BHIVA, British HIV Association; EACS, European AIDS Clinical Society

[a] 2013 World Health Organization (WHO) Guidelines on the use of Antiretroviral Therapy (ART) are applicable to a public health model of care potentially less relevant to Australia. The WHO guidelines provide no guidance on ART initiation in early infection, recommend ART at CD4 counts < 500 in chronic infection (Rating: Strong – Moderate), and all risk groups in serodiscordant relationships are recommended to receive ART for prevention of HIV transmission. (Rating: Strong – Moderate for perinatal group, and Strong – High for remaining groups).

[b] Colour coding based on Strength of recommendations (detailed in Rating Scheme for Recommendations table): Highest Category (Green), Middle Category if available (Orange), Lowest Category (Red). Cells coded Grey mean no specific guidance.

[c] Definitions of early HIV infection: EACS (Clinical symptoms / recent exposure / +ve HIV RNA / -ve or indeterminate serology), BHIVA (Not strictly defined but refer to Fidler et al, N Engl J Med 2013;368(3):207-17), IAS-USA (Not defined), US DHHS (Up to 6 months after infection).

[d] Referred to 2012 BHIVA guidelines specific to pregnant women.

[e] Data from one RCT reporting that ART reduces HIV transmission was considered in the recommendation to offer ART to all adults regardless of CD4.

[f] This GPP recommends that ART to prevent HIV transmission be discussed with all patients and there is good evidence from one RCT to support this.

Table 2. Rating scheme for recommendations

Guideline	Each guideline typically assigns one category for both the strength and the quality of evidence for each recommendation as detailed below	
	Strength of recommendation	Quality of Evidence
US DHHS May 2014	A: Strong	I: One or more randomized trials with clinical outcomes and/or validated laboratory endpoints
	B: Moderate	II: One or more well-designed, non-randomized trials or observational cohort studies with long-term clinical outcomes
	C: Optional	III: Expert opinion
IAS-USA July 2012	A: Strong	Ia: ≥ 1 published randomized trial Ib: ≥ 1 randomized trial in abstract form
	B: Moderate	IIa: Published non-randomized trials or observational studies IIb: Non-randomized trials or observational studies in abstract form
	C: Limited	III: Expert opinion
BHIVA July 2012	1: Strong	A: High – Well executed randomized trials or overwhelming evidence from observational studies
		B: Moderate – Randomized trials with flaws or consistent evidence from observational studies
	2: Weaker or Conditional	C: Low – Controlled trials with serious limitations or observational studies with limited evidence
		D: Case studies, expert opinion, observational studies with inconsistent findings and potential biases
	Good Practice Point (GPP): recommendations based on expert opinion. Areas where there is not, nor is there likely to be, any significant research evidence. They are not an alternative to evidence-based recommendations.	
EACS Oct 2013	Recommended	Not described
	Consider	Not described
	Defer	Not described
WHO June 2013	Strong	High: Further research unlikely to change our confidence in the estimate of effect
		Moderate: Further research is likely to have an important impact on our confidence in the effect
	Conditional	Low: Further research is very likely to have an estimate of effect and is likely to change the estimate
		Very Low: Any estimate of effect is very uncertain