Table 8: In all patients with vitiligo, what is the efficacy of a course of narrow-band UVB including high intensity light sources compared to placebo in terms of condition progression, area reduction and QOL score? AV Anstey

Bibliographic citation	Study type	Ev lev	No of patients	Intervention	Comparison	Length follow-up	Outcomes measured and result	Patient characteristics	Additional comments
Spencer 2002	Intervention study	3	18	Excimer laser	Within patient controls (untreated vitiligo)	4/52	Arbitrary scoring method		Pilot study
Hofer A. 2006	Intervention study, single arm, before and after	3	25	Excimer laser	Within patient controls (untreated vitiligo)	12/12	Arbitrary scoring method + photos. No stats No stats	White patients	Benefit depends on body site.
Hamzavi I. 2004	RCT	1-	22	NB-UVB vs no treatment	L vs R	6/12	VASI scores compared to baseline. 42.9% repigmentation on treated side versus 3.3% on untreated side ($p<0.001$) 50% or more	15 white, 6 indo-Pakistan, 1 Chinese	Odds ratios for response according to body region. Greatest response on trunk and nonacral extremities
Menchini G. 2003	Open study	3	734	Filtered Xenon arc lamp with fibre optic cable	Response compared to baseline	Unclear	Photograph planimetry. No statistics	Ages 6-78. All had stable or active disease	"Highly effective with no side effects" No controls
Westerhof. 1997	2 arm before and after study	2-	175	PUVA vs TL01 for first study; TL01 alone for second study	Response compared to baseline	up to 12 months	Arbitrary scoring system. No statistics. 67% of TL01 group showed repigmentation after 4 months	Mainly Skin Type III	No controls. No adverse effects with TL01. TL01 is "as efficient as topical PUVA with fewer side effects"
Yones 2007	Double-blind randomize	1+	56	PUVA Vs TL01	Change in area affected,	Up to 12 months after end	Colour photographs, clinical assessment of affected skin using rule of nines, DLQI	Non-segmental vitiligo.	Both PUVA and NBUVB produced a significant improvement. Improvement

	d study				and colour match afet 48 treatments, end of course and after 12 months after end of course	of course		Exclusions: age less than 18 or greater than 70, previous failure of PUVA	was greater for NBUVB but this was not significant.
Hartmann A *2005*	Interventio n study	2-	10	Within patient comparison of TL01 vs Broad-band UVB	Response compared to baseline	up to 12 months	Photography, planimetry, VIDA score and DLQI 6/9 showed response to TL01, 0/6 responded to BB UVB at 6 months		Conclusion: TL01 was effective in treating vitiligo, whereas broad-band had no effect. Combination with calcipotriol was not superior to TL01 monotherapy
Hong SB 2005	Open, intervention study	2-	8	Excimer laser vs TL01	No controls. One intervention was compared with the other	10 weeks	Arbitrary score of photographs. At 20 treatments, the score for treated areas showed better scores for Excimer laser than TL01 ($p<0.05$)		Authors state that Excimer produced more rapid and more profound repigmentation
Njoo M. J 2000	Open study in children	3	51	NB-UVB	No controls	1 year max	Arbitrary score + VIDA. 53% of patients had more than 75% repigmentation. There was “stabilisation” of disease in 80%		All patients were children

Table 9: In all patients with vitiligo, what is the efficacy of a course of **PUVA** or **PUVAsol** compared to **placebo** in terms of condition progression, area reduction and QOL score? AV Anstey

Bibliographic citation	Study type	Ev lev	No of patients	Intervention	Comparison	Length follow-up	Outcomes measured and result	Effect size	Patient characteristics	Additional comments
Barman KD 2004										Not relevant to question
Czajkowski 2004										Not relevant to question
Valkova 2004										Not relevant to question
Baysal 2003										Not relevant to question
Cherif 2003										Not relevant to question
Ameen 2001										Not relevant to question
Ermis 2001										Not relevant to question
Mofty 2001										Not relevant to question
Parsad 1999										Not relevant to question
Westerhof 1997	"Before and after study"	3	28	Topical PUVA compared with TL01	Before and after study!	4 months	Arbitrary assessment of response	No stats	Predominantly Skin Type III	46% of PUVA group showed repigmentation
Khalid *1995*	Clinical trial, cohort study	2-	366	Clobetasone vs PUVASOL	Global response	26 months	Photographs	No stats	East Indian patients	Mostly not relevant to question
Sehgal ????	Three limb non-randomis	2-	89	Three psoralen products compared	Clinical response		Arbitrary assessment	No stats		Trimethyl Psoralen and Psoralen were better than 8-MOP

	ed clinical study			(Trimethyl Psoralen, psoralen and 8-MOP)						
Farah 1997	Open study of psoralens and triamcinolone by mouth	3								Not relevant to question
Pathak MA. *1994*	Randomised, double-blind prospective study	2-	366	8 treatment groups. Various concentrations of Psoralen vs placebo	With placebo	up to 2 years	Arbitrary assessment of photographs	No statistics	Indian	Small differences between different psoralens in terms of rate of response
Yones SS *et al. 2007*	Double-blind randomized study	1+	56	PUVA vs TL01	Patients with other treatment, and resoponse compared to baseline status	1 year study, 1 year follow-up	Rule of nines. Photographs. DLQI. VAS self-assessment	yes, exact χ^2, exact Mann-Whitney and Wilcoxon signed rank correlation coefficient	Non-segmental vitiligo affecting 2-70% of skin. Skin types I-IV	16 of 25 patients (64%) in TL01 group showed greater than 50% improvement compared to 9 out of 25 patients in the PUVA group (36%). Colour match was good for TL01 but less good for PUVA. Loss of pigmentation was more significant in the PUVA than the TL01 group

Table 10: In all patients with vitiligo, what is the efficacy of a course of **khellin** with sunlight, UVA or UVB compared to **PUVA** or **PUVAsol** in terms of condition progression, area reduction and QOL score? AV Anstey

Bibliographic citation	Study type	Ev level	No pats	Intervention	Comparison	Length of FU	Outcomes measured and result	Additional comments
Valkova S. 2004	Pilot study	3	33	Khellin + UVA	Within patient, before and after study	Not stated	Arbitrary. KUVA achieved better results in younger patients. No stats	KUVA: no side effects PUVA: Erythema, itching, GI-upset in some patients. Repigmentation for both treatments was "comparable"
Orrecchia. J 1999	L vs R study	2-	36	Khellin gel + UVA versus UVA monotherapy	Within patient L Vs R	Not stated	Repigmentation of >10% of the combination therapy (86%) compared to 66% for the UVA monotherapy side $p<0.01$	Young patients with short duration of disease showed better response. Authors state: "Khellin gel + UVA significantly improves outcome of patients with vitiligo"
Procaccini. J 1995	L vs R placebo-controlled study	2-	72	Khellin + UVA vs vehicle alone	L vs R	5 months	Clinically and with photographs. No randomisation.No statistics	Topical application of Khellin did not induce repigmentation; responders seem to respond to UVA not khellin. No adverse effects noted.
Orecchia. 1992	L vs R study	3	41	Khellin + sun vs vehicle + sun	L vs R	4 months	Arbitrary	No difference was found between the 2 groups
Abdel-Fattah. 1992	Double-blind	3	60	Oral khellin	Double-blind	4 months	Arbitrary. No statistics. Control patients showed no response. Khellin + sunlight patients included 12 out of 30 with greater than 50% repigmentation	"The achieved pigmentation was stable for 1 year after drug cessation"

Table 11: What is the evidence for the risk of long-term complications of precancerous change or skin cancer with PUVA or narrow-band UVB in the treatment of vitiligo? AV Anstey

Author, citation	Evidence level	Number of patients	Intervention	Comparison	Length of follow-up	Outcome measured and result	Additional comments
Harrist TJ. *1984*	3	596 enrolled in prospective study 230 followed-up for 55 months	PUVA	Within patient controls (ie unaffected skin)	4 years	29 (13%) developed skin lesions within areas of vitiligo. Skin lesions were biopsied: no malignancy. Some actinic keratoses, lichenoid keratoses.	No tumours identified. Follow-up too short to have excluded future risk of skin cancers. Conclusion: No increased risk of carcinoma was apparent during the follow-up period
Abdel Nasser. *2004*	3	1	PUVA for 3 years, cumulative dose ~1750J/cm^2	Within patient		Skin lesions biopsied	No evidence of skin malignancy was observed clinically or histologically
Takeda H. 1998	4	1	PUVA	No control	9 years of PUVA. 360 trratments	Multiple SCCs in situ were diagnosed within vitiligo areas.	Overall dose of UVA was low (392 J/cm^2)
Halder RM. 1995	4	326	PUVA	No controls	4 years +	264 adults in study.No actinic keratoses or malignancies were observed in any of the patients	Power of the study to detect increased risk of malignancy was “quite limited”

Calanchini-Postizzi E. 1987			PUVA	Case control study		No significant increase in skin cancer compared to controls	
Westerhof W. 1996	4	2500	PUVA	Open observation (not a true study)		No skin cancer in any patient	
Buckley DA. 1996	4	1	PUVA	Case report		Multiple SCC and keratoses in vitiligo with prolonged PUVA	271 PUVA exposures and 451 J/cm2 UVA.